



**American
Red Cross**



Basic Life Support for Healthcare Providers

Instructor's Manual



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for Healthcare Providers
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This instructor's manual is part of the American Red Cross Basic Life Support for Healthcare Providers program. The emergency care procedures outlined in the program materials reflect the standard of knowledge and accepted emergency practices in the United States at the time this manual was published. **It is the reader's responsibility to stay informed of changes in emergency care procedures.**

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Many individuals shared in the development and revision process in various supportive, technical and creative ways. The *American Red Cross Basic Life Support for Healthcare Providers Instructor's Manual* was developed through the dedication of both employees and volunteers. Their commitment to excellence made this manual possible.

The care steps outlined within this manual are consistent with the 2010 International Liaison Committee on Resuscitation (ILCOR) Consensus on Science and Treatment Recommendations (CoSTR) and the 2010 American Heart Association Guidelines for CPR & ECC.

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SECTION A: ADMINISTRATION

Chapter 1: Introduction

Chapter 2: Course Design and Materials

Chapter 3: Classroom Setup and Delivery

Chapter 4: Running the Instructor-Led Course

Chapter 5: Running the Blended Learning Course

Chapter 1: Introduction

COURSE PURPOSE

The purpose of the American Red Cross Basic Life Support for Healthcare Providers course is to ensure that individuals with a duty to respond (public safety professionals and healthcare providers) have the requisite knowledge and skills to respond to patients who are experiencing respiratory and cardiac arrest and airway obstruction. The emphasis is on providing high-quality care integrating psychomotor skills with the skills of critical thinking, problem solving and team dynamics to achieve the best possible outcomes.

COURSE PREREQUISITES

None

COURSE PARTICIPANTS

Participants in this course may represent a broad range of backgrounds and differ in levels of education and experience, for example, those with prior knowledge and background as well as those just entering the healthcare field. Participants may include:

- Public safety personnel, such as first responders (law enforcement officers and firefighters), emergency medical responders (EMRs), emergency medical technicians (EMTs), advanced EMTs (AEMTs) and paramedics.
- Medical personnel, such as pharmacists, nurses, physicians, physician assistants, nurse practitioners, dentists and students entering the field.
- Members of emergency response teams, such as athletic trainers, corporate response teams, security personnel and ski patrollers.

INSTRUCTOR RESPONSIBILITIES

As a certified American Red Cross instructor, you are responsible for:

- Providing for the health and safety of participants by always ensuring that:
 - All equipment is clean and in good working order.
 - All participants are aware of health precautions and guidelines concerning infectious diseases.
 - The classroom and all practice areas are clean and have been checked for any hazards.
- Foreseeing hazards and taking steps to control them before participants arrive or enter the classroom.
- Being familiar with and knowing how to use course materials and training equipment safely and effectively.
- Planning, coordinating and managing training with the Red Cross, including advising the Red Cross in advance of any classes you are scheduled to teach.
- Informing participants about knowledge and skill evaluation procedures and course completion requirements.
- Creating a nonthreatening environment conducive to achieving the learning objectives.
- Preparing participants to meet the course objectives.
- Adapting your teaching approach to match the experience and abilities of the participants, identifying participants who are having difficulty and developing effective strategies to help them meet course objectives.
- Observing participants while they are practicing course skills.
- Evaluating participants as they perform skills, focusing on critical performance steps as described in the skill sheets.
- Conducting courses in a manner consistent with course design.
- Administering and scoring the final written exam for the instructor-led program.
- Submitting the required course documents according to current Red Cross procedural guidelines within the specified time frame.
- Being familiar with and informing participants of other Red Cross courses and programs.
- Being prepared to answer participants' questions or knowing where to find the answers.
- Providing a positive example by being neat in appearance and not practicing unhealthy behaviors, such as eating, drinking or utilizing any type of tobacco products, while conducting Red Cross courses.
- Abiding by the obligations in the Instructor Agreement and Code of Conduct and the Authorized Provider Agreement or Licensed Training Provider Agreement.
- Representing the Red Cross in a positive manner.

- Promoting volunteer opportunities available through the Red Cross.
- Continuing your learning and development by staying informed about science and guideline changes including reviewing the American Red Cross Scientific Advisory Council (SAC) Scientific Statements, Advisories and question-and-answer documents. (For more information, see American Red Cross Resources below.)

In addition, Red Cross instructors are expected to regularly access the Learning Center (classes.redcross.org/instructor/authentication/login) and to maintain a current instructor profile, including a current e-mail address. The Red Cross uses the contact information in the instructor profile to communicate important information to instructors (for example, related to maintaining instructor certification, reporting teaching activity or providing certificates to successful course participants).

AMERICAN RED CROSS RESOURCES

Instructors must keep up-to-date on the latest information by visiting Instructor's Corner (redcross.org/instructorscorner.org). This site features program materials, FAQs, instructor and program updates, and program-related forms. Your Red Cross representative 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 Basic Life Support for Healthcare Providers course, find out how your Red Cross representative 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 a wide range of Red Cross retail products, are available through your Red Cross representative or the Red Cross store (redcrossstore.org).

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 physicians, nurses, EMTs, athletic trainers, 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 Training Support Center.

HEALTH PRECAUTIONS FOR COURSE PARTICIPANTS

As an American Red Cross instructor, one of your responsibilities is to protect participants from health risks. The materials and procedures for teaching this program are designed to:

- Limit the risk of disease transmission.
- Limit the risk of one participant injuring another when practicing.
- 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. Ask participants to talk with you before any skill session or critical thinking and problem solving or team dynamics scenarios if they are unsure if they are able to participate. Suggest that participants with medical illnesses or injuries check with their healthcare providers before participating in activities involving physical exertion. Inform participants who take the course but are not able to demonstrate the skills taught that they cannot receive certification. Encourage them, however, to participate to whatever extent possible because they can still learn valuable, lifesaving information. The American 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 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 learning objectives and skill competencies.

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 (www.instructorscorner.org).

Chapter 2: Course Design and Materials

The *Basic Life Support for Healthcare Providers Instructor's Manual*, along with the Basic Life Support for Healthcare Providers course presentation(s) and *Basic Life Support for Healthcare Providers Handbook* provide the materials necessary to help a qualified instructor conduct the American Red Cross Basic Life Support for Healthcare Providers instructor-led, review, challenge and blended learning courses in their entirety. All required learning objectives and assessments must be covered as outlined in the manual. It is understood and accepted that instructors may need to vary from the prescribed script or outline to assist the students in developing the understanding necessary to meet the learning objectives and achieve certification. Further, instructors may incorporate local protocols and practices as approved by the organization's medical director, if applicable, provided they are not in conflict with the learning objectives.

This chapter describes the organization, content and structure of the American Red Cross Basic Life Support for Healthcare Providers courses, related materials and resources.

BASIC LIFE SUPPORT FOR HEALTHCARE PROVIDERS COURSE DESIGN

The American Red Cross Basic Life Support for Healthcare Providers program is built on a framework that is evidence-based, contextual, modular and flexible. The course design integrates foundational knowledge and psychomotor skills with the development of critical thinking, problem-solving and team dynamics (leadership, teamwork and communication). With these skills, participants will be able to function effectively within a dynamic team environment, leading to improved patient outcomes. The technical content within the Basic Life Support for Healthcare Providers program reflects the most current consensus on science and treatment recommendations from the International Liaison Committee on Resuscitation (ILCOR), the 2010 American Heart Association Guidelines for CPR & ECC and the American Red Cross Scientific Advisory Council (SAC).

Two course delivery options are available: an instructor-led course, and a blended learning course featuring simulation learning.

Instructor-Led Course

The Basic Life Support for Healthcare Providers instructor-led course follows experiential learning by providing participants the opportunity to learn through experience, observation, reflecting and debriefing to form and test new understanding. The course is designed to include a significant amount of active, hands-on learning.

The course consists of four modules: knowledge and skills, critical thinking and problem solving, team dynamics and certification assessment. Using team-based scenarios, participants are required to apply their knowledge and demonstrate the skills necessary to provide safe, appropriate and effective patient care. The contents of the specific course components are described in Chapter 4.

Blended Learning Course

The blended learning version of the Basic Life Support for Healthcare Providers course consists of an online simulation learning program and an in-person skills practice and assessment session. Similar to the instructor-led course, the simulation learning experience provides a series of team-based "missions" where participants learn the base knowledge necessary to respond to respiratory and cardiac arrest and airway obstruction for adult, child and infant patients. Upon successful completion of the online portion of the course, participants are required to attend an in-person skills practice and assessment session. Additional details about the blended learning course including how to run a skills session are described in Chapter 5.

INSTRUCTOR MATERIALS

Basic Life Support for Healthcare Providers Instructor's Manual

This instructor's manual contains all the information needed for planning, preparing and conducting the Basic Life Support for Healthcare Providers instructor-led course and the blended learning course skills practice and assessment session.

In addition to this administrative section (Section A), the instructor's manual contains the following sections:

- **Section B: Basic Life Support for Healthcare Providers Lesson Plans.** This section contains the course introduction as well as the components for each of the four modules of the instructor-led course. Each module includes:
 - o Performance objectives.
 - o Information about setup and the necessary materials, equipment and supplies.

- o Lesson plans that contain:
 - Lecture content.
 - Skill demonstration.
 - Required and optional scenarios.
 - Reflection and debriefing questions for each of the scenarios.
- **Section C: Appendices.** The appendices at the end of this instructor's manual contain additional information needed for effectively conducting the course and scenarios. The following appendices are located in Section C:
 - o **Appendix A:** Skill Sheets (Participant Copy)
 - o **Appendix B:** Skill Sheets (Instructor Copy)
 - o **Appendix C:** Additional Topics
 - o **Appendix D:** Final Written Exam, Answer Sheet and Answer Keys
 - o **Appendix E:** Practical Assessment Scenarios

Basic Life Support for Healthcare Providers Course Presentation

The Basic Life Support for Healthcare Providers course presentation is an in-class visual aid that should be projected onto a screen or viewing area or played on a DVD player connected to a television. Similar to a PowerPoint presentation, instructors click through the presentation slides as they progress through the modules of the instructor-led course. The modules in Section B of the instructor's manual reference the corresponding presentation slide.

The course presentation is designed to include all the visual information necessary to conduct the Basic Life Support for Healthcare Providers course. The course presentation includes the course introduction, key points for each module, skills, practice scenarios, as well as important topics related to reflection and debriefing activities. When using the course presentation, it is not necessary to use any print products.

Two course presentations are provided. The full course presentation covers all of the content provided in the course introduction and each of the four modules. There is also a separate course presentation for the additional topics listed in Appendix C. This course presentation allows the instructor to cover these additional topics, if deemed necessary, without having to move from one section to another in the full course presentation. Instructors have the flexibility to choose which, if any, additional topics to include based on the needs of the participants. Instructors can simply open the separate course presentation in a new window and cover the selected topic(s).

Before conducting the course, instructors should become familiar with the presentation software and test the display of the system you will use while teaching the course. 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 Minimum 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/monitor capable of connecting to a computer, projection screen/area, and computer speakers, **OR**
- A DVD player connected to a television

The presentation, available for download from Instructor's Corner, can be saved in a 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. A separate DVD is available for purchase.

Skill Sheets

Skill sheets identify the actions required for a skill. Two versions of the skill sheets are provided: a participant copy and an instructor copy.

The participant copy is to be used by the participants as a guide when practicing the skills. The participant copy allows room for note taking as necessary.

The instructor copy is to be used by the instructor to provide guidance and highlight important actions during the scenarios, and for assessment during the final practical skills assessment. Both versions can be found in the Appendix. The instructor version of the skill sheets identifies the competencies for each skill along with the critical actions as well as other actions that would not constitute a failure if missed in isolation. When using these skill sheets for assessment, the instructor determines a scoring level of "Excellent," "Pass" and "Failure."

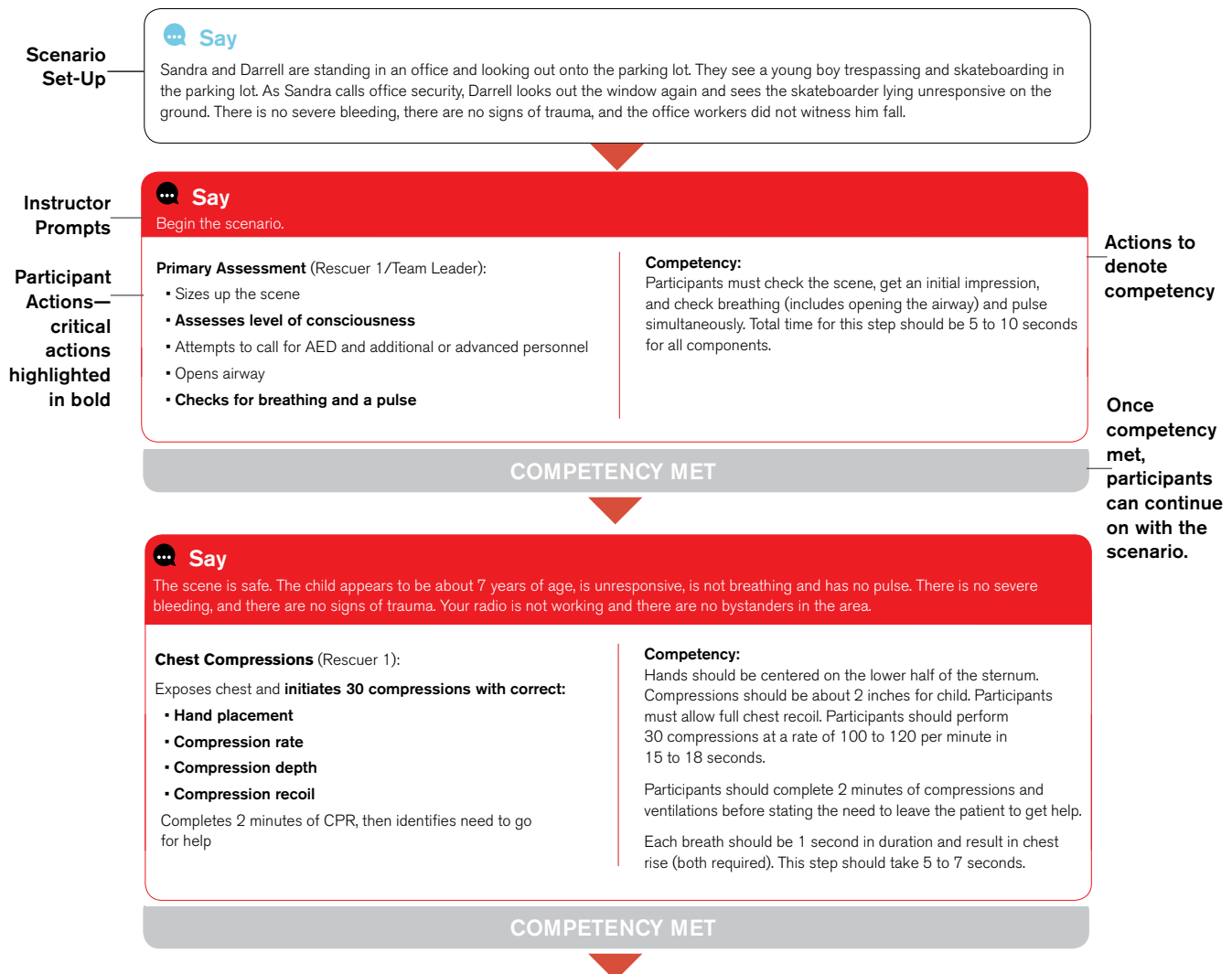
- "Excellent" score is given if a participant demonstrates all the critical actions in the correct sequence and timing, as well as all the noncritical elements.
- "Pass" score is given to a participant who demonstrates all the critical actions, although the actions may be slightly out of sequence, and addresses the majority of noncritical elements.
- "Failure" score is given to a participant who misses any critical action or does not demonstrate a majority of noncritical actions.

Scenario Flow Sheets

The flow sheets provide the instructor with a visual, easy-to-use tool for conducting scenarios in Modules 2 and 3. Each flow sheet (excerpt shown below) is scenario specific and is designed to include a brief scenario setup, required participant actions, instructor prompts and competencies. Participant actions that reflect the participant's ability to critically think and problem solve are highlighted to address any modifications or adaptations needed. The flow sheets are provided at the end of Modules 2 and 3 in this instructor's manual.

CRITICAL THINKING AND PROBLEM SOLVING SCENARIO FLOW SHEET

Scenario 3: Office Parking Lot



Instructor's Corner

As an instructor, you must register on Instructor's Corner (redcross.org/instructorscorner.org) 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 Basic Life Support for Healthcare Providers instructor resources are available on Instructor's Corner:

- *Basic Life Support for Healthcare Providers Instructor's Manual*
- Basic Life Support for Healthcare Providers Course Presentation
- Basic Life Support for Healthcare Providers Course Presentation: Additional Topics
- *Basic Life Support for Healthcare Providers Handbook*
- Basic Life Support for Healthcare Providers Instructor Bridge Course
- Instructions for Completing the Basic Life Support for Healthcare Providers Instructor Bridge for Instructors
- Instructor Bulletin
- Manikin Decontamination and Use
- *Course Record and Course Record Addendum*
- Directions for Using the Course Record and Addendum
- AED Resource Information
- Manikin Requirements
- Frequently Asked Questions for Digital Certificates

Additional materials on Instructor's Corner include:

- Administrative tools, including the Instructor Agreement and Code of Conduct and the *ADA Accommodation Resource Guide*.
- Science advisories published by the American Red Cross Scientific Advisory Council.
- Resources to help instructors stay current on the scientific guidelines (ECC, CoSTR, etc.).
- 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 redcrossstore.org for training supplies and Red Cross retail products.

PARTICIPANT MATERIALS

In addition to the participant versions of the skill sheets previously described, the participant materials associated with the Basic Life Support for Healthcare Providers program include the *Basic Life Support for Healthcare Providers Handbook*. This handbook provides an up-to-date reference source for participants. It is available in print form or in digital format that can be downloaded from Instructor's Corner or from the Basic Life Support for Healthcare Providers page on redcross.org.

The handbook consists of three sections:

- **Section 1: Basic Life Support**—This section describes the major components of the course, including key skills, scene size-up, primary assessment of the unconscious adult, compressions, ventilations, automated external defibrillator (AED), one-rescuer and two-rescuer CPR, CPR differences for children and infants and obstructed airway. Key topics, such as high-quality and high-performance CPR, required changes for CPR when advanced airways are in place and the integration of advanced providers, are included.
- **Section 2: Skill Sheets**—These skill sheets provide a highly visual progression of how to perform the skills of CPR/AED for adult, child and infant. These skill sheets are based on the skill sheets found in Appendix A of the instructor's manual.
- **Section 3: Additional Topics**—This section provides information about foundational concepts that may be included in the course as needed. These topics can be used to provide foundational learning for participants new to Basic Life Support for Healthcare Providers, or for review or remediation for those seeking recertification. Topics include:
 - o Key Skills (critical thinking, problem solving, communication and teamwork)
 - o The Emergency Medical Services System
 - o Legal Considerations
 - o Standard Precautions

MASTER EQUIPMENT LIST

In addition to the course materials described above, the following equipment, materials and supplies are required in order to teach this course.

Equipment

- CPR manikins
 - One adult and one infant manikin for every two participants for skill practice (Module 1)
 - One adult and one infant manikin for each team of up to three participants for skill demonstration
 - One child manikin, if available, for each team of up to three participants
- Adult pocket masks with a one-way valve that is compatible with the pocket mask (one for each participant)
- Infant pocket masks with a one-way valve that is compatible with the pocket mask (one for each participant)
- Child pocket masks with a one-way valve that is compatible with the pocket mask (optional; one for each participant)
- Adult bag-valve-mask resuscitators (one for each adult manikin)
- Infant bag-valve-mask resuscitators (one for each infant manikin)
- Child bag-valve-mask resuscitators (one for each child manikin, optional)
- AED training devices with adult and pediatric AED pads (one for each set of adult and infant manikins)
- Timing device such as a stop watch (one for each adult manikin)

Supplies

- Breathing barriers
- Nonlatex disposable gloves
- Manikin decontamination supplies
- Blankets and/or mats (optional)
- Name tags (one for each participant, optional)
- Pens, pencils (optional)

Technology

- Desktop/laptop computer with power source and speakers
- Projector and projection screen/area or large monitor
- Television with a DVD player (optional)

Course Materials

- *Basic Life Support for Healthcare Providers Instructor's Manual*
- Basic Life Support for Healthcare Providers Course Presentation
- *Basic Life Support for Healthcare Providers Provider Handbook*
- *Basic Life Support for Healthcare Providers DVD* (optional)
- American Red Cross Instructor Identification
- Participant Skill Sheets (one for each participant; see Appendix A)
- Instructor Skill Sheets (one for each participant; see Appendix B)
- Final Written Exams A and B (one for each participant)
- Final Written Exam Answer Sheets (two for each participant)
- Final Written Exam Answer Keys (Exams A and B)
- Extra copies of Final Written Exam (Exams A and B) and Answer Sheets

Chapter 3: Classroom Setup and Delivery

CLASSROOM SPACE

The modules described in this instructor's manual require classroom space suitable for class discussion, skill sessions and scenario demonstrations. 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/demonstration 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.

CLASS SIZE

The course has been developed for a class of approximately one instructor for six participants. If a class session is larger, instructors will need to allow more time. Personal supervision is necessary to ensure effective practice and demonstration as well as the safety of participants. If the course size is too large, instructors may not be able to provide proper supervision or complete the required course activities in the allotted time. The amount of available equipment and assistance from additional instructors can also impact course size. It is strongly recommended that additional instructors help during skill sessions and team-based scenarios when possible.

The estimated course length in this manual is based on the following:

- One instructor per six participants
- Two participants per manikin/bag-valve-mask resuscitator
- The experience and abilities of participants
- The experience and abilities of the instructor
- The recommended amount of equipment needed at each class session

Other factors that may influence lesson planning include:

- Number of modules required for completion of course objectives.
- Classroom availability and layout.
- Equipment availability.
- Number of participants.
- Skill level of participants and the number of required and/or flexible scenarios.
- Instructor experience.
- Number of instructors.

NOTE: The **maximum ratio of instructor to participants for this course is 1:9**; however that ratio will require additional time above and beyond what is listed in this manual.

CLASS SAFETY

As an American 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 course. 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.
- *Additional instructors.* Having additional 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 additional 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.

CRITERIA FOR COURSE COMPLETION AND CERTIFICATION

American Red Cross certification means that on a particular date a certified 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 or skills session.
- Actively participate in all required elements of the course, including assuming various roles during scenarios.
- Demonstrate competency in skills for all required scenarios.
- Pass the final written exam with a minimum grade of 80 percent.
 - o For participants using the blended learning format, this assessment is completed online.
 - o For participants in the instructor-led course who fail to reach the minimum 80 percent on the final written exam, a retest is allowed using the other version of the exam, provided that the learner has passed the practical assessment.
 - o Failure to achieve 80 percent or better in the retest requires participants to retake the course.
- Demonstrate competency as a team leader in one of the scenarios and successfully perform compression and ventilation skills in all scenarios during the practical assessment in Module 4: Certification Assessment. Participants who fail in the practical assessment are eligible for same-day retest of the failed scenario(s).

Note: If a participant fails BOTH the written and skills portions of the instructor-led course, the retest options above do not apply and the participant must retake the course.

Reporting Procedures

You must submit a completed *Course Record* and *Course Record Addendum* to the American Red Cross Learning Center within the specified time frame. Instructions for using and submitting course records are available on Instructor's Corner (www.instructorscorner.org).

Chapter 4: Running the Instructor-Led Course

This course follows experiential learning theory. To achieve this, the course includes opportunities for the participant to learn through experience, observation, reflection and debriefing to form and test new knowledge. This course is designed to include a significant amount of active participation and hands-on learning. This chapter explains how to organize and conduct the instructor-led course.

COURSE LENGTH

You must carefully consider the issue of time when planning each instructor-led course session. The modules in this instructor's manual should be followed as closely as possible, keeping in mind that the timing listed is based on the below instructor-to-participant and equipment-to-participant ratios.

Based upon the recommended class size limits and equipment recommendations included in Chapter 3, the full Basic Life Support for Healthcare Providers instructor-led course (all four modules) is designed to be taught in approximately 4.5 hours. Remember that the course was designed for a ratio of one instructor to six participants (1:6). **The maximum permitted ratio is one instructor to nine participants (1:9)**; however that expanded class size may require additional time above and beyond what is listed in this manual.

COURSE COMPONENTS

The Basic Life Support for Healthcare Providers course consists of a course introduction and four flexible modules. The course is organized as follows:

- Course Introduction
 - o This course introduction is mandatory for all learners.
 - o This introduction provides an overview of the course, including expectations of participants, key administrative items, and the assessment methods and criteria.
 - o It reviews the course framework and describes the use of scenarios to challenge participants to think critically, solve problems, communicate and work as a team, which are the core course elements integrated throughout the course.
 - o The introduction also reviews the important elements of reflection and debriefing.
- Module 1: Knowledge and Skills
 - o This module focuses on basic knowledge and skill acquisition for those in need of initial learning and/or remediation.
 - o Skill practice and demonstration occur in pairs with two participants per manikin. After demonstration of the skill(s) by the instructor, individual participants practice in rotations until both participants in the team have practiced the skill and feel comfortable performing the skill.
 - o For the "Putting It All Together" adult and infant scenarios in Module 1, participants should form teams of up to three participants with one manikin per team.
 - o Throughout the skill practice, instructors should provide coaching and feedback to participants.
- Module 2: Critical Thinking and Problem Solving
 - o Using team-based scenarios, this module focuses on critical thinking and problem solving within a team environment.
 - o Participants, acting in teams consisting of up to nine individuals, are faced with a series of scenarios that pose challenges to the participants' knowledge base and understanding by requiring the participants to think critically, use their problem-solving skills and pose treatment recommendations for the specific scenario.
 - o All course participants should have a role in each response scenario. As indicated in the lesson plan (see Section B), instructors should keep participants involved by assigning roles including rescuers, record keeper, bystanders and observers.
 - o Any information about local protocols and practices may be included, as appropriate, allowing participants to function based on local standards when courses are for a specified group of individuals that routinely work together.
 - o Simple stressors and challenges are applied in early scenarios with an increasing difficulty of stresses and challenges as participants progress.

- o The scenarios have multiple layers of branching and allow participants to make wrong choices and possibly fail.
- o Participants use their copies of the skill sheets for guidance through the scenarios. Instructors can use their skill sheets to reinforce critical actions for each skill.
- o Each scenario includes a short animation that will set up the scenario in an appropriate context for the participant and is focused on “hands-on” exploration when possible.
- o Six critical-thinking scenarios are provided, with specific requirements based on the course outlines below. The following scenarios are included:
 - 1: Construction site setting focusing on Adult CPR
 - 2: Pharmacy setting focusing on Infant Obstructed Airway progressing to CPR/AED
 - 3: Office parking lot setting focusing on Child CPR
 - 4: Home setting focusing on Adult CPR/AED
 - 5: Roadside setting focusing on Adult Obstructed Airway, progressing to CPR/AED
 - 6: Home setting focusing on Two-Rescuer Infant CPR
- o Each scenario includes a customized reflection and debriefing activity, where participants are required to reflect on their feelings, actions and observations as the scenario unfolded, sharing them with the team. Instructors also share their observations and feedback.
- **Module 3: Team Dynamics**
 - o This module focuses on team dynamics and communication, presenting elements of team leadership and being a team member, team roles, coordination and team communication as well as patient/bystander communication.
 - o The concepts of high-quality and high-performance CPR are addressed to emphasize the significance of uninterrupted chest compressions. Participants will engage in a team challenge exercise that fosters teamwork to get first-hand experience in functioning as a team.
 - o Participants, acting in teams consisting of up to nine individuals, are faced with a series of team dynamics scenarios that require using the strategies of coordination, communication and leadership. Any information about local protocols and practices may be included, as appropriate, allowing participants to function based on local protocol when courses are for a specified group of individuals that routinely all work together.
 - o Each scenario includes a short animation that will set up the scenario in an appropriate context for the participant and is focused on “hands-on” exploration when possible.
 - o Four team dynamics scenarios are provided with requirements based on the course outlines below. The following scenarios are included:
 - 1: Construction site setting focusing on Adult Two-Rescuer CPR involving integration of advanced life support, emphasizing team coordination and communication
 - 2: Back of an ambulance setting focusing on Adult CPR/AED, emphasizing team management, leadership and communication
 - 3: Pharmacy setting focusing on Child CPR involving integration of advanced life support, emphasizing team coordination, team building and communication
 - 4: Dental office setting focusing on Infant Obstructed Airway progressing to CPR/AED, emphasizing family communication
- **Module 4: Certification Assessment**
 - o This module focuses on the evaluation of participants' knowledge and skills.
 - o It includes a final written assessment of 20 questions that address the core knowledge related to CPR, AED and airway obstruction. Participants are required to score a minimum of 80 percent (16 out of 20 questions answered correctly) to be eligible for certification.
 - o The module also includes a practical assessment where participants rotate through a series of up to 3 scenarios while performing different roles within a team response setting. Participants will need to identify critical decision points and act appropriately, safely and effectively.
 - o For certification, each participant must assume the role of team leader in one of the scenarios and successfully perform compression and ventilation skills in all scenarios. As team leader, the participant is required to dictate the correct treatment decisions.
 - o Instructors should use the provided skill sheets to evaluate participant competency.

INSTRUCTOR-LED COURSE DELIVERY OPTIONS

The design of the Basic Life Support for Healthcare Providers course is flexible, allowing the instructor to tailor the course to the participants' experience and needs. Three instructor-led course options are available for the Basic Life Support for Healthcare Providers course:

- **Full instructor-led course**, designed for individuals who are new to BLS learning or are in need of remediation or seeking science updates
- **Review course**, designed for individuals who already possess current certification or course completion certificate
- **Challenge**, for individuals wishing to demonstrate knowledge and skill competency by completing only the written and practical certification assessments detailed below

The lesson plans included in Section B of this instructor's manual support the full instructor-led course, review course and challenge outlines provided below. Each option for the instructor-led course emphasizes the skills involved in Basic Life Support for Healthcare Providers as well as the critical thinking, problem solving, communication, teamwork and leadership necessary to effectively put those skills and knowledge into action.

Additional topics—found in Appendix C—are for classes where learners may not have the cognitive background through their employer or initial medical training curriculum. These topics can be reviewed at the instructor's discretion but will add time to the course outside of what is detailed below.

Full Instructor-Led Course

The full instructor-led course outline below is designed for novice learners and those experienced learners who require review or remediation. Note that there is flexibility in Modules 2 and 3 for the instructor to choose between scenarios based on the background of learners. If learner experience is unknown, instructors should choose Scenario 5 in Module 2 and Scenario 4 in Module 3 as the flexible scenarios.

The outline and time frame for the full instructor-led course is as follows:

L—Lecture; Q—Question-and-answer discussion; SP—Skill demonstration/practice; S—Scenarios; A—Activity

Module	Components	Scenarios	Module Length*
Course Introduction	▪ L ▪ Q		15 minutes
Module 1: Knowledge and Skills	▪ L ▪ Q ▪ SP ▪ S	Putting It All Together Scenarios: ▪ CPR/AED—Adult/Child ▪ CPR/AED—Infant	100 minutes
Module 2: Critical Thinking and Problem Solving	▪ L ▪ Q ▪ S	REQUIRED 1: First Responder setting at a construction site focusing on Adult CPR 2: Pharmacy setting focusing on Infant Obstructed Airway progressing to CPR/AED FLEXIBLE—choose at least one 3: Office parking lot setting focusing on Child CPR 4: Home setting focusing on Adult CPR/AED 5: Roadside setting focusing on Adult Obstructed Airway, progressing to CPR/AED 6: Home setting focusing on two-rescuer Infant CPR	55 minutes

Module	Components	Scenarios	Module Length*
Module 3: Team Dynamics	▪ L ▪ Q ▪ A (Team dynamics challenge) ▪ S	REQUIRED 1: Construction site setting focusing on two-rescuer Adult CPR involving integration of advanced life support, emphasizing team coordination and communication FLEXIBLE—choose at least one 2: Back of an ambulance setting focusing on Adult CPR/AED, emphasizing team management/leadership and communication 3: Pharmacy setting focusing on Child CPR involving integration of advanced life support, emphasizing team coordination, team building and communication 4: Dental office setting focusing on Infant Obstructed Airway progressing to CPR/AED, emphasizing family communication	60 minutes
Module 4: Certification Assessment	▪ Final Written Exam ▪ Practical Assessment**	▪ CPR/AED—Adult Assessment Scenario ▪ CPR/AED—Infant Assessment Scenario ▪ CPR/AED—Child Assessment Scenario	40 minutes
TOTAL REQUIRED FULL COURSE TIME			4 hours, 30 minutes

***NOTE:** The module lengths listed in this table are based on the recommended class size and equipment ratios provided in the lesson plans in Section B. For classes larger than the recommended instructor-to-participant ratio of 1:6, instructors may need to include additional scenarios to ensure adequate student participation.

****For certification, each participant must assume the role of team leader in one scenario in the Practical Assessment (Module 4).**

Review Course

The purpose of a review course is to give individuals the opportunity to review the course content within a formal class setting. The format optimizes a participant's ability to successfully compete the knowledge and skill evaluation. The responsibility for preparing for the final written exam is shared by the instructor and the participants.

To be eligible to participate in a review course, the participant must possess a current healthcare provider-level American Red Cross certificate (or equivalent). Those without a certificate may not participate in the review course option. They can only participate in a full course or a challenge.

The lesson plans found in Section B of this instructor's manual support the following review course outline. Each participant should have the opportunity to practice skills prior to entering Module 4: Certification Assessment.

The outline and time frame for the review course is as follows:

L—Lecture; Q—Question-and-answer discussion; SP—Skill demonstration/practice; S—Scenarios; A—Activity

Module	Components	Scenario #	Module Length*
Course Introduction	▪ L ▪ Q		15 minutes
1: Knowledge and Skills	NOT Required—Instructors may refer back to this module if remediation is necessary.	OPTIONAL: Putting It All Together scenarios: ▪ CPR/AED—Adult/Child ▪ CPR/AED—Infant	Varies—Not required

Module	Components	Scenario #	Module Length*
2: Critical Thinking and Problem Solving	▪ L ▪ Q ▪ S	REQUIRED 1: Construction site setting focusing on Adult CPR 2: Pharmacy setting focusing on Infant Obstructed Airway progressing to CPR/AED OPTIONAL (time permitting) 3: Office parking lot setting focusing on Child CPR 4: Home setting focusing on Adult CPR/AED 5: Roadside setting focusing on Adult Obstructed Airway, progressing to CPR/AED 6: Home setting focusing on two-rescuer Infant CPR	40 minutes
3: Team Dynamics	▪ L ▪ Q ▪ A (Team dynamics challenge) ▪ S	REQUIRED 1: Construction site setting focusing on two-rescuer Adult CPR involving integration of advanced life support, emphasizing team coordination and communication OPTIONAL (time permitting) 2: Back of an ambulance setting focusing on Adult CPR/AED, emphasizing team management/leadership and communication 3: Pharmacy setting focusing on Child CPR involving integration of advanced life support, emphasizing team coordination, team building and communication 4: Dental office setting focusing on Infant Obstructed Airway progressing to CPR/AED, emphasizing family communication	40 minutes
4: Certification Assessment	▪ Final Written Exam ▪ Practical Assessment**	▪ CPR/AED—Adult Assessment Scenario ▪ CPR/AED—Infant Assessment Scenario ▪ CPR/AED—Child Assessment Scenario	40 minutes
TOTAL REQUIRED REVIEW COURSE TIME			2 hours, 15 minutes

***NOTE:** The module lengths listed in this table are based on the recommended class size and equipment ratios provided. For classes larger than the recommended instructor-to-participant ratio of 1:6, you may need to include additional scenarios to ensure adequate student participation.

****For certification, each participant must assume the role of team leader in one scenario in the Practical Assessment (Module 4).**

Challenge

The purpose of a Challenge is to give individuals the opportunity to demonstrate knowledge and skill competency outside a formal class setting. Participants have sole responsibility to prepare for the knowledge and skill evaluations. Preparing for the final written exam is the responsibility of the participant. Anyone is eligible to participate in a challenge, regardless of current certification.

Individuals who possess a current certification in Basic Life Support for Healthcare Providers (or equivalent) may challenge as opportunities are available and their certificate remains valid.

Individuals who do not possess current certification may participate in a challenge **once**. If they do not pass the challenge, those individuals should be directed to take the full course. They should not be allowed to attempt a challenge again, nor are they eligible to participate in a review course.

The Challenge includes Module 4 only. The outline and time frame are as follows:

Module	Components	Scenarios	Module Length*
Course Introduction	NOT Applicable		NOT Applicable
1: Knowledge and Skills	NOT Required		NOT Applicable
2: Critical Thinking and Problem Solving	NOT Required		NOT Applicable
3: Team Dynamics	NOT Required		NOT Applicable
4: Certification Assessment	- Final Written Exam - Practical Assessment**	- CPR/AED—Adult Assessment Scenario - CPR/AED—Infant Assessment Scenario - CPR/AED—Child Assessment Scenario	Varies
TOTAL CHALLENGE TIME			Varies

***NOTE:** Module lengths are not listed in this table as challenge length depends on the ability of individuals to complete the written and practical assessments.

**For certification, each participant must assume the role of team leader in one scenario in the Practical Assessment (Module 4).

Chapter 5: Running the Blended Learning Course

This chapter explains how to organize and conduct the blended learning course, which consists of two parts: an online simulation learning experience followed by an in-person skills practice and assessment session. The topics covered and learning objectives for the blended learning course are identical to the instructor-led option. Students must successfully complete both the online and in-person portions of the blended learning course in order to receive certification.

SIMULATION LEARNING

Simulation learning is a self-paced, virtual environment where learners are presented with a variety of team-based “missions” covering the same base knowledge and response techniques to care for a variety of patient ages and symptoms. In order to successfully complete the online portion of the program and move on to the in-person skills practice and assessment session, learners must successfully complete the most difficult “Level 3” missions and a 20-question cognitive assessment with a minimum score of 80 percent.

After successfully completing the online portion of the simulation program, participants will be provided with a certificate of completion. This certificate of completion must be printed out and presented by the participant to the instructor when arriving for the in-person skills practice and assessment session.

Before teaching a blended learning in-person skills session, you need to view the simulation learning demo to familiarize yourself with the online learning experience. Access to the demo is available on the Basic Life Support for Healthcare Providers page of Instructor's Corner.

Note: The lesson plans included in Section B of this instructor's manual support the Blended Learning Skill Session Course Outline provided below.

IN-PERSON SKILLS PRACTICE AND ASSESSMENT SESSION

The In-Person Skills Practice and Assessment Session (“Skills Session”) of the blended learning course consists of the course introduction; a brief skills practice, where participants become familiar with the equipment and team-based scenario approach; and the practical assessment, where participants will leverage their learning from the online simulation to complete the same practical assessment scenarios as participants from the instructor-led course.

