



Basic Life Support

— Instructor's Manual for Instructor-Led Training —



American Red Cross
Training Services



American Red Cross
Training Services

Basic Life Support

Instructor's Manual for Instructor-Led Training



This Instructor's Manual for Instructor-Led Training is part of the American Red Cross Basic Life Support 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.

PLEASE READ THE FOLLOWING TERMS AND CONDITIONS (the "Terms and Conditions") BEFORE AGREEING TO ACCESS, USE OR DOWNLOAD THE FOLLOWING AMERICAN NATIONAL RED CROSS MATERIALS. BY PURCHASING, DOWNLOADING, OR OTHERWISE USING OR ACCESSING THE MATERIALS, YOU ACKNOWLEDGE AND HEREBY AGREE TO BE LEGALLY BOUND BY