Course Introduction

A skills session should begin with a brief course introduction by the instructor, including a brief welcome, instructor and participant introductions, and logistics as well as information about the practical assessment (see Section B, Course Introduction). Note: Use of the course presentation is optional for instructors leading a Blended Learning skills session.

Skills Practice

The first component of the skills session will be for practice. Participants will be provided time for skills practice and gaining familiarity with class equipment such as manikins, masks, bag-valve-mask resuscitators (BVMs) and automated external defibrillators (AEDs) as needed. New learners will require a more comprehensive opportunity to practice skills to ensure psychomotor skills competency for CPR/AED for adult, child and infant patients. To assist participants with Skills Practice, instructors should provide each participant a copy of the Participant Skill Sheets found in Section C.

For new learners, the table below lists the skills to cover in Module 1 with the corresponding slides. Instructors should also use the Putting It All Together Adult and Infant CPR/AED response scenarios (slides 1-06 and 1-25 for Adult, slides 1-29 and 1-42 for Infant) to ensure competency with new learners. **Experienced learners that do not need practice can bypass the demonstration and practice portion and move directly to the Team Dynamics scenario practice and practical assessment at the instructor's discretion.**

Skill	Demonstration and Practice Slide Number
Adult Scene Size-Up and Primary Assessment	1-07: Scene Size-Up 1-08 to 1-10: Primary Assessment
Adult CPR: Chest Compressions and Ventilations	1-13 to 1-14: Chest Compressions 1-15 to 1-16: Ventilations
Adult AED	1-18: Adult AED
Adult Two-Rescuer CPR	1-20 to 1-21: Ventilations with Bag-Valve-Mask 1-24: Two-Rescuer CPR
Infant Scene Size-Up and Primary Assessment	1-30: Scene Size-Up 1-31 to 1-33: Primary Assessment
Infant CPR: Chest Compressions and Ventilations	1-35: Chest Compressions 1-36: Ventilations 1-37: Practice Compressions and Ventilations
Infant AED	1-39: AED: Infant Pads
Infant Two-Rescuer CPR	1-40 to 1-41: Two-Rescuer Infant CPR
Obstructed Airway	1-44 to 1-45 Adult/Child 1-46 to 1-47 Infant

After skills demonstration and practice, instructors are required to lead all participants through one team dynamics scenario while demonstrating basic life support skills, including activities for reflection and debriefing. If the class is small and does not have enough participants to effectively perform the team dynamics scenario, the instructor may serve as a team member to facilitate the scenario. Instructors should use the corresponding scenario flow sheet located at the end of Module 3 for guidance during the scenario.

Practical Assessment

The remainder of the skills session will focus on the final practical assessment (see Module 4: Practical Assessment for more information). During the practical assessment, a participant must assume the role of team leader in at least one scenario and as a team member in the remaining scenarios.

BLENDING LEARNING SKILLS SESSION COURSE OUTLINE

The outline and time frame for the in-person skills practice and assessment session is as follows:

L—Lecture; Q—Question-and-answer discussion; SP—Skill demonstration/practice; S—Scenarios; A—Activity

Module	Component	Scenarios	Module Length*
Course Introduction	L,Q		10 minutes
1: Knowledge and Skills	SP	Putting It All Together scenarios: ▪ CPR/AED—Adult/Child ▪ CPR/AED—Infant	50 minutes
2: Critical Thinking and Problem Solving	NOT required	OPTIONAL (time permitting) 1: Construction site setting focusing on Adult CPR 2: Pharmacy setting focusing on Infant Obstructed Airway progressing to CPR/ AED 3: Office parking lot setting focusing on Child CPR 4: Home setting focusing on Adult CPR/AED 5: Roadside setting focusing on Adult Obstructed Airway, progressing to CPR/AED 6: Home setting focusing on two-rescuer Infant CPR	N/A
3: Team Dynamics	S	REQUIRED 1: Construction site setting focusing on two-rescuer Adult CPR involving integration of advanced life support, emphasizing team coordination and communication OPTIONAL (time permitting) 2: Back of an ambulance setting focusing on Adult CPR/AED, emphasizing team management/ leadership and communication 3: Pharmacy setting focusing on Child CPR involving integration of advanced life support, emphasizing team coordination, team building and communication 4: Dental office setting focusing on Infant Obstructed Airway progressing to CPR/AED, emphasizing family communication	20 minutes
4: Certification Assessment	Practical Assessment**	▪ CPR/AED—Adult Assessment Scenario ▪ CPR/AED—Infant Assessment Scenario ▪ CPR/AED—Child Assessment Scenario	40 minutes
TOTAL IN-PERSON SKILLS SESSION TIME			2 hours

***NOTE:** The module lengths listed in this table are based on the recommended class size and equipment ratios provided. For classes larger than the recommended instructor-to-participant ratio of 1:6, you may need to include additional scenarios to ensure adequate student participation.

******For certification, each participant must assume the role of team leader in one scenario in the Practical Assessment (Module 4).

SKILLS SESSION LENGTH

The length of the skills session will vary based upon the number of participants per instructor and the amount of equipment available.

The blended learning skills session is estimated to be 2 hours based upon the class size and equipment availability limits detailed in Chapter 3 above. Similar to the instructor-led course, the skill session was designed for a ratio of one instructor for six participants (1:6). The maximum permitted **ratio is 1 instructor to 9 participants (1:9)**, however that expanded class size may require additional time above and beyond what is listed in this manual.

SECTION B: BASIC LIFE SUPPORT FOR HEALTHCARE PROVIDERS LESSON PLANS

Course Introduction

Module 1: Knowledge and Skills

Module 2: Critical Thinking and Problem Solving

Module 3: Team Dynamics

Module 4: Certification Assessment

Course Introduction

Performance Objectives

During this session, participants will:

- Introduce themselves and get to know their instructor and fellow participants.
- Draw upon their experience to identify fears, concerns and stressors associated with emergency care and performing cardiopulmonary resuscitation.
- Learn about the expectations of the course and of themselves.
- Learn about the course design framework.
- Learn about the methods for assessment during the course.
- Understand the criteria for certification.

Materials, Equipment and Supplies

- Skill sheets (participant copy, one for each participant; see Appendix A)
- Name tags (optional)
- Basic Life Support for Healthcare Providers course presentation
- Basic Life Support for Healthcare Providers DVD (optional)
- Desktop/laptop computer with power source and speakers and projector **OR** television with a DVD player (if using the DVD)

Instructor Preparation

- Identify the expected number of participants for the class.
- Obtain the necessary materials, equipment and supplies.
- Set up the classroom to maximize teaching and learning.
- Review emergency and evacuation procedures as well as the location of the AED, if available, for the facility.
- Review the course and participant expectations.

Instructor's Note:

- *The modules described in this instructor's manual require classroom space suitable for class discussions and skill practice. The classroom should be well lit, well ventilated and comfortable in temperature, providing participants with a safe, comfortable and appropriate learning environment.*
- *Feel free to use the points exactly as written or adapt them to your teaching style throughout this instructor's manual.*

SLIDE 0-01: Course Introduction



Instructor's Note:

Briefly introduce yourself. Include your relevant background and identify yourself as an instructor certified by the American Red Cross.

SLIDE 0-02: Welcome and Introductions



Instructor's Note:

- Encourage each participant to briefly state his or her name and role as it relates to emergency services and/or healthcare, such as emergency medical technician, nurse or firefighter. (Be careful not to allow participants to give lengthy descriptions of their role.)
- In situations where you know the participants and their backgrounds, ensure that each of the participants are introduced to each other if they are not all familiar.

Have participants introduce themselves and answer the question about their biggest fear, challenge or frustration in caring for critically ill or injured patients.

Take answers then engage in a brief discussion about what a person can control and those things that are out of one's control.

SLIDE 0-03: Logistics



Instructor's Note:

Review the following:

- Course schedule
- Restrooms, water fountains, break areas
- Emergency procedures:
 - Location of the phone to call 9-1-1 or other means of notification
 - Location of automated external defibrillator (AED)
 - Emergency exits
 - Location for meeting in case of required evacuation
 - Other relevant emergency procedures

Instructor's Note: (Continued)

- Class safety:
 - Careful and proper use of equipment
 - Infection control, including standard precautions and manikin decontamination
 - Simulation of skill on other participants for obstructed airway (if covered)
- If any participants have concerns or issues that may affect their ability to take part in skills, tell them to speak with you privately at the conclusion of the course introduction or prior to the skills sessions.

Review the logistics for the course.

SLIDE 0-04: Course Expectations

Course Expectations

Goal: Improve patient outcomes through:

- Application of basic life support (BLS) knowledge and psychomotor skills
- Critical thinking and problem solving
- Teamwork and communication
- Feedback and coaching

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Instructor's Note:

Reinforce with participants that feedback and coaching are critical elements of learning so they should listen respectfully and keep an open mind.



The goal of this course is to help improve patient outcomes. We will do this through:

- Applying basic life support knowledge and psychomotor skills.
- Developing your ability to think critically and solve problems.
- Working as a resuscitation response team that will be tasked with communicating with patients, families, bystanders and each other to provide optimal care.

These are the core elements of this course and essential to successful resuscitations.

Throughout this course, you will have ample opportunity to demonstrate your skills as a member of a team as well as a team leader. You will also be getting feedback, not just from your instructor, but also from your peers.

SLIDE 0-05: Participant Expectations

Participant Expectations

- Attend the entire course
- Be on time when returning from breaks
- Actively participate in all components of the course



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Remind participants that they are expected to actively participate in all class discussion, skill practice sessions and scenarios.



The more you participate in discussion and ask questions, the more you will get out of this course.

SLIDE 0-06: Course Framework

Course Framework

- Discussion, hands-on skill practice, team-based scenarios
- Work in teams—not as individuals—for skills practice, scenarios and assessment
- Scenarios to develop critical thinking, problem solving, communication and team dynamics

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Instructor's Note:

- Inform participants that the course includes scenarios that will present them with challenges that they will have to address as a team. The scenarios are realistic and integrate each of the elements of critical thinking, problem solving, teamwork and leadership.
- For a more in-depth review of these elements, consider incorporating the optional topic “Core Course Elements” here. See Appendix C.

Review the key components of the course framework.



Say

The course involves discussion, hands-on skill demonstration and practice and team-based scenarios.

Throughout this course, you will work within a team environment and not as individuals.

The primary component of this course is a series of scenarios designed to not only test your ability to perform the basic life support psychomotor skills, but also to develop your skills around these four core course elements:

- **Critical Thinking:** Clear and rational thinking based on facts presented as well as your experience and expertise
- **Problem Solving:** Identifying solutions to issues or complications that arise using readily available resources
- **Communication:** A closed-loop communication process involving a sender, message and receiver
- **Team Dynamics:** Integration and coordination of all team members working together toward a common goal

SLIDE 0-07: Course Framework

Course Framework

- Reflection and debriefing
 - How did you feel the team leader responded?
 - What did you do well? What could you have done differently?
 - What problems did you encounter?
- Instructor and peer feedback/coaching
- Skill sheets



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Instructor's Note:

- Distribute copies of the skill sheets to the participants. Be sure to hand out the “participant copy” of the skill sheet.
- Also inform participants that these skill sheets can be found in the Basic Life Support for Healthcare Providers Handbook, available as a digital download or for purchase.



Say

At the end of each scenario, I will lead you in a reflection and debriefing activity.

These activities are designed to help you reflect on how you performed in the scenario individually AND to discuss how the team performed throughout the scenario.

This feedback will help you improve your basic life support skills AND they will help you learn from your teammates.

SLIDE 0-07: Course Framework (Continued)

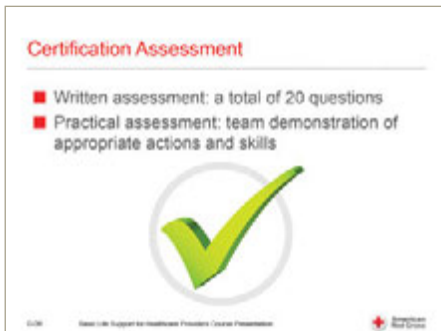
Remind participants that reflection and debriefing is not designed to criticize, but to help support the learning process.



Say

We will use the skill sheets to help you learn and demonstrate skills. These sheets include key skills and competencies that you will be assessed on in this course. You can use these to help you through all portions of the course except for the assessment.

SLIDE 0-08: Certification Assessment



Instructor's Note:

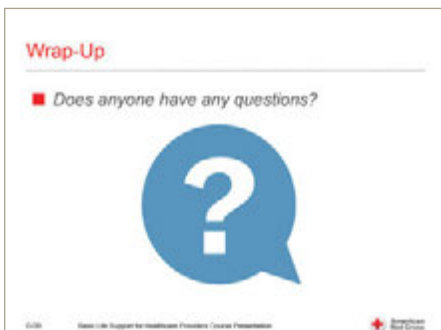
- *Emphasize to participants that they must successfully complete both assessments to be certified.*
- *If this is a blended learning course, participants will have already completed the written assessment online and you will only need to conduct the in-person skills session and assessment. Remind those participants that they must only complete the practical assessment for certification.*

Remind participants that in order to receive certification, they must:

- o Successfully complete the written assessment with a score of at least 80 percent, **and**
- o Demonstrate competency in all required skills as a team leader and as a team member.

Inform participants that the Basic Life Support for Healthcare Providers certification is valid for 2 years.

SLIDE 0-09: Wrap-Up



Conclude the course introduction by answering any questions that the participants may have about the course and what is to come next.

Module 1: Knowledge and Skills

Performance Objectives

During this session, participants will:

- Effectively assess an emergency situation and perform a scene size-up.
- Demonstrate how to check both a conscious and unconscious patient.
- Demonstrate how to give effective chest compressions.
- Demonstrate how to give effective ventilations to a patient experiencing a cardiac arrest and/or respiratory arrest, including using a pocket mask and bag-valve-mask (BVM) resuscitator.
- Demonstrate how to effectively operate an AED.
- Demonstrate how to effectively care for an obstructed airway.

Materials, Equipment and Supplies

- CPR manikins for the instructor (one adult and one infant manikin; one child if available and desired)
- CPR manikins for each team of two participants (one adult and one infant manikin; one child manikin – if available and desired)
- Pocket masks with a compatible one-way valve (one adult and one infant pocket mask for each participant; one child pocket mask for each participant if available and desired)
- BVM resuscitators (one adult BVM for each adult manikin; one infant BVM for each infant manikin; one child BVM for each child manikin if available and desired)
- AED training devices with adult and pediatric AED pads (one for each set of adult and infant manikins)
- Breathing barriers (one for each participant)
- Nonlatex disposable gloves
- Manikin decontamination supplies
- Blankets and/or mats (optional)
- Basic Life Support for Healthcare Providers course presentation
- Basic Life Support for Healthcare Providers DVD (optional)
- Desktop/laptop computer with power source and speakers and projector **OR** television with a DVD player (if using the DVD)

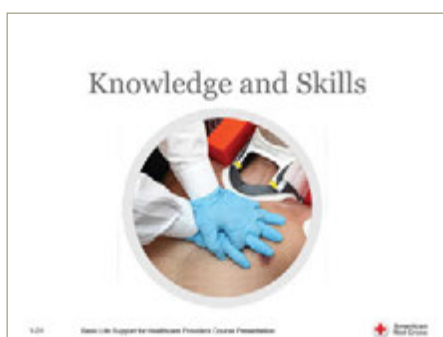
Instructor Preparation

- Identify the expected number of participants as well as their experience level and backgrounds.
- Obtain the necessary materials, equipment and supplies.
- Set up the classroom to maximize teaching and learning, and allow effective skill demonstration and practice.
- Review the skills to be demonstrated and practiced.
- Obtain the necessary number of skill sheets (both instructor and participant copies).
- Set up and test the desktop/laptop computer for the course presentation (or television and DVD player) prior to the start of the class.

Instructor's Note:

- The modules described in this instructor's manual require classroom space suitable for class discussions and skill scenarios to practice the skills. 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 skills area is not carpeted, consider providing some knee protection, such as folded blankets or mats, for use by participants or allow them to bring their own padding materials.
- When arranging the classroom for skills practice, ensure that there are an adequate number of manikins, pocket masks, BVMs and AED trainers with adult and pediatric pads for the number of participants in the class. Refer to the list in Materials, Equipment and Supplies.
- Arrange the skill areas so that each participant has ample room to view the screen for the course presentation, move about, practice the skill, ask questions and receive feedback on his or her performance. Also ensure that you and your fellow instructors can easily visualize the screen for the course presentation, move from station to station, and provide feedback and oversight at all times.

SLIDE 1-01: Knowledge and Skills



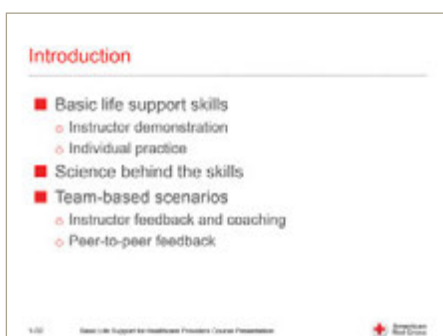
Instructor's Note:

If you have not already done so, distribute copies of the skill sheets to each participant to use as a guide.

When participants are practicing skills, provide feedback to ensure participants are performing the skills effectively.

Explain to participants that they will learn (or review) and practice basic life support skills during this portion of the course.

SLIDE 1-02: Introduction



Instructor's Note:

- For more information about the “why” behind the skills and the current science, refer participants to the International Liaison Committee on Resuscitation (ILCOR) Consensus on Science and Treatment Recommendations (CoSTR) website (www.ilcor.org), the 2010 American Heart Association Guidelines for CPR & ECC, and the Scientific Advisory Council of the American Red Cross “About the Science” tab on Instructor's Corner (www.instructorscorner.org/science/).
- Throughout this module, be sure each participant has time to practice the skill and that you have the opportunity to observe each participant's technique, providing corrective feedback when necessary.
- Use a timing device such as a clock or stopwatch to help you progress at the appropriate pace through the practice sessions.

This portion of the course uses a demonstration and practice approach where you (the instructor) will demonstrate the skill including highlighting proper technique and then participants will have time to practice each skill. Encourage participants to use the skill sheets to help reinforce the key actions for each skill.

As you are introducing a skill and demonstrating, you will also be explaining the science behind the skills.

Explain to participants that they will be working in teams of two and learning the skills in a team-based scenario setting.

Each team will have a manikin to practice on and during the practice time, you will be observing participants and providing feedback and coaching as necessary.

Explain to participants that in addition to your feedback and coaching, peer-to-peer feedback is critical to the learning process and they should provide constructive feedback to their fellow participants.

SLIDE 1-03: Introduction



Elicit any questions from the participants.

SLIDE 1-04: Duty to Respond



Instructor's Note:

- If the class consists of novice participants or participants that need a more in-depth review, consider incorporating the additional topics "The Emergency Medical Services System" and/or "Legal Considerations" here. See Appendix C.



Say

Before we get started, let's watch a short video on your duty to respond in an emergency.



Click to Play

SLIDE 1-05: Adult Response



Instructor's Note:

- At the conclusion of the video, make sure all participants are ready in skills practice areas in teams of two with an adult manikin, AED, pocket masks and an adult BVM.



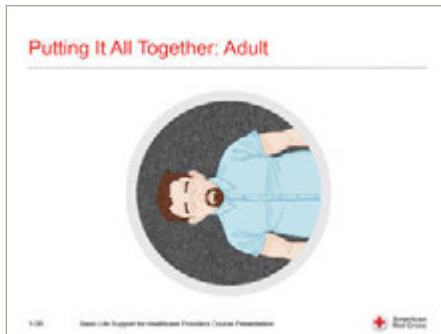
Say

Now that we've learned about our duty to respond, let's watch a short video that depicts a response to an adult patient in cardiac arrest. Once the video is complete, we will break the response into shorter parts for demonstration and practice.



Click to Play

SLIDE 1-06: Putting It All Together: Adult



Instructor's Note:

- Present a team-based scenario that is in context to the majority of the learners. Use the “dispatch” information from an EMS, hospital or first responder/healthcare setting.



Say

I am going to give you some information about a case that we will respond to as we go over the skills for adult CPR. As we learn new skills, we will use this same scenario as an introduction to help us practice all steps of the response.

Choose one of the following team-based scenarios and then read it aloud:



Say

- **EMS Setting:** You and your partner arrive at the local shopping mall in response to a call about a female collapsing near the food court. On your arrival, you start assessing the woman while your partner starts gathering information and clearing an area around the woman.
- **HOSPITAL Setting:** While you are making rounds on the medical-surgical unit, you notice that Mrs. Jones has not gotten out of bed this morning and has not touched her breakfast tray. You call out to her but she doesn't answer. As you approach her more closely, you notice that her skin is ashen and she is not moving.
- **FIRST RESPONDER/HEALTHCARE Setting:** While at a college basketball game, one of the players suddenly collapses and falls to the floor. You go over to help.

SLIDE 1-07: Scene Size-Up



Instructor's Note:

- Ensure participants understand that in class they should verbalize each component of the scene size-up each time they practice a case scenario. **Note:** If they are wearing gloves and goggles, they do not have to verbalize the PPE step.
- If the class consists of novice participants or participants who need a more in-depth review, consider incorporating the additional topic “Standard Precautions” here. See Appendix C.

Explain that the first step in an emergency response is a full scene size-up.

Emphasize that the key is to focus on the initial things learned when approaching a patient.



Demonstrate

Demonstrate a full scene size-up using the team-based scenario selected and the key actions listed below, verbalizing each component.

- **Scene Safety:** Use your senses such as hearing, sight and smell to get a complete picture of the situation to ensure that you, other rescuers, the ill or injured patients as well as any bystanders remain safe.
- **Standard Precautions:** Wear appropriate personal protective equipment (PPE) such as gloves and goggles
- **Number of Patients**
- **Nature of Illness/Mechanism of Injury**
- **Initial Impression:** Ask yourself:
 - o Are they awake? Moving? Do they look sick?
 - o Is there any **uncontrolled life-threatening bleeding**? If there is life-threatening bleeding present, it should be controlled as soon as possible if available resources exist such as additional rescuers or a tourniquet, if rescuers are trained in applying tourniquets.
- **Need for Additional Resources:** Could include 9-1-1, Advanced Life Support, Rapid Response Team, Code Team, etc.

SLIDE 1-08: Primary Assessment: Level of Consciousness

Primary Assessment: Level of Consciousness

- Tap and shout: "Are you okay?"
- AVPU
 - A: Alert
 - V: Verbal
 - P: Painful
 - U: Unresponsive
- Additional resources, if needed and not already called for

1-08 Basic Life Support for Healthcare Providers: Current Presentation American Red Cross

Explain that once the initial impression is completed, the primary assessment is next, which begins with determining whether the patient is conscious or unconscious.

Demonstrate

Demonstrate how to assess a patient's level of consciousness.

- Check for responsiveness by tapping the shoulder and shouting, "Are you okay?"
- Evaluate the patient's level of consciousness using the AVPU mnemonic:
 - A: Alert; fully awake
 - V: Verbal; responds to verbal stimuli
 - P: Painful; responds to painful stimuli
 - U: Unresponsive; does not respond
- Verbalize that the patient is not alert or does not respond and summon additional resources if you have not already done so.

SLIDE 1-09: Primary Assessment: Airway

Primary Assessment: Airway

- Supine position
- Head-tilt/chin-lift
- Modified jaw-thrust if head, neck, or spinal injury suspected



1-09 Basic Life Support for Healthcare Providers: Current Presentation American Red Cross

Explain that once participants have determined that the patient is unresponsive and summoned additional help, the next step is to evaluate the patient's airway.

Demonstrate

Demonstrate how to open a patient's airway.

- Explain that an unresponsive patient must be in a **supine (face-up) position** to effectively evaluate the airway. Explain that if the patient is unresponsive and face-down, you must roll him or her onto the back, taking care not to injure the patient.
- Highlight the steps for performing the **head-tilt/chin-lift technique**:
 - Press down on the forehead while pulling up on the bony part of the chin with two to three fingers of the other hand.
- Explain that if a head, neck, or spinal injury is suspected, the **modified jaw-thrust maneuver** should be used.
 - From above the patient's head, place your fingers on the angle of the jaw and thrust the jaw upward without moving the patient's neck.

SLIDE 1-10: Primary Assessment: Simultaneous Breathing and Pulse Check

Primary Assessment: Simultaneous Breathing and Pulse Check

- Look-Listen-Feel
- Carotid pulse
- At least 5 but no more than 10 seconds

1-10 Basic Life Support for Healthcare Providers: Current Presentation American Red Cross

Explain that once the airway is open, participants now need to **simultaneously** check for breathing and a pulse.

Demonstrate

Demonstrate how to simultaneously check breathing and pulse, emphasizing:

- **Look-Listen-Feel: LOOK** to see if the patient's chest rises, **LISTEN** for escaping air, and **FEEL** for air against the side of the cheek.
- **Check the Carotid Pulse:** On an adult, place two fingers in the groove on the side of the patient's neck being careful not to reach across the patient's neck and obstruct the airway.
- **Duration:** Count quietly for at least 5 but no more than 10 seconds.

SLIDE 1-11: Putting It All Together: Adult

Putting It All Together: Adult

Scene size-up

- Scene: a small crowd of bystanders has formed
- Patient(s): one patient, supine on the ground
- Nature of illness: sudden collapse
- Impression: appears to be unconscious
- Bleeding: no life-threatening bleeding
- Resources needed: AED, BVM and additional personnel

Primary assessment

- AVPU: unresponsive
- Airway: clear
- Breathing: agonal
- Pulse: none

4-11 Basic Life Support for Healthcare Providers / Course Presentation

Instructor's Note:

- *Work between the teams giving feedback and encourage peer-to-peer learning using the skill sheet. Pay particular attention to the need to send the other team member for additional resources, the method of opening the airway and the location and duration of the pulse check.*

Have participants work in their teams of two to practice the first two steps of the response using their skill sheets and manikins.

- Assign each team member to be a number 1 or number 2.
- Beginning with the team member 1s, reread the initial scenario and have all team members simultaneously complete the scene size-up and primary assessment using the information presented on the slide, including sending the other team member to get additional resources.
- Once all team member 1s have completed the skill, reset the teams and have team member 2s complete the scene size-up and primary assessment.

SLIDE 1-12: Primary Assessment Results

Primary Assessment Results

- Cardiac arrest vs. respiratory arrest
- Agonal breaths

Respiratory arrest

- No normal breathing
- Definitive pulse
- Care: 1 ventilation every 5 to 6 seconds for adults

4-12 Basic Life Support for Healthcare Providers / Course Presentation

Science Note:

Hyperventilation leads to increased intrathoracic pressure and a subsequent decrease in coronary filling and coronary perfusion pressures by putting pressure on the vena cava. This most commonly occurs when patients are being ventilated in respiratory arrest or when an advanced airway is placed during cardiac arrest.

Discuss how participants need to evaluate the information they obtained during the breathing and pulse check to determine the best care.

Explain that when there is no breathing but a definitive pulse, the patient is in respiratory arrest. If there is no breathing and no pulse, the patient is in cardiac arrest.

Describe agonal breaths—isolated or infrequent gasping that occurs in the absence of normal breathing in an unconscious patient; they occur after the heart has stopped beating and are NOT normal breathing.

Emphasize that if a patient is demonstrating agonal breaths, rescuers should care for the patient as if he or she is not breathing at all.

Explain that for adult patients in respiratory arrest, rescuers should give 1 ventilation every 5 to 6 seconds, with each ventilation lasting about 1 second and making the chest rise.

Emphasize that it is critical to avoid hyperventilation of the patient, which can happen by giving ventilations at a rate faster than 1 every 5 to 6 seconds.

Inform participants that we will discuss proper ventilation technique later.

SLIDE 1-13: Chest Compressions

Chest Compressions

If patient is unresponsive, not breathing and has no definitive pulse, begin CPR with 30 chest compressions.

High-quality chest compressions—adult patient

- Position on a firm, flat surface
- Expose the chest
- Position hands in the center of chest/lower half of sternum
- Keep arms straight with shoulders directly over hands
- Give compressions at a rate of 100 to 120 per minute
- Give compressions at a depth of at least 2 inches
- Allow full chest recoil

4-13 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Explain that patients who are unresponsive, have no normal breathing and no definitive pulse are in cardiac arrest and need CPR, which starts with immediate chest compressions.

Describe the importance of high-quality chest compressions, emphasizing the following:

- Place the patient on a **firm, flat surface** to allow for adequate compression (typically the ground or floor unless a bed or stretcher with a rigid board or CPR function is available).
- **Expose the chest** to ensure proper hand placement and ability to visualize recoil.
- **Correctly position the hands** with heel of one hand in center of chest on lower half of sternum with the other hand on top, fingers interlaced.
- Keep **arms straight** with elbows locked and **shoulders directly over the hands** for appropriate leverage.
- Give compressions at a rate of at least **100 compressions per minute to a maximum of 120 per minute**.
- Provide compressions **at least 2 inches deep** to promote adequate circulation.
- Allow the chest to **fully recoil** between each compression to allow blood to flow back into the heart.



Demonstrate

Demonstrate **30** high-quality chest compressions.

SLIDE 1-14: PRACTICE: Compressions

PRACTICE: Compressions

Perform 100 to 120 compressions in 1 minute.



4-14 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

Work between the teams giving feedback and encouraging peer-to-peer feedback. Pay particular attention to the ability to perform high-quality compressions.

Using team and team number assignments from before, instruct each participant to practice giving compressions for 1 minute.

- Using a timing device, have all team member 2s start together and run the timer for 1 minute. Team member 1s should help count compressions and provide peer feedback to their teammate.
- Once team member 2s have completed compressions, have teammates switch roles so team member 1s can practice giving high-quality compressions. Team member 2s should observe and provide feedback. Run the timer for 1 minute, reinforcing high-quality compressions.

SLIDE 1-15: Ventilations: One-Rescuer CPR



Explain that after performing compressions, the next step is to open the airway and give 2 mouth-to-mouth ventilations or 2 ventilations with a pocket mask, if available.

Emphasize that the total time for 2 ventilations should take approximately 5 to 7 seconds



Demonstrate

Demonstrate while describing how to give mouth-to-mouth ventilations. (Note: use a breathing barrier on your manikin):

- Open the airway using the head-tilt/chin-lift technique.
- Ensure a complete seal over the mouth while pinching the nose and give 2 ventilations lasting approximately **1 second long** each.
- Look for a chest rise while giving ventilations.
- Break the seal between ventilations to take a breath.



Demonstrate

Demonstrate while describing how to give ventilations using a pocket mask:

- Assemble the mask and valve.
- Open the airway using the head-tilt/chin-lift technique.
- Seal the mask over the mouth and nose starting from the bridge of the nose to the chin.
- Give 2 ventilations lasting approximately **1 second long** each.
- Look for a chest rise while giving ventilations.
- Break the seal between ventilations to take a breath.

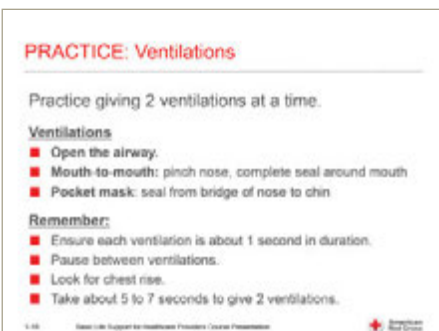
Explain that if the chest does not rise after the first breath, participants should reopen the airway, make a seal and try a second breath. If the breath is not successful, participants should move directly back to compressions and check the airway for an obstruction before attempting subsequent ventilations. If an obstruction is found, tell participants to remove it and attempt ventilations.

Remind participants to NEVER perform a blind finger sweep.

Emphasize the need to ventilate only until you see the chest rise (that is, avoid breathing past the point of airway resistance).

Reinforce the rationale for avoiding overventilation (gastric distension and emesis).

SLIDE 1-16: PRACTICE: Ventilations



Instructor's Note:

- Move around the room to observe each team during the practice session.
- Ensure infection control measures are being maintained such as switching breathing barriers.

Using team and team number assignments from before, have each participant practice giving mouth-to-mouth ventilations in sets of 2 and ventilations using a pocket mask in sets of 2. Each team member should have approximately 1 minute to perform 2 to 3 sets of ventilations using the mouth-to-mouth technique and 2 to 3 sets of ventilations using an adult pocket mask, ensuring they successfully achieve chest rise.

Have all team member 1s start together; team member 2s should provide peer feedback to their teammate. Once team member 1s have completed ventilations, have teammates switch roles so team member 2s can practice and team member 1s can observe and provide feedback.

Remind participants to help their teammates achieve effective ventilations.

SLIDE 1-17: Putting It All Together: Adult

Putting It All Together: Adult

Scene size-up

- Scene: a small crowd of bystanders has formed
- Patient(s): one patient, supine on the ground
- Nature of illness: sudden collapse
- Impression: appears to be unconscious
- Bleeding: no life-threatening bleeding
- Resources needed: AED, BVM and additional personnel

Primary assessment

- A/P/U: unresponsive
- Airway: clear
- Breathing: agonal
- Pulse: none

CPR: Chest compressions and ventilations

- Chest: exposed
- CPR cycle 1: 30 chest compressions, 2 ventilations with pocket mask
- CPR cycle 2: 30 chest compressions, 2 ventilations with pocket mask

1-17 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

- Encourage use of the skill sheets as reminders and encourage peer-to-peer feedback.
- Move between teams providing feedback and coaching as necessary.
- Ensure all scene size-up and primary assessment steps are completed before compressions begin.
- Each team member should take no more than 2 minutes to complete the scene size-up and progress through 2 cycles of CPR.

Refer back to the team-based scenario to have participants practice the response beginning with the same scene size-up and primary assessment but now continuing through 2 cycles of CPR (2 sets of 30:2).

- Beginning with team member 2s, reread the initial scenario and have all team member 2s simultaneously complete scene size-up, primary assessment, and 2 cycles of CPR using the information presented on the slide, including sending the other team member to get additional resources.
- Once all team member 2s have completed the steps, reset the teams and have team member 1s complete the scenario continuing through 2 cycles of CPR.

SLIDE 1-18: Adult AED

Adult AED

- Analyzes heart's electrical rhythm
- Delivers defibrillation (shock) to patients in sudden cardiac arrest with ventricular fibrillation (V-fib) or ventricular tachycardia (V-tach)
- Applied as soon as available; follow audio prompts

Steps:

1. Turn the AED on.
2. Ensure chest is exposed and dry.
3. Apply pads and plug in connectors (if necessary).
4. Analyze, pause CPR and hover for analysis.
5. Clear and shock, if indicated.
6. Continue CPR as soon as shock is delivered or AED prompts that no shock is indicated. Do not wait for CPR prompt.

1-18 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

It may be appropriate to have participants move back to their seats (if convenient) for the next set of slides that include demonstrations and discussion about AEDs and BVMs.

Science Note:

- Remind participants that for every 1 minute of delayed defibrillation, the rate of survival drops 7 to 10 percent.
- Inform participants that some AEDs allow for compressions post-analysis while charging. Rescuers may perform compressions from the time the shock advised prompt is noted through the time that the prompt to clear occurs, just prior to depressing the shock button. Emphasize the need to follow the manufacturer's recommendations and their local protocols and practices.

Explain what an AED is.



Demonstrate

Demonstrate how to use an AED using an AED trainer on an adult manikin following these steps:

- Turn the AED on. (Explain that if more than one rescuer is present, CPR should continue without interruption until the AED is ready to analyze.)
- Ensure that the chest is exposed and dry. Remove any medication patches with a gloved hand and remove or cut any undergarments that may be in the way.
- Apply pads and plug in connectors (if necessary). Pads need to adhere to the patient's bare chest for the shock to be delivered to the heart.
- Apply the appropriate-sized pads for the patient's age in the proper location on the chest:
 - Adult pads for adults and children over the age of 8 years or over 55 pounds
 - Pediatric pads for infants and children up to 8 years old or weighing less than 55 pounds
 - One pad on the upper right chest below the right clavicle to the right of the sternum; other pad on the left side of the chest at the mid-axillary line a few inches below the armpit
- Analyze: Pause CPR and hover for analysis.
 - Tell everyone to remain clear while the AED is analyzing to ensure accurate analysis.
 - Have the rescuer performing the compressions break contact and hover a few inches above the chest, but remain in position to resume compressions immediately after a shock is delivered or the AED advises that a shock is not indicated.

SLIDE 1-18: Adult AED (Continued)

- Clear and shock if indicated.
 - Ensure that everyone is clear of the patient before the shock is delivered.
 - Ensure the rescuer in the hover position is ready to resume compressions immediately after a shock is delivered or the AED advises that a shock is not indicated.
 - Remember that the AED delivers an electrical current that could injure anyone in contact with the patient.
- Deliver the shock by pressing the shock button, if indicated.
- Begin CPR as soon as a shock is delivered or prompted that no shock is indicated. **Do not wait** for the AED CPR prompt.

Once the AED trainer prompts to begin 5 cycles of CPR in between shock/analysis, use that time (approximately 2 minutes) to provide the following background information and answer any questions:

- An AED is a portable device that analyzes the heart's electrical rhythm, and if necessary prompts the rescuer to deliver a shock (also called a defibrillation) to a patient in sudden cardiac arrest with ventricular fibrillation or ventricular tachycardia.
- When a patient experiences a cardiac arrest, an AED should be applied as soon as one is readily available. Defibrillation can help the heart re-establish an effective rhythm.
- After the shock is delivered, compressions are immediately started and about 2 minutes of CPR are performed until the AED prompts that it is reanalyzing, the patient shows signs of return of spontaneous circulation (ROSC), or you are instructed by the team leader or more advanced personnel to stop.
- By using an AED early, the patient's chances of survival are greatly increased.

SLIDE 1-19: AED Safety



Instructor's Note:

- If you do not use the video, briefly explain the following safety issues. With or without the video, be sure to discuss the issue of excessive hair on the chest.
 - **Medication Patches:** Medication patches on the chest can create a hazard or interfere with analysis and defibrillation when AED pads are applied on top of them. Be sure to remove all medication patches on the chest that would interfere with pad placement using a gloved hand. Also make sure that all residue is wiped away before applying the pads.
 - **Water, Snow and Ice:** AEDs are generally safe to use in all weather situations, but water can pose a hazard. Ensure the patient's chest is dry and that the patient is not lying in a pool/puddle of water when applying a shock. It is especially important to ensure that rescuers are not in contact with water (a puddle or pool of water) when operating the AED. Light rain, mist, or snow does not generally pose a concern for AED operation.

Instructor's Note: (Continued)

- **Implanted Devices:** Some patients have implanted devices such as pacemakers and implantable cardioverter defibrillators (ICD). Often a scar is visible on the right upper chest in the general location where the right upper chest pad should be placed. Avoid placing the pad directly over this area; instead, place the pad about 1 inch away.
- **Excessive Hair:** Some patients have excessive hair on the chest that can interfere with the adherence of the AED pads and analysis. While it is rare that you would need to shave the chest it may be required. Many AED cases contain a razor to shave excessive hair. When only one set of AED pads exist, it is better to proactively shave the chest area where the pad(s) will be placed. When more than one set of pads or AEDs are available it may be prudent to use the first set of pads to determine if they will function without shaving. Keep in mind that removing a set of pads abruptly does not remove the majority of the chest hair and the chest hair should still be shaved prior to applying the second set of pads.



Say

Now, let's watch a short video on special safety considerations with AEDs.



Click to Play

SLIDE 1-20: Ventilations with a Bag-Valve-Mask: One Rescuer Vs. Two Rescuers

Ventilations with a Bag-Valve-Mask Resuscitator One Rescuer Vs. Two Rescuers

Technique

- Position and seal
- Ventilation volume: 400 to 700 ml
- Complications

Instructor's Note:

Enlist the help of a participant to serve as the second rescuer when demonstrating the use of a BVM.

Science Note:

Ventilation with a BVM is reserved for when multiple rescuers are available to treat the patient. While often used by a single rescuer, the evidence supports the use of a BVM with two rescuers: one to maintain an adequate seal and one to squeeze the bag to deliver the ventilation.

Explain that, when available, a bag-valve-mask (BVM) device may be used to provide ventilations. The BVM is reserved for when multiple rescuers are available to treat the patient. Ideally, two rescuers operate the BVM during a resuscitation effort with one rescuer maintaining a mask seal while the other rescuer squeezes the bag to provide the ventilation.



Demonstrate

Demonstrate while describing how to give ventilations using a BVM:

- Assemble the BVM as needed.
- Open the airway from the top of the head past a neutral position.
- Seal the mask by using an E-C hand position. The rescuer places both hands around the mask forming an E with the last three fingers on each hand and a C with the thumb and index finger around both sides of the mask. The goal is to make a complete seal by "lifting" the jaw into the mask while opening the airway.
- Squeeze the bag. The second rescuer squeezes the bag, depressing it about halfway to deliver between 400 and 700 milliliters (ml) of volume and making the chest rise. BVMs can hold greater than 1000 ml of volume and should never be completely deflated.

Remind participants that when giving ventilations, they should be looking for chest rise.

Emphasize the need for smooth and effortless ventilations, lasting for about 1 second in duration.

Inform participants that an increasing difficulty in bag-valve-mask ventilation may mean an increase in intrathoracic pressure, inadequate airway opening or other complications. Encourage them to share this information with the team so corrective actions can be taken.

SLIDE 1-21: PRACTICE: BVM Ventilations

PRACTICE: BVM Ventilations

Practice giving 2 ventilations at a time.

Ventilations

- Open the airway.
- Maintain mask seal.
- Squeeze bag.

Remember:

- Ensure each ventilation is about 1 second in duration.
- Pause between ventilations.
- Look for visible chest rise.
- Take 5 to 7 seconds for 2 ventilations.



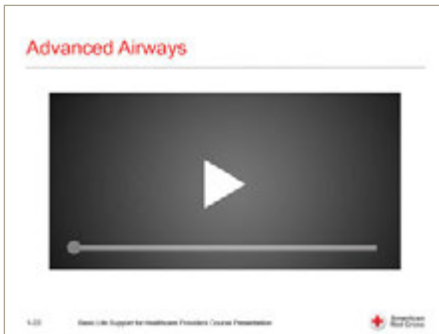
Instructor's Note:

- If the participants were in their seats, move them back to the practice area.
- Move around the room to observe each team during the practice session and provide coaching and feedback. Encourage peer-to-peer learning.
- As time permits, allow participants to practice using a BVM with one rescuer to determine the differences with making a seal and achieving chest rise.

Ensure each group has an adult BVM and then do the following:

- Using the same team and team number assignments, start with team member 1s at the head of the manikin to perform the mask seal.
- Have team member 2s squeeze the bag and perform 6 successful ventilations with the BVM (should take 1 to 2 minutes).
- Repeat the process with team member 2s sealing the mask and team member 1s squeezing the bag.

SLIDE 1-22: Advanced Airways



Instructor's Note:

Integration of an advanced airway into the CPR process by advanced-level providers should not interfere with the delivery of high-quality chest compressions. When an advanced airway is secured, there is no longer a reason to pause for ventilations. The rate of ventilations changes with an advanced airway to 1 ventilation every 6 to 8 seconds, as opposed to 1 ventilation every 5 to 6 seconds during respiratory arrest.



Now that we have practiced using a bag-valve-mask device, let's watch a short video discussing how ventilations change during CPR when a BVM is connected to an advanced airway.



SLIDE 1-23: Hyperventilation



Science Note:

During cardiac arrest, the body's metabolic demand for oxygen is decreased. Ventilations can cause an increase in intrathoracic pressure that decreases atrial/ventricular fill and also reduces coronary perfusion pressures. Hyperventilation further increases intrathoracic pressure and associated risks.

Instructor's Note:

- Often rescuers will confuse the rate of ventilations between respiratory arrest and CPR with an advanced airway. Remind participants about this common error, as well as the common errors of hyperventilation and overventilation by squeezing the bag too deeply due to an increased level of urgency during the resuscitation.
- Emphasize that team leaders should pay particular attention to this phenomenon and give feedback to rescuers responsible for ventilations throughout the resuscitation.



Why shouldn't we hyperventilate a patient with an advanced airway?

Elicit answers from the participants for a few moments. Answers should include the concepts of increased intrathoracic pressure and decreased coronary filling and decreased coronary perfusion pressures as discussed during the respiratory arrest topic.

Explain to participants that hyperventilation is a common complication when an advanced airway is in place and it is critical for the entire team to recognize when the patient is being ventilated too quickly (1 ventilation faster than every 6 to 8 seconds). Team leaders should be mindful of this concern and provide feedback throughout the resuscitation.

Remind participants not to confuse the ventilation rate for respiratory arrest—1 ventilation every 5 to 6 seconds—with the ventilation rate of 1 ventilation every 6 to 8 seconds during CPR with an advanced airway in place.

SLIDE 1-24: Two-Rescuer CPR

Two-Rescuer CPR

- Coordination
- Communication
- Fatigue
- Interruptions minimized

Remember:

- Chest compressions are the first priority.
- Initial rescuer continues one-rescuer CPR until additional rescuers and equipment are ready.
- The initial rescuer is the team leader unless leadership is transferred.

1.24 Basic Life Support for Healthcare Providers / Current Presentation

Instructor's Note:

- Enlist the aid of a volunteer to be a second rescuer and demonstrate two-rescuer CPR.
- In many healthcare settings, more than two rescuers may be available during a resuscitation. While the progression demonstrated in the class moves from one rescuer to two rescuers, often two or more will arrive together. If only two rescuers arrive, ensure that additional resources are called and one of the rescuers gets the AED. If more than two arrive together, two-rescuer CPR can begin after completion of the primary assessment with one rescuer providing ventilation and one providing compressions, changing after every 5 cycles.

Instructor's Note: (Continued)

- It is not possible within the timing of the module to demonstrate multiple variations of rescuers and equipment. The principles of strong coordination and communication are essential as well as a focus on high-quality CPR with minimal interruptions. Chest compressions are always the first priority.
- The transfer of leadership will be discussed in the team dynamics module.



Say

Now that we have learned how to provide CPR as a single rescuer as well as how to use an AED and a BVM, we will focus on your role as a healthcare provider working with other professionals to provide care in a team environment.

Emphasize the critical need to ensure that efforts are well coordinated as more rescuers arrive at the patient's side, including the need to communicate and provide support to each other from the time the second rescuer enters the scene.

Emphasize to participants that rescuer fatigue during CPR is real and that no rescuer should provide compressions for longer than 2 minutes, if at all possible. Stress the need to put a plan in place for rescuers to switch whenever fatigue is recognized, thus minimizing interruptions of chest compressions.



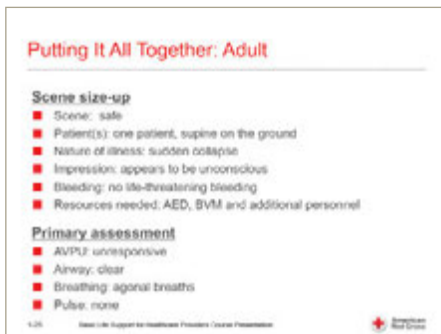
Demonstrate

Demonstrate while describing how to coordinate the arrival of additional rescuers when one-rescuer CPR is in progress.

- **Communicate** upon arrival of the second rescuer who you are and what actions have been taken and what resources are available.
- **Ensure** that additional resources have been requested as appropriate, including calling for an AED.
- **Plan** on how to change compressors and apply an AED if available. If the AED is available, it is applied by the second rescuer while the first rescuer continues CPR (positions change upon the first AED analysis).
- **Position** the second rescuer on the opposite side of the patient's chest if possible.
- **Signal** the timing for a compressor change by raising your voice during the last 5 compressions of the verbal compression count to prepare the rescuer (e.g., "Change 1..2..3...23...24...**25...26...27...28...29...30**")
- **Ventilate:** the first rescuer moves to give 2 ventilations with a pocket mask while the second rescuer gets into position to provide chest compressions.
- **Compressions:** the second rescuer provides compressions after the second ventilation is delivered and ensures a verbal count to prepare the first rescuer to give ventilations at the end of each cycle.
- **Continue CPR:** rescuers continue with a total of 5 cycles of CPR (30:2). Upon the start of the 5th cycle, the compressor calls for a change and increases the volume of the verbal compression count for the last 5 compressions of the cycle. (If an AED has been applied, the changes will occur on the analysis. This should be anticipated and communicated by the team leader.)
- **Change:** the compressor moves to give 2 ventilations while the other rescuer moves into position to provide compressions.

Explain that if additional rescuers are available, they may be assimilated into the compressor or ventilator roles, allowing the team leader to monitor performance and ensure that high-quality CPR is maintained. Additionally, if a BVM is available, ideally it is prepared by a third rescuer positioned at the top of the patient's head and used upon completion of a cycle of chest compressions, with the first rescuer squeezing the bag while the third rescuer maintains an open airway and seals the mask.

SLIDE 1-25: Putting It All Together: Adult



Instructor's Note:

- *Separate the class into teams of three participants for this “putting it all together” practice session when possible.*
- *Ideally this session will include two teams of three participants with one manikin, AED trainer and BVM per team. Each team member should have his or her own PPE and pocket mask. It is better to have a team of two than a team of four rescuers so that all team members can fully participate in the practice scenario.*
- *Encourage use of the skill sheets as reminders and encourage peer-to-peer feedback.*
- *Move between teams, providing feedback and coaching as necessary.*
- *Ensure all scene size-up and primary assessment steps are completed before compressions begin.*
- *Choose the team-based scenario that is in context to the majority of the participants. Use the “dispatch” information from an EMS, hospital or first responder/healthcare setting.*



Now it's time to put it all together. I am going to break you up into new teams of three rescuers and select a team leader for the team. *[If you have an odd mix, state that you will break up participants into new teams of two or three rescuers.]* Have your pocket mask ready, as well as your skill sheets to guide you through the scenario.

Assemble each team near an adult manikin with an AED and adult BVM off to the side.

Explain that you will introduce a scenario for the team to respond to.

- The team leader should perform the scene size-up, including sending the other team member(s) to get additional resources (additional personnel, the AED and a BVM) and the primary assessment.
- The team leader should initiate CPR while waiting for the team members to return with the AED and BVM. You will prompt the team members' return (all resources arrive at the 20th compression of the 2nd cycle of CPR).
- The teams should progress through the scenario until the second AED analysis delivers a “no shock advised” message and CPR is resumed, which is when you will prompt that the patient shows signs of return of spontaneous circulation (ROSC).

Choose one of the following team-based scenarios that is appropriate for the background of the team leader and then read the scenario aloud:



EMS Setting: You and your partner arrive at the local shopping mall in response to a call about a female collapsing near the food court. On your arrival, you start assessing the woman while your partner starts gathering information and clearing an area around the woman.

HOSPITAL Setting: While you are making rounds on the medical-surgical unit, you notice that Mrs. Jones has not gotten out of bed this morning and has not touched her breakfast tray. You call out to her but she doesn't answer. As you approach her more closely, you notice that her skin is ashen and she is not moving.

FIRST RESPONDER/HEALTHCARE Setting: While at a college basketball game, one of the players suddenly collapses and falls to the floor. You go over to help.

SLIDE 1-26: CPR Differences: Adult and Child

CPR Differences: Adult and Child		
	Adult	Child (age 1 through onset of puberty)
Calling for additional resources	Immediately, when possible (100)	At least 1 minute or 100 seconds before leaving for help
Airway: Head-tilt/chin-lift	Open mouth position	Infants: open mouth position
Ventilations: Respiratory arrest	1 ventilation every 5 to 6 seconds	1 ventilation every 3 seconds
Compression rate	100 to 120 per minute	100 to 120 per minute
Compression depth	At least 2 inches	At least 2 inches
Compression/ventilation Ratio	• 1 Rescuer – 30:2 • 2 Rescuers – 15:2	• 1 Rescuer – 30:2 • 2 Rescuers – 15:2
AED pads	Adult pads, age 1 to 8 years, weight > 55 pounds	• Child/infant, age 1 to 8 years, weight < 55 pounds • Adult pads if child/infant pads not available
AED and chest compressions	• Right pad on upper right chest, right nipple • Left pad on lower left chest, left nipple • Left side of chest pad below the right pad	• Child/infant pads: age 1 to 8 years, weight < 55 pounds • Adult pads if child/infant pads not available • Right pad on upper right chest, right nipple • Left pad on lower left chest, left nipple • Left side of chest pad below the right pad

Science Note:

The majority of pediatric cardiac arrests are a result of a respiratory cause such as a breathing problem (asthma/anaphylaxis), an obstructed airway, drowning or an injury. As such, ventilations and appropriate oxygenation are important for a successful resuscitation. In these situations, laryngeal spasm may occur, making passive ventilation during chest compressions minimal or non-existent.

OPTION: Based on local protocol or practice, it is permissible to provide 2 ventilations prior to initiating CPR after the primary assessment if a hypoxic event is suspected.

Instructor's Note:

- A child-specific “putting it all together” practice session may be added based on time and participants’ learning needs. Follow the outline for the adult putting it all together scenario and use the child skill sheets.



While quite similar, I want to take a few moments to talk about the subtle differences between adult CPR and child CPR.

Discuss the following:

- Age Differences:** A child is considered to be from the age of 1 to the onset of puberty, which is defined as breast development for girls and underarm hair development for boys.
- Consent:** For minors, consent from a parent or guardian is required when the parent or guardian is present. Rescuers must state who they are, what they observe and what they plan to do when asking for permission to treat a minor. If there is no parent or legal guardian present, consent is implied in life-threatening situations.
- Airway Opening:** The head-tilt/chin-lift technique is used, positioning slightly past a neutral position as compared to a more extended position for adults.
- Compression Position:** Hand position is the same as for an adult on the lower half of the sternum.
- Compression Depth:** Depth is **ABOUT** 2 inches instead of **AT LEAST** 2 inches.
- Compression Rate:** Rate is the same as for an adult—between 100 to 120 per minute.
- Compression to Ventilation Ratios:**
 - One-rescuer CPR: 30:2
 - Two-rescuer CPR: 15:2
- Single Rescuer:** When alone, rescuer performs about 2 minutes of CPR prior to leaving a child to call for additional resources unless it was a witnessed arrest and the child has a known cardiac history.
- AED Pads:**
 - Age from 1 to 8 years or weight less than 55 pounds: pediatric pads
 - Age over 8 years or weight greater than 55 pounds: adult pads
 - If no pediatric pads available, adult pads can be used, but ensure they do not touch or use the anterior/posterior placement

Explain that for adult patients in respiratory arrest, rescuers should give 1 ventilation every 5 to 6 seconds, lasting about 1 second and creating a chest rise. For children and infants, rescuers should give 1 ventilation every 3 seconds, lasting about 1 second and creating a chest rise.

SLIDE 1-27: CPR Differences: Adult, Child and Infant

	Adult	Child (age 1 through onset of puberty)	Infant (prior to age 1)
Calling for additional assistance	Immediately, from previous 1st aid	1 minute of CPR before calling in 2nd	1 minute of CPR before calling in 2nd
Airway: Head-tilt/chin-lift	Place rescuer's hand on forehead	Head up position	Head up position
Ventilations: Respiratory arrest	1 ventilation every 1 1/2 s	1-ventilator every 1 second	1 ventilation every 1 second
Compression rate	100 to 120 per minute	100 to 120 per minute	100 to 120 per minute
Compression depth	At least 1.5 inches	At least 2 inches	At least 1.5 inches
Compression/cycle ratio	1:1 (compression-30:2)	2:1 (compression-30:2)	1:1 (compression-30:2)
AED pads	Adult pads, age 1 to 9 years, weight 50 lbs	• Adult pads, age 1 to 9 years, weight 50 lbs • Adult pads in child pads not available	• Adult pads (adult age 1 to 9 years) • Child pads (adult age 1 to 9 years) • Child pads (adult age 1 to 9 years)
AED pad placement	• Upper right chest • Lower left chest (not right side of chest) • Left side of chest just below right arm	• Upper right chest • Right chest to right of right arm • Left side of chest just below right arm • 9 pads (not hearting each other - anterior-posterior placement)	• Anterior-posterior placement • Middle of chest • Back between navel and

OPTION: Based on local protocol or practice, it is permissible to provide two ventilations prior to initiating CPR after the primary assessment if a hypoxic event is suspected.



While adult and child CPR techniques are quite similar, the techniques for delivering CPR to an infant are different.

Review the following points:

- **Age Differences:** An infant is considered to be from birth to the age of 1 year.
- **Consent:** For minors, consent from a parent or guardian is required when present. Rescuers must state who they are, what they observe and what they plan to do when asking for permission to treat a minor. If there is no parent or legal guardian present, consent is implied.
- **Airway Opening:** The head-tilt/chin-lift technique is used, positioning at a neutral position (also called a sniffing position).
- **Compression Position:** Two fingers are positioned on the lower half of the sternum about 1 finger-width below the nipple line.
- **Compression Depth:** Depth is **ABOUT** 1½ inches.
- **Compression Rate:** Rate is the same as for an adult and child (between 100 and 120 per minute).
- **Compression to Ventilation Ratio:**
 - o One-rescuer CPR: 30:2
 - o Two-rescuer CPR: 15:2
- **Single Rescuer:** Rescuer performs about 2 minutes of CPR prior to leaving an infant to call for additional resources unless it was a witnessed arrest and the child has a known cardiac history.
- **AED Pads:**
 - o Age less than 1 year: pediatric pads
 - o If no pediatric pads are available, adult pads can be used
 - o Anterior/posterior placement

SLIDE 1-28: Infant Team Response



Instructor's Note:
At the conclusion of the video, have all participants get ready in the skills practice area in their original teams of two with an infant manikin, infant pocket mask, infant BVM and an AED with pediatric pads.

At the conclusion of the video, have all participants get ready in the skills practice area in their original teams of two with an infant manikin, infant pocket mask, infant BVM and an AED with pediatric pads.



Now that we have learned about the differences for caring for an infant in cardiac arrest, let's watch a short video that depicts a team response to this emergency. Once the video is complete, we will break the response into shorter parts for demonstration and practice.



Click to Play

SLIDE 1-29: Putting It All Together: Infant



Instructor's Note:

Select a team-based scenario that is in context to the majority of the participants. Use the "dispatch" information from an EMS, hospital or first responder/healthcare setting scenario.



I want you to think about the information in the following team-based scenario and how your response may differ as compared to an adult patient.

Explain that the scenario will be the premise of the demonstration and practice sessions to follow.

Choose one of the following team-based scenarios as determined by the backgrounds of the majority of participants and then read the scenario:

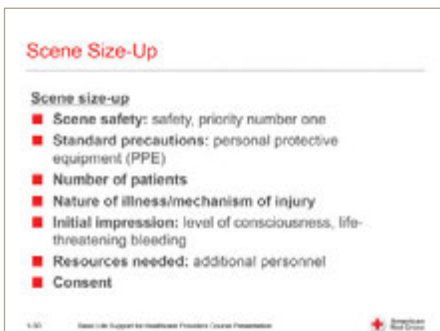


EMS Setting: You arrive at the home of the parents of an 8-month-old infant. The parents called 9-1-1 because they weren't able to wake their infant and then noticed that he wasn't breathing. You came in with your jump kit as your partner finished gathering the rest of the equipment and stretcher. You find the infant lying face-up in his crib.

HOSPITAL Setting: Mrs. Lenny, the mother of a 3 month old on the pediatric floor, tells you that she is going downstairs to get a cup of coffee. About 10 minutes later, Mrs. Lenny arrives back on the unit. Suddenly, you hear her scream. As you enter the room, Mrs. Lenny tells you that her baby isn't moving or breathing.

FIRST RESPONDER/HEALTHCARE Setting: A new mom is in the coffee shop with her 6-month-old infant. As she reaches down to put away a toy, she notices that her infant is not moving and not breathing. She screams out for help and you respond.

SLIDE 1-30: Scene Size-Up



Instructor's Note:

- Ensure participants understand that in class they should verbalize each component of the size-up each time they practice a team-based scenario. **Note:** If they are wearing gloves and goggles, they do not have to verbalize the PPE step.

Remind participants that the first step in an emergency response is a full scene size-up and that the key actions that are part of a scene size-up are listed on slide 1-30.

Highlight the need to gain consent from a parent or legal guardian (if present) before providing care.

Discuss the need to communicate with family and bystanders and the potential for significant emotional responses based on caring for an infant.



Demonstrate

Demonstrate a full scene size-up based on the team-based scenario chosen above and the actions listed.

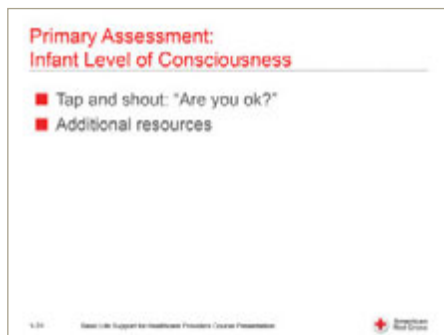
Verbalize each component:

- Scene Safety:** Use your senses such as hearing, sight and smell to get a complete picture of the situation to ensure that you, other rescuers, the ill or injured patients as well as any bystanders remain safe
- Standard Precautions:** Wear appropriate personal protective equipment (PPE) such as gloves and goggles

SLIDE 1-30: Scene Size-Up (Continued)

- **Number of Patients**
- **Nature of Illness/Mechanism of Injury**
- **Initial Impression:** Ask yourself:
 - o Is the infant awake? Is the infant moving? Does he or she look sick?
 - o Is there any **uncontrolled life-threatening bleeding**? If there is life-threatening bleeding present, it should be controlled as soon as possible if available resources exist (such as additional rescuers or a tourniquet, if rescuers are trained in applying tourniquets).
- **Need for Additional Resources:** Could include 9-1-1, Advanced Life Support, Rapid Response Team, Code Team, etc.
- **Consent:** State who you are, what you see and what you plan to do, then ask for permission to treat.

SLIDE 1-31: Primary Assessment: Infant Level of Consciousness



Science Note:

AVPU is not as accurate in infants and children as it is in adults. The pediatric assessment triangle—Appearance, Effort of breathing and Circulation—can give you a more accurate depiction of an infant's status. For the purposes of this course, the recognition of an unresponsive infant is the priority.

Remind participants that once the initial impression is completed, the next step is the primary assessment of the infant, which begins with determining whether the infant is conscious or unconscious.

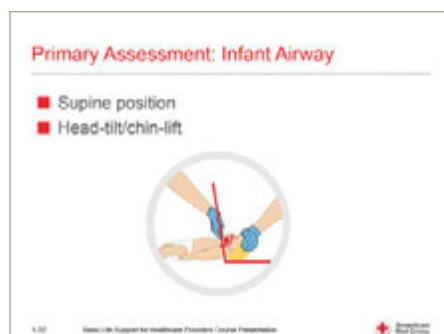


Demonstrate

Demonstrate while describing the differences in the primary assessment of an infant:

- Check for responsiveness by tapping the foot and shouting, "Are you okay?" If the infant's name is known, use it.
- Verbalize that the infant is not alert or does not respond and summon additional help if you have not already done so.

SLIDE 1-32: Primary Assessment: Infant Airway



Explain that once it is determined that the infant is unresponsive and additional help has been summoned, the next step is to evaluate the infant's airway.



Demonstrate

Demonstrate while describing how to open the infant's airway:

- **Supine Position:** Explain that an unresponsive infant must be in a supine (face-up) position to effectively evaluate the airway. Explain that if the infant is unresponsive and face-down, you must roll him or her onto the back, taking care not to cause injury.
- **Head-Tilt/Chin-Lift Technique:**
 - o Press down on the forehead while pulling up on the bony part of the chin with two to three fingers of the other hand, being sure not to press into the soft tissues under the chin and neck.
 - o Do not hyperextend the neck when opening the airway. The head should come to a neutral position, ensuring the chin is off the chest.

Explain that infants' heads are proportionally larger to body size than an adult. This can create an anatomical obstruction in the unresponsive infant as gravity moves the shoulders to the lowest point possible, causing the base of the tongue to obstruct the airway.

SLIDE 1-33: Primary Assessment: Infant Breathing and Pulse Check

**Primary Assessment:
Infant Breathing and Pulse Check**

- Look-Listen-Feel
- Brachial pulse
- At least 5 but no more than 10 seconds



1-33 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

OPTION: Based on local protocol and practice, rescuers may provide 2 initial rescue breaths prior to performing compressions for an infant if a hypoxic event is suspected after the breathing and pulse check.

Explain that the breathing and pulse check is similar as in an adult once the airway is open.

Emphasize the need to **simultaneously** check for breathing and a pulse. Note that in an infant, the brachial pulse, located on the inside of the upper arm, is used.



Demonstrate

Demonstrate how to simultaneously check breathing and pulse:

- **Look-Listen-Feel:** **LOOK** to see if the infant's chest rises, **LISTEN** for escaping air, and **FEEL** for air against the side of the cheek.
- **Brachial Pulse:** For an infant, check the brachial pulse with two fingers on the inside of the upper arm. Be careful not to use your thumb because it has its own detectable pulse. You will need to expose the arm to accurately feel a brachial pulse.
- **Duration:** Count quietly for at least 5 but no more than 10 seconds.

SLIDE 1-34: Putting It All Together: Infant

Putting It All Together: Infant

Scene size-up

- Scene: a nervous parent displaying some emotion
- Patient(s): one infant in the parent's arms
- Nature of illness: suddenly stopped breathing
- Impression: appears to be unconscious
- Bleeding: no life-threatening bleeding
- Resources needed: AED, infant BVM and additional personnel

Primary assessment

- Unresponsive
- Airway: clear
- Breathing: no normal breathing
- Pulse: none

1-34 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

- Work between the teams, giving feedback and encouraging peer-to-peer learning using the skill sheet. Pay particular attention to the need to send the other team member for additional resources, the need to gain consent, the method of opening the airway and the location and duration of the pulse check.

Have participants work in their teams of two using their team number assignments to practice performing the scene size-up through the primary assessment using the team-based scenario and their skill sheets.

- Start with team member 1s, who complete the assessment using the information as presented on the slide.
- Once all team member 1s have completed the skill, reset the teams and have team member 2s act as the team leader and complete the assessment.

SLIDE 1-35: Chest Compressions: Infant—One-Rescuer CPR

Chest Compressions: Infant—One-Rescuer CPR

If infant is unresponsive, not breathing and has no definitive pulse, begin CPR with 30 chest compressions.

High-quality chest compressions

- Position on a firm, flat surface (may be above the ground).
- Expose the chest.
- Position the fingers in the center of chest on the lower half of sternum, about 1 finger width below the nipple line.
- Give compressions at a rate of 100 to 120 per minute.
- Give compressions at a depth of about 1½ inches.
- Allow full chest recoil.



4.36 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

- Two consecutive fingers (typically the index and middle fingers or the middle and ring fingers) should be used to perform chest compressions for an infant. Fingers more similar in length tend to be preferred by rescuers, especially when providing several cycles of CPR. For one-rescuer infant CPR, rescuers should not use their thumb to perform compressions.

Explain that infants who are unresponsive, have no normal breathing and no definitive pulse are in cardiac arrest and need CPR, which starts with immediate chest compressions.

Describe the importance of high-quality chest compressions, emphasizing the following:

- Position the infant on a **firm, flat surface** to allow for adequate compression. The surface may be above the ground on a firm or sturdy table or counter
- **Expose the chest** to ensure proper hand placement and ability to visualize recoil
- **Correctly position the fingers** with two fingers in center of the chest on the lower half of the sternum, about 1 finger-width below the nipple line
- Give compressions at a rate of at least **100 compressions per minute to a maximum of 120 per minute**
- Provide compressions **about 1½ inches deep** to promote adequate circulation
- Allow the chest to **fully recoil** between each compression to allow blood to flow back into the heart



Demonstrate

Demonstrate **30** high-quality chest compressions.

SLIDE 1-36: Ventilations: Infant—One-Rescuer CPR

Ventilations: Infant—One-Rescuer CPR

- Open the airway.
- Two techniques for one rescuer:
 - Mouth-to-mouth-and-nose: complete seal around the mouth and nose
 - Pocket mask: assemble the infant mask and valve; seal over mouth and nose from the bridge of the nose to the chin
- Key actions:
 - Duration: 1 second
 - Chest rise
 - Break between for a breath
 - Total time 5 to 7 seconds
- Overventilation

4.37 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Explain that after performing compressions, the next step is to open the airway and give two ventilations using either mouth-to-mouth and nose or a pocket mask if available.

Emphasize that the total time for 2 ventilations should take approximately 5 to 7 seconds.



Demonstrate

Demonstrate while describing how to give mouth-to-mouth-and-nose ventilations. (Note: use a breathing barrier on your manikin):

- Open the airway using the head-tilt/chin-lift technique.
- Ensure a complete seal over the mouth and nose and give 2 ventilations lasting approximately **1 second long** each.
- Look for chest rise.
- Break the seal between ventilations to take a breath.

SLIDE 1-36: Ventilations: Infant—One-Rescuer CPR (Continued)



Demonstrate

Demonstrate while describing how to give ventilations using an infant pocket mask:

- Assemble the mask and valve.
- Open the airway using the head-tilt/chin-lift technique to a neutral position.
- Seal the mask over the mouth and nose, starting from the bridge of the nose to the chin.
- Look for chest rise.
- Break the seal between ventilations to take a breath.

Explain that if the chest does not rise after the first breath, participants should reopen the airway, make a seal and try a second breath. Just as for an adult, if the breath is not successful, move directly back to compressions and check the airway for an obstruction before attempting subsequent ventilations. If an obstruction is found, tell participants to remove it and attempt ventilations. **Remind participants to NEVER perform a blind finger sweep.**

Emphasize the need to ventilate only until you see the chest rise (that is, avoid breathing past the point of airway resistance).

Reinforce the rationale for avoiding overventilation (gastric distension and emesis).

SLIDE 1-37: PRACTICE: Infant Compressions and Ventilations

PRACTICE: Infant Compressions and Ventilations

Perform 2 cycles of compressions and ventilations.

- Mouth-to-mouth-and-nose
- Infant pocket mask

1-37 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

- *Move around the room to observe each team during the practice session.*
- *Work between the teams, giving feedback and encouraging peer-to-peer learning using the infant skill sheet.*
- *Ensure infection control measures are being maintained (such as switching breathing barriers and/or faces between practice groups).*

Explain that participants will now practice providing compressions and ventilations together for an infant in cardiac arrest.

Using the same team and team member assignments from before, begin with team member 2s, positioned at the side of the manikin.

- Have each participant practice providing 2 cycles of CPR with 30 chest compressions using two fingers about 1 finger-width below the nipple line in the center of the chest followed by 2 ventilations, sealing over the mouth and nose.
- After all team member 2s have finished, have them remain at the manikin's side and deliver another 2 cycles of CPR using a pocket mask for ventilations.
- Encourage team member 1s to provide peer-to-peer coaching and feedback using the Infant skill sheet as a guide.
- Once team member 2s have completed the skill, switch and have team member 1s complete the practice following the same progression.

SLIDE 1-38: Putting It All Together: Infant

Putting It All Together: Infant

Scene size-up

- Scene: concerned parent
- Patients: one infant in parent's arms
- Nature of illness: suddenly stopped breathing
- Impression: appears to be unconscious
- Bleeding: no life-threatening bleeding
- Resources needed: AED, infant BVM and additional personnel

Primary assessment

- A&P: unresponsive
- Airway: clear
- Breathing: absent
- Pulse: none

CPR: Chest compressions and ventilations

- Chest exposed
- CPR cycle 1: 30 chest compressions, 2 ventilations with pocket mask
- CPR cycle 2: 30 chest compressions, 2 ventilations with pocket mask

4-58 Basic Life Support for Healthcare Providers Course Presentation

Instructor's Note:

- Encourage use of the infant skill sheets as reminders and encourage peer-to-peer feedback.
- Move between teams providing feedback and coaching as necessary.
- Ensure all scene size-up and primary assessment steps, including consent, are completed before compressions begin.
- Check to make sure that each team member takes no more than 2 minutes to complete the task, from scene size-up through 2 cycles of CPR.

Refer back to the infant scenario used previously for scene size-up and primary assessment and inform participants that they will now be practicing the response beginning with the same scene size-up and primary assessment and continuing through 2 cycles of infant CPR (2 sets of 30:2).

- Reread the team-based scenario selected.
- Have team member 1s simultaneously complete scene size-up, primary assessment, and 2 cycles of CPR using the information presented, including sending the other team member to get additional resources. They should use a pocket mask for ventilations.
- Once all team member 1s have completed the task, reset the teams and have team member 2s complete the scenario through 2 cycles of CPR.

SLIDE 1-39: AED: Infant Pads

AED: Infant Pads

Pad placement

- Anterior/posterior
- If no pediatric pads, okay to use adult pads



4-59 Basic Life Support for Healthcare Providers Course Presentation

Explain that the operation of the AED for infants is the same as for an adult with the exception of pad placement.



Demonstrate

Demonstrate while describing the placement of infant AED pads.

- Anterior pad: center of chest
- Posterior pad: center of back between the scapulae

Explain that infant pads are always placed in the anterior/posterior position with the anterior pad placed in the center of the chest and the posterior pad placed in the center of the back between the scapulae. In order to place the posterior pad, the infant must be turned on the side and the back exposed to apply the pad. This should be done as quickly as possible to avoid interruptions of chest compressions.

Inform participants that if no pediatric pads are available, adult pads may be used for infants in the same way as for a child between the ages of 1 and 8 years. However, the pads must be applied in the anterior and posterior positions. Remind participants that at no time should pediatric pads be used for adult patients.

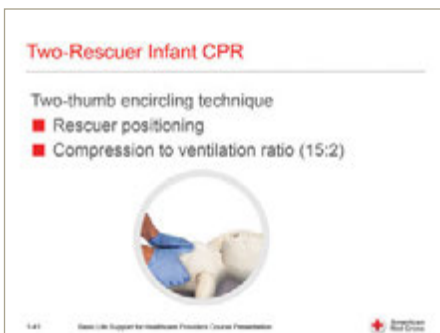
SLIDE 1-40: Two-Rescuer Infant CPR



Let's watch a short video demonstrating the essential components of performing two-rescuer CPR on an infant.



SLIDE 1-41: Two-Rescuer Infant CPR



Instructor's Note:

- *Enlist the aid of a volunteer to be a second rescuer and demonstrate two-rescuer CPR for an infant.*



Demonstrate while describing how to perform the two-thumb encircling technique using the following:

- **Show** the head and foot positioning for the two-thumb encircling technique. Focus on placing the infant on a firm, flat surface and the need to be able to work around the infant when changing positions.
- **Specify** the location for the thumbs: side-by-side in the center of the chest about 1 finger-width below the nipple line with the fingers supporting the infant's back.
- **Remind** participants that when performing two-rescuer infant CPR, the compression to ventilation ratio changes from 30:2 to 15:2 (the same as in two-rescuer child CPR).
- **Focus** on how to signal a need for a change such as increasing the volume of the verbal count for the last 5 compressions of the cycle: ...**9...10...11...12...13...14...15...**
- **Discuss** how to work through the arrival of the AED and BVM while minimizing interruptions of chest compressions.
- **Emphasize** the positioning of the airway in a neutral position and the differences in sealing a pocket mask versus a BVM (avoid placing the fingers on the neck and soft tissues).

SLIDE 1-42: Putting It All Together: Infant

Putting It All Together: Infant

Scene size-up

- Scene: safe
- Patient(s): one infant in parent's arms
- Nature of illness: suddenly stopped breathing
- Impression: appears to be unconscious
- Bleeding: no life-threatening bleeding
- Resources needed: AED, BVM and additional personnel

Primary assessment

- AVPU: unresponsive
- Airway: clear
- Breathing: agonal
- Pulse: none

1-42 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

- Separate the class into teams of three participants for this "putting it all together" practice session when possible. Ideally this session will include two teams of three participants with one infant manikin, AED trainer and infant BVM per team. Each team member should have his or her own PPE and infant pocket mask. It is better to have a team of two than a team of four responders so that all team members can fully participate in the practice scenario.
- Encourage use of the infant skill sheet for reminders and encourage peer-to-peer feedback.
- Move between teams, providing feedback and coaching as necessary.
- Ensure all scene size-up, consent and primary assessment steps are completed before compressions begin.



Say

Now it's time to put it all together. Once again, I am going to break you up into your teams of three rescuers and select a team leader for each team. *[If you have an odd mix, state that you will break participants into teams of two or three rescuers.]* You should have your infant pocket mask as well as your infant skill sheets to guide you through the scenario.

Assemble each team near an infant manikin with an AED and infant BVM off to the side.

Explain that you will introduce a team-based scenario for the team to respond to.

- The team leader should perform the scene size-up, including sending the other team member(s) to get additional resources (additional personnel, the AED and a BVM) and the primary assessment.
- The team leader should initiate CPR while waiting for the team members to return with the AED and BVM. You will prompt the team members' return (all resources arrive at the 20th compression of the 2nd cycle of CPR).
- The teams should progress through the scenario until the second AED analysis delivers a "no shock advised" message and CPR is resumed, which is when you will prompt that the patient shows signs of return of spontaneous circulation (ROSC).
- Upon the arrival of the additional rescuers, the teams should switch to the two-thumb encircling technique for compressions and use the AED and infant BVM.
- All team members should have an opportunity to perform the compressions using the two-thumb encircling technique.

Choose one of the following team-based scenarios as determined by the background of the team leader and read the scenario aloud:



Say

EMS Setting: You arrive at the home of the parents of an 8-month-old infant. The parents called 9-1-1 because they weren't able to wake their infant and then noticed that he wasn't breathing. You came in with your jump kit as your partner finished gathering the rest of the equipment and stretcher. You find the infant lying face-up in his crib.

HOSPITAL Setting: Mrs. Lenny, the mother of a 3 month old on the pediatric floor, tells you that she is going downstairs to get a cup of coffee. About 10 minutes later, Mrs. Lenny arrives back on the unit. Suddenly, you hear her scream. As you enter the room, Mrs. Lenny tells you that her baby isn't moving or breathing.

FIRST RESPONDER/HEALTHCARE Setting: A new mom is in the coffee shop with her 6-month-old infant. As she reaches down to put away a toy, she notices that her infant is not moving and not breathing. She screams out for help and you respond.

SLIDE 1-43: Obstructed Airway



Explain that now that participants have completed the CPR portion of this module, they will learn about another life-threatening emergency, obstructed airway.



Ask

What is the universal sign for choking?

Engage the participants in a brief discussion of their answers, explaining that the universal sign for choking is a conscious patient clutching the throat. Reinforce the concept that in many cases, however, a patient will just panic. Review other behaviors that might be seen, including running about, flailing arms or trying to get another's attention.

SLIDE 1-44: Obstructed Airway: Adult/Child



Instructor's Note:

- *Enlist the aid of a volunteer and demonstrate the skill for obstructed airway for an adult/child.*

OPTION: *Based on local protocol or practice, back blows may be added for the adult or child obstructed airway. If more than one method is used, alternate between 5 back blows and 5 abdominal thrusts until successful or until the patient becomes unresponsive.*

Safety Note: *Ensure no participants attempt to perform abdominal thrusts or chest thrusts on their team members. A manikin or a choking training device may be used if available.*

Science Note:

Evidence shows that more than one technique is sometimes needed to clear an airway obstruction and abdominal thrusts, back blows and chest thrusts are all effective techniques.

Reinforce the importance of the scene size-up and gathering an initial impression.



Demonstrate

Demonstrate while explaining how to care for a patient with an obstructed airway using the following:

- **Verify** the patient is choking by asking simple questions such as "Are you choking?" and "Can you speak?"
- **Obtain consent** to give care. If the patient is unable to make sounds and acknowledges he or she is choking, gain consent from the patient. If the patient is a child and a parent or legal guardian is present, obtain consent from the parent or legal guardian. An affirmative gesture such as a nod of the head is acceptable for expressed consent.
- **Position yourself** behind the patient, standing with one foot in front of the other and your knees bent for good balance. Find the navel with one hand and then place the thumb side of your other fist just about at the navel and well below the sternum. (If the patient is a child, you may have to kneel.) Stress the importance of body position when performing abdominal thrusts.
- **Administer** continuous inward and upward thrusts into the abdomen until the airway is clear or the patient becomes unconscious.
- **Use chest thrusts** if the patient is pregnant or if you are unable to wrap your arms around the patient's abdomen. Place the thumb side of a fist in the center of the chest, grab the fist with the other hand from behind the patient and pull straight back.
- If the patient becomes unconscious, carefully lower the patient to a firm flat surface (the floor or ground) and begin CPR with compressions. Before giving ventilations open the mouth and look for the object. If you see the object, remove it before attempting ventilations. Continue CPR.

SLIDE 1-45: PRACTICE: Obstructed Airway: Adult/Child



Instructor's Note:

- Choose a team-based scenario that is in context to the majority of the participants. Use the "dispatch" information from an EMS, hospital or first responder/healthcare setting.
- Work between the teams giving feedback and encouraging peer-to-peer learning using the skill sheet.

Explain that participants will separate into their original teams of two and **simulate** caring for an adult with an obstructed airway by positioning the patient and finding the appropriate anatomical landmarks.

Emphasize that participants **should NOT perform actual abdominal thrusts**.

- Have participants begin with sizing up the scene and obtaining consent, and then have them find the appropriate landmarks on their team member.
- Start with team member 1s and after finding the landmarks rotate to team member 2s.
- Warn participants not to pretend to become unresponsive.

Choose one of the following team-based scenarios and read it to the participants:



Say

EMS Setting: You and your partner are taking a break at the local coffee shop when one of the patrons suddenly gets up from his chair, clutching his throat. Initially he is coughing forcibly, but then stops and is unable to speak.

HOSPITAL Setting: A patient's husband brings some pastries and cookies to the unit as a thank-you for the staff. One of the staff members begins eating a chewy cookie, suddenly gets a panicked look on his face and starts coughing. He cannot tell you what is happening.

FIRST RESPONDER/HEALTHCARE Setting: You are sitting in the cafeteria eating your lunch when you notice a child at the table next to you begin coughing forcibly while eating a hot dog. Suddenly the child stops coughing and cannot speak or cry. The mother begins shouting out for help.

SLIDE 1-46: Obstructed Airway: Infant



Say

Just as CPR for an infant is different from CPR for an adult, so is caring for an infant with an obstructed airway. Let's watch a short video to learn about how to care for an infant who is choking.



Click to Play

SLIDE 1-47: Obstructed Airway: Infant



Explain that you will demonstrate the care for an infant with an obstructed airway and then the participants will work in teams to practice.



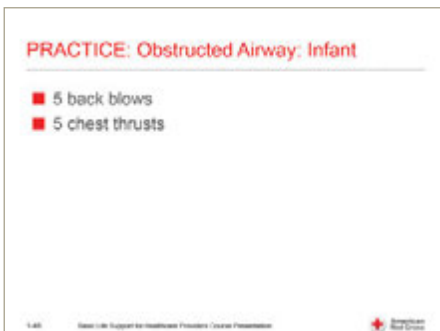
Demonstrate

Demonstrate while describing the following:

- Perform the **scene size-up** and recognize that the infant is awake but not making sounds. (The infant has an obstructed airway.)
- **Gain consent** from the parent.
- **Position** the infant face down with his or her legs straddling both sides of your arm. Place your arm on your thigh for support while holding the infant's jaw with your hand and the chin between your thumb and index finger. The infant's head should be down and lower than the body.

- **Give 5 back blows** in the center of the back between the scapulae with the heel of your free hand from several inches away. The blows should be forceful enough to dislodge the obstruction.
- If back blows are unsuccessful, **give chest thrusts**. Carefully turn the infant over, supporting the head and body between your arms and moving the infant to your opposite leg for support. While maintaining control of the infant's head with one hand, place two fingers in the center of the infant's chest in the same place you would for CPR. Administer 5 chest thrusts in a similar manner to chest compressions.
- **Repeat** the process of 5 back blows and 5 chest thrusts until the airway is clear and the infant can breathe or the infant becomes unresponsive.
- If the infant becomes **unresponsive**, lower the infant to a firm flat surface and start CPR, beginning with chest compressions. Remember to look for the object before attempting ventilations. If you see the object, remove it. **Do not attempt a blind finger sweep.**

SLIDE 1-48: PRACTICE: Obstructed Airway: Infant



Instructor's Note:

- For the skill practice, choose a team-based scenario that is in context to the majority of the participants. Use the "dispatch" information from an EMS, hospital or first responder/healthcare setting.
- Move between teams providing feedback and coaching as necessary. Encourage peer-to-peer feedback.
- Ensure all scene size-up, consent and primary assessment steps are completed before back blows begin during the practice sessions.

Explain that participants will now practice caring for an infant with an obstructed airway in their assigned teams of two.

- Start by having the team member 2s perform the scene size-up through gaining consent and applying 2 sets of back blows and chest thrusts to an infant manikin.
- After the team member 2s have completed the skill, have team member 1s practice the skill.

Choose one of the team-based scenarios for skill practice and read the scenario aloud:



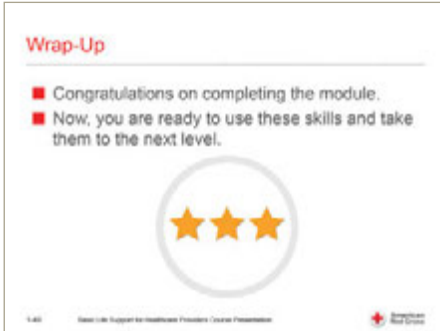
Say

EMS Setting: You and your partner have stopped at a local fast-food restaurant when someone runs up to you to tell about an infant choking. You run to the infant while your partner calls in the alarm and gets the equipment. As you get to the infant, the infant is moving and appears to be crying, but is not making any sounds. The parents say, "Our baby got all red in the face and started coughing but then stopped."

HOSPITAL Setting: The mother of a 10 month old on the pediatric floor was giving her infant some snacks that she brought from home. Suddenly the infant becomes flushed and starts gagging and coughing. Then the coughing stops and the infant isn't making any sounds.

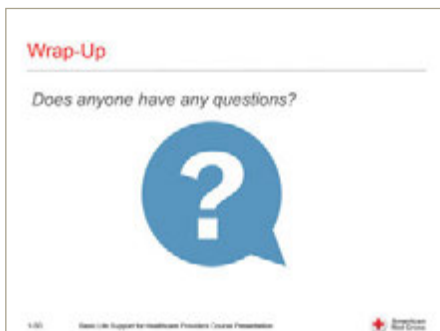
FIRST RESPONDER/HEALTHCARE Setting: While walking through the lobby, you see a parent holding his infant in his arms. The parent is screaming, "Help me, help me! My baby isn't breathing!" There is a stuffed teddy bear on the chair nearby. You notice that one of the button eyes is missing.

SLIDE 1-49: Wrap-Up



Congratulate the participants on completing the knowledge and skills module. Inform them that they should now be prepared to perform the skills they have learned in the next module, Critical Thinking and Problem Solving.

SLIDE 1-50: Wrap-Up



Instructor's Note:

- If the participants have not had a break in the past 30 to 45 minutes, consider a short break so you can prepare for the next module, Critical Thinking and Problem Solving.



Ask

Does anyone have any questions before we start the next module?

Module 2: Critical Thinking and Problem Solving

Performance Objectives

During this section, participants will:

- Demonstrate the ability to effectively apply critical-thinking skills (e.g., correctly predict next steps and ramifications of actions).
- Demonstrate the ability to effectively apply problem-solving skills.
- Demonstrate effective communication with team, patient, family and bystanders.
- Demonstrate the ability to effectively function as a team member.
- Demonstrate the ability to effectively function as a team leader.
- Effectively assess, treat and manage a patient requiring basic life support resuscitation, incorporating local protocols as necessary.

Materials, Equipment and Supplies

- Critical Thinking and Problem Solving Scenario Flow Sheets (one for each scenario)
- CPR manikins (one adult and one infant manikin for each team of up to three participants; one child manikin, if available, for each team of up to three participants)
- Adult pocket masks with a one-way valve that is compatible with the pocket mask (one for each participant)
- Infant pocket masks with a one-way valve that is compatible with the pocket mask (one for each participant)
- Child pocket masks with a one-way valve that is compatible with the pocket mask (optional; one for each participant)
- Adult bag-valve-mask resuscitators (one for each adult manikin)
- Infant bag-valve-mask resuscitators (one for each infant manikin)
- Child bag-valve-mask resuscitators (one for each child manikin, optional)
- AED training devices with adult and pediatric AED pads (one for each set of adult and infant manikins)
- Breathing barriers
- Nonlatex disposable gloves
- Manikin decontamination supplies
- Blankets and/or mats (optional)
- Basic Life Support for Healthcare Providers course presentation
- Desktop/laptop computer with power source and speakers
- Projector and projection screen/area or large monitor
- Television with a DVD player (optional)

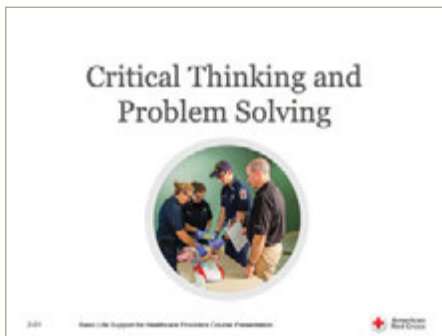
Instructor Preparation

- Identify the participant audience for the class, including the expected number of participants.
- Obtain the necessary materials, equipment and supplies.
- Set up the classroom to maximize teaching and learning and allow effective skill, critical-thinking and problem-solving demonstration.
- Review the scenarios that the participants will actively work through while demonstrating skill knowledge, critical-thinking, and problem-solving skills.
- Obtain the necessary number of Critical Thinking and Problem Solving Scenario Flow Sheets.
- Review any local protocols that apply and incorporate that information into the scenarios.
- Set up and test the desktop/laptop computer for the course presentation prior to the start of the class.

Instructor's Note:

- *The items listed are based on a team of 6 to 9 participants. All participants will take part in the critical thinking and problem solving scenarios. A minimum of three participants will act as the primary rescuers, with the remaining participants fulfilling secondary roles such as acting as advanced providers, bystanders or observers. When possible, assign a participant to act as a recorder. Be flexible in your approach, bringing in other participants, as you deem necessary. All participants should actively engage in the debriefing activities regardless of their role.*
- *When conducting the scenarios, incorporate local protocols and practices as approved by the organization's medical director, if applicable, provided they are not in conflict with the learning objectives.*
- *Also allow participants to function based on local protocols when courses are for a specified group of individuals who routinely all work together.*
- *The modules described in this instructor's manual require classroom space suitable for class discussions and areas to complete the critical thinking and problem solving scenarios. 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 skill station 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.*
- *Arrange the area for the critical thinking and problem solving scenarios so that each participant has ample room to view the screen for the course presentation, move about, demonstrate the skill, ask questions and receive feedback on his or her performance. Also ensure that you and your fellow instructors can easily visualize the screen for the course presentation, move about, and provide feedback and oversight at all times.*
- *Feel free to use the points exactly as written or adapt them to your teaching style throughout this instructor's manual.*

SLIDE 2-01: Critical Thinking and Problem Solving



Instructor's Note:

- When participants are working through the scenarios in this module, use the *Critical Thinking and Problem Solving Scenario Flow Sheets* to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds to ensure that the participants are performing the skills effectively and thinking critically when faced with situations that are more challenging and have more patient variables that affect the way that care is given.
 - Evaluate participant performance.

Explain to the participants that in this module, they will work on applying their knowledge and basic life support skills in team-based scenarios that will challenge them to think critically and solve problems.

SLIDE 2-02: Introduction



Say

Welcome to the Critical Thinking and Problem Solving Module of the course.

In this module:

- You will have the opportunity to participate in challenging emergency scenarios. Within each scenario, you will perform basic life support skills in situations that require you to use critical-thinking and problem-solving skills to provide the most optimal care to the patient.
- You will participate as part of a team that will demonstrate all the steps of the skill, such as assessing the patient, performing compressions and performing ventilations.
- During each scenario, your instructors may provide prompts for you to make decisions about care as well as limited corrective feedback.
- You can use your skill sheets as you practice.

After each scenario, we will spend a short time reflecting upon the scenario and then participate in a debriefing activity.

SLIDE 2-03: Introduction



Instructor's Note:

- Each participant should actively participate as the team leader or team member at minimum one time in a scenario in this module or the next module as time permits.
- The first person to respond is considered the team leader.



You, as a team, are expected to ensure that the major areas of responsibility are addressed to provide optimal outcomes. These critical areas are:

- Compressions
- Ventilations
- AED

Explain that it is not enough for the participants to say what they are going to do, but they need to perform the skills as they would for a real patient.

SLIDE 2-04: Introduction



Instructor's Note:

- For each of the scenarios, explain that the participant acting as the team leader can assign roles; however, the participant cannot choose who will be on his or her team.
- Remind participants that everyone is expected to participate in the reflection and debriefing, even if the participant was an observer.
- Six scenarios are provided for your use. Complete all six scenarios, if time allows. However, at minimum, you must use the appropriate scenarios based on the course outline provided in Section A:
 - o For the full instructor-led course, you **must** conduct Scenarios 1 and 2, and you must also choose to conduct one additional scenario from Scenario 3, 4, 5 or 6.
 - o For the review course, you **must** conduct Scenarios 1 and 2; if time permits, also consider using any of the other scenarios that may focus on any identified needs of the participants.

Instructor's Note (continued):

- o For the in-person skills session of the blended learning course, it is recommended that you include scenarios from this module, if time permits.
- If the class is large and consists of more than nine participants, or if the class is separated in different areas or rooms, you may need to read the scenario to the participants.
- If a participant's actions deviate from the actions and competencies identified on the flow sheet, the instructor and/or other team members should provide corrective feedback.



For each scenario, I'll be asking for a volunteer to act as the team leader and he or she will be assigning roles as part of his or her duties.

For each scenario, you will watch a short animation that will set up the scene. The person in charge of recording will record the data shared with you through the scenario.

Then you, as a member of the team, will demonstrate the actions necessary to care for the patient. This will include conducting a scene size-up, forming an initial impression, identifying how to treat the patient and performing the actions to treat the patient. Use critical-thinking and problem-solving skills to work through the challenges presented in each scenario in order to provide the best care.

SLIDE 2-04: Introduction (Continued)

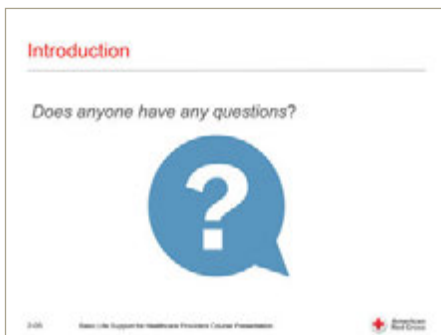
When necessary, I'll jump in to provide more details.

We'll continue through the scenario until the patient is stabilized, transferred, dies or the scenario terminates based on time.

Once the scenario is completed, I'll give each of you a minute to reflect on the scenario. Then we'll engage in a debriefing activity related to the scenario and discuss how you felt, where the team did well, and where you and the team can improve based on the challenges presented.

Finally, remember that throughout these scenarios, your main goal is to acquire knowledge and skill. This is not an assessment. You may make mistakes, and you should take those as an opportunity to learn.

SLIDE 2-05: Introduction



Instructor's Note:

- Ask for a volunteer to serve as the first team leader.
- Select participants to be team members for the first scenario using the scenario flow sheet as a guide.
- When conducting the scenarios, include any information about local protocols, as appropriate. Also allow participants to function based on local protocol when courses are for a specified group of individuals who routinely all work together.



Ask

Does anyone have any questions before we begin?

SLIDE 2-06: Scenario 1: Construction Site



Instructor's Note:

Use this scenario (1) if you are conducting the full instructor-led course or the review course. Use this or other scenarios from this module if you are conducting the in-person skills session of the blended learning course, if time permits.

Explain that participants will view a short scene that sets up the scenario for the team to respond to. Upon the conclusion of the video, the team leader should begin the process of caring for the patient with a scene size-up.



Say

Now let's begin.



Click to Play

SLIDE 2-06: Scenario 1: Construction Site (Continued)



Facilitate the Scenario

- Use Critical Thinking and Problem Solving Scenario Flow Sheet, Scenario 1: Construction Site (page 67) to:
 - Guide the scenario by providing findings and/or information as prompts as the scenario unfolds.
 - Evaluate participant performance.
- Do not disrupt the scenario to correct errors or demonstrate techniques.
- If the participants are extremely confused or the scenario response has become chaotic, inject a "timeout" and let the team gather their thoughts and begin again at an appropriate point.



Say

Now, take a minute to reflect on your individual and the team's performance during the scenario, and how you felt as the resuscitation progressed. Then we will engage in a debriefing activity related to the scenario.

SLIDE 2-07: Scenario 1: Reflection And Debriefing

Scenario 1: Reflection and Debriefing

Team Leader:

- Can you summarize the scenario?
- How did you feel you and the team performed?

Team:

- How did the team perform when the patient had a return of spontaneous circulation (ROSC)?

All:

- How did the team leader handle the delay in the arrival of the second rescuer and the AED?

3-07 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

Provide your own observations about the scenario.

Have the team leader give a report as if he or she is handing off the patient to another rescuer based on the team leader's role. For example:

- If the team leader was part of EMS, then the leader would be handing off to emergency department personnel or paramedics.
- If the team leader was medical personnel, the leader would be handing off to the resuscitation team.
- If the team leader was the first rescuer, the leader would be handing off to EMS personnel.

Conduct the debriefing activity by asking the questions on the screen in the order that they appear. Take answers. Be sure to involve the team leader as well as the other participants in the questions and answers. Provide your own observations about the scenario and the team's response to the patient's condition. This should be a learning environment.

SLIDE 2-08: Scenario 2: Pharmacy

Scenario 2: Pharmacy

3-08 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

- Use this scenario (2) if you are conducting the full instructor-led or review course. Use this or other scenarios from this module if you are conducting the in-person skills session of the blended learning course, if time permits.
- Have participants volunteer to demonstrate the scenario.
- Remind participants that the first person to respond will be the team leader.
- Ensure that each participant assumes the role of the team leader during at least one scenario.



Say

Okay, now let's check out another setting—a pharmacy.

Watch the scene set-up and get ready to provide care.

SLIDE 2-08: Scenario 2: Pharmacy (Continued)



Click to Play



Facilitate the Scenario

- Use Critical Thinking and Problem Solving Scenario Flow Sheet, Scenario 2: Pharmacy (page 71) to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds.
 - Evaluate participant performance.
- Do not disrupt the scenario to correct errors or demonstrate techniques.
- If the participants are extremely confused or the scenario response has become chaotic, inject a “timeout” and let the team gather their thoughts and begin again at an appropriate point.



Say

Now, take a minute to reflect on your individual and the team's performance during the scenario and how you felt as the choking situation progressed. Then we will engage in a debriefing activity related to the scenario.

SLIDE 2-09: Scenario 2: Reflection and Debriefing

Scenario 2: Reflection and Debriefing

Team Leader:

- Can you summarize the scenario?

Team:

- How did you feel you were integrated into the scenario when the infant became unresponsive?

All:

- How did the team perform when the mother became visibly anxious and upset and began to cry?

3-08 Basic Life Support for Healthcare Providers Course Presentation

Instructor's Note:

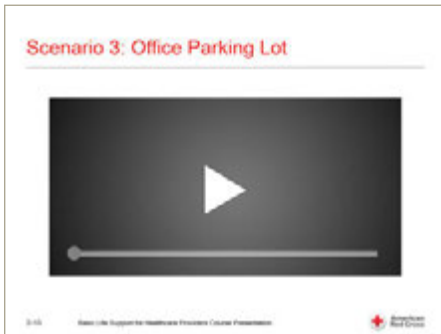
Provide your own observations about the scenario.

Have the team leader give a report as if he or she is handing off the patient to another rescuer based on the team leader's role. For example:

- If the team leader was part of EMS, then the leader would be handing off to emergency department personnel or paramedics.
- If the team leader was medical personnel, the leader would be handing off to the resuscitation team.
- If the team leader was the first rescuer, the leader would be handing off to EMS personnel.

Conduct the debriefing activity by asking the questions on the screen in the order that they appear. Take answers. Be sure to involve the team leader as well as the other participants in the questions and answers. Provide your own observations about the scenario and the team's response to the patient's condition. This should be a learning environment.

SLIDE 2-10: Scenario 3: Office Parking Lot



Instructor's Note:

- Use this scenario (3) if you are conducting the full instructor-led course as a flexible choice between Scenarios 3 through 6. Use this scenario as an additional scenario in the review course, if time permits. Use this or other scenarios from this module if you are conducting the in-person skills session of the blended learning course, if time permits.
- Have participants volunteer to demonstrate the scenario.
- Remind participants that the first person to respond will be the team leader.
- Ensure that each participant assumes the role of the team leader during at least one scenario.



Say

Good discussion. All right, let's check out this office parking lot.

Watch the scene setup and get ready to provide care.



Click to Play



Facilitate the Scenario

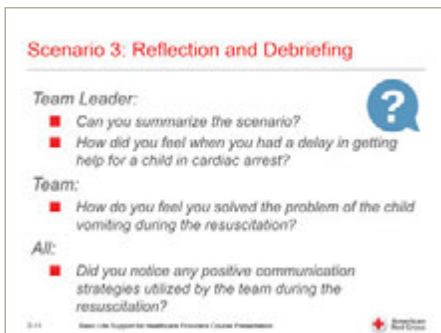
- Use Critical Thinking and Problem Solving Scenario Flow Sheet, Scenario 3: Office Parking Lot (page 75) to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds.
 - Evaluate participant performance.
- Do not disrupt the scenario to correct errors or demonstrate techniques.
- If the participants are extremely confused or the scenario response has become chaotic, inject a "timeout" and let the team gather their thoughts and begin again at an appropriate point.



Say

Now, take a minute to reflect on your individual and the team's performance during the scenario and how you felt as the resuscitation progressed. Then we will engage in a debriefing activity related to the scenario.

SLIDE 2-11: Scenario 3: Reflection and Debriefing



Have the team leader give a report as if he or she is handing off the patient to another rescuer based on the team leader's role. For example:

- If the team leader was part of EMS, then the leader would be handing off to emergency department personnel or paramedics.
- If the team leader was part of a medical team, the leader would be handing off to the resuscitation team.
- If the team leader was the first rescuer, the leader would be handing off to EMS personnel.

Conduct the debriefing activity by asking the questions on the screen in the order that they appear. Take answers. Be sure to involve the team leader as well as the other participants in the questions and answers. Provide your own observations about the scenario and the team's response to the patient's condition. This should be a learning environment.

SLIDE 2-12: Scenario 4: Patient's Home



Instructor's Note:

- Use this scenario (4) if you are conducting the full instructor-led course as a flexible choice between Scenarios 3 through 6. Use this scenario as an additional scenario in the review course, if time permits. Use this or other scenarios from this module if you are conducting the in-person skills session of the blended learning course, if time permits.
- Have participants volunteer to demonstrate the scenario.
- Remind participants that the first person to respond will be the team leader.
- Ensure that each participant assumes the role of the team leader during at least one scenario.



Say

Okay, our next scenario takes place at the patient's home.

Watch the scene setup and get ready to provide care.



Click to Play



Facilitate the Scenario

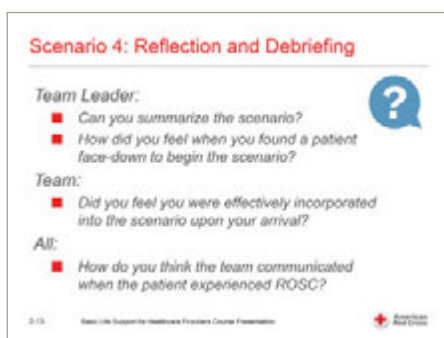
- Use Critical Thinking and Problem Solving Scenario Flow Sheet, Scenario 4: Patient's Home (page 80) to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds.
 - Evaluate participant performance.
- Do not disrupt the scenario to correct errors or demonstrate techniques.
- If the participants are extremely confused or the scenario response has become chaotic, inject a "timeout" and let the team gather their thoughts and begin again at an appropriate point.



Say

Now, take a minute to reflect on your individual and the team's performance during the scenario and how you felt as the resuscitation progressed. Then we will engage in a debriefing activity related to the scenario.

SLIDE 2-13: Scenario 4: Reflection and Debriefing



Have the team leader give a report as if he or she is handing off the patient to another rescuer based on the team leader's role. For example:

- If the team leader was part of EMS, then the leader would be handing off to emergency department personnel or paramedics.
- If the team leader was part of a medical team, the leader would be handing off to the resuscitation team.
- If the team leader was the first rescuer, the leader would be handing off to EMS personnel.

Conduct the debriefing activity by asking the questions on the screen in the order that they appear. Take answers. Be sure to involve the team leader as well as the other participants in the questions and answers. Provide your own observations about the scenario and the team's response to the patient's condition. This should be a learning environment.

SLIDE 2-14: Scenario 5: Roadside



Instructor's Note:

- Use this scenario (5) if you are conducting the full instructor-led course as a flexible choice between Scenarios 3 through 6. Use this scenario as an additional scenario in the review course, if time permits. Use this or other scenarios from this module if you are conducting the in-person skills session of the blended learning course, if time permits.
- Have participants volunteer to demonstrate the scenario.
- Remind participants that the first person to respond will be the team leader.
- Ensure that each participant assumes the role of the team leader during at least one scenario.



Say

Now, let's check out this roadside setting and see what is happening.

Watch the scene setup and get ready to provide care.



Click to Play



Facilitate the Scenario

- Use Critical Thinking and Problem Solving Scenario Flow Sheet, Scenario 5: Roadside (page 85) to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds.
 - Evaluate participant performance.
- Do not disrupt the scenario to correct errors or demonstrate techniques.

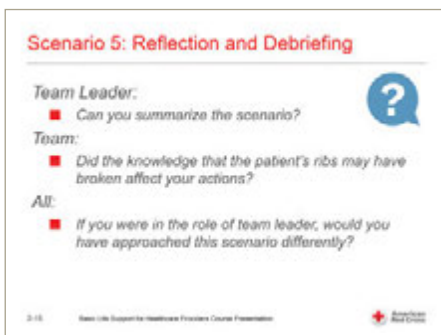
If the participants are at a point of extreme confusion or chaos, inject a "timeout" and let the team gather their thoughts and begin again at an appropriate point.



Say

Now, take a minute to reflect on your individual and the team's performance during the scenario and how you felt as the choking situation progressed. Then we will engage in a debriefing activity related to the scenario.

SLIDE 2-15: Scenario 5: Reflection and Debriefing



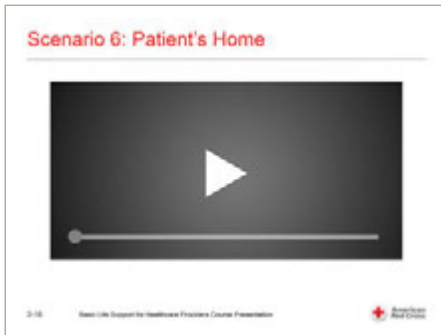
Have the team leader give a report such as if he or she is handing off the patient to another rescuer based on the team leader's role. For example:

- If the team leader was part of EMS, then the leader would be handing off to emergency department personnel or paramedics.
- If the team leader was part of a medical team, the leader would be handing off to the resuscitation team.
- If the team leader was the first rescuer, the leader would be handing off to EMS personnel.

SLIDE 2-15: Scenario 5: Reflection and Debriefing (Continued)

Conduct the debriefing activity by asking the questions on the screen in the order that they appear. Take answers. Be sure to involve the team leader as well as the other participants in the questions and answers. Provide your own observations about the scenario and the team's response to the patient's condition. This should be a learning environment.

SLIDE 2-16: Scenario 6: Patient's Home



Instructor's Note:

- Use this scenario (6) if you are conducting the full instructor-led course as a flexible choice between Scenarios 3 through 6. Use this scenario as an additional scenario in the review course, if time permits. Use this or other scenarios from this module if you are conducting the in-person skills session of the blended learning course, if time permits.
- Have participants volunteer to demonstrate the scenario.
- Remind participants that the first person to respond will be the team leader.
- Ensure that each participant assumes the role of the team leader during at least one scenario.



Say

It's time to finish up. Let's go home again.

Watch the scene setup and get ready to provide care.



Click to Play



Facilitate the Scenario

- Use Critical Thinking and Problem Solving Scenario Flow Sheet, Scenario 6: Patient's Home (page 90) to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds.
 - Evaluate participant performance.
- Do not disrupt the scenario to correct errors or demonstrate techniques.
- If the participants are extremely confused or the scenario response has become chaotic, inject a "timeout" and let the team gather their thoughts and begin again at an appropriate point.



Say

Now, take a minute to reflect on your individual and the team's performance during the scenario and how you felt as the resuscitation progressed. Then we will engage in a debriefing activity related to the scenario.

SLIDE 2-17: Scenario 6: Reflection and Debriefing

Scenario 6: Reflection and Debriefing

Team Leader:

- Can you summarize the scenario?

Team Leader/Team:

- How do you feel the team performed when switching from one-rescuer to two-rescuer CPR?

Team:

- Did the battery warnings and failure distract you from maintaining the critical elements of chest compressions and ventilations?

All:

- What additional strategies could the team have used to ensure an effective outcome?

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Have the team leader give a report as if he or she is handing off the patient to another rescuer based on the team leader's role. For example:

- If the team leader was part of EMS, then the leader would be handing off to emergency department personnel or paramedics.
- If the team leader was part of a medical team, the leader would be handing off to the resuscitation team.
- If the team leader was the first rescuer, the leader would be handing off to EMS personnel.

Conduct the debriefing activity by asking the questions on the screen in the order that they appear. Take answers. Be sure to involve the team leader as well as the other participants in the questions and answers. Provide your own observations about the scenario and the team's response to the patient's condition. This should be a learning environment.

SLIDE 2-18: Wrap-Up

Wrap-Up

- What was your key take-away from these scenarios?
- Does anyone have any questions?

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Congratulate participants on completing the critical thinking and problem solving scenarios.



Now, you are ready to use these skills and take them to an even higher level in the next module, Team Dynamics.

CRITICAL THINKING AND PROBLEM SOLVING SCENARIO FLOW SHEET

Scenario 1: Construction Site



Say

Jamal and Cameron are walking through the construction site when Cameron starts having chest pains and collapses. You are the first rescuer at the scene along with a police officer.



Say

Begin the scenario.

Primary Assessment (Rescuer 1/Team Leader):

- Sizes up the scene
- **Assesses level of consciousness**
- Calls for help and sends Rescuer 2 to call 9-1-1 and get an AED
- Opens airway
- **Checks for breathing and a pulse**

Competency:

Participants must check breathing (includes opening the airway) and pulse simultaneously. Total time for this step should be 5 to 10 seconds for all components.

COMPETENCY MET



Say

The scene is safe. The individual is unresponsive, is not breathing and has no pulse. There is no bleeding.

Chest Compressions (Rescuer 1):

Exposes chest and **initiates 30 compressions with correct:**

- **Hand placement**
- **Compression rate**
- **Compression depth**
- **Compression recoil**

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches for adult. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET



Say

Patient's status remains unchanged.

Ventilations:

- **Opens the airway**
- **Gives 2 ventilations with pocket mask**

Competency:

Each breath should be 1 second in duration and result in chest rise (both required). This step should take 5 to 7 seconds.

COMPETENCY MET



Say

The chest rises.

Continued CPR with Chest Compressions and Ventilations

(Rescuer 1):

Resumes chest compressions with correct:

- Hand placement
- Compression rate
- Compression depth
- Compression recoil

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches for adult. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET



Say

Return of Rescuer 2 and EMS/AED are delayed.

Chest Compressions (Rescuer 1):

- Resumes 30 chest compressions and 2 ventilations
- Continues until AED/EMS arrives

Competency:

Participants should perform a minimum of 5 cycles of chest compressions and ventilations (30:2) until additional rescuers arrive and an AED is available for analysis. Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches for adult. Participants must allow full recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET



Say

Patient's status remains unchanged.

Ventilations (Rescuer 1):

- Opens the airway from a position at the top of the patient's head
- Gives 2 ventilations with pocket mask
- Continues compressions and ventilations until AED/EMS arrives

Competency:

Note whether participants perform, at minimum, 5 cycles of CPR. Each breath should be 1 second in duration and result in chest rise (both required). This step should take 5 to 7 seconds.

COMPETENCY MET

Say

The chest rises. (After 3 cycles of CPR): Rescuers 2 and 3 return with AED and BVM.

AED:

- Turns on machine
- **Attaches the AED pads**
- Plugs in connectors, if necessary
- Continues compressions and ventilations until AED prompts

Competency:

As Rescuer 1 completes the 3rd cycle, Rescuers 2 and 3 arrive with an AED. Note Rescuer 2's ability to apply AED. The device should be turned on within 15 seconds of arrival, pads placed appropriately while CPR is in progress.

COMPETENCY MET

Say/AED prompt

Analyzing heart rhythm. Do not touch the patient.

AED:

- Says, "Clear"
- Analyzes heart rhythm

Competency:

Rescuer should verbalize an "all clear" message. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest.

COMPETENCY MET

Say/AED prompt

No shock advised.

Continued Cycles of Compressions and Ventilations:

- Continues compressions
- Manages airway and mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of compressions

Competency:

Participants should perform a minimum of 5 cycles of chest compressions and ventilations (30:2).

Management of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow for full chest recoil. Participants should perform the 30 compressions in 15 to 18 seconds.

COMPETENCY MET

Say

Compressions and ventilations are effective. ROSC is noted.

Breathing and Pulse Check (Rescuer Performing Ventilations):

- Checks for breathing and pulse, no more than 5 to 10 seconds

Competency:

Participants must check breathing (includes opening the airway) and pulse together. Total time for this step should be at least 5, but no more than 10 seconds for all components.

COMPETENCY MET

Say

There is a rapid pulse and breathing 14 times per minute.

Recovery Position:

- Kneeling at the patient's side, rolls the patient towards the rescuer
- Places the top leg on the other with both knees in a bent position
- Aligns the arm on top with the upper body

Competency:

None

COMPETENCY MET

Say

End scenario.

REFLECTION AND DEBRIEFING

Ask team members to take a minute to reflect on the team's performance during the scenario and then review the debriefing questions individually.

Ask The team leader: **Can you summarize the scenario?**

Ask The team leader: **How did you feel you and the team performed?**

Ask The team: **How did the team perform when the patient had a return of spontaneous circulation (ROSC)?**

Ask All participants: **How did the team leader handle the delay in the arrival of the second rescuer and the AED?**

CRITICAL THINKING AND PROBLEM SOLVING SCENARIO FLOW SHEET

Scenario 2: Pharmacy



Say

A young woman and her infant daughter are in line at a pharmacy. The infant, Tamera, begins to choke on a button she pulled from her mother's shirt while her mother talks with the pharmacist. You are an off-duty police officer who is in line behind Tamera and saw everything happen.



Say

Begin the scenario.

Primary Assessment (Rescuer 1/Team Leader):

- Sizes up the scene
- Forms initial impression
- Recognizes obstruction in conscious infant
- **Obtains consent from parent**
- Sends someone for additional assistance, as needed

Competency:

Participants must check scene, get an initial impression, obtain consent, and send bystander to call 9-1-1 or the local emergency number and get an AED.

COMPETENCY MET



Say

The scene is safe. The infant is conscious and not making sounds.

Back Blows (Rescuer 1):

Positions self and infant to **give 5 back blows**, paying attention to:

- Infant placement
- Support of infant head and neck
- Infant positioning for back blows
- Correct technique

Competency:

Places infant in face-down position along rescuer's forearm. Supports infant's head and neck with rescuer's hand. Lowers infant onto thigh, keeping infant's head lower than chest. Strikes the back using the heel of the hand between the scapulae.

COMPETENCY MET



Say

Back blows have no effect.

Chest Thrusts (Rescuer 1):

Delivers 5 chest thrusts, paying attention to:

- Proper positioning of infant
- Finger placement
- Compression depth

Competency:

Turns infant face-up on opposite arm with head supported in rescuer's hands. Ensures airway in neutral position. Uses two fingers centered on the sternum, about 1 finger-width below the nipple line. Compresses chest about 1½ inches.

COMPETENCY MET

... Say

Chest thrusts have no effect.

Back Blows (Rescuer 1):

- Resumes 5 back blows

Competency:

Places infant in face-down position along rescuer's forearm. Supports infant's head and neck with rescuer's hand. Lowers infant onto thigh, keeping infant's head lower than his or her chest. Strikes the back using heel of the hand between the scapulae. Participants should perform back blows and chest thrusts until object is forced out, infant coughs or breathes on his/her own or infant becomes unconscious.

COMPETENCY MET

... Say

Back blows have no effect. Infant becomes unresponsive. Mother is very upset.

Infant CPR (Rescuer 1):

- **Moves infant to firm, flat surface**
- **Exposes chest and begins chest compressions immediately**
- Opens airway
- Looks for object; **sweeps mouth, if object visible**
- Gives 2 ventilations using a pocket mask

Competency:

Places infant carefully on a firm, flat surface. Begins chest compressions using two fingers centered on the sternum about 1 finger-width below the nipple line, compressing to a depth of about 1½ inches and allowing for full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

Opens airway by placing one hand on the forehead and tilting the head to a neutral position while pulling up on the bony part of the chin with two or three fingers of the other hand. Looks for object; uses sweep to remove object only if seen.

Each breath should be 1 second in duration and result in chest rise (both required). Participants should perform this step in approximately 5 to 7 seconds.

COMPETENCY MET

... Say

Object is found and removed. Chest rises. Two additional rescuers arrive with BVM. Mother is crying and extremely anxious.

Continued Cycles of Chest Compressions and Ventilations:

- **Gives 15 chest compressions using the two-thumb encircling technique**
- Manages airway and mask seal
- Gives 2 breaths after each set of compressions
- **Communicates with, and comforts, mother**

Competency:

Two thumbs should be centered on the sternum about 1 finger-width below the nipple line, encircling the chest. Compressions should be at a depth of 1½ inches. Participants must allow for full chest recoil. Participants should perform 15 compressions in 7 to 9 seconds.

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Rescuer uses closed-loop communication and demonstrates credibility, trustworthiness, confidence and empathy.

COMPETENCY MET

 Say

Patient's status is unchanged. Communication with, and comfort of, mother is successful. Mother remains upset, but does not interfere with care.

Continued Cycles of Compressions and Ventilations:

- **Continues compressions using the two-thumb encircling technique**
- Ventilates by compressing the infant BVM
- Manages airway and mask seal
- Gives 2 breaths after each set of compressions
- Continues support of mother

Competency:

Participants should perform a minimum of 10 sets of chest compressions and ventilations (15:2).

Management of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Two thumbs should be centered on the sternum about 1 finger-width below the nipple line. Compressions should be at a depth of about 1½ inches. Participants must allow for full chest recoil. Participants should perform the 15 compressions in 7 to 9 seconds.

Communication:

Rescuer continues using closed-loop communication and demonstrating credibility, trustworthiness, confidence and empathy; mother controlled.

COMPETENCY MET

 Say

Patient's status is unchanged. (After 4 rounds of compressions and ventilations): Rescuer 2 notes ROSC.

Breathing and Pulse Check (Rescuer Performing Ventilations):

- **Checks for breathing and pulse, no more than 5 to 10 seconds.**

Competency:

Participants must check breathing (includes opening the airway) and pulse together. Total time for this step should be at least 5, but no more than 10 seconds for all components.

COMPETENCY MET

 Say

There is a rapid pulse and normal breathing.

Recovery Position:

- Carefully positions the infant face-down along participant's forearm
- Supports infant's head and neck with participant's other hand while keeping the infant's mouth and nose clear

Competency:

None

COMPETENCY MET

 Say

End scenario.

REFLECTION AND DEBRIEFING

Ask team members to take a minute to reflect on the team's performance during the scenario and then review the debriefing questions individually.



Ask The team leader: **Can you summarize the scenario?**



Ask The team: **How did you feel you were integrated into the scenario when the infant became unresponsive?**



Ask All participants: **How did the team perform when the mother became visibly anxious and upset and began to cry?**

CRITICAL THINKING AND PROBLEM SOLVING SCENARIO FLOW SHEET

Scenario 3: Office Parking Lot



Say

Sandra and Darrell are standing in an office and looking out onto the parking lot. They see a young boy trespassing and skateboarding in the parking lot. As Sandra calls office security, Darrell looks out the window again and sees the skateboarder lying unresponsive on the ground. There is no severe bleeding, there are no signs of trauma, and the office workers did not witness him fall.



Say

Begin the scenario.

Primary Assessment (Rescuer 1/Team Leader):

- Sizes up the scene
- **Assesses level of consciousness**
- Attempts to call for AED and additional or advanced personnel
- Opens airway
- **Checks for breathing and a pulse**

Competency:

Participants must check the scene, get an initial impression, and check breathing (includes opening the airway) and pulse simultaneously. Total time for this step should be 5 to 10 seconds for all components.

COMPETENCY MET



Say

The scene is safe. The child appears to be about 7 years of age, is unresponsive, is not breathing and has no pulse. There is no severe bleeding, and there are no signs of trauma. Your radio is not working and there are no bystanders in the area.

Chest Compressions (Rescuer 1):

Exposes chest and **initiates 30 compressions with correct:**

- **Hand placement**
- **Compression rate**
- **Compression depth**
- **Compression recoil**

Completes 2 minutes of CPR, then identifies need to go for help

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of about 2 inches for child. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

Participants should complete 2 minutes of compressions and ventilations before stating the need to leave the patient to get help.

Each breath should be 1 second in duration and result in chest rise (both required). This step should take 5 to 7 seconds.

COMPETENCY MET

... Say

Patient's status remains unchanged. (*Jump forward in time*): Security patrol vehicle arrives with two security officers. AED and BVM are available in the vehicle.

AED:

- Turns on machine
- Attaches the AED pads
- Plugs in connectors, if necessary
- Continues chest compressions and ventilations until AED prompts

Competency:

Note second rescuer's ability to apply AED. The device should be turned on within 15 seconds of arrival, pads placed appropriately.

COMPETENCY MET

... Say/AED prompt

Analyzing heart rhythm.

AED:

- Says, "Clear" while AED analyzes

Competency:

Rescuer should verbalize "clear" while AED is analyzing. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above the chest.

COMPETENCY MET

... Say/AED prompt

Preparing shock.

AED:

- Says, "Clear"
- Delivers shock

Competency:

Rescuer should verbalize an "all clear" message before shock. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above the chest.

COMPETENCY MET

... Say/AED prompt

Press flashing button to deliver shock. Shock delivered.

Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 15:2 ratio**
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 15 compressions

Competency:

Participants should perform a minimum of 10 cycles of chest compressions and ventilations (15:2) or until AED prompts for analysis. Rescuers should switch using an agreed-upon term after 10 cycles or when rescuer becomes fatigued as demonstrated by diminishing performance of compressions.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum.

Compressions should be at a depth of about 2 inches.

Participants must allow full chest recoil. Participants should perform the 15 compressions at a rate of 100 to 120 per minute in 7 to 9 seconds.

COMPETENCY MET

... Say

Chest rises. (During 7th cycle of CPR [15:2]): The patient vomits.

Airway:

- **Clears the airway**
- Resumes compressions and ventilations

Competency:

Rescuer must clear the airway by rolling the patient to his side and removing the vomit from the mouth, then reposition the patient on the back. The other two rescuers resume compressions and ventilations.

COMPETENCY MET

... Say

Airway is cleared. Chest rises. Patient status is unchanged.

AED:

- Says, "Clear"
- Analyzes heart rhythm

Competency:

Note ability of rescuer to ensure that all are clear of the patient while analyzing and before shock.

COMPETENCY MET

Say/AED prompt

No shock advised. Continue CPR. (After 30 seconds): Signs of life are noted.

Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 15:2 ratio**
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 15 compressions

Competency:

Participants should perform a minimum of 10 cycles of chest compressions and ventilations (15:2) or until AED prompts for analysis. Rescuers should switch during compressions, using an agreed-upon term.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of about 2 inches. Participants must allow full chest recoil. Participants should perform the 15 compressions at a rate of 100 to 120 per minute in 7 to 9 seconds.

COMPETENCY MET

Say

(After the 3rd cycle of 15:2): ROSC is noted.

Breathing and Pulse Check (Rescuer 1):

- **Checks for breathing and pulse, no more than 5 to 10 seconds**

Competency:

Participants must check breathing (includes opening the airway) and pulse together. Total time for this step should be at least 5, but no more than 10 seconds for all components.

COMPETENCY MET

Say

There is a rapid pulse and breathing 14 times per minute.

Recovery position:

- Kneeling at the patient's side, rolls the patient towards the rescuer
- Places the top leg on the other with both knees in a bent position
- Aligns the arm on top with the upper body

Competency:

None

COMPETENCY MET

Say

End scenario.

REFLECTION AND DEBRIEFING

Ask team members to take a minute to reflect on the team's performance during the scenario and then review the debriefing questions individually.



Ask The team leader: **Can you summarize the scenario?**



Ask The team leader: **How did you feel when you had a delay in getting help for a child in cardiac arrest?**



Ask The team: **How do you feel you solved the problem of the child vomiting during the resuscitation?**



Ask All participants: **Did you notice any positive communication strategies utilized by the team during the resuscitation?**

CRITICAL THINKING AND PROBLEM SOLVING SCENARIO FLOW SHEET

Scenario 4: Patient's Home



Say

Emmett, an elderly man, is home alone with his dog (Watson). He is standing in front of the bathroom mirror and begins to feel chest pains. When the chest pains persist, he pulls a cell phone from his pocket and dials 9-1-1. While on the phone, he collapses face-down.



Say

Begin the scenario.

Primary Assessment (Rescuer 1/Team Leader):

- Sizes up the scene
- **Positions patient on back**
- **Assesses level of consciousness**
- Calls for AED/additional or advanced personnel
- Opens airway
- **Checks for breathing and a pulse**

Competency:

Participants must check breathing (includes opening the airway) and pulse simultaneously. Total time for this step should be 5 to 10 seconds for all components.

COMPETENCY MET



Say

The scene is safe. The individual is unresponsive, is not breathing and has no pulse. There is no bleeding.

Chest Compressions (Rescuer 1):

Exposes chest and **initiates 30 compressions with correct:**

- **Hand placement**
- **Compression rate**
- **Compression depth**
- **Compression recoil**

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches for adult. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET



Say

Patient's status is unchanged.

Ventilations:

- **Opens the airway**
- **Gives 2 ventilations with pocket mask**

Competency:

Each breath should be 1 second in duration and result in chest rise (both required). This step should take 5 to 7 seconds.

COMPETENCY MET

Say

The chest rises.

Continued Chest Compressions (Rescuer 1):

Resumes chest compressions with correct:

- **Hand placement**
- **Compression rate**
- **Compression depth**
- **Compression recoil**

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches for adult. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

Another two rescuers have arrived with the AED and BVM.

AED:

- Turns on machine
- **Attaches the AED pads**
- Plugs in connectors, if necessary
- Continues chest compressions and ventilations (Rescuer 1) until AED prompts

Competency:

As Rescuer 1 completes the 20th compression, Rescuer 2 arrives with AED. Note second rescuer's ability to apply AED. The device should be turned on within 15 seconds of arrival, pads placed appropriately.

COMPETENCY MET

Say/AED prompt

Analyzing heart rhythm.

AED:

- **Says, "Clear"**
- Waits for AED to analyze

Competency:

Rescuer should verbalize an "all clear" message. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest.

COMPETENCY MET

Say/AED prompt

Preparing shock.

AED:

- Says, "Clear"
- Delivers shock

Competency:

Rescuer should verbalize an "all clear" message before shock. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest.

COMPETENCY MET

Say/AED prompt

Press red flashing button to deliver shock. Shock delivered. It is now safe to touch the patient.

Chest Compressions and Ventilations:

- Resumes 30 compressions at a 30:2 ratio
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Participants should perform a minimum of 5 cycles of compressions and ventilations (30:2) or until AED prompts for analysis. Rescuers should switch after 5 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term.

Maintenance of airway and mask seal

Ventilations:

Performs ventilations. Each breath should be 1 second in duration and result in chest rise (both required). This step should take 5 to 7 seconds.

Compressions:

Performs compressions. Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches for adult. Participants must allow full recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

Chest rises. AED analyzing.

AED:

- Says, "Clear"
- Analyzes heart rhythm
- Says, "Clear"

Competency:

Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest.

COMPETENCY MET



Say/AED prompt

No shock advised. Continue CPR.

Continued Cycles of Compressions and Ventilations:

- Resumes 30 compressions at a 30:2 ratio
- Opens the airway from the top of the head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Participants should perform a minimum of 5 cycles of compressions and ventilations (30:2) or until AED prompts for analysis. Rescuers should switch after 5 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term.

Management of airway and mask seal

Ventilations:

Performs ventilations. Each breath should be 1 second in duration and result in chest rise (both required). This step should take 5 to 7 seconds.

Compressions:

Performs compressions. Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches for adult. Participants must allow full recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET



Say

(About midway during the 2nd cycle, approximately 30 seconds): Signs of ROSC are noted.

Breathing and Pulse Check:

- Checks for breathing and pulse, no more than 5 to 10 seconds

Competency:

Participants must check breathing (includes opening the airway) and pulse together. Total time for this step should be at least 5, but no more than 10 seconds for all components.

COMPETENCY MET



Say

There is a rapid pulse and breathing 14 times per minute.

Recovery Position:

- Kneeling at the patient's side, rolls the patient towards the rescuer
- Places the top leg on the other with both knees in a bent position
- Aligns the arm on top with the upper body

Competency:

None

COMPETENCY MET



Say

End scenario.

REFLECTION AND DEBRIEFING

Ask team members to take a minute to reflect on the team's performance during the scenario and then review the debriefing questions individually.



Ask The team leader: **Can you summarize the scenario?**



Ask The team leader: **How did you feel when you found a patient face-down to begin the scenario?**



Ask The team: **Did you feel you were effectively incorporated into the scenario upon your arrival?**



Ask All participants: **How do you think the team communicated when the patient experienced ROSC?**

CRITICAL THINKING AND PROBLEM SOLVING SCENARIO FLOW SHEET

Scenario 5: Roadside



Say

On the side of the road, Zack and Chris stand next to a car with a flat tire. Zack is near the tire and Chris is standing next to the car eating pretzels out of a snack bag. You are a police officer at the scene talking to Zack. A second police officer remains in the police vehicle. At the end of the scene, Chris begins to choke.



Say

Begin the scenario.

Primary Assessment (Rescuer 1/Team Leader):

- Sizes up the scene
- Calls for help and sends for AED
- **Obtains consent**

Competency:

Participants must check scene, obtain consent, and send bystander and second rescuer for help and to get an AED.

COMPETENCY MET



Say

The scene is safe. The individual is conscious and choking on an object.

Abdominal Thrusts (Rescuer 1):

- Positions self and patient to give abdominal thrusts
- **Gives continuous abdominal thrusts**

Competency:

Rescuer positions self so that knees are bent and one foot is in front of the other for stability. Thumb side of fist should be placed on abdomen between the lower part of the rib cage and umbilicus, just above the umbilicus, with second hand over the fist. Delivers thrust using an upward and inward motion.

COMPETENCY MET



Say

(After the 8th abdominal thrust): Abdominal thrusts still do not relieve the obstruction. The patient is now unresponsive.

Adult CPR (Rescuer 1):

- Moves patient to a firm, flat surface
- Exposes chest
- **Initiates 30 chest compressions using correct hand placement, at the proper rate and depth, allowing for full chest recoil**

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches for adult. Participants must allow for full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

Patient's status remains unchanged, but you hear and feel a "crack" of ribs.

Ventilations (Rescuer 1):

- Opens the airway
- **Looks for and removes a visible object**
- Gives 2 ventilations using a pocket mask

Competency:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

COMPETENCY MET

Say

A visible object is removed from the patient's airway. The chest rises with each breath.

Continued CPR with Chest Compressions (Rescuer 1):

- **Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil**
- Opens airway
- Gives 2 ventilations with pocket mask

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow for full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

Compressions are effective. A second police officer has returned with an AED.

AED:

- Turns on machine
- **Attaches AED pads**
- Plugs in connectors, if necessary
- Continues compressions (and, if needed, ventilations) until the AED starts to analyze
- Team changes compressors during analysis
- Ensures all providers are clear while AED analyzes and prepares for shock

Competency:

As Rescuer 1 completes the 2nd cycle of compressions, Rescuer 2 arrives and starts by applying the AED, with Rescuer 1 continuing compressions and, if needed, ventilations. The AED should be turned on within 15 seconds of arrival, pads placed appropriately. Participant states to stay clear of patient while AED is analyzing while team changes compressor. The new compressor should have their hands in hovering position a few inches above chest prior to a shock advised prompt.

COMPETENCY MET

Say/AED prompt

Analyzing heart rhythm. Do not touch the patient. Preparing shock.

AED:

- Says, "Clear"
- Delivers shock

Competency:

Rescuer should verbalize an "all clear" message. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest.

COMPETENCY MET

Say/AED prompt

Press flashing button to deliver shock. Shock delivered. It is now safe to touch the patient. A third responder has arrived on the scene with a BVM.

Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 30:2 ratio**
- Opens the airway from the top of the head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Participants should perform a minimum of 5 cycles of chest compressions and ventilations (30:2) or until AED prompts for analysis. Rescuers should switch after 5 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds. One rescuer maintains a two handed mask seal while the other rescuer squeezes the bag.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow full chest recoil. Participants should perform the 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

AED analyzes.

AED:

- Says, "Clear"
- Analyzes heart rhythm
- Says, "Clear"

Competency:

Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest while AED is analyzing and before shock.

COMPETENCY MET

Say

No shock advised. Continue CPR.

Continued Cycles of Compressions and Ventilations:

- Continues compressions at a 30:2 ratio
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Participants should perform a minimum of 5 cycles of chest compressions and ventilations (30:2) or until AED prompts for analysis. Rescuers should switch after 5 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow full chest recoil. Participants should perform the 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

(About midway through the 2nd cycle): Signs of ROSC are noted.

Breathing and Pulse Check:

- Checks for breathing and pulse, no more than 5 to 10 seconds

Competency:

Participants must check breathing (includes opening the airway) and pulse together. Total time for this step should be at least 5, but no more than 10 seconds for all components.

COMPETENCY MET

Say

There is a rapid pulse and breathing 14 times per minute.

Recovery Position:

- Kneeling at the patient's side, rolls the patient towards the rescuer
- Places the top leg on the other with both knees in a bent position
- Aligns the arm on top with the upper body

Competency:

None

COMPETENCY MET

Say

End scenario.

REFLECTION AND DEBRIEFING

Ask team members to take a minute to reflect on the team's performance during the scenario and then review the debriefing questions individually.



Ask The team leader: **Can you summarize the scenario?**



Ask The team: **Did the knowledge that the patient's ribs may have broken affect your actions?**



Ask All participants: **If you were in the role of team leader, would you have approached this scenario differently?**

CRITICAL THINKING AND PROBLEM SOLVING SCENARIO FLOW SHEET

Scenario 6: Patient's Home



Say

Jason, the father of an infant girl, is seated in the living room of his apartment watching football on television and talking to himself. His daughter, Michelle, is in a portable baby play yard nearby. During a commercial, Jason goes to the play yard to pick up Michelle and discovers she is not breathing. He starts screaming her name and then calls 9-1-1. You are an off-duty fireman and live across the hall from Jason. You heard Jason screaming and came to find out what was wrong.



Say

Begin the scenario.

Primary Assessment (Rescuer 1/Team Leader):

- Sizes up the scene
- Obtains consent
- Assesses level of consciousness
- Opens airway
- Checks for breathing and a pulse

Competency:

Participants must check breathing (includes opening the airway) and pulse simultaneously. Total time for this step should be 5 to 10 seconds for all components.

COMPETENCY MET



Say

The scene is safe. The infant is unresponsive, is not breathing and has no pulse. There is no severe bleeding, and there are no signs of trauma.

Chest Compressions (Rescuer 1):

Exposes chest and initiates 30 compressions with correct:

- Finger placement
- Compression rate
- Compression depth
- Compression recoil

Competency:

Two fingers should be centered on the sternum about 1 finger-width below the nipple line. Compressions should be at a depth of about 1 ½ inches. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

Patient's status remains unchanged. A second rescuer has arrived with an AED and a BVM.

AED

- Turns on machine
- **Attaches the AED pads**
- Plugs in connectors, if necessary
- Continue chest compressions and ventilations until AED prompts

Competency:

Note rescuer's ability to apply AED. The device should be turned on within 15 seconds of arrival, pads placed appropriately. Pediatric pads and front-and-back pad placement are used.

Compressions:

Two fingers should be centered on the sternum about 1 finger-width below the nipple line. Compressions should be at a depth of about 1½ inches. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

COMPETENCY MET

Say/AED prompt

Low-battery warning light comes on. Analyzing heart rhythm.

AED:

- Says, "Clear"
- Waits for AED to analyze
- Says, "Clear"
- Rescuer 1 identifies need for new AED battery or replacement AED

Competency:

Rescuer should verbalize an "all clear" message. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest. Because low-battery warning light comes on, Rescuer 1 identifies need for replacement AED battery or new AED while CPR is paused for AED analysis.

COMPETENCY MET

Say/AED prompt

Shock delivered. Low battery. *(Only if rescuer identified need for replacement):* Second AED is en route.

Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 15:2 ratio**
- Opens the airway from the top of the head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 15 compressions

Competency:

Participants should perform a minimum of 10 cycles of chest compressions and ventilations (15:2) or until AED prompts for analysis. Rescuers should switch after 10 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Two thumbs should be centered on the sternum about 1 finger-width below the nipple line, encircling the chest. Compressions should be at a depth of about 1½ inches. Participants must allow full chest recoil. Participants should perform the 15 compressions at a rate of 100 to 120 per minute in 7 to 9 seconds.

COMPETENCY MET

Say

Patient's status remains unchanged. Chest rises. *(During 7th cycle of CPR [15:2]):* The AED stops functioning.

Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 15:2 ratio**
- Opens the airway from the top of the head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 15 compressions

Competency:

Participants should continue cycles of CPR without a break in care until a replacement AED battery or AED arrives. Rescuers should switch after 10 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Two thumbs should be centered on the sternum just below the nipple line, encircling the chest. Compressions should be at a depth of about 1½ inches. Participants must allow full chest recoil. Participants should perform 15 compressions at a rate of 100 to 120 per minute in 7 to 9 seconds.

COMPETENCY MET

Say

Patient's status remains unchanged. The chest rises. A third responder arrives with a replacement AED. Analyzing heart rhythm. Do not touch the patient.

AED:

- Says, "Clear"
- Shock advised
- Says, "Clear"
- Delivers shock (presses red flashing button to deliver shock)

Competency:

Rescuer should verbalize an "all clear" message when analyzing and before shock. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest.

COMPETENCY MET

Say/AED prompt

Shock delivered.

Continued Cycles of Compressions and Ventilations:

- Continues compressions at a 15:2 ratio
- Opens the airway from the top of the head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 15 compressions

Competency:

Participants should perform a minimum 10 cycles of chest compressions and ventilations (15:2) or until AED prompts for analysis. Rescuers should switch after 10 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Two thumbs should be centered on the sternum just below the nipple line, encircling the chest. Compressions should be at a depth of about 1½ inches. Participants must allow full chest recoil. Participants should perform 15 compressions at a rate of 100 to 120 per minute in 7 to 9 seconds.

COMPETENCY MET

Say

The chest rises. AED analyzes.

AED:

- Says, "Clear"
- Analyzes heart rhythm
- Says, "Clear"

Competency:

Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest while analyzing and before shock.

COMPETENCY MET

Say

No shock advised. Continue CPR.

Continued Cycles of Compressions and Ventilations:

- Continues compressions at a 15:2 ratio
- Opens the airway from the top of the head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 15 compressions

Participants should perform a minimum 10 cycles of chest compressions and ventilations (15:2) or until AED prompts for analysis. Rescuers should switch after 10 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Two thumbs should be centered on the sternum just below the nipple line, encircling the chest. Compressions should be at a depth of about 1½ inches. Participants must allow full chest recoil. Participants should perform 15 compressions at a rate of 100 to 120 per minute in 7 to 9 seconds.

COMPETENCY MET

 Say

(About midway through the 2nd cycle): Signs of ROSC are noted.

Breathing and Pulse Check:

- Checks for breathing and pulse, no more than 5 to 10 seconds

Competency:

Participants must check breathing (includes opening the airway) and pulse together. Total time for this step should be at least 5, but no more than 10 seconds for all components.

COMPETENCY MET

 Say

There is a rapid pulse and normal breathing.

Recovery Position:

- Carefully positions the infant face-down along forearm
- Supports infant's head and neck with other hand while keeping the infant's mouth and nose clear

Competency:

None

COMPETENCY MET

 Say

End scenario.

REFLECTION AND DEBRIEFING

Ask team members to take a minute to reflect on the team's performance during the scenario and then review the debriefing questions individually.



Ask The team leader: **Can you summarize the scenario?**



Ask The team leader/team: **How do you feel the team performed when switching from one-rescuer to two-rescuer CPR?**



Ask The team: **Did the battery warnings and failure distract you from maintaining the critical elements of chest compressions and ventilations?**



Ask All participants: **What additional strategies could the team have used to ensure an effective outcome?**

Module 3: Team Dynamics

Performance Objectives

During this session, participants will:

- Identify the important elements of team dynamics.
- Explain the importance of high-quality CPR.
- Identify how team dynamics influence high-performance CPR.
- Demonstrate the ability to effectively apply team dynamics skills to resuscitation situations as a team leader and team member.
- Demonstrate effective communication with team members, patients, families and bystanders.
- Effectively assess, treat and manage a patient requiring BLS resuscitation, incorporating local protocols as necessary.
- Understand how to effectively integrate additional team members into resuscitation including advanced-level providers.

Materials, Equipment and Supplies

- Team Dynamics Scenario Flow Sheets (one for each scenario)
- CPR manikins (one adult and one infant manikin for each team of up to three participants; one child manikin, if available, for each team of up to three participants)
- Adult pocket masks with a one-way valve that is compatible with the pocket mask (one for each participant)
- Infant pocket masks with a one-way valve that is compatible with the pocket mask (one for each participant)
- Child pocket masks with a one-way valve that is compatible with the pocket mask (optional; one for each participant)
- Adult bag-valve-mask resuscitators (one for each adult manikin)
- Infant bag-valve-mask resuscitators (one for each infant manikin)
- Child bag-valve-mask resuscitators (one for each child manikin, optional)
- AED training devices with adult and pediatric AED pads (one for each set of adult and infant manikins)
- Breathing barriers
- Nonlatex disposable gloves
- Timing device such as a stop watch (one for each group for the team challenge exercise)
- Blankets and/or mats (optional)
- Basic Life Support for Healthcare Providers course presentation
- Desktop/laptop computer with power source and speakers
- Projector and projection screen/area or large monitor
- Television with a DVD player (optional)

Instructor Preparation

- Identify the participant audience for the class, including the expected number of participants.
- Obtain the necessary materials, equipment and supplies.
- Set up the classroom to maximize teaching and learning and allow effective foundation demonstration of skills, critical thinking, problem solving, communication, coordination, leadership and teamwork.
- Review the scenarios that the participants will actively work through while demonstrating the required skills.

- Obtain the necessary number of Team Dynamics Scenario Flow Sheets.
- Review any local protocols that apply and incorporate that information into the scenarios.
- Set up and test the desktop/laptop computer for the course presentation prior to the start of the class.

Instructor's Note:

- *The items listed are based on a team of 6 to 9 participants. All participants will take part in the team dynamics scenarios. A minimum of three participants will act as the primary rescuers, with the remaining participants fulfilling secondary roles such as acting as advanced care providers, bystanders or observers. When possible, assign a participant to act as a recorder. Be flexible in your approach, bringing in other participants, as you deem necessary. All participants should actively engage in the debriefing activities regardless of their role.*
- *When conducting the scenarios, incorporate local protocols and practices as approved by the organization's medical director, if applicable, provided they are not in conflict with the learning objectives.*
- *Also allow participants to function based on local protocol when courses are for a specified group of individuals that routinely all work together.*
- *The modules described in this instructor's manual require classroom space suitable for class discussions and areas to complete the team dynamics scenarios. 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 scenario 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.*
- *Arrange the area for the team dynamics scenarios so that each participant has ample room to view the screen for the course presentation, move about, demonstrate the skill, ask questions and receive feedback on his or her performance. Also ensure that you and your fellow instructors can easily visualize the screen for the course presentation, move about, and provide feedback and oversight at all times.*
- *Feel free to use the points exactly as written or adapt them to your teaching style throughout this instructor's manual.*

SLIDE 3-01: Team Dynamics

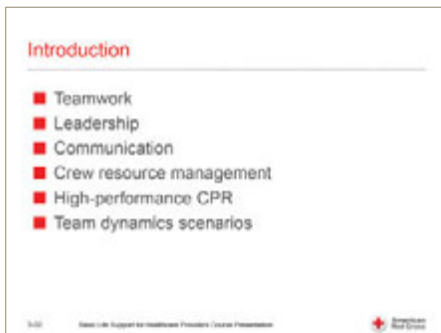


Instructor's Note:

- When participants are working through the scenarios in this module, use the Team Dynamics Scenario Flow Sheets to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds to ensure that the participants are performing the skills effectively and thinking critically when faced with situations that are more challenging and have more patient variables that affect the way that care is given.
 - Evaluate participant performance.

Explain to the participants that in this module they will work on applying their knowledge and basic life support skills in complex team-based case scenarios.

SLIDE 3-02: Introduction



Say

In this module, we will focus on teamwork, including team leadership, team and patient/bystander communication and team member roles as well as the concept of crew resource management. The information presented here builds on the knowledge and skills that you have already learned so far in this course.

You will also learn about the concept of high-performance CPR, focusing on the premise of providing uninterrupted chest compression. You'll be challenged as part of a team to maximize the amount of hands-on time you spend on the patient's chest performing compressions, known as chest compression fraction (CCF).

Finally, you will have the opportunity to participate in challenging team dynamics scenarios that require you to perform basic life support psychomotor skills while integrating the elements of critical thinking, problem solving, communication and team dynamics to provide the most optimal care to the patient.

SLIDE 3-03: Teamwork

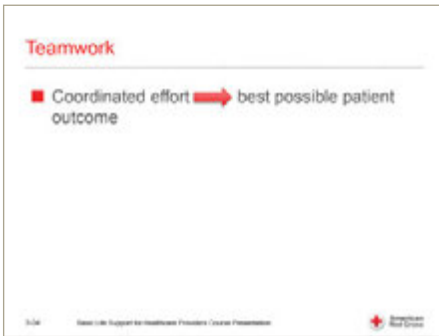


Say

Now, let's review the concept of teamwork. The important elements of a team include:

- A group working together toward a common goal.
- Well-defined roles and responsibilities.
- Clear, closed-loop communication.
- Respectful treatment of others.

SLIDE 3-04: Teamwork



Say

In healthcare, the goal is to improve patient outcomes but no one rescuer can treat a patient alone. We must work together in a coordinated effort to achieve the best possible outcomes for the patients.

SLIDE 3-05: Teamwork



Instructor's Note:

Focus on uninterrupted chest compressions and limiting "hands-off" time as rescuers work through the resuscitation.

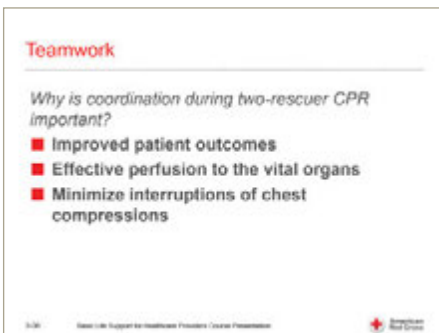


Ask

Why is coordination during two-rescuer CPR important?

Show the screen with the question and then engage the participants in a discussion of the answers. After the discussion, click to advance the slide to show the answers.

SLIDE 3-06: Teamwork



Explain that coordination is necessary to:

- Ensure that all individuals involved work as team to help promote the best possible outcomes for the patient.
- Promote effective perfusion to the vital organs.
- Minimize interruptions of chest compressions, which has been shown to improve survival.

SLIDE 3-07: Team Leader

Team Leader

An effective team also requires an effective team leader, one who:

- Sets clear expectations.
- Prioritizes.
- Directs.
- Acts decisively.
- Encourages team input and interaction.
- Focuses on the big picture.

3-07 Basic Life Support for Healthcare Providers Course Presentation American Red Cross



Say

An effective team requires an effective team leader, one who:

- Sets clear expectations.
- Prioritizes.
- Directs.
- Acts decisively.
- Encourages team input and interaction.
- Focuses on the big picture.

SLIDE 3-08: Team Leader

Team Leader

What else can you do to be an effective leader?



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Ask

What else can you do to be an effective leader?

Show the screen with the question and then engage the participants in a discussion of the answers. After the discussion, click to advance the slide to show the answers.

SLIDE 3-09: Team Leader

Team Leader

What else can you do to be an effective leader?

- Assign and understand roles
- Monitor performance while providing support
- Be a role model
- Coach the team
- Re-evaluate and summarize progress

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Discuss the following points about an effective leader:

- Team leaders assign and understand roles and can function in each role.
- Team leaders must monitor the team's performance (for example, looking for chest compression fatigue) and provide support.
- Team leaders need to be role models.
- Coaching the team to improve performance is critical.
- Team leaders re-evaluate and summarize progress.

SLIDE 3-10: Crew Resource Management

Crew Resource Management

- Goal: High-performance CPR through effective and efficient teamwork
- Communication process
 - Team leader coordinates the actions and activities of team members.
 - Team members directly and effectively communicate to team leader about dangerous or time-critical decisions.

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Say

During resuscitation, crew resource management helps to promote effective and efficient teamwork. Crew resource management is a communication process and centers around the team leader who coordinates the actions and activities of team members.

Crew resource management also guides team members to directly and effectively communicate to a team leader about dangerous or time-critical decisions. It was developed from the analysis of airline disasters as a way that many could have been prevented.

During resuscitation, the team leader directs and coordinates all the working elements, including team members, activities, actions and equipment, to focus on providing high-quality CPR, the goal of any resuscitation effort.

Now, another closely related topic: high-performance CPR.

SLIDE 3-11: High-Performance CPR

High-Performance CPR



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Click to Play

Explain to participants that they will see a video overview of high-performance CPR and that there are no national protocols, but all variations focus on minimizing interruptions of chest compressions.

SLIDE 3-12: High-Performance CPR

High-Performance CPR

- High-quality chest compressions as part of a well-organized team response to a cardiac arrest
- Coordinated, efficient, effective teamwork to minimize time spent off the chest during a resuscitation

3-12 Basic Life Support for Healthcare Providers Course Presentation American Red Cross



Say

High-performance CPR refers to providing high-quality chest compressions as part of a well-organized team response to a cardiac arrest. Coordinated, efficient, effective teamwork is essential to minimize the time spent not in contact with the chest to improve patient outcomes.

SLIDE 3-13: High-Performance CPR

High-Performance CPR

During CPR, you perform numerous activities. What are some examples that could affect your ability to maintain contact with the chest?



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Ask

During CPR, you perform numerous activities. What are some examples that could affect your ability to maintain contact with the chest?

Show the screen with the question and then engage the participants in a discussion of the answers. Answers will vary. After the discussion, click to advance the slide to show the answers.

SLIDE 3-14: High-Performance CPR

High-Performance CPR

During CPR, you perform numerous activities. What are some examples that could affect your ability to maintain contact with the chest?

- Application of AED pads and charging of the AED
- Repositioning the mask or bag-valve-mask resuscitator or reopening the airway
- Integration of additional responders
- Rescuers switching positions
- Advanced airway insertion
- Pulse checks (if done unnecessarily)

3-14 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Explain that the following activities all can lead to disruption of chest compressions. Some cannot be avoided, but they need to be limited to maximize the chances for a successful resuscitation.

- Application of AED pads and charging of the AED
- Repositioning the mask or BVM or re-opening the airway
- Arrival of other personnel on scene
- Rescuers switching positions
- Advanced airway insertion
- Pulse checks (if done unnecessarily)

SLIDE 3-15: High-Performance CPR

High-Performance CPR

- Survival following resuscitation significantly affected by the quality of CPR performed
- Minimizing interruptions in chest compressions → maximizes blood flow

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Science Note:

Evidence continues to build that the key to successful resuscitations is the delivery of high-quality basic life support care, including uninterrupted chest compressions and ventilation. Advanced care should be seen as an adjunct and not the primary goal of high-performance CPR.



Say

Current research indicates that survival following resuscitation is significantly affected by the quality of CPR performed. One important aspect is minimizing interruptions in chest compressions, which helps to maximize the blood flow generated by the compressions.

SLIDE 3-16: High-Performance CPR

High-Performance CPR

Chest Compression Fraction (CCF):

- Time in contact with patient's chest/total time of resuscitation
- Beginning with arrival on scene until ROSC
- Expert consensus: at least 80 percent CCF to promote optimal outcomes



3-16 Basic Life Support for Healthcare Providers Course Presentation American Red Cross



Say

Chest compression fraction, or CCF, is the term used to denote the time that chest compressions are performed. It represents the fraction of time spent performing compressions; that is, the time that the rescuer is in contact with the patient's chest, divided by the total time of the resuscitation, beginning with the arrival on scene until the return of spontaneous circulation, or ROSC.

Expert consensus identifies a CCF of at least 80 percent to promote optimal outcomes.

SLIDE 3-17: High-Performance CPR

High-Performance CPR

To achieve the best CCF percentage:

- Coordinated team approach
- Pre-assigned roles for each member
- Integration and assimilation of additional personnel arriving on the scene

3-17 Basic Life Support for Healthcare Providers Course Presentation American Red Cross



Say

To achieve the best CCF percentage, a coordinated team approach is needed, with each member assuming pre-assigned roles, anticipating the next action steps for yourself and other team members.

This coordinated team approach also includes integrating and assimilating additional personnel, such as paramedics or a code team, who arrive on the scene.

SLIDE 3-18: High-Performance CPR

High-Performance CPR

Example: automotive racing team

- Specific roles
- Leader supervision
- Outcome dependent on the quality, efficiency and swiftness of actions



3-18 Basic Life Support for Healthcare Providers Course Presentation American Red Cross



Say

To further your understanding of high-performance CPR, consider the example of an automotive racing team. Each crew member has a specific role when the race car arrives in the pit area. They are supervised by a leader, who keeps the crew on task and gets the race car back on the track as safely and quickly as possible. The quality, efficiency and swiftness of the crew's actions can ultimately affect the outcome of how the race car performs.

SLIDE 3-19: High-Performance CPR



Instructor's Note:

Emphasize the need to follow local protocols and be prepared to discuss the local protocol for programs that reflect the role functions of the participants in the class.



Say

The specific steps of high-performance CPR, including how additional personnel assimilate into the team, may vary depending on your location. There are no national protocols in place. Your goal is to function as a team within your local protocols or practice.

SLIDE 3-20: High-Performance CPR Team Challenge



Instructor's Note:

- *Introduce the challenge in a fun, engaging manner. Using this challenge as a game within the class adds a new level of engagement for the participants while teaching a very specific objective.*
- *Feel free to offer incentives or prizes to help make the challenge a fun activity while also driving home the importance of high-performance CPR.*
- *Separate the class into two teams and have each team run through a scenario as a team. The run-through can occur simultaneously (preferred) or one right after the other.*
- *Select a scenario from Module 1 that is appropriate for the makeup of the class.*
- *If the size of the team allows, one person on each team should assume the role of the timer. If not, then you as the instructor would become the timer.*
- *Allow the scenario to run over a period of exactly 6 minutes from arrival at the patient's side.*
- *Interject in the scenario events, such as the AED being available.*
- *At the end of the challenge, total up the time for when the hands were on the chest in seconds; then divide that time by 360 (6 minutes) to arrive at the CCF.*



Say

Now it's time to see how well you do with high-quality CPR and find out what your CCF is.

I'm going to separate you into two teams. You and your fellow team members will provide care to a patient for 6 minutes. During this time, you will have to switch roles after every 2 minutes of compressions and ventilations or when the performance of the compressor begins to deteriorate because of fatigue.

But here's the challenge—the actions related to compressions during the resuscitation will be timed, starting with the arrival on scene up until the 6 minutes have passed. Timing for the compressions will start with the 1st compression, stop when hands are off the chest and then resume when compressions begin again. Afterwards, we will calculate your CCF and see just how effective and efficient a team you are. And we'll compare the results to see which team has the better CCF.

SLIDE 3-21: Team Dynamics Scenarios



Instructor's Note:

- When participants are working through the scenario, use the Team Dynamics Scenario Flow Sheets to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds to ensure that the participants are performing the skills effectively and thinking critically when faced with situations that are more challenging and have more patient variables that affect the way that care is given.
 - Evaluate participant performance.

Explain to participants that they will now participate in the team dynamics scenarios, conducted in a similar manner to the critical thinking and problem solving scenarios in the previous module.

SLIDE 3-22: Team Dynamics Scenarios: Introduction



Instructor's Note:

- Remember that each participant must act as the team leader or team member at minimum one time in a scenario in this module or the previous module on application of critical thinking.
- The first person to respond is considered the team leader.
- For each of the scenarios, explain that the participant acting as the team leader can assign roles; however, the participant cannot choose who will be on his or her team.
- Remind participants that everyone is expected to participate in the reflection and debriefing, even if the participant was an observer.

Instructor's Note: (Continued)

- Four scenarios are provided for your use. Complete all four scenarios, if time allows. However, at minimum, you must use the appropriate scenarios based on the course outline provided in Section A:
 - If you are conducting the full instructor-led course, you **must** conduct scenario 1 and choose either scenario 2, 3 or 4.
 - If you are conducting the review course, you **must** conduct scenario 1; if time permits, also consider using scenarios 2, 3 and 4.
 - If you are conducting the in-person skills session of the blended learning course, you **must** conduct scenario 1; if time permits, also consider using scenarios 2, 3 and 4.
- If the class is large and consists of more than nine participants or if the class is separated in different areas or rooms, you may need to read the scenario to the participants.
- You can assign a participant who is observing the scenario in the role of recorder.
- If the participant's actions deviate from the actions and competencies identified on the flow sheet, the instructor and/or other team members should provide corrective feedback.



Say

You will participate as part of a team that will demonstrate all the steps of the skill, such as assessing the patient, performing compressions and performing ventilations.

During each scenario, your instructors may provide prompts for you to make decisions about care as well as limited corrective feedback.

You can use your skill sheets to help guide you through the practice.

SLIDE 3-22: Team Dynamics Scenarios: Introduction (Continued)

After each scenario, we will spend a short time reflecting about the scenario and conducting a debriefing activity.

You, as a team, will be expected to ensure that the major areas of responsibility are addressed to provide the best possible outcome. These critical areas are:

- Compressions
- Ventilations
- AED

In addition, you will need to demonstrate your ability to lead and work as a team, communicating, critically thinking, problem solving and coordinating.

For each scenario I'll be asking for a volunteer to act as the team leader, and he or she will be assigning roles as part of his or her duties.

For each scenario, you will watch a short animation that will set up the scene like you did with the critical-thinking scenarios.

Then you, as a team, will treat the patient. You'll need to size up the scene, provide your initial impression, identify how to treat the patient and perform the actions to treat the patient. Use critical-thinking, problem-solving, communication and team dynamics skills to work through the challenges presented in each scenario in order to provide the best care.

When necessary, I'll jump in to provide more details.

We'll continue through the scenario until the patient is stabilized, transferred, dies or the scenario terminates based on time.

Once the scenario is completed, I'll give each of you a minute to reflect on the scenario. Then we'll engage in a debriefing activity related to the scenario and discuss how you felt, where the team did well, and where you and the team can improve.

Finally, remember that throughout these scenarios, your main goal is to acquire knowledge and skill. This is not an assessment. You may make mistakes, and you should take those as an opportunity to learn more.

SLIDE 3-23: Team Dynamics Scenarios: Introduction



Instructor's Note:

When conducting the scenarios, incorporate local protocols and practices as approved by the organization's medical director, if applicable, provided they are not in conflict with the learning objectives.

Also allow participants to function based on local protocol when courses are for a specified group of individuals that routinely all work together.



Ask

Does anyone have any questions before we begin?

SLIDE 3-24: Scenario 1: Construction Site



Instructor's Note:

- Use this scenario (1) if you are conducting the full instructor-led course, the review course or the in-person skills session of the blended learning course.
- Have participants volunteer to demonstrate the scenario.
- Ask for a volunteer team leader who will then assign roles for the other team members.
- Ensure that each participant assumes the role of the team leader during at least one scenario.



Say

Okay, now let's begin with a patient who collapses in front of a construction site.

Watch the scene setup and get ready to provide care.



Click to Play



Facilitate the Scenario

- Use Team Dynamics Scenario Flow Sheet, Scenario 1: Construction Site (page 113) to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds.
 - Evaluate participant performance.
- Do not disrupt the scenario to correct errors or demonstrate techniques.
- If the participants are extremely confused or the scenario response has become chaotic, inject a "timeout" and let the team gather their thoughts and begin again at an appropriate point.



Say

Now, take a minute to reflect on your individual and the team's performance during the scenario and how you felt as the resuscitation progressed. Then we will engage in a debriefing activity related to the scenario.

SLIDE 3-25: Scenario 1: Reflection and Debriefing

Scenario 1: Reflection and Debriefing

Team Leader:

- Can you summarize the scenario and describe how your team performed?

Team:

- After the advanced life support (ALS) team arrives and inserts an advanced airway, how would CPR change?

All:

- How did the team interact and communicate with the ALS team?
- How did the team transition care when the ALS team arrived on scene?

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Instructor's Note:

- Be sure to involve all team members in the questions and answers. Provide your own observations about the scenario.
- Take answers. Provide your own observations on any problems you noticed, including any specific examples related to communication and/or teamwork, how the team identified them and how they addressed them.

Have the team leader give a report as if he or she is handing off the patient to another rescuer based on the team leader's role. For example:

- If the team leader was part of EMS, then the leader would be handing off to emergency department personnel or paramedics.
- If the team leader was medical personnel, the leader would be handing off to the resuscitation team.
- If the team leader was the first rescuer, the leader would be handing off to EMS personnel.

Conduct the debriefing activity by asking the questions on the screen in the order that they appear. Take answers. Be sure to involve the team leader as well as the other participants in the questions and answers. Provide your own observations about the scenario and the team's response to the patient's condition. This should be a learning environment.

SLIDE 3-26: Scenario 2: Ambulance

Scenario 2: Ambulance



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Instructor's Note:

- Choose this scenario (2) or Scenario 3 or 4 if you are conducting the full instructor-led course.
- Use this scenario (2) if you are conducting the review course or the in-person skills session and time permits.
- Ask for a volunteer team leader who will then assign roles for the other team members.



Say

Okay, now let's check out the situation in the back of an ambulance.

Watch the scene setup and get ready to provide care.



Click to Play



Facilitate the Scenario

- Use Team Dynamics Scenario Flow Sheet, Scenario 2: Ambulance (page 117) to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds.
 - Evaluate participant performance.
- Do not disrupt the scenario to correct errors or demonstrate techniques.
- If the participants are extremely confused or the scenario response has become chaotic, inject a "timeout" and let the team gather their thoughts and begin again at an appropriate point.



Say

Now, take a minute to reflect on your individual and the team's performance during the scenario and how you felt as the resuscitation progressed. Then we will engage in a debriefing activity related to the scenario.

SLIDE 3-27: Scenario 2: Reflection and Debriefing

Scenario 2: Reflection and Debriefing

Team Leader:

- Can you summarize the scenario and describe how your team performed?

Team:

- How did you address the issue of provider fatigue?

All:

- How effective was the team in communicating and working together?

3-27 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

Be sure to involve all team members in the questions and answers. Provide your own observations about the scenario.

Take answers. Provide your own observations on any problems you noticed, including any specific examples related to communication and/or teamwork, how the team identified them and how they addressed them.

Have the team leader give a report as if he or she is handing off the patient to another rescuer based on the team leader's role. For example:

- If the team leader was part of EMS, then the leader would be handing off to emergency department personnel or paramedics.
- If the team leader was medical personnel, the leader would be handing off to the resuscitation team.
- If the team leader was the first rescuer, the leader would be handing off to EMS personnel.

Conduct the debriefing activity by asking the questions on the screen in the order that they appear. Take answers. Be sure to involve the team leader as well as the other participants in the questions and answers. Provide your own observations about the scenario and the team's response to the patient's condition. This should be a learning environment.

SLIDE 3-28: Scenario 3: Pharmacy

Scenario 3: Pharmacy



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Instructor's Note:

- Choose this scenario (3) or Scenario 2 or 4 if you are conducting the full instructor-led course; use this scenario (3) if you are conducting the review course or the in-person skills session and time permits.
- Have participants volunteer to demonstrate the scenario.
- Ask for a volunteer team leader who will then assign roles for the other team members.
- Ensure that each participant assumes the role of the team leader during at least one scenario.



Say

Good discussion. All right. Let's check out what is happening in the pharmacy.

Watch the scene setup and get ready to provide care.



Click to Play



Facilitate the Scenario

- Use Team Dynamics Scenario Flow Sheet, Scenario 3: Pharmacy (page 124) to:
 - o Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds.
 - o Evaluate participant performance.
- Do not disrupt the scenario to correct errors or demonstrate techniques.
- If the participants are extremely confused or the emergency response has become chaotic, inject a "timeout" and let the team gather their thoughts and begin again at an appropriate point.



Say

Now, take a minute to reflect on your individual and the team's performance during the scenario and how you felt as the resuscitation progressed. Then we will engage in a debriefing activity related to the scenario.

SLIDE 3-29: Scenario 3: Reflection and Debriefing

Scenario 3: Reflection and Debriefing

Team Leader:

- Can you summarize the scenario and describe how your team performed?

Team:

- How did the team interact and communicate when the additional rescuers arrived on scene?

All:

- How effective was the team leader in assigning roles and ensuring that critical responsibilities were maintained?

3-29 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

Be sure to involve all team members in the questions and answers. Provide your own observations about the scenario.

Take answers. Provide your own observations on any problems you noticed, including any specific examples related to communication and/or teamwork, how the team identified them and how they addressed them.

Have the team leader give a report as if he or she is handing off the patient to another rescuer based on the team leader's role. For example:

- If the team leader was part of EMS, then the leader would be handing off to emergency department personnel or paramedics.
- If the team leader was medical personnel, the leader would be handing off to the resuscitation team.
- If the team leader was the first rescuer, the leader would be handing off to EMS personnel.

Conduct the debriefing activity by asking the questions on the screen in the order that they appear. Take answers. Be sure to involve the team leader as well as the other participants in the questions and answers. Provide your own observations about the scenario and the team's response to the patient's condition. This should be a learning environment.

SLIDE 3-30: Scenario 4: Dentist's Office

Scenario 4: Dentist's Office

3-30 Basic Life Support for Healthcare Providers Course Presentation American Red Cross

Instructor's Note:

- Choose this scenario (4) or Scenario 2 or 3 if you are conducting the full instructor-led course; use this scenario (4) if you are conducting the review course or in-person skills session and time permits.
- Have participants volunteer to demonstrate the scenario.
- Ask for a volunteer team leader who will then assign roles for the other team members.
- Ensure that each participant assumes the role of the team leader during at least one scenario.



Say

Okay, it's time to go to the dentist.

Watch the scene setup and get ready to provide care.



Click to Play



Facilitate the Scenario

- Use Team Dynamics Scenario Flow Sheet, Scenario 4: Dentist's Office (page 128) to:
 - Guide the scenario by providing findings and/or information as prompts and feedback as the scenario unfolds.
 - Evaluate participant performance.
- Do not disrupt the scenario to correct errors or demonstrate techniques.
- If the participants are extremely confused or the scenario response has become chaotic, inject a "timeout" and let the team gather their thoughts and begin again at an appropriate point.



Say

Now, take a minute to reflect on your individual and the team's performance during the scenario and how you felt as the resuscitation progressed. Then we will engage in a debriefing activity related to the scenario.

SLIDE 3-31: Scenario 4: Reflection and Debriefing

Scenario 4: Reflection and Debriefing

Team Leader:

- Can you summarize the scenario and describe how your team performed?
- How did you respond when the patient became unresponsive?

Team:

- How did the team respond when the mother became hysterical and started to interfere with care?

All:

- How effective was the team in working together and communicating with each other and the family?

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Instructor's Note:

- Be sure to involve all team members in the questions and answers. Provide your own observations about the scenario.
- Take answers. Provide your own observations on any problems you noticed, including any specific examples related to communication and/or teamwork, how the team identified them and how they addressed them.

Have the team leader give a report as if he or she is handing off the patient to another rescuer based on the team leader's role. For example:

- If the team leader was part of EMS, then the leader would be handing off to emergency department personnel or paramedics.
- If the team leader was medical personnel, the leader would be handing off to the resuscitation team.
- If the team leader was the first rescuer, the leader would be handing off to EMS personnel.

Conduct the debriefing activity by asking the questions on the screen in the order that they appear. Take answers. Be sure to involve the team leader as well as the other participants in the questions and answers. Provide your own observations about the scenario and the team's response to the patient's condition. This should be a learning environment.

SLIDE 3-32: Wrap-Up

Wrap-Up

- What was your key take-away from these scenarios?
- Does anyone have any questions?

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Instructor's Note:

After a question-and-answer session, give the participants a short break if time permits in order to set up for the assessment module.



Say

Congratulations on completing the team dynamics scenarios.

Now, it's time to get ready for the assessment.

TEAM DYNAMICS SCENARIO FLOW SHEET

Scenario 1: Construction Site



Say

You and your partner are the first two rescuers to arrive on the scene after receiving a call from dispatch. You find a man and a woman dressed in workout clothes in front of a construction site. The man is sitting down, breathing heavily and is very pale. The woman explains that they were running and then her friend started having trouble breathing, became very pale and almost fainted. As you are assessing the man, he suddenly loses consciousness.



Say

Begin the scenario.

Primary Assessment (Rescuer 1/Team Leader):

- **Sizes up the scene**
- **Assesses level of consciousness**
- Calls for additional personnel and AED
- Opens airway
- **Checks for breathing and a pulse**

Competency:

Participants must check breathing (includes opening the airway) and pulse simultaneously. Total time for this step should be 5 to 10 seconds for all components.

COMPETENCY MET



Say

The scene is safe. The individual is unresponsive, is not breathing and has no pulse. There is no severe bleeding, and there are no signs of trauma.

Chest Compressions (Rescuer 1):

Exposes chest and **initiates 30 compressions with correct:**

- **Hand placement**
- **Compression rate**
- **Compression depth**
- **Compression recoil**

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches for adult. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET



Say

Patient's status remains unchanged.

Ventilations (Rescuer 1):

- **Opens the airway**
- **Gives 2 ventilations with pocket mask**

Competency:

Each breath should be 1 second in duration and result in chest rise (both required). This step should take 5 to 7 seconds.

COMPETENCY MET

Say

Chest rises. The second rescuer has retrieved an AED and a BVM.

AED:

- Turns on machine
- **Attaches the AED pads**
- Plugs in connectors, if necessary
- Continues chest compressions and ventilations (Rescuer 1) until AED prompts
- **Says, "Clear"**

Competency:

Note second rescuer's ability to apply AED. The device should be turned on within 15 seconds of arrival, pads placed appropriately. Rescuer should verbalize an "all clear" message; note ability to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest.

COMPETENCY MET



Say

The chest rises.



Say/AED prompt

Analyzing heart rhythm. Do not touch the patient.

AED (Rescuer 2):

- **Says, "Clear"**
- Delivers shock

Competency:

Rescuer should verbalize an "all clear" message. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest.

COMPETENCY MET



Say/AED prompt

Press red flashing button to deliver shock. Shock delivered. It is now safe to touch the patient. Resume CPR, if necessary.

Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 30:2 ratio**
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Participants should perform a minimum 5 cycles of chest compressions and ventilations (30:2) or until AED prompts for analysis. Rescuers should switch after 5 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed upon term.

Management of airway and mask

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow full chest recoil. Participants should perform the 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

The compressions are effective and the chest rises. AED prompts for analysis.

AED:

- Says, "Clear"
- Analyzes heart rhythm
- Says, "Clear"

Competency:

Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest while AED is analyzing and before shock.

COMPETENCY MET

Say/AED prompt

Press red flashing button to deliver shock. Shock delivered. It is now safe to touch the patient. Resume CPR.

Rescuers Switch Positions—Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 30:2 ratio**
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Participants should perform a minimum of 5 cycles of chest compressions and ventilations (30:2) or until AED prompts for analysis. Rescuers should switch after 5 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term. Care should not be interrupted.

Management of airway and mask

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow full chest recoil. Participants should perform the 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

There is no breathing and no pulse. An advanced life support (ALS) team arrives at the scene.

Report to ALS Team (Rescuer 1/Team Leader):

- **Provides patient status report to ALS team while contributing to care**
- ALS team takes over care of patient

Competency:

Events and current patient status are given to ALS team leader.

COMPETENCY MET

Say

End scenario.

REFLECTION AND DEBRIEFING

Ask team members to take 1 to 2 minutes to reflect on the team's performance during the scenario and then review the debriefing questions individually.



Ask The team leader: **Can you summarize the scenario and describe how your team performed?**



Ask The team: **After the advanced life support (ALS) team arrives and inserts an advanced airway, how would CPR change?**



Ask All participants: **How did the team interact and communicate with the ALS team?**



Ask All participants: **How did the team transition care when the ALS team arrived on scene?**

TEAM DYNAMICS SCENARIO FLOW SHEET

Scenario 2: Ambulance



Say

You are in the back of the ambulance on the way to the hospital with a male patient who is experiencing a cardiac emergency. Your partner, another EMT, is driving the ambulance. Suddenly, the patient codes. His chest is already exposed.



Say

Begin the scenario.

Primary Assessment (Rescuer 1/Team Leader):

- **Assesses level of consciousness**
- **Opens airway**
- Alerts second rescuer of situation and need for assistance with providing care
- **Quickly assesses for pulse and breathing**

Competency:

Participants must check breathing (includes opening the airway) and pulse simultaneously. Total time for this step should be 5 to 10 seconds for all components.

COMPETENCY MET



Say

The individual is unresponsive, is not breathing and has no pulse. There is no bleeding. Scene is safe.

Chest Compressions (Rescuer 1):

Exposes chest **and initiates 30 compressions with correct:**

- **Hand placement**
- **Compression rate**
- **Compression depth**
- **Compression recoil**

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches for adult. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET



Say

Patient's status remains unchanged.

Ventilations (Rescuer 1):

- **Opens the airway**
- **Gives 2 ventilations with pocket mask**

Competency:

Each breath should be 1 second in duration and result in chest rise (both required). This step should take 5 to 7 seconds.

COMPETENCY MET

Say

Chest rises.

Chest Compressions (Rescuer 1):

- **Resumes chest compressions**
- Continues until AED is available

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at least 2 inches for adult. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

Patient's status remains unchanged. Rescuer 2 has stopped the ambulance, called for additional personnel and is in the back of the ambulance to help provide care.

AED:

- Turns on machine
- **Attaches the AED pads**
- Plugs in connectors, if necessary
- Continues chest compressions and ventilations until AED prompts

Competency:

As rescuer 1 completes the 1st cycle, rescuer 2 attaches AED. Note second rescuer's ability to apply AED. The device should be turned on within 15 seconds of arrival, pads placed appropriately.

COMPETENCY MET

Say/AED prompt

Analyzing heart rhythm. Do not touch the patient.

AED:

- Says, "Clear"
- Waits for AED to analyze rhythm
- Says, "Clear" before shock

Competency:

Rescuer should verbalize an "all clear" message while AED is analyzing and before shock. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest.

COMPETENCY MET



Say/AED prompt

Press red flashing button to deliver shock. Shock delivered. It is now safe to touch the patient. Resume CPR if necessary.

Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 30:2 ratio**
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Participants should perform a minimum of 5 cycles of chest compressions and ventilations (30:2) or until AED prompts for analysis. Rescuers should switch during compressions, using an agreed-upon term.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at least 2 inches. Participants must allow full chest recoil. Participants should perform the 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET



Say

Chest rises. Patient's status is unchanged.

Rescuers Switch Positions—Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 30:2 ratio**
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Rescuers should switch during compressions, using an agreed-upon term. Care should not be interrupted.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow full chest recoil. Participants should perform the 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

(About midway through the 3rd cycle): Rescuer 2 complains of fatigue.

Rescuers Switch Positions—Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 30:2 ratio**
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Rescuers should switch during compressions, using an agreed-upon term. Care should not be interrupted.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow full chest recoil. Participants should perform the 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

Chest rises. Patient status is unchanged.

Rescuers Switch Positions—Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 30:2 ratio**
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Rescuers should switch during compressions, using an agreed-upon term. Care should not be interrupted.

Maintenance of airway and mask seal

Ventilations

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow full chest recoil. Participants should perform the 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

Chest rises. Patient's status is unchanged. (Near the end of the 5th cycle): Rescuer 1 complains of fatigue. AED is reanalyzing patient.

AED:

- Says, "Clear"
- Analyzes heart rhythm
- Says, "Clear"

Competency:

Rescuer should verbalize an "all clear" message while AED is analyzing and before shock. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above chest.

COMPETENCY MET

Say/AED prompt

Press red flashing button to deliver shock. Shock delivered. It is now safe to touch the patient. Resume CPR if necessary. Another emergency medical rescuer has arrived and is driving the ambulance to the hospital.

Rescuers Switch Positions—Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 30:2 ratio**
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

After AED analysis and shock, CPR should be resumed with rescuers switching positions. Care should not be interrupted.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow full chest recoil. Participants should perform the 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

 Say

Chest rises. Patient status is unchanged.

Rescuers Switch Positions—Continued Cycles of Compressions and Ventilations:

- **Continues compressions at a 30:2 ratio**
- Opens the airway from a position at the top of the patient's head
- Maintains BVM mask seal
- Ventilates by compressing the BVM
- Gives 2 breaths after each set of 30 compressions

Competency:

Rescuers should switch during compressions, using an agreed-upon term. Care should not be interrupted.

Maintenance of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of at least 2 inches. Participants must allow full chest recoil. Participants should perform the 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

 Say

The patient is still not breathing and has no pulse. You have arrived at the hospital and an advanced life support team has taken over care of the patient.

 Say

End scenario.

REFLECTION AND DEBRIEFING

Ask team members to take 1 to 2 minutes to reflect on the team's performance during the scenario and then review the debriefing questions individually.



Ask The team leader: **Can you summarize the scenario and describe how your team performed?**



Ask The team: **How did you address the issue of provider fatigue?**



Ask All participants: **How effective was the team in communicating and working together?**

TEAM DYNAMICS SCENARIO FLOW SHEET

Scenario 3: Pharmacy



Say

You are an off-duty firefighter shopping at your local pharmacy when you notice a young boy having trouble breathing and looking very tired. As the father is asking the boy what is wrong, the boy suddenly faints. The father quickly calls 9-1-1 and you run over to provide emergency care.



Say

Begin the scenario.

Primary Assessment (Rescuer 1/Team Leader):

- Sizes up the scene
- Obtains consent from parent
- Assesses level of consciousness
- Opens airway
- Checks for breathing and a pulse
- Sends for additional assistance and an AED, as needed

Competency:

Participants must check breathing (includes opening the airway) and pulse simultaneously. Total time for this step should be 5 to 10 seconds for all components.

COMPETENCY MET



Say

The scene is safe. Consent was obtained. The child is unresponsive, is not breathing and has no pulse. There is no bleeding.

Chest Compressions (Rescuer 1):

Exposes chest and initiates 30 compressions with correct:

- Hand placement
- Compression rate
- Compression depth
- Compression recoil

Competency:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of about 2 inches for a child. Participants must allow full chest recoil. Participants should perform 30 compressions at a rate of 100 to 120 per minute in 15 to 18 seconds.

COMPETENCY MET

Say

Patient's status remains unchanged.

Continued CPR with Compressions and Ventilations:

- **Opens the airway**
- Gives 2 ventilations with pocket mask
- **Continues compressions using correct hand placement, compression rate, depth and allowing for recoil**

Competency:

Performs, at minimum, 5 cycles of CPR. Each breath should be 1 second in duration and result in chest rise (both required). This step should take 5 to 7 seconds.

COMPETENCY MET

Say

Chest rises. Patient's status remains unchanged. Another rescuer has arrived on the scene.

Continued Chest Compressions and Ventilations:

- **Continues chest compressions at a 15:2 ratio**
- Opens airway
- Gives 2 breaths after each set of 15 compressions

Competency:

Participants should perform a minimum of 10 cycles of chest compressions and ventilations (15:2). Rescuers should switch after 10 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term.

Management of airway

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of about 2 inches. Participants must allow full chest recoil. Participants should perform the 15 compressions at a rate of 100 to 120 per minute in 7 to 9 seconds.

COMPETENCY MET

Say

Chest compressions and ventilations are effective.

Rescuers Switch Positions—Continued Chest Compressions and Ventilations:

- **Continues chest compressions at a 15:2 ratio**
- Opens airway
- Gives 2 breaths after each set of 15 compressions

Competency:

Participants should perform a minimum of 10 cycles of chest compressions and ventilations (15:2). Rescuers should switch after 10 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions, using an agreed-upon term.

Management of airway

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Hands should be centered on the lower half of the sternum. Compressions should be at a depth of about 2 inches. Participants must allow full chest recoil. Participants should perform the 15 compressions at a rate of 100 to 120 per minute in 7 to 9 seconds.

COMPETENCY MET

Say

Chest rises. An EMS team of two additional rescuers has arrived with a BVM and an AED.

Report to EMS:

- **Provides briefing to EMS team; assigns roles to team**
(Rescuer 1/Team Leader)
- EMS personnel integrate into team and take over care

Competency:

Ensure events and current patient status are given to ALS team leader.

COMPETENCY MET

SAY

End scenario.

REFLECTION AND DEBRIEFING

Ask team members to take 1 to 2 minutes to reflect on the team's performance during the scenario and then review the debriefing questions individually.



Ask The team leader: **Can you summarize the scenario and describe how your team performed?**



Ask The team: **How did the team interact and communicate when the additional rescuers arrived on scene?**



Ask All participants: **How effective was the team leader in assigning roles and ensuring that critical responsibilities were maintained?**

TEAM DYNAMICS SCENARIO FLOW SHEET

Scenario 4: Dentist's Office



Say

You are performing dental work on a young woman while her infant daughter sits in her portable car seat eating a teething biscuit. As you are talking with the woman, the infant suddenly begins to choke.



Say

Begin the scenario.

Primary Assessment (Rescuer 1/Team Leader):

- Sizes up the scene
- **Obtains consent from parent**
- Forms initial impression
- **Recognizes obstruction in conscious infant**
- Sends someone for additional assistance and an AED, as needed

Competency:

Participants must check scene, obtain consent and send bystander to call 9-1-1 or the local emergency number and get an AED.

COMPETENCY MET



Say

The scene is safe. The infant is conscious but not making sounds.

Back Blows (Rescuer 1):

Positions self and infant to **give 5 back blows**, paying attention to:

- Infant placement
- Support of infant head and neck
- Infant positioning for back blows
- Correct technique

Competency:

Places infant in face-down position along rescuer's forearm. Supports infant's head and neck with rescuer's hand. Lowers infant onto thigh, keeping infant's head lower than her chest. Strikes the back using the heel of the hand between the scapulae.

COMPETENCY MET

Say

Back blows do not relieve the obstruction.

Chest Thrusts (Rescuer 1):

Delivers 5 chest thrusts, paying attention to:

- Proper positioning of infant
- Finger placement
- Compression depth

Competency:

Turns infant face-up on opposite arm with head supported in rescuer's hands. Ensures airway in neutral position.

Uses two fingers on the center of the chest, about 1 finger-width below the nipple line. Compresses chest about 1½ inches.

COMPETENCY MET

Say

Chest thrusts do not relieve the obstruction.

Back Blows (Rescuer 1):

- Resumes 5 back blows

Competency:

Places infant in face-down position along rescuer's forearm. Supports infant's head and neck with rescuer's hand. Lowers infant onto thigh, keeping infant's head lower than his or her chest. Strikes the back using heel of the hand between the scapulae. Participants should perform back blows and chest thrusts until object is forced out, infant coughs or breathes on his or her own or infant becomes unconscious.

COMPETENCY MET

Say

Back blows do not relieve the obstruction. Infant becomes unresponsive. Mother becomes extremely upset.

Infant CPR (Rescuer 1):

- **Moves infant to firm, flat surface**
- Exposes chest and **begins chest compressions**
- **Opens the airway**
- **Looks for object and removes it, if present**
- Gives 2 ventilations using a pocket mask
- Attempts to calm mother

Competency:

Places infant carefully on a firm, flat surface and begins chest compressions. Then places one hand on the forehead and tilts the head to a neutral position while pulling up on the bony part of the chin with two or three fingers of the other hand. Identifies object and uses sweep to remove object. Each breath should be 1 second in duration and result in chest rise (both required). Participants should perform this step in approximately 5 to 7 seconds.

Rescuer uses closed-loop communication and demonstrates credibility, trustworthiness, confidence and empathy.

COMPETENCY MET

Say

Object is found and removed. Chest rises. Infant remains unresponsive.

Chest Compressions:

- **Initiates 30 chest compressions using the two-finger technique**

Competency:

Two fingers should be centered on the sternum about 1 finger-width below the nipple line. Compressions should be at a depth of about 1½ inches. Participants must allow for full chest recoil. Participant should perform 15 compressions at a rate of 100 to 120 per minute in 7 to 9 seconds

COMPETENCY MET

Say

Patient's status remains unchanged. Two additional rescuers arrive with a BVM and an AED. Mother is screaming and crying and interfering with care of her daughter. When mother sees AED, she begins to scream louder and attempts to pick up her daughter.

AED:

- Turns on machine
- **Attaches the AED pads**
- Plugs in connectors, if necessary
- Continues chest compressions and ventilations until AED prompts
- **Communicates with, and comforts, mother; holds mother back while talking to her constantly; escorts her from the room**

Competency:

Note second rescuer's ability to apply AED. The device should be turned on within 15 seconds of availability, pads placed appropriately.

Rescuer uses closed-loop communication and demonstrates credibility, trustworthiness, confidence and empathy.

COMPETENCY MET

Say/AED prompt

Analyzing heart rhythm. Do not touch the patient. Mother successfully held back and escorted from the scene.

AED:

- **Says, "Clear"**
- Waits for AED to analyze
- **Says, "Clear"**
- Delivers shock

Competency:

Rescuer should verbalize an "all clear" message while AED is analyzing and again before shock. Note ability of rescuer to ensure that all are clear of the patient and compressor is hovering hands a few inches above the chest.

COMPETENCY MET

Say/AED prompt

All are clear. Press red flashing button to deliver shock. Shock delivered. It is now safe to touch the patient. Begin CPR.

Continued Cycles of Compressions and Ventilations:

- Continues compressions using the two-thumb encircling technique
- Ventilates by compressing the infant BVM
- Manages airway and mask seal
- Gives 2 breaths after each set of compressions

Competency:

Participants should perform a minimum of 10 cycles of chest compressions and ventilations (15:2) or until AED prompts for analysis. Rescuers should switch using an agreed-upon term after 10 cycles or when rescuer becomes fatigued, as demonstrated by diminishing performance of compressions.

Management of airway and mask seal

Ventilations:

Each breath should be 1 second in duration and result in chest rise (both required). Both breaths should be delivered in 5 to 7 seconds.

Compressions:

Two thumbs should be centered on the sternum about 1 finger-width below the nipple line encircling the chest.

Compressions should be at a depth of about 1½ inches.

Participants must allow for full chest recoil. Participants should perform the 15 compressions at a rate of 100 to 120 per minute in 7 to 9 seconds.

COMPETENCY MET

Say/AED prompt

(After 4 cycles of compressions and ventilations): Rescuer 1 notes signs of life.

Breathing and Pulse Check (Rescuer 1):

- Checks for breathing and pulse, no more than 5 to 10 seconds

Competency:

Participants must check breathing (includes opening the airway) and pulse together. Total time for this step should be at least 5, but no more than 10 seconds for all components.

COMPETENCY MET

Say/AED prompt

There is a rapid pulse and normal breathing.

Recovery Position:

- Carefully positions the infant face-down along participant's forearm
- Supports infant's head and neck with participant's other hand while keeping the infant's mouth and nose clear

Competency:

None

COMPETENCY MET

Say

End scenario.

REFLECTION AND DEBRIEFING

Ask team members to take a minute to reflect on the team's performance during the scenario and then review the debriefing questions individually.



Ask The team leader: **Can you summarize the scenario and describe how your team performed?**



Ask The team leader: **How did you respond when the patient became unresponsive?**



Ask The team: **How did the team respond when the mother became hysterical and started to interfere with care?**



Ask All participants: **How effective was the team in working together and communicating with each other and the family?**

Module 4: Certification Assessment

Performance Objectives

During this session, participants will:

- Successfully complete a practical assessment, acting on critical decision points in a safe and effective manner.
- Successfully complete the written assessment with a score of at least 80 percent.

Materials, Equipment and Supplies

- CPR manikins (one adult and one infant manikin for each team of up to three participants; one child manikin, if available, for each team of up to three participants)
- Adult pocket masks with a one-way valve that is compatible with the pocket mask (one for each participant)
- Infant pocket masks with a one-way valve that is compatible with the pocket mask (one for each participant)
- Child pocket masks with a one-way valve that is compatible with the pocket mask (optional; one for each participant)
- Adult bag-valve-mask resuscitators (one for each adult manikin)
- Infant bag-valve-mask resuscitators (one for each infant manikin)
- Child bag-valve-mask resuscitators (one for each child manikin, optional)
- AED training devices with adult and pediatric AED pads (one for each set of adult and infant manikins)
- Breathing barriers
- Nonlatex disposable gloves
- Manikin decontamination supplies
- Blankets and/or mats (optional)
- Basic Life Support for Healthcare Providers course presentation
- Instructor skill sheets (one set for each participant; see Appendix B)
- Final Written Exams A and B (one for each participant; see Appendix D)
- Final Written Exam Answer Sheets (two for each participant; see Appendix D)
- Final Written Exam Answer Keys (Exams A and B; see Appendix D)
- Extra copies of Final Written Exam (Exams A and B) and Answer Sheets (see Appendix D)
- Pencils, pens (optional)

Instructor Preparation

- Identify the participant audience for the class, including the expected number of participants.
- Obtain the necessary materials, equipment and supplies.
- Set up the classroom to allow for the written assessment and effective skill assessment.
- Review the scenarios to be used for assessment.
- Obtain the necessary number of skill sheets (instructor copies).
- Obtain the required number of copies of the written assessment and answer keys.
- Have additional pencils and/or pens for participants to complete the written assessment.

Instructor's Note:

- If participants are using the blended learning course, participants have already completed a written assessment online and only need to successfully complete the practical assessment for certification.
- For participants engaged in the full instructor-led course, review course and challenge course, both objectives must be met.
- Keep in mind that copies of the final written exam are needed only for those participants involved in the instructor-led course.
- When arranging the classroom for the skills assessment, ensure that there are adequate numbers of manikins, pocket masks, BVMs and AED trainers with adult and pediatric pads for the number of participants in the class. Refer to the list in Materials, Equipment and Supplies.
- Arrange the skill assessment areas so that each participant has ample room to move about and demonstrate the skill(s). Also ensure that you and your fellow instructors can easily visualize the skill assessment areas and all participants involved in the scenario.
- Feel free to rearrange and customize the order of the assessments in this module to fit the needs of your class. For example, the practical assessment can be performed before or after the written assessment, or half the class can do the written assessment while the other half of the class completes the practical assessment (depending on class size, space and instructor availability).
- If a portion of the class is completing the written assessment while the other portion is completing the practical assessment, arrange the classroom so that neither group disrupts the other; consider a separate area for the participants taking the practical assessment.

SLIDE 4-01: Certification Assessment



Instructor's Note:

- Remind participants in the full instructor-led course, review course and Challenge that they must complete both the practical assessment and the written assessment to receive certification.
- Tell participants involved in the blended learning course that they must complete the practical assessment to receive certification.



Now, it's time to show me what you have learned.

SLIDE 4-02: Practical Assessment



Instructor's Note:

- Use the appropriate scenarios found in Appendix E, Practical Assessment Scenarios, based on the background of the majority of the participants.
- Remember that participants will be assessed through a series of up to three resuscitation scenarios (1 adult; 1 child; 1 infant) with up to three participants. Each participant will serve as the Team Leader (the first to arrive on scene) and all team members will have to perform chest compressions and ventilations in each scenario.
- In cases where no child manikins are available, conduct the scenario using an adult manikin, but keep the focus of the scenario on a child resuscitation
- Be prepared to adapt based on group size:
 - If a group consists of less than three participants, they will not be required to perform the child scenario.
 - If there is only one participant in the team, you may serve as a team member to facilitate the scenario.
- Remember, all participants must perform adult and infant compressions and ventilations at a minimum.



Once again, you'll be participating in scenarios to demonstrate the skills you have learned, functioning as a part of a team of up to three participants with one participant acting as the team leader—the first to arrive on scene.

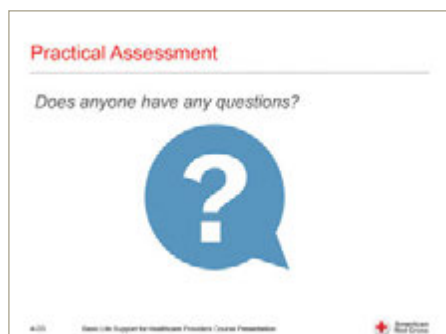
You will rotate through scenarios ensuring you all have an opportunity to perform compressions and ventilations for each age group

Unlike previous scenarios, I/we will not be providing any coaching or guidance.

As a team leader, you will be assessed on whether you've completed all the critical actions and whether you have acted upon decisions in a timely, sequential, safe and effective manner.

As a team member, you will be assessed on your ability to effectively perform compressions and ventilations including opening the airway for each scenario.

SLIDE 4-03: Practical Assessment

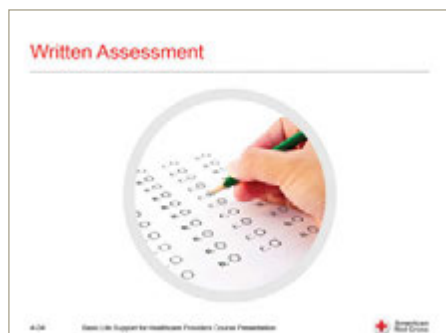


Ask

Are there any questions?

Answer any questions posed by participants and explain what to expect if needed.

SLIDE 4-04: Written Assessment



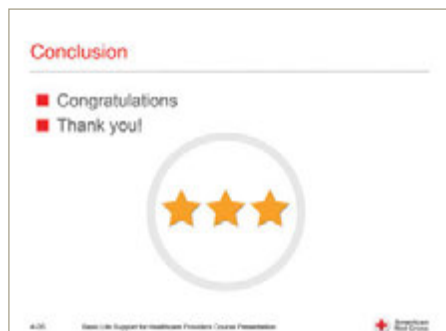
Instructor's Note:

- The written assessment consists of 20 questions. Participants must score a minimum of 80% to pass the assessment. This allows a total of 4 incorrect answers.
- The flexible design of the course allows you to separate participants between the practical and written assessment. As an example, if you have 6 participants, 3 could take the written assessment while the other 3 could complete the practical assessment. You must maintain test security and ensure that the written assessment is proctored effectively if you are conducting the practical assessment simultaneously.

Explain how the written assessment will be conducted. Remind participants that this is not an open book or group activity.

Explain how the class will be divided, if appropriate, to facilitate a simultaneous written and practical assessment.

SLIDE 4-05: Conclusion



Instructor's Note:

- Tell participants that they will receive an email from the American Red Cross with a link to access their digital certificate. This digital certificate can be downloaded, printed or shared, as needed.
- If a participant in the full instructor-led course, review course or Challenge did not successfully complete one of the assessments, offer the opportunity for a same-day retest. If a participant in the blended learning course did not successfully complete the practical assessment, offer the opportunity for a same-day retest.
- If a participant in the full instructor-led course, review course or Challenge did not successfully complete both assessments; inform the participant about the need to retake the course.



Say

Congratulations and thank you for participating in the American Red Cross Basic Life Support for Healthcare Providers course.

SECTION C: APPENDICES

Appendix A: Skill Sheets (Participant Copy)

Appendix B: Skill Sheets (Instructor Copy)

Appendix C: Additional Topics

Appendix D: Final Written Exam, Answer Sheet and Answer Keys

Appendix E: Practical Assessment Scenarios

Appendix A: Skill Sheets (Participant Copy)

CPR/AED—Adult

CPR/AED—Child

CPR/AED—Infant

CPR/AED—Adult

Step	Action *Denotes a Critical Action	Competencies	Notes
1	Scene size-up: - Scene safety* - Standard precautions* - Number of patients - Nature of illness/mechanism of injury - Initial impression, including life-threatening bleeding* - Additional resources needed?	- Sequence is not critical if all goals are accomplished and verbalized. (PPE may be worn instead of verbalized.) - Resources may include: 9-1-1, Advanced Life Support, Rapid Response Team, Code Team or additional personnel as needed or appropriate.	
2	Primary assessment: - Assesses level of consciousness (LOC)* - Opens airway - Checks breathing and carotid pulse simultaneously for at least 5, but no more than 10 seconds*	LOC: Taps the patient's shoulder to elicit painful stimuli LOC: Shouts, "Are you OK?" (or a reasonable facsimile) to elicit a verbal stimuli Airway: Opens using head-tilt/chin-lift past a neutral position or a modified jaw thrust Breathing/pulse check: Checks for breathing and carotid pulse simultaneously for at least 5, but no more than 10 seconds	
3	Chest compressions: - Exposes chest - Initiates 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil*	Hand position: Centered on the lower half of the sternum Depth: At least 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions	
4	Ventilations: - Opens the airway* - Gives 2 ventilations using a pocket mask*	Airway: Head-tilt/chin-lift past a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds	
5	Continues CPR: - Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* - Opens airway - Gives 2 ventilations with pocket mask	Hand position: Centered on the lower half of sternum Depth: At least 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions	
6	Integration of team members (arrive at 20th compression in step 5): - Team leader continues care* - Communicates with teammates - Prepares for rotation upon AED analysis	Continues care: Maintains uninterrupted CPR Communicates relevant patient information Verbalizes compression count to coordinate ventilations with team Verbalizes coordination plan to switch compressors upon AED analysis	
7	AED applied: - Turns on machine - Attaches AED pads* - Plugs in connectors, if necessary - Continues compressions	AED on: Activates within 15 seconds of arrival Pads: Pad 1—right upper chest below right clavicle and right of sternum; Pad 2—left side of chest several inches below left armpit on mid-axillary line	
8	AED analysis and rotation: - Ensures all providers are clear while AED analyzes and prepares for shock* - Says "Clear" - Rotates rescuers during analysis to prevent fatigue - Bag-valve-mask resuscitator (BVM) prepared	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR	

Step	Action *Denotes a Critical Action	Competencies	Notes
9	Shock Advised: - Says "Clear" - Presses shock button to deliver shock*	Clear: Ensures no one is touching the patient while shock being delivered Delivers shock: Depresses shock button within 10 seconds	
10	Resumes CPR: - Continues with 5 cycles of CPR (30 compressions/2 ventilations)* - Performs compressions (Rescuer 2) - Manages airway and mask seal (Rescuer 1) - Provides ventilations using the BVM (Rescuer 3) - Continues until AED prompts	Resumes CPR: Immediately following shock, resumes CPR starting with compressions until prompted by the AED for analysis Hand position: Centered on the lower half of sternum Depth: At least 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions	
11	Ventilations with BVM: - Opens airway from top of the head: - Maintains mask seal - Compresses BVM to give 2 ventilations	Seal: 2 hands using the E-C technique Airway: Head-tilt/chin-lift past a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (approximately 400–700 ml of volume avoiding over inflation)	
12	Anticipates compressor change: - Communicates with teammates - Prepares for rotation upon AED analysis	Verbalizes coordination plan to switch compressors prior to AED analysis	
13	AED analyzes: - Says, "Stand clear" - No shock advised	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR	
14	Resumes CPR: - Continues with 5 cycles of CPR (30 compressions/2 ventilations)* - Performs compressions (Rescuer 3) - Manages airway and mask seal (Rescuer 2) - Provides ventilations using the BVM (Rescuer 1) - Continues until AED prompts	Resumes CPR: immediately following shock CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Centered on the lower half of sternum Depth: At least 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions	
15	AED analyzes and rotation: - Says, "Clear" - No shock advised	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR	
16	Spontaneous patient movement: Checks for breathing and pulse	Pulse check: Rescuer performing ventilations opens the airway and checks for breathing and pulse simultaneously for at least 5, but no more than 10 seconds	

CPR/AED—Child

Step	Action *Denotes a Critical Action	Competencies	Notes
1	Scene size-up: - Scene safety* - Standard precautions* - Number of patients - Nature of illness/mechanism of injury - Initial impression, including life-threatening bleeding* - Additional resources needed? - Consent	- Sequence is not critical if all goals are accomplished and verbalized. (PPE may be worn instead of verbalized.) - Resources may include: 9-1-1, Advanced Life Support, Rapid Response Team, Code Team or additional personnel as needed or appropriate. Consent: States name, background, what they plan to do and permission to treat.	
2	Primary assessment: - Assesses level of consciousness (LOC)* - Opens airway - Checks breathing and carotid pulse simultaneously for at least 5, but no more than 10 seconds*	LOC: Taps the patient's shoulder to elicit painful stimuli LOC: Shouts, "Are you OK?" (or a reasonable facsimile) to elicit a verbal stimuli Airway: Opens using head-tilt/chin-lift slightly past a neutral position or a modified jaw thrust Breathing/pulse check: Checks for breathing and carotid pulse simultaneously for at least 5, but no more than 10 seconds.	
3	Chest compressions: - Exposes chest - Initiates 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil*	Hand position: Centered on the lower half of the sternum Depth: About 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions	
4	Ventilations: - Opens the airway* - Gives 2 ventilations using a pocket mask*	Airway: Head-tilt/chin-lift slightly past a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds	
5	Continues CPR: - Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* - Opens airway - Gives 2 ventilations with pocket mask	Hand position: Centered on the lower half of sternum Depth: About 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions	
6	Integration of team members (arrive at 20th compression in step 5): - Team leader continues care* - Communicates with teammates - Prepares for rotation upon AED analysis	Continues care: Maintains uninterrupted CPR Communicates relevant patient information including patient age if known Verbalizes compression count to coordinate ventilations with team Verbalizes coordination plan to switch compressors upon AED analysis	
7	AED applied: - Turns on machine - Attaches AED pads* - Plugs in connectors, if necessary - Continues compressions	AED on: Activates within 15 seconds of arrival Pads: Applies correct pads for age of the child. Pad 1—right upper chest below right clavicle and right of sternum; Pad 2—left side of chest several inches below left armpit on mid-axillary line	

Step	Action *Denotes a Critical Action	Competencies	Notes
8	AED analysis and rotation: - Ensures all providers are clear while AED analyzes and prepares for shock* - Says "Clear" - Rotates rescuers during analysis to prevent fatigue - Bag-valve-mask resuscitator (BVM) prepared	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR	
9	Shock advised: - Says "Clear" - Presses shock button to deliver shock*	Clear: Ensures no one is touching the patient while shock being delivered Delivers shock: Depresses shock button within 10 seconds	
10	Resumes CPR: - Continues with 10 cycles of CPR (15 compressions/2 ventilations)* - Performs compressions (Rescuer 2) - Manages airway and mask seal (Rescuer 1) - Provides ventilations using the BVM (Rescuer 3) - Continues until AED prompts	Resumes CPR: Immediately following shock CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Centered on the lower half of sternum Depth: About 2 inches Number: 15 compressions Rate: 100–120 per minute (7–9 seconds) Full Chest Recoil: 12 of 15 compressions	
11	Ventilations with BVM: - Opens airway from top of the head - Maintains mask seal - Compresses BVM to give 2 ventilations	Seal: 2 hands using the E-C technique Airway: Head-tilt/chin-lift slightly past a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (avoiding over inflation)	
12	Anticipates compressor change: - Communicates with teammates - Prepares for rotation upon AED analysis	Verbalizes coordination plan to switch compressors prior to AED analysis	
13	AED analyzes: - Says, "Stand clear" - No shock advised	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR	
14	Resumes CPR: - Continues with 10 cycles of CPR (15 compressions/2 ventilations)* - Performs compressions (Rescuer 3) - Manages airway and mask seal (Rescuer 2) - Provides ventilations using the BVM (Rescuer 1) - Continues until AED prompts	Resumes CPR: Immediately following shock CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Centered on the lower half of sternum Depth: About 2 inches Number: 15 compressions Rate: 100–120 per minute (7–9 seconds) Full chest recoil: 12 of 15 compressions	
15	AED analyzes and rotation: - Says, "Clear" - No shock advised	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR	
16	Spontaneous patient movement: Checks for breathing and pulse	Pulse check: Rescuer performing ventilations opens the airway and checks for breathing and pulse simultaneously for at least 5, but no more than 10 seconds	

CPR/AED—Infant

Step	Action *Denotes a Critical Action	Competencies	Notes
1	Scene size-up: - Scene safety* - Standard precautions* - Number of patients - Nature of illness/mechanism of injury - Initial impression, including life-threatening bleeding* - Additional resources needed? - Consent	- Sequence is not critical if all goals are accomplished and verbalized. (PPE may be worn instead of verbalized.) - Resources may include: 9-1-1, Advanced Life Support, Rapid Response Team, Code Team or additional personnel as needed or appropriate. Consent: States name, background, what they plan to do and permission to treat.	
2	Primary assessment: - Positions infant on a firm flat surface - Assesses level of consciousness (LOC)* - Opens airway - Checks breathing and brachial pulse simultaneously for at least 5, but no more than 10 seconds*	Position: Places infant on a firm, flat surface LOC: Taps the infant's foot to elicit stimuli LOC: Shouts, "Are you OK?" (or a reasonable facsimile) to elicit verbal stimuli. Uses infant's name if available Airway: Opens using Head-tilt/chin-lift to a neutral position Breathing/pulse check: Checks for breathing and brachial pulse simultaneously for at least 5, but no more than 10 seconds	
3	Chest compressions: - Exposes chest - Initiates 30 chest compressions using correct finger placement at the proper rate and depth, allowing for full chest recoil*	Finger position: Centered on the lower half of the sternum about 1 finger-width below the nipple line Depth: About 1½ inches Number: 30 compressions Rate: 100 to 120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions	
4	Ventilations: - Opens the airway* - Gives 2 ventilations using an infant pocket mask*	Airway: Head-tilt/chin-lift to a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds	
5	Continues CPR: - Gives 30 chest compressions using correct finger placement at the proper rate and depth, allowing for full chest recoil* - Opens airway - Gives 2 ventilations with an infant pocket mask	Finger position: Centered on the lower half of sternum about 1 finger-width below nipple line Depth: About 1½ inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions	
6	Integration of team members (arrive at 20th compression in step 5): - Team leader continues care* - Communicates with teammates - Prepares for rotation upon AED analysis	Continues care: Maintains uninterrupted CPR Communicates relevant patient information including patient age if known Verbalizes compression count to coordinate ventilations with team Verbalizes coordination plan to switch compressors upon AED analysis and switch to encircling thumbs technique	
7	AED applied: - Turns on machine - Attaches AED pads* - Plugs in connectors, if necessary - Continues compressions	AED on: Activated within 15 seconds of arrival Pads: Applies correct pads for an infant. Pad 1—in the center of the anterior chest; Pad 2—on the infant's back between the scapulae	

Step	Action *Denotes a Critical Action	Competencies	Notes
8	AED analysis and rotation: - Ensures all providers are clear while AED analyzes and prepares for shock* - Says "clear" - Rotates rescuers during analysis to prevent fatigue - Infant bag-valve-mask resuscitator (BVM) prepared	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis and moves to a head and foot position for encircling thumbs technique Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR	
9	Shock advised: - Says "Clear"* - Presses shock button to deliver shock*	Clear: Ensures no one is touching the patient while shock being delivered Delivers shock: Depresses shock button within 10 seconds	
10	Resumes CPR: - Continues with 10 cycles of CPR (15 compressions/2 ventilations)* - Performs compressions (Rescuer 2) - Manages airway and mask seal (Rescuer 1) - Provides ventilations using the infant BVM (Rescuer 3) - Continues until AED prompts	Resumes CPR: Immediately following shock CPR resumed starting with compressions until prompted by the AED for analysis Thumb position: Two thumbs centered on the lower half of sternum about 1 finger-width below the nipple line Depth: About 1½ inches Number: 15 compressions Rate: 100–120 per minute (7–9 seconds) Full chest recoil: 12 of 15 compressions	
11	Ventilations with BVM: - Opens airway from top of the head - Maintains mask seal - Compresses infant BVM to give 2 ventilations	Seal: 2 hands using the E-C technique Airway: Head-tilt/chin-lift to a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (avoiding over inflation)	
12	Anticipates compressor change: - Communicates with teammates - Prepares for rotation upon AED analysis	Verbalizes coordination plan to switch compressors prior to AED analysis	
13	AED analyzes: - Says, "Stand clear" - No shock advised	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR	
14	Resumes CPR: - Continues with 10 cycles of CPR (15 compressions/2 ventilations)* - Performs compressions (Rescuer 3) - Manages airway and mask seal (Rescuer 2) - Provides ventilations using the infant BVM (Rescuer 1) - Continues until AED prompts	Resumes CPR: Immediately following shock CPR resumed starting with compressions until prompted by the AED for analysis Thumb position: two thumbs centered on the lower half of sternum 1 finger-width below the nipple line Depth: About 1½ inches Number: 15 compressions Rate: 100–120 per minute (7–9 seconds) Full chest recoil: 12 of 15 compressions	
15	AED analyzes and rotation: - Says, "Clear"* - No shock advised	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR	
16	Spontaneous patient movement: Checks for breathing and pulse	Pulse check: Rescuer performing ventilations opens the airway and checks for breathing and pulse simultaneously for at least 5, but no more than 10 seconds.	

Appendix B: Skill Sheets (Instructor Copy)

CPR/AED—Adult

CPR/AED—Child

CPR/AED—Infant

CPR/AED—Adult

Rescuer 1 (Team Leader): _____

Rescuer 2: _____

Rescuer 3: _____

Step	Action *Denotes a Critical Action	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
1	Scene size-up: - Scene safety* - Standard precautions* - Number of patients - Nature of illness/mechanism of injury - Initial impression, including life-threatening bleeding* - Additional resources needed?	- Sequence is not critical if all goals are accomplished and verbalized. (PPE may be worn instead of verbalized.) - Resources may include: 9-1-1, Advanced Life Support, Rapid Response Team, Code Team or additional personnel as needed or appropriate.			
2	Primary assessment: - Assesses level of consciousness (LOC)* - Opens airway - Checks breathing and carotid pulse simultaneously for at least 5, but no more than 10 seconds*	LOC: Taps the patient's shoulder to elicit painful stimuli LOC: Shouts, "Are you OK?" (or a reasonable facsimile) to elicit a verbal stimuli Airway: Opens using head-tilt/chin-lift past a neutral position or a modified jaw thrust Breathing/pulse check: Checks for breathing and carotid pulse simultaneously for at least 5, but no more than 10 seconds.			
3	Chest compressions: - Exposes chest - Initiates 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil*	Hand position: Centered on the lower half of the sternum Depth: At least 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions			
4	Ventilations: - Opens the airway* - Gives 2 ventilations using a pocket mask*	Airway: Head-tilt/chin-lift past a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds			
5	Continues CPR: - Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* - Opens airway - Gives 2 ventilations with pocket mask	Hand position: Centered on the lower half of sternum Depth: At least 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions			

E: Excellent, P: Pass, F: Fail

Step	Action *Denotes a Critical Action	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
6	Integration of team members (arrive at 20th compression in step 5): - Team leader continues care* - Communicates with teammates - Prepares for rotation upon AED analysis	Continues care: Maintains uninterrupted CPR Communicates relevant patient information Verbalizes compression count to coordinate ventilations with team Verbalizes coordination plan to switch compressors upon AED analysis			
7	AED applied: - Turns on machine - Attaches AED pads* - Plugs in connectors, if necessary - Continues compressions	AED on: Activated within 15 seconds of arrival Pads: Pad 1—right upper chest below right clavicle and right of sternum; Pad 2—left side of chest several inches below left armpit on mid-axillary line			
8	AED analysis and rotation: - Ensures all providers are clear while AED analyzes and prepares for shock* - Says "Clear" - Rotates rescuers during analysis to prevent fatigue - Bag-valve-mask resuscitator (BVM) prepared	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR			
9	Shock advised: - Says "Clear"* - Presses shock button to deliver shock*	Clear: Ensures no one is touching the patient while shock being delivered Delivers shock: Depresses shock button within 10 seconds			
10	Resumes CPR: - Continues with 5 cycles of CPR (30 compressions/2 ventilations)* - Performs compressions (Rescuer 2) - Manages airway and mask seal (Rescuer 1) - Provides ventilations using the BVM (Rescuer 3) - Continues until AED prompts	Resumes CPR: Immediately following shock, CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Centered on the lower half of sternum Depth: At least 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions			
11	Ventilations with BVM: - Opens airway from top of the head - Maintains mask seal - Compresses BVM to give 2 ventilations	Seal: 2 hands using the E-C technique Airway: Head-tilt/chin-lift past a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (approximately 400–700 ml of volume avoiding over inflation)			

E: Excellent, P: Pass, F: Fail

Step	Action *Denotes a Critical Action	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
12	Anticipates compressor change: - Communicates with teammates - Prepares for rotation upon AED analysis	Verbalizes coordination plan to switch compressors prior to AED analysis			
13	AED analyzes: - Says, "Stand clear" - No shock advised	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR			
14	Resumes CPR: - Continues with 5 cycles of CPR (30 compressions/2 ventilations)* - Performs compressions (Rescuer 3) - Manages airway and mask seal (Rescuer 2) - Provides ventilations using the BVM (Rescuer 1) - Continues until AED prompts	Resumes CPR: Immediately following shock CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Centered on the lower half of sternum Depth: At least 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions			
15	AED analyzes and rotation: - Says, "Clear"* - No shock advised	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR			
16	Spontaneous patient movement: Checks for breathing and pulse	Pulse check: Rescuer performing ventilations opens the airway and checks for breathing and pulse simultaneously for at least 5, but no more than 10 seconds.			

E: Excellent, P: Pass, F: Fail

Overall Scenario Assessment

	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
Leadership and Communication	▪ Communication: Accurately and effectively communicated with fellow rescuers ▪ Coordination: Clearly and decisively directed team through rotations of roles on AED analysis ▪ Feedback: Provided coaching and feedback to ensure effective performance of team member skills			
Chest Compressions	▪ Location: Hands centered on the lower half of the sternum ▪ Depth: At least 2 inches ▪ Recoil: Allow full chest recoil between compressions ▪ Rate: 30 compressions at a rate of 100–120 per minute (15–18 seconds for a set of 30)			
Ventilations	▪ Length: Each breath should be 1 second in duration ▪ Visual: Chest should rise ▪ Time: 2 ventilations in approximately 5 to 7 seconds			

Instructor Name: _____ Instructor Signature: _____ Date: _____

E: Excellent, P: Pass, F: Fail

CPR/AED—Child

Rescuer 1 (Team Leader): _____

Rescuer 2: _____

Rescuer 3: _____

Step	Action *Denotes a Critical Action	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
1	Scene size-up: - Scene safety* - Standard precautions* - Number of patients - Nature of illness/mechanism of injury - Initial impression, including life-threatening bleeding* - Additional resources needed? - Consent	- Sequence is not critical if all goals are accomplished and verbalized (PPE may be worn instead of verbalized). - Resources may include: 9-1-1, Advanced Life Support, Rapid Response Team, Code Team or additional personnel as needed or appropriate. - Consent: States name, background, what they plan to do and permission to treat.			
2	Primary assessment: - Assesses level of consciousness (LOC)* - Opens airway - Checks breathing and carotid pulse simultaneously for at least 5, but no more than 10 seconds*	LOC: Taps the patient's shoulder to elicit painful stimuli LOC: Shouts, "Are you OK?" (or a reasonable facsimile) to elicit a verbal stimuli Airway: opens using head-tilt/chin-lift slightly past a neutral position or a modified jaw thrust Breathing/pulse check: Checks for breathing and carotid pulse simultaneously for at least 5, but no more than 10 seconds			
3	Chest compressions: - Exposes chest - Initiates 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil*	Hand position: Centered on the lower half of the sternum Depth: About 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full Chest Recoil: 26 of 30 compressions			
4	Ventilations: - Opens the airway* - Gives 2 ventilations using a pocket mask*	Airway: Head-tilt/chin-lift slightly past a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds			
5	Continues CPR: - Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* - Opens airway - Gives 2 ventilations with pocket mask	Hand position: Centered on the lower half of sternum Depth: About 2 inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions			

E: Excellent, P: Pass, F: Fail

Step	Action *Denotes a Critical Action	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
6	Integration of team members (arrive at 20th compression in step 5): - Team Leader continues care* - Communicates with teammates - Prepares for rotation upon AED analysis	Continues care: Maintains uninterrupted CPR Communicates relevant patient information including patient age if known Verbalizes compression count to coordinate ventilations with team Verbalizes coordination plan to switch compressors upon AED analysis			
7	AED applied: - Turns on machine - Attaches AED pads* - Plugs in connectors, if necessary - Continues compressions	AED on: Activated within 15 seconds of arrival Pads: Applies correct pads for age of the child Pad 1—right upper chest below right clavicle and right of sternum; Pad 2—left side of chest several inches below left armpit on mid-axillary line			
8	AED analysis and rotation - Ensures all providers are clear while AED analyzes and prepares for shock* - Says “clear” - Rotates rescuers during analysis to prevent fatigue - Bag-valve-mask resuscitator (BVM) prepared	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR			
9	Shock advised: - Says “Clear”* - Presses shock button to deliver shock*	Clear: Ensures no one is touching the patient while shock being delivered Delivers shock: Depresses shock button within 10 seconds			
10	Resumes CPR: - Continues with 10 cycles of CPR (15 compressions/2 ventilations)* - Performs compressions (Rescuer 2) - Manages airway and mask seal (Rescuer 1) - Provides ventilations using the BVM (Rescuer 3) - Continues until AED prompts	Resumes CPR: Immediately following shock CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Centered on the lower half of sternum Depth: About 2 inches Number: 15 compressions Rate: 100–120 per minute (7–9 seconds) Full chest recoil: 12 of 15 compressions			
11	Ventilations with BVM: - Opens airway from top of the head - Maintains mask seal - Compresses BVM to give 2 ventilations	Seal: 2 hands using the E-C technique Airway: Head-tilt/chin-lift slightly past a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (avoiding over inflation)			

E: Excellent, P: Pass, F: Fail

Step	Action *Denotes a Critical Action	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
12	Anticipates compressor change: - Communicates with teammates - Prepares for rotation upon AED analysis	Verbalizes coordination plan to switch compressors prior to AED analysis			
13	AED analyzes: - Says, "Stand clear" - No shock advised	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR			
14	Resumes CPR: - Continues with 10 cycles of CPR (15 compressions/2 ventilations)* - Performs compressions (Rescuer 3) - Manages airway and mask seal (Rescuer 2) - Provides ventilations using the BVM (Rescuer 1) - Continues until AED prompts	Resumes CPR: Immediately following shock CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Centered on the lower half of sternum Depth: About 2 inches Number: 15 compressions Rate: 100–120 per minute (7–9 seconds) Full Chest Recoil: 12 of 15 compressions			
15	AED analyzes and rotation: - Says, "Clear"* - No shock advised	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR			
16	Spontaneous patient movement: Checks for breathing and pulse	Pulse check: Rescuer performing ventilations opens the airway and checks for breathing and pulse simultaneously for at least 5, but no more than 10 seconds			

E: Excellent, P: Pass, F: Fail

Overall Scenario Assessment

	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
Leadership and Communication	▪ Communication: Accurately and effectively communicated with fellow rescuers ▪ Coordination: Clearly and decisively directed team through rotations of roles on AED analysis ▪ Feedback: Provided coaching and feedback to ensure effective performance of team member skills			
Chest Compressions	▪ Location: Hands centered on the lower half of the sternum ▪ Depth: About 2 inches ▪ Recoil: Allow full chest recoil between compressions ▪ Rate: 30 compressions at a rate of 100–120 per minute (15–18 seconds for a set of 30) or 15 compressions at a rate of 100–120 per minute (7–9 seconds for a set of 15)			
Ventilations	▪ Length: Each breath should be 1 second in duration ▪ Visual: Chest should rise ▪ Time: 2 ventilations in approximately 5–7 seconds			

Instructor Name: _____ Instructor Signature: _____ Date: _____

E: Excellent, P: Pass, F: Fail

CPR/AED—Infant

Rescuer 1 (Team Leader): _____

Rescuer 2: _____

Rescuer 3: _____

Step	Action *Denotes a Critical Action	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
1	Scene size-up: - Scene safety* - Standard precautions* - Number of patients - Nature of illness/mechanism of injury - Initial impression, including life-threatening bleeding* - Additional resources needed? - Consent	- Sequence is not critical if all goals are accomplished and verbalized (PPE may be worn instead of verbalized). - Resources may include: 9-1-1, Advanced Life Support, Rapid Response Team, Code Team or additional personnel as needed or appropriate. Consent: States name, background, what they plan to do and permission to treat.			
2	Primary assessment: - Positions infant on a firm flat surface - Assesses level of consciousness (LOC)* - Opens airway - Checks breathing and brachial pulse simultaneously for at least 5, but no more than 10 seconds*	Position: Places infant on a firm, flat surface LOC: Taps the infant's foot to elicit stimuli LOC: Shouts, "Are you OK?" (or a reasonable facsimile) to elicit verbal stimuli. Uses infant's name if available Airway: Opens using head-tilt/chin-lift to a neutral position Breathing/pulse check: Checks for breathing and brachial pulse simultaneously for at least 5, but no more than 10 seconds			
3	Chest compressions: - Exposes chest - Initiates 30 chest compressions using correct finger placement at the proper rate and depth, allowing for full chest recoil*	Finger position: Centered on the lower half of the sternum about 1 finger-width below the nipple line Depth: About 1½ inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions			
4	Ventilations: - Opens the airway* - Gives 2 ventilations using an infant pocket mask*	Airway: Head-tilt/chin-lift to a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds			
5	Continues CPR: - Gives 30 chest compressions using correct finger placement at the proper rate and depth, allowing for full chest recoil* - Opens airway - Gives 2 ventilations with an infant pocket mask	Finger position: Centered on the lower half of sternum about 1 finger-width below nipple line Depth: About 1½ inches Number: 30 compressions Rate: 100–120 per minute (15–18 seconds) Full chest recoil: 26 of 30 compressions			

E: Excellent, P: Pass, F: Fail

Step	Action *Denotes a Critical Action	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
6	Integration of team members (arrive at 20th compression in step 5): - Team leader continues care* - Communicates with teammates - Prepares for rotation upon AED analysis	Continues care: Maintains uninterrupted CPR Communicates shares relevant patient information including patient age if known Verbalizes compression count to coordinate ventilations with team Verbalizes coordination plan to switch compressors upon AED analysis and switch to encircling thumbs technique			
7	AED applied: - Turns on machine - Attaches AED pads* - Plugs in connectors, if necessary - Continues compressions	AED on: Activated within 15 seconds of arrival Pads: Applies correct pads for an infant. Pad 1—in the center of the anterior chest; Pad 2—on the infant's back between the scapulae			
8	AED analysis and rotation - Ensures all providers are clear while AED analyzes and prepares for shock* - Says "Clear" - Rotates rescuers during analysis to prevent fatigue - Infant bag-valve-mask resuscitator (BVM) prepared	Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis and moves to a head and foot position for encircling thumbs technique Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR			
9	Shock advised: - Says "Clear" - Presses shock button to deliver shock*	Clear: Ensures no one is touching the patient while shock being delivered Delivers shock: Expresses shock button within 10 seconds			
10	Resumes CPR: - Continues with 10 cycles of CPR (15 compressions/2 ventilations)* - Performs compressions (Rescuer 2) - Manages airway and mask seal (Rescuer 1) - Provides ventilations using the infant BVM (Rescuer 3) - Continues until AED prompts	Resumes CPR: Immediately following shock CPR resumed starting with compressions until prompted by the AED for analysis Thumb position: Two thumbs centered on the lower half of sternum about 1 finger-width below the nipple line Depth: About 1½ inches Number: 15 compressions Rate: 100–120 per minute (7–9 seconds) Full chest recoil: 12 of 15 compressions			
11	Ventilations with BVM: - Open airway from top of the head - Maintains mask seal - Compresses infant BVM to give 2 ventilations	Seal: 2 hands using the E-C technique Airway: Head-tilt/chin-lift to a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Delivered in 5–7 seconds Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (avoiding over inflation)			

E: Excellent, P: Pass, F: Fail

Step	Action *Denotes a Critical Action	Competencies	Rescuer 1	Rescuer 2	Rescuer 3
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16	Spontaneous patient movement: Checks for breathing and pulse	Pulse check: Rescuer performing ventilations opens the airway and checks for breathing and brachial pulse simultaneously for at least 5, but no more than 10 seconds			

E: Excellent, P: Pass, F: Fail

Overall Scenario Assessment

	Competencies	Rescuer 1	Rescuer 1	Rescuer 1
Leadership and Communication	▪ Communication: Accurately and effectively communicated with fellow rescuers ▪ Coordination: Clearly and decisively directed team through rotations of roles on AED analysis ▪ Feedback: Provided coaching and feedback to ensure effective performance of team member skills			
Chest Compressions	▪ Location: Fingers/thumbs centered on the lower half of the sternum ▪ Depth: About 1½ inches ▪ Recoil: Allow full chest recoil between compressions ▪ Rate: 30 compressions at a rate of 100 to 120 per minute (15–18 seconds for a set of 30) or 15 compressions at a rate of 100–120 per minute (7–9 seconds) with encircling thumbs technique			
Ventilations	▪ Length: Each breath should be 1 second in duration ▪ Visual: Chest should rise ▪ Time: 2 ventilations in approximately 5–7 seconds			

Instructor Name: _____ Instructor Signature: _____ Date: _____

E: Excellent, P: Pass, F: Fail

Appendix C: Additional Topics

1A: Core Course Elements

Performance Objectives

During this session, participants will effectively:

- Define the four core course elements.
- Discuss how critical thinking, problem solving, communication and team dynamics affect outcomes.

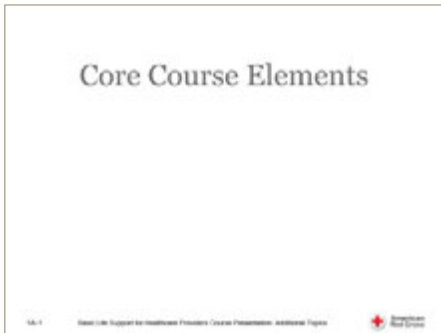
Materials, Equipment and Supplies

- Basic Life Support course presentation—Additional Topics
- Desktop/laptop computer with power source and speakers
- Projector and projection screen or large monitor
- Television with a DVD player (optional)

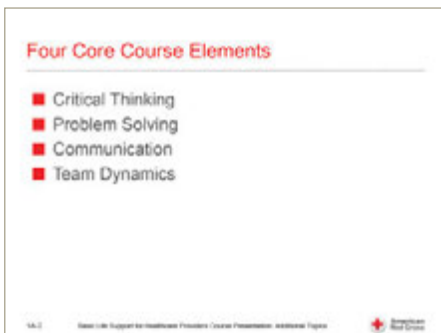
Instructor Preparation

- Ensure that the desktop/laptop computer and course presentation are set up and working properly.

SLIDE 1A-1: Core Course Elements



SLIDE 1A-2: Four Core Course Elements



Explain that being able to think critically, solve problems, work as a team and communicate is critical to providing optimal care.

Reinforce that these skills are essential to successful resuscitation.

SLIDE 1A-3: Critical Thinking

Critical Thinking

- Identifying changing information and situations
- Logically adapting to new information
- Thinking clearly and rationally
- Connecting information and actions
- Anticipating actions and reactions based on information

1A.3

Basic Life Support for Healthcare Providers Course Presentation: Additional Topics



Instructor's Note:

- Reinforce the concept that critical thinking requires clear and rational thinking based on facts presented and the learner's experience and expertise.

Describe the components of critical thinking including:

- Constantly identifying new information and situations, adapting to them logically.
- Thinking that is clear and rational.
- Connecting information and actions.
- Anticipating actions and reactions based on information.

SLIDE 1A-4: Critical Thinking and Healthcare

Critical Thinking and Healthcare

Can you give me an example of how you or someone you know applied critical thinking in a healthcare situation?



1A.4

Basic Life Support for Healthcare Providers Course Presentation: Additional Topics



Instructor's Note:

- Take answers which will vary.



Ask

Can you give me an example of how you or someone you know applied critical thinking in a health care situation?

Elicit answers from the participants for a few moments. Point out similarities in the examples, focusing on the need to continuously reassess and re-evaluate and modify actions based on the situation.

SLIDE 1A-5: Problem Solving

Problem Solving

- Solutions for complex or challenging situations or issues
- Use of readily available resources

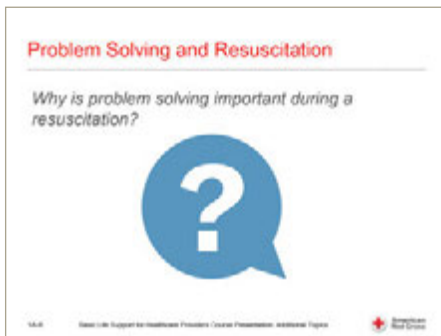
1A.5

Basic Life Support for Healthcare Providers Course Presentation: Additional Topics



Describe the concept of problem solving, reinforcing the importance of finding solutions to challenging or complex situations or issues that arise, using readily available resources.

SLIDE 1A-6: Problem Solving and Resuscitation



Ask

Why is problem solving important during a resuscitation?

Elicit answers from the participants for a few moments, making sure to address the following:

- Possibility that problems or issues can arise at any point during basic life support and resuscitation
- Need for addressing or solving swiftly and with minimal interruption to patient care to ensure the best possible outcomes

Emphasize the need for swift action, creative solutions, even in light of available resources, to achieve optimal outcomes.

SLIDE 1A-7: Communication



Instructor's Note:

- Remind participants that communication is not just the words spoken (verbal), but that it also includes the nonverbal message conveyed through body language, such as gestures and facial expressions.

Describe the important components of communication including the following:

- **Sender:** The person initiating the communication
- **Message:** The content of the communication; must be clear so that all persons involved know exactly what the message is
- **Receiver:** The person translating and interpreting the message
- **Closed loop:** Ensures that messages are received and understood

Emphasize the need for closed-loop communication to ensure that messages are received and understood.

SLIDE 1A-8: Communication with Patients and Families



Instructor's Note:

- Remind participants that when communicating with patients, families and bystanders, they need to demonstrate credibility and trustworthiness, confidence and empathy.

Explain that communication with patients, their families and bystanders, as well as colleagues, is essential during an emergency. Include a discussion of the need to build rapport, establish trust, and minimize fears (as necessary) and gather data.

SLIDE 1A-9: Effective Communication with the Family



Explain that being open and honest, especially about the patient's condition, is important when communicating with the family. Also emphasize the need to provide reassurance that everything is being done that can be done but to avoid giving misleading information or false hope.

SLIDE 1A-10: Communication About Death



Remind participants that death and dealing with it is a difficult topic, even for health care professionals.

Review the following important concepts for communicating with the family about death:

- Providing the information honestly and with compassion, in a straightforward manner, including information about events that may follow based on local protocols, policies or procedures.
- Allowing the family to begin processing the information.
- Allowing time for the family to begin the grief process; ask if there is anyone, such as other family members or clergy, that they would like to contact or have you contact.
- Anticipating a myriad of reactions by family members such as crying, sobbing, shouting, anger, screaming or physically lashing out.
- Waiting and answering any questions that the family may have.

SLIDE 1A-11: Team Communication



Explain to participants that they are part of a team with many moving parts providing care to patients and that it is impossible for any one person to know all that is going on at all times.

Remind them that being a member of the team is just as important as being a team leader.

Emphasize the importance of communicating with team members because everyone on the team is part of the process, has a voice, is vital to the team and is obligated to speak up if a problem arises.

SLIDE 1A-12: Crew Resource Management



Has anyone heard of crew resource management? Do any of you currently use it in your local protocols? How?

Engage participants in a discussion of crew resource management if participants are familiar with or use crew resource management.

Emphasize that the primary purpose of crew resource management is to make sure the team functions effectively.

SLIDE 1A-13: Crew Resource Management



Instructor's Note:

- Remind participants that the goal of any resuscitation is high-quality CPR.

Describe the concept of crew resource management as centering on the team leader who coordinates the actions of team members so that the team functions effectively and efficiently.

Provide an example of crew resource management such as when new individuals arrive on the scene or when team members switch roles during an emergency; it is the team leader who is responsible for coordinating these activities.

Discuss how to effectively communicate via crew resource management: team members should get the attention of the team leader, state their concern, the problem as they see it and a solution. They should then be sure to obtain direction from the team leader.

Explain how crew resource management works during resuscitation: the team leader directs and coordinates all the working elements, including team members, activities and actions as well as equipment, to focus on providing high-quality CPR.

SLIDE 1A-14: Teamwork



Define teamwork: a group of people with well-defined roles and responsibilities working together to achieve a common goal.

Explain that teamwork is crucial during resuscitation because the ultimate goal is saving a life. No one person can treat a patient alone. It takes a coordinated effort.

SLIDE 1A-15: Effective Team Member



Describe important characteristics of a team member; be sure to address the following:

- Having the necessary knowledge and skills to perform your role
- Staying in your assigned role but giving assistance to others as needed as long as you can maintain your responsibilities
- Communicating effectively with the team leader if:
 - o You are lacking any knowledge or skills
 - o You identify something that the team leader may have overlooked
 - o You recognize a dangerous situation or need for urgent action
- Focusing on achieving the goals
- Asking pertinent questions and sharing pertinent observations

SLIDE 1A-16: Effective Team Leader



Instructor's Note:

- *Remind participants that the team leader does not have to be the primary care provider.*

Discuss how to be an effective team leader. Be sure to include the following topics:

- Assigning and understanding roles
- Monitoring performance
- Providing support
- Modeling behavior
- Coaching the team
- Allowing team input and interaction
- Re-evaluating and summarizing progress
- Focusing on the big picture

1B: The Emergency Medical Services System

Performance Objectives

During this session, participants will effectively:

- Describe the emergency medical services (EMS) system.
- List the series of events that occur when the emergency medical services (EMS) system is activated.

Materials, Equipment and Supplies

- Basic Life Support course presentation—Additional Topics
- Desktop/laptop computer with power source and speakers
- Projector and projection screen or large monitor
- Television with a DVD player (optional)

Instructor Preparation

- Ensure that the desktop/laptop computer and course presentation are set up and working properly.

SLIDE 1B-1: The Emergency Medical Services System



SLIDE 1B-2: The Emergency Medical Services System



Explain the EMS system as a network of community resources including healthcare and public safety professionals who respond across a continuum of care, including but not limited to: 9-1-1 call takers and dispatchers at the public safety answering point (PSAP); first responders; EMS providers such as EMRs, EMTs, AEMTs and Paramedics and emergency department and hospital personnel.

Describe the purpose: To provide a coordinated response and optimal emergency care to individuals experiencing sudden illness or injury

SLIDE 1B-3: Emergency Medical Services System Providers

Emergency Medical Services System Providers

- Prompt and correct role performance necessary → increased chances for survival and recovery
- Importance of keeping education and training current

16.1 Basic Life Support for Healthcare Providers Course Presentation, 10/20/2016 Update



Explain that the EMS system depends on all providers performing their roles promptly and correctly, which, in turn, increases the chances for survival and recovery.

Emphasize the need for professional rescuers to keep their education and training current and stay abreast of science changes, new evidence-based guidelines and other developments in emergency care.

1C: Legal Considerations

Performance Objectives

During this session, participants will effectively:

- Describe an individual's right to accept or refuse care.
- Identify the steps to obtain consent.
- State the need to maintain confidentiality of patient information.
- Relate the importance of documentation.

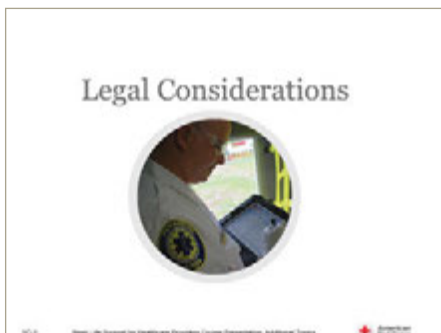
Materials, Equipment and Supplies

- Basic Life Support course presentation—Additional Topics
- Desktop/laptop computer with power source and speakers
- Projector and projection screen or large monitor
- Television with a DVD player (optional)

Instructor Preparation

- Ensure that the desktop/laptop computer and course presentation are set up and working properly.

SLIDE 1C-1: Legal Considerations



SLIDE 1C-2: Consent



Explain that adults who are awake, alert and oriented have a basic right to accept or refuse care and that this consent is obtained verbally or through a gesture.

Emphasize that if the patient is a minor, consent must be obtained from a parent or legal guardian, if available. If a parent or legal guardian is not present, then consent is implied for life-threatening conditions.

SLIDE 1C-3: Steps to Obtain Consent

Steps to Obtain Consent

- Identify yourself to the patient.
- State your level of training.
- Explain what you observe.
- Explain what you plan to do.
- Ask for permission to provide care.

1C.3 Basic Life Support for Healthcare Providers Course Presentation, additional topics American Red Cross

Instructor's Note:

- *Keep in mind that depending on the participants' backgrounds and roles in health care, responses and expectations may be different. For example, in the hospital setting, consent has already been obtained on admission when the patient or legal guardian signs a consent-to-treat form.*

Describe the steps for obtaining consent. Be sure to include the following:

- Identifying yourself to the patient
- Stating your level of training
- Explaining what you observe
- Explaining what you plan to do
- Asking for permission to provide care

SLIDE 1C-4: Implied Consent

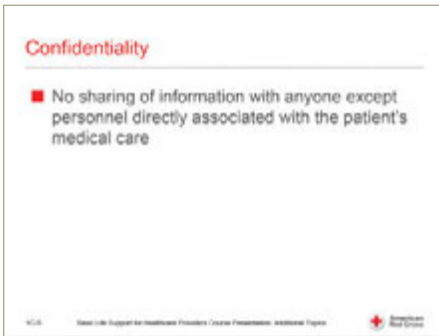
Implied Consent

- Unconscious
- Altered mental status
- Mentally impaired
- Unable to give consent verbally or through a gesture

1C.4 Basic Life Support for Healthcare Providers Course Presentation, additional topics American Red Cross

Explain that if a patient is unconscious, has an altered mental status, or is mentally impaired, and is unable to give consent verbally or through a gesture, then consent is implied.

SLIDE 1C-5: Confidentiality



Emphasize that while providing care to a patient, participants may learn details about the patient that are private and confidential.

Reinforce the necessity of not sharing this information with anyone except personnel directly associated with the patient's medical care.

SLIDE 1C-6: Documentation



Instructor's Note:

- *Recommend that participants contact their legal representative for specific information about legal considerations.*

Reinforce the need to always document care provided.

Discuss the importance of documenting injuries and incidents to establish a written record of the events that took place, the care provided and the facts discovered after the incident occurred.

Inform participants that laws vary from state to state and that they should know their state's laws and consult their legal representative for more information.

1D: Standard Precautions

Performance Objectives

During this session, participants will effectively:

- Describe standard precautions.
- State measures to prevent infection.
- Identify actions to take if an exposure occurs.

Materials, Equipment and Supplies

- Examples of personal protective equipment, including disposable, nonlatex gloves
- Basic Life Support course presentation—Additional Topics
- Desktop/laptop computer with power source and speakers
- Projector and projection screen or large monitor
- Television with a DVD player (optional)

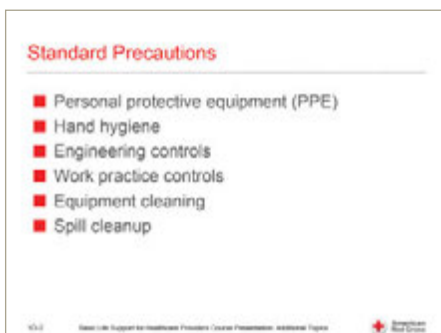
Instructor Preparation

- Ensure that the desktop/laptop computer and course presentation are set up and working properly.

SLIDE 1D-1: Standard Precautions



SLIDE 1D-2: Standard Precautions



Instructor's Note:

- *Explain that participants will verbalize when to use gloves and other standard precautions during the course.*
- *Encourage participants to review their employer-specific guidelines for standard precautions.*

Tell participants that standard precautions will be followed throughout this course.

Explain that personal protective equipment (PPE) also includes all specialized clothing, equipment and supplies, such as CPR breathing barriers, gowns, face shields, protective eyewear and biohazard bags.

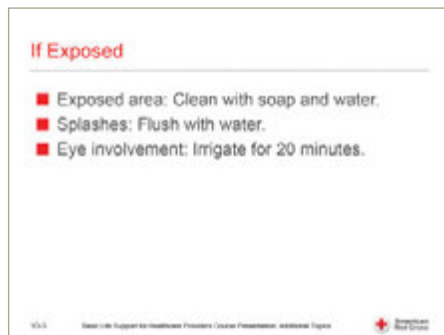
SLIDE 1D-2: Standard Precautions (Continued)

Discuss the other elements included in standard precautions:

- Good hand hygiene
- Engineering controls (objects that isolate or remove a hazard, reducing the risk of exposure)
- Work practice controls (methods that reduce the likelihood of exposure by changing the way a task is carried out)
- Proper equipment cleaning
- Proper spill cleanup procedures

Reinforce the need to adhere to good health habits to prevent infection and their transmission and to be current with all required/suggested immunizations

SLIDE 1D-3: If Exposed



Explain how to address a situation in which the participant would be exposed to blood or body fluids, including:

- Cleaning the contaminated area thoroughly with soap and water. Wash needlestick injuries, cuts and exposed skin.
- If splashed around the mouth or nose with blood or other body fluids, flushing the area with water.
- If eyes are involved, irrigating with clean water, saline or sterile irrigants for 20 minutes.

SLIDE 1D-4: After Exposure



Instructor's Note:

- *Emphasize the need for each participant to follow his or her employer's policies and procedures for reporting exposure incidents.*

Describe what to do after a participant is exposed; be sure to address the following:

- Reporting the incident to the appropriate person identified in the employer's exposure control plan immediately.
- Writing down what happened, including the time, date and circumstances, actions taken and any other information required by your employer.
- Seeking immediate follow-up care according to your employer's infection/exposure control plan.

1E: Myocardial Infarction (Heart Attack)

Performance Objectives

During this session, participants will effectively:

- Identify the signs and symptoms associated with a myocardial infarction.

Materials, Equipment and Supplies

- Basic Life Support course presentation—Additional Topics
- Desktop/laptop computer with power source and speakers
- Projector and projection screen or large monitor
- Television with a DVD player (optional)

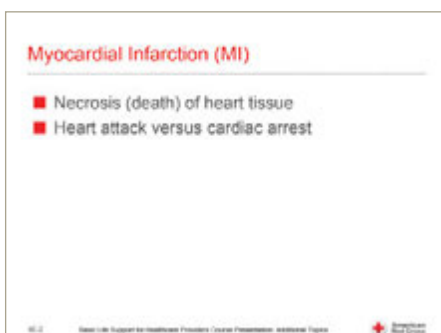
Instructor Preparation

- Ensure that the desktop/laptop computer and course presentation are set up and working properly.

SLIDE 1E-1: Myocardial Infarction (Heart Attack)



SLIDE 1E-2: Myocardial Infarction (MI)



Describe a myocardial infarction (MI) or heart attack as the necrosis (death) of heart tissue resulting from a loss of oxygenated blood. Explain that MI is not cardiac arrest, but MI can cause cardiac arrest.

Differentiate MI from cardiac arrest:

- Cardiac arrest is a life-threatening situation in which the electrical system of the heart malfunctions, resulting in complete cessation of the heart's ability to function and circulate blood efficiently.
- A patient in cardiac arrest is unresponsive and has no breathing or pulse.

SLIDE 1E-3: Signs and Symptoms of MI

Signs and Symptoms of MI

- Highly variable
- Early recognition: decreased risk of morbidity and mortality

1E-3 Basic Life Support for Healthcare Providers Course Presentation: additional topics American Red Cross

Explain the importance of early recognition of signs and symptoms of MI—the sooner the signs and symptoms are recognized and treated, the lower the risk of morbidity and mortality. Also inform participants that even patients who have had an MI in the past may not recognize the signs and symptoms of a subsequent MI because each MI may not cause the same signs and symptoms.

SLIDE 1E-4: Signs and Symptoms of MI

Signs and Symptoms of MI

- Chest discomfort or pain
- Pain that comes and goes
- Difficulty breathing
- Pale or ashen skin
- Sweating
- Dizziness or light-headedness
- Possible loss of consciousness
- Nausea or vomiting

1E-4 Basic Life Support for Healthcare Providers Course Presentation: additional topics American Red Cross

Instructor's Note:

- Remind participants that signs and symptoms vary significantly based on the individual, gender and circumstances.

Review the most common signs and symptoms of MI including:

- 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

SLIDE 1E-5: Atypical Signs and Symptoms

Atypical Signs and Symptoms

- Occurring in women and other individuals such as elderly and those with diabetes
- With or without chest pain
 - Shortness of breath
 - Nausea or vomiting
 - Stomach, back or jaw pain
 - Unexplained fatigue or malaise
- Atypical chest pain in women: may be sudden, sharp and short-lived outside breastbone

1E-5 Basic Life Support for Healthcare Providers Course Presentation: additional topics American Red Cross

Explain that women may experience the common signs and symptoms, such as chest pain or discomfort, but may also experience common atypical warning signs, such as:

- Shortness of breath.
- Nausea or vomiting.
- Stomach, back or jaw pain.
- Unexplained fatigue or malaise.

Include that other individuals such as those with diabetes or the elderly may present with atypical signs and symptoms.

Emphasize that these warning signs may occur with or without chest pain, but that when women do experience chest pain, it may be atypical—sudden, sharp but short-lived pain outside the breastbone.

1F: Cardiac Chain of Survival

Performance Objectives

During this session, participants will effectively:

- List the 5 links in the Adult Cardiac Chain of Survival.
- List the 5 links in the Pediatric Cardiac Chain of Survival.

Materials, Equipment and Supplies

- Basic Life Support course presentation—Additional Topics
- Desktop/laptop computer with power source and speakers
- Projector and projection screen or large monitor
- Television with a DVD player (optional)

Instructor Preparation

- Ensure that the desktop/laptop computer and course presentation are set up and working properly.

SLIDE 1F-1: Cardiac Chain of Survival



SLIDE 1F-2: The Cardiac Chain of Survival



Click to Play

Show the video segment on the cardiac chain of survival.

1G: AED Maintenance

Performance Objectives

During this session, participants will effectively:

- Identify what is involved in maintaining an AED.

Materials, Equipment and Supplies

- Basic Life Support course presentation—Additional Topics
- Desktop/laptop computer with power source and speakers
- Projector and projection screen or large monitor
- Television with a DVD player (optional)

Instructor Preparation

- Ensure that the desktop/laptop computer and course presentation are set up and working properly.

SLIDE 1G-1: AED Maintenance



SLIDE 1G-2: AEDs



Explain that AEDs require minimal maintenance, but that participants need to be familiar with the various visual and audible prompts to warn of malfunction or low battery.

SLIDE 1G-3: AED Maintenance



Instructor's Note:

- *Remind participants about knowing the manufacturer's recommendations because many manufacturers require that they be contacted for service.*

Discuss how to maintain an AED, including the following:

- Knowing the manufacturer's recommendations for maintenance.
- Periodically checking equipment.
- Having a fully charged backup battery, when available, that is properly sealed and unexpired.
- Having correct AED pads available.
- Replacing all used accessories.

Emphasize the need to make sure the machine is in proper working order before placing it back in service.

1H: Recovery Positions

Performance Objectives

During this session, participants will effectively:

- Identify the recovery positions that may be used for a patient.
- Describe the recovery position that can be used for an infant.

Materials, Equipment and Supplies

- Basic Life Support course presentation—Additional Topics
- Desktop/laptop computer with power source and speakers
- Projector and projection screen or large monitor
- Television with a DVD player (optional)

Instructor Preparation

- Ensure that the desktop/laptop computer and course presentation are set up and working properly.

SLIDE 1H-1: Recovery Positions



SLIDE 1H-2: Recovery Positions



Instructor's Note:

- Remind participants about knowing the manufacturer's recommendations because many manufacturers require that they be contacted for service.

Ask

If a patient is unconscious but breathing and has no suspected head, neck or spinal injury, what recovery positions could be used?

Elicit answers from the participants for a few moments. Answers should include supine (face-up) position; recovery (side-lying) position; and infant recovery position.

Explain that in most cases while you are with the patient, you would leave an unconscious patient who is breathing in a face-up position and maintain the airway.

SLIDE 1H-3: H.A.I.N.E.S. Recovery Position

H.A.I.N.E.S. Recovery Position

- Suspected head, neck or spinal injury
- If alone and must leave the patient
- If unable to maintain an open and clear airway because of fluids or vomit

164.5

Basic Life Support for Healthcare Providers Course Presentation: Additional Topics



Explain the situations where the H.A.I.N.E.S. recovery position would be used, including the following:

- With suspicion of head, neck or spinal injury
- If alone and must leave the patient
- If unable to maintain an open airway because of fluids or vomit

SLIDE 1H-4: Steps for Placing a Patient in the Modified H.A.I.N.E.S. Position

Steps for Placing a Patient in the Modified H.A.I.N.E.S. Position



164.6

Basic Life Support for Healthcare Providers Course Presentation: Additional Topics



Describe how to place a patient in the modified H.A.I.N.E.S. recovery position, using the following steps:

- Kneel at side of patient and roll the patient toward the rescuers
- Place the top leg on the other with both knees in a bent position
- Align the arm on top with the upper body

SLIDE 1H-5: Infant Recovery Position

Infant Recovery Position



164.7

Basic Life Support for Healthcare Providers Course Presentation: Additional Topics



Explain how to place an infant in the infant recovery position; include the following:

- Carefully positioning the infant face-down along the forearm
- Supporting the infant's head and neck with your other hand while keeping the infant's mouth and nose clear
- Keeping the head and neck slightly lower than the chest

Appendix D: Final Written Exam, Answer Sheet and Answer Keys

- American Red Cross Basic Life Support for Healthcare Providers Course Final Written Exam A
- American Red Cross Basic Life Support for Healthcare Providers Course Final Written Exam B
- Answer Sheet: Final Written Exam
- Answer Key: Final Written Exam A
- Answer Key: Final Written Exam B

—DO NOT WRITE ON THIS EXAM—

American Red Cross Basic Life Support Final Written Exam A

Important: Read all instructions before beginning the exam.

Instructions: Do not write on this exam. Mark all answers on the separate answer sheet as directed by your instructor. Read each question carefully. Then choose the **best** answer and completely fill in that circle on the answer sheet. If you wish to change an answer, erase your first answer completely. Return this exam with your answer sheet to your instructor when you are finished.

EXAMPLE

ANSWER SHEET

xx. ☐ A ☐ B ☐ C ☒ D

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 the appropriate decisions when they see an emergency
- C) To enable people to give immediate care to a suddenly ill or injured patient until additional medical personnel take over
- D) All of the above

American Red Cross Basic Life Support Final Written Exam A

1. Which of the following is NOT a step in the Adult Cardiac Chain of Survival?
 - A) Early CPR
 - B) Prevention
 - C) Rapid defibrillation
 - D) Integrated Post-Cardiac Arrest Care

2. While performing CPR on an adult, a second trained rescuer arrives with an AED. What should you do?
 - A) Stop CPR and assist the second rescuer with the AED pad placement
 - B) Stop CPR and rest while the second rescuer turns on the AED and applies the pads
 - C) Continue CPR while the second rescuer turns on the AED and applies the pads
 - D) Continue CPR until you have completed 5 cycles of 30 compressions and 2 ventilations (approximately 2 minutes), then apply the AED

3. 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 patient on a soft, flat surface
 - D) Positioning the hands at the upper half of the patient's breastbone

4. While assessing an unresponsive adult who has been pulled from the water, you find that the patient has only occasional gasps, no definitive pulse and no severe bleeding. Which of the following should you do next?
 - A) Begin 30 chest compressions
 - B) Provide 5 abdominal thrusts
 - C) Place the patient in the recovery position
 - D) Open the airway and check for breathing

5. 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.

6. 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 patient for full exhalation is not required.
 - C) Two rescuers should operate the BVM when at all possible.
 - D) When used by a single rescuer, BVMs allow easy coordination with chest compressions.
7. You are about to apply AED pads to a patient's chest when you notice that the patient has several body piercings with jewelry on his chest. Which of the following should you do?
- A) Avoid placing the pads directly over 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
8. The cycles of chest compressions and ventilations in two-rescuer CPR for a 6 year old are:
- 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.
9. How should you place your hands when giving chest compressions to an infant during CPR with two trained rescuers?
- A) Two fingers on the breastbone about 1 finger-width below the nipple line
 - B) Two fingers on the breastbone on the nipple line
 - C) Two-thumb encircling technique with thumbs about 1 finger-width below the nipple line
 - D) Two-thumb encircling technique with thumbs on the nipple line
10. When providing ventilations for an adult patient in cardiac arrest with an advanced airway in place:
- A) Provide 30 chest compressions, then pause to allow for the 2 ventilations.
 - B) Provide continuous compressions with 1 ventilation every 5 to 6 seconds.
 - C) Provide continuous compressions with 1 ventilation every 6 to 8 seconds.
 - D) Ventilations are not required once an advanced airway is in place.

11. When using an AED:
- A) Pediatric pads may be used on an adult if the adult pads are not available.
 - B) Adult pads may be used on an infant if pediatric pads are not available.
 - C) A child is never shocked with adult pads even if pediatric pads are not available.
 - D) Pediatric pads may only be used on a child above the age of 1 year.
12. An adult choking patient becomes unresponsive after providing seven abdominal thrusts. You lay the patient on the floor. The next step you should do is to:
- A) Open the airway and give 2 ventilations.
 - B) Open the airway and look for the obstruction.
 - C) Reassess the patient for breathing and a pulse.
 - D) Start chest compressions.
13. All these are components of a scene size-up EXCEPT:
- A) Looking for situations that are hazardous.
 - B) Checking for responsiveness.
 - C) Gathering an initial impression of the situation.
 - D) Calling for additional resources as needed.
14. The best compression rate for an 8-year-old child would be (pick the most appropriate answer):
- A) 124 compressions per minute.
 - B) 98 compressions per minute.
 - C) 132 compressions per minute.
 - D) 114 compressions per minute.
15. You have an infant that is apneic and pulseless. Another rescuer is doing compressions. There is no advanced airway in place. You need to ventilate:
- A) 1 time after every 15th compression.
 - B) 2 times after every 30th compression.
 - C) 1 time after every 30th compression.
 - D) 2 times after every 15th compression.

16. When possible, two-rescuer ventilation with a bag-valve-mask resuscitator is preferred because:
- A) It prevents the ventilator from becoming fatigued as quickly.
 - B) It allows one rescuer to create and maintain a mask seal.
 - C) It allows you to ventilate at a faster rate.
 - D) It can allow higher ventilation volumes.
17. Your initial impression of a patient is based on:
- A) The patient's SAMPLE history.
 - B) What you have been told about the patient.
 - C) How the patient appears to you as you size up the scene.
 - D) The patient's initial vital signs.
18. You happen to be at the mall when you notice a 9-year-old girl and her 16-year-old sister near the candy store. The 9 year old cannot cough, speak or make any sound and appears to be choking. Choose the most appropriate statement:
- A) You should have the sister contact a parent to give you consent to help.
 - B) You should call and wait for EMS since you do not have expressed consent.
 - C) You should begin care as consent is implied.
 - D) You should get expressed consent from the older sister.
19. You are performing chest compressions on a 6 year old. You should be compressing the chest to what depth?
- A) At least 2 inches
 - B) About 2 inches
 - C) About 1½ inches
 - D) At least 1 inch
20. Full chest recoil is necessary for a successful resuscitation as it:
- A) Allows more complete filling of the heart between compressions.
 - B) Gives blood in the lungs time to exchange CO₂ and oxygen.
 - C) Increases intrathoracic pressure and increases coronary blood flow.
 - D) Allows the person doing compressions to conserve energy.

—DO NOT WRITE ON THIS EXAM—

American Red Cross Basic Life Support Final Written Exam B

Important: Read all instructions before beginning the exam.

Instructions: Do not write on this exam. Mark all answers on the separate answer sheet as directed by your instructor. Read each question carefully. Then choose the **best** answer and completely fill in that circle on the answer sheet. If you wish to change an answer, erase your first answer completely. Return this exam with your answer sheet to your instructor when you are finished.

EXAMPLE

ANSWER SHEET

xx. ☐ A ☐ B ☐ C ☒ D

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 the appropriate decisions when they see an emergency
- C) To enable people to give immediate care to a suddenly ill or injured patient until additional medical personnel take over
- D) All of the above

American Red Cross Basic Life Support Final Written Exam B

1. When providing ventilations for an adult patient in cardiac arrest with an advanced airway in place:
 - A) Provide 30 chest compressions then pause to allow for the 2 ventilations.
 - B) Provide continuous compressions with 1 ventilation every 5 to 6 seconds.
 - C) Ventilations are not required once an advanced airway is in place.
 - D) Provide continuous compressions with 1 ventilation every 6 to 8 seconds.

2. All these are components of scene size-up EXCEPT:
 - A) Gathering an initial impression of the situation.
 - B) Checking for responsiveness.
 - C) Calling for additional resources as needed.
 - D) Looking for situations that are hazardous.

3. To ensure effective chest compressions during CPR, which of the following is most appropriate?
 - A) Positioning the hands at the upper half of the patient's breastbone
 - B) Allowing the chest to fully recoil between compressions
 - C) Placing the patient on a soft, flat surface
 - D) Compressing the chest to a shallow depth

4. Your initial impression of a patient is based on:
 - A) How the patient appears to you as you size up the scene.
 - B) The patient's initial vital signs.
 - C) The patient's SAMPLE history.
 - D) What you have been told about the patient.

5. While assessing an unresponsive adult who has been pulled from the water, you find that he has only occasional gasps, no definitive pulse and no severe bleeding. Which of the following should you do next?
 - A) Provide 5 abdominal thrusts
 - B) Begin 30 chest compressions
 - C) Open the airway and check for breathing
 - D) Place the patient in the recovery position

6. How should you place your hands when giving chest compressions to an infant during CPR with two trained rescuers?
- A) Two fingers on the breastbone about 1 finger-width below the nipple line
 - B) Two fingers on the breastbone on the nipple line
 - C) Two-thumb encircling technique with thumbs about 1 finger-width below the nipple line
 - D) Two-thumb encircling technique with thumbs on the nipple line
7. An adult choking patient becomes unresponsive after providing seven abdominal thrusts. You lay them on the floor. The next step you should do is to:
- A) Reassess the patient for breathing and a pulse.
 - B) Start chest compressions.
 - C) Open the airway and look for the obstruction.
 - D) Open their airway and give 2 ventilations.
8. You have an infant that is apneic and pulseless. Another rescuer is doing compressions. There is no advanced airway in place. You need to ventilate:
- A) 1 time after every 30th compression.
 - B) 2 times after every 30th compression.
 - C) 1 time after every 15th compression.
 - D) 2 times after every 15th compression.
9. If there is a risk of the AED pads touching each other, such as with a small child or an infant, you should:
- A) Reverse the pads' position on the chest.
 - B) Place one pad in the middle of the chest and the other on the back.
 - C) Place one pad on the stomach and one pad on the chest.
 - D) Place them as usual. It does not matter if the pads touch each other.
10. You happen to be at the mall when you notice a 9-year-old girl and her 16-year-old sister near the candy store. The 9 year old cannot cough, speak or make any sound and appears to be choking. Choose the most appropriate statement:
- A) You should begin care as consent is implied.
 - B) You should have the sister contact a parent to give you consent to help.
 - C) You should call and wait for EMS since you do not have expressed consent.
 - D) You should get expressed consent from the older sister.

11. Full chest recoil is necessary for a successful resuscitation as it:
- A) Increases intrathoracic pressure and increases coronary blood flow.
 - B) Allows the person doing compressions to conserve energy.
 - C) Allows more complete filling of the heart between compressions.
 - D) Gives blood in the lungs time to exchange CO₂ and oxygen.
12. While performing CPR on an adult, a second trained rescuer arrives with an AED. What should you do?
- A) Continue CPR while the second rescuer turns on the AED and applies the pads
 - B) Stop CPR and rest while the second rescuer turns on the AED and applies the pads
 - C) Stop CPR and assist the second rescuer with the AED pad placement
 - D) Continue CPR until you have completed 5 cycles of 30 compressions and 2 ventilations (approximately 2 minutes), then apply the AED
13. Which of the following statements about bag-valve-mask (BVM) resuscitators is most accurate?
- A) BVMs are readily available at all emergency scenes.
 - B) When used by a single rescuer, BVMs allow easy coordination with chest compressions.
 - C) Two rescuers should operate the BVM when at all possible.
 - D) Monitoring the patient for full exhalation is not required.
14. When possible, two-rescuer ventilation with a bag-valve-mask resuscitator is preferred because:
- A) It allows one rescuer to create and maintain a mask seal.
 - B) It prevents the ventilator from becoming fatigued as quickly.
 - C) It allows you to ventilate at a faster rate.
 - D) It can allow higher ventilation volumes.
15. When using an AED:
- A) A shock is never given to a child with adult pads even if pediatric pads are not available.
 - B) Pediatric pads may be used on an adult if the adult pads are not available.
 - C) Pediatric pads may only be used on a child above the age of 1 year.
 - D) Adult pads may be used on an infant if pediatric pads are not available.

16. You are performing chest compressions on a 6 year old. You should be compressing the chest to what depth:
- A) About 2 inches
 - B) At least 1 inch
 - C) About 1½ inches
 - D) At least 2 inches
17. The best compression rate for an 8-year-old child would be (pick the most appropriate answer):
- A) 114 compressions per minute.
 - B) 132 compressions per minute.
 - C) 98 compressions per minute.
 - D) 124 compressions per minute.
18. Which of the following is NOT a step in the Adult Cardiac Chain of Survival?
- A) Integrated Post-Cardiac Arrest Care
 - B) Rapid defibrillation
 - C) Prevention
 - D) Early CPR
19. You are about to apply AED pads to a patient's chest when you notice that the patient has several body piercings with jewelry on his chest. Which of the following should you do?
- A) Wipe the chest, including the jewelry, with alcohol.
 - B) Remove the jewelry before applying the pads.
 - C) Avoid placing the pads directly over the jewelry.
 - D) Use one pad, applying it directly over the jewelry.
20. The cycles of chest compressions and ventilations in two-rescuer CPR for a 6 year old are:
- A) 30 chest compressions and 1 ventilation.
 - B) 15 chest compressions and 1 ventilation.
 - C) 30 chest compressions and 2 ventilations.
 - D) 15 chest compressions and 2 ventilations.

Answer Sheet: Basic Life Support Final Written Exam

Name: _____ Date: _____

1. (A) (B) (C) (D)
2. (A) (B) (C) (D)
3. (A) (B) (C) (D)
4. (A) (B) (C) (D)
5. (A) (B) (C) (D)
6. (A) (B) (C) (D)
7. (A) (B) (C) (D)
8. (A) (B) (C) (D)
9. (A) (B) (C) (D)
10. (A) (B) (C) (D)
11. (A) (B) (C) (D)
12. (A) (B) (C) (D)
13. (A) (B) (C) (D)
14. (A) (B) (C) (D)
15. (A) (B) (C) (D)
16. (A) (B) (C) (D)
17. (A) (B) (C) (D)
18. (A) (B) (C) (D)
19. (A) (B) (C) (D)
20. (A) (B) (C) (D)

Answer Key: Basic Life Support Final Written Exam

Exam A

1. ☐ A ☒ B ☐ C ☐ D
2. ☐ A ☐ B ☒ C ☐ D
3. ☒ A ☐ B ☐ C ☐ D
4. ☒ A ☐ B ☐ C ☐ D
5. ☒ A ☐ B ☐ C ☐ D
6. ☐ A ☐ B ☒ C ☐ D
7. ☒ A ☐ B ☐ C ☐ D
8. ☐ A ☒ B ☐ C ☐ D
9. ☐ A ☐ B ☒ C ☐ D
10. ☐ A ☐ B ☒ C ☐ D
11. ☐ A ☒ B ☐ C ☐ D
12. ☐ A ☐ B ☐ C ☒ D
13. ☐ A ☒ B ☐ C ☐ D
14. ☐ A ☐ B ☐ C ☒ D
15. ☐ A ☐ B ☐ C ☒ D
16. ☐ A ☒ B ☐ C ☐ D
17. ☐ A ☐ B ☒ C ☐ D
18. ☐ A ☐ B ☒ C ☐ D
19. ☐ A ☒ B ☐ C ☐ D
20. ☒ A ☐ B ☐ C ☐ D

Exam B

1. ☐ A ☐ B ☐ C ☒ D
2. ☐ A ☒ B ☐ C ☐ D
3. ☐ A ☒ B ☐ C ☐ D
4. ☒ A ☐ B ☐ C ☐ D
5. ☐ A ☒ B ☐ C ☐ D
6. ☐ A ☐ B ☒ C ☐ D
7. ☐ A ☒ B ☐ C ☐ D
8. ☐ A ☐ B ☐ C ☒ D
9. ☐ A ☒ B ☐ C ☐ D
10. ☒ A ☐ B ☐ C ☐ D
11. ☐ A ☐ B ☒ C ☐ D
12. ☒ A ☐ B ☐ C ☐ D
13. ☐ A ☐ B ☒ C ☐ D
14. ☒ A ☐ B ☐ C ☐ D
15. ☐ A ☐ B ☐ C ☒ D
16. ☒ A ☐ B ☐ C ☐ D
17. ☒ A ☐ B ☐ C ☐ D
18. ☐ A ☐ B ☒ C ☐ D
19. ☐ A ☐ B ☒ C ☐ D
20. ☐ A ☐ B ☐ C ☒ D

Appendix E: Practical Assessment Scenarios

Instructor's Note: For practical assessment scenarios, choose the setting that best applies to the participants' background.

EMS SETTING

Adult CPR

You are called to the gym in response to a situation in which an individual has collapsed on the outdoor racquetball court. You and your partner arrive on the scene, and you notice the individual is lying on the ground with the racket still clenched in his hand. You go to the patient with your medical kit while your partner gets the rest of the equipment and stretcher.

Instructor's Note:

- Use CPR/AED—Adult skill sheet to evaluate the team leader in his/her ability to integrate the additional rescuers into the scenario and all team members on their ability to perform compressions and ventilations based on the skill sheet.

Infant CPR

You and your partner are called to the home of a child for poor feeding and irritability. On arrival, you find a 6-month-old infant in his dad's arms very limp and cyanotic. The dad states that the child was crying until about a minute ago. Your partner goes back to the vehicle to retrieve equipment for an infant.

Instructor's Note:

- Use CPR/AED—Infant skill sheet to evaluate the team leader in his/her ability to integrate the additional rescuers into the scenario and all team members on their ability to perform compressions and ventilations based on the skill sheet.

Child CPR

You respond to a child who collapsed in the front yard. Neighbors report that they were just sitting on the lawn when they saw him "pass out." They checked on the child but could not arouse him. As you approach the child, he does not respond to your calls.

Instructor's Note:

- Use CPR/AED—Child skill sheet to evaluate the team leader in his/her ability to integrate the additional rescuers into the scenario and all team members on their ability to perform compressions and ventilations based on the skill sheet.

HOSPITAL SETTING

Adult CPR

You are in the intensive care unit (ICU) step-down unit. As you approach your patient, Mrs. Hoover, in her room, you notice there is no movement or reaction to your knock or greeting. She looks ashen.

Instructor's Note:

- Use CPR/AED—Adult skill sheet to evaluate the team leader in his/her ability to integrate the additional rescuers into the scenario and all team members on their ability to perform compressions and ventilations based on the skill sheet.

Infant CPR

You are transferring an infant with a noncritical illness from the emergency department to the pediatric unit. While in the elevator, you notice that the infant is no longer moving his arms or legs and does not appear to be breathing.

Instructor's Note:

- Use CPR/AED—Infant skill sheet to evaluate the team leader in his/her ability to integrate the additional rescuers into the scenario and all team members on their ability to perform compressions and ventilations based on the skill sheet.

Child CPR

You are on a pediatric unit in a hospital wing when you walk into a room and find Michael in his bed with his head elevated. But as you enter the room, he does not appear to be moving.

Instructor's Note:

- Use CPR/AED—Child skill sheet to evaluate the team leader in his/her ability to integrate the additional rescuers into the scenario and all team members on their ability to perform compressions and ventilations based on the skill sheet.

FIRST RESPONDER/HEALTHCARE SETTING

Adult CPR

You work the night shift at the factory. You arrive early and as you approach the time clock, you notice a crowd of people gathering. As you approach, you find a 54-year-old male on the ground in the middle of the crowd. You are the only one that is trained in CPR or first aid. Trained security officers with AEDs are available in the building, and everyone in the office is trained on how to access help within the building.

Instructor's Note:

- Use CPR/AED—Adult skill sheet to evaluate the team leader in his/her ability to integrate the additional rescuers into the scenario and all team members on their ability to perform compressions and ventilations based on the skill sheet.

Infant CPR

You are at a gas station when someone pulls in honking their horn. A distressed young woman gets out of the car shouting, "My baby is not moving." You see an infant in a car seat in the back of the car. The infant is not moving and is blue around the face.

Instructor's Note:

- Use CPR/AED—Infant skill sheet to evaluate the team leader in his/her ability to integrate the additional rescuers into the scenario and all team members on their ability to perform compressions and ventilations based on the skill sheet.

Child CPR

You are waiting for a table at a restaurant when you see a child in the parking lot collapse on the lawn outside. You go to check to see if the child is okay but the child does not respond when you call to him. A couple of bystanders have gathered, but nobody is helping.

Instructor's Note:

- Use CPR/AED—Child skill sheet to evaluate the team leader in his/her ability to integrate the additional rescuers into the scenario and all team members on their ability to perform compressions and ventilations based on the skill sheet.

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Basic Life Support for Healthcare Providers



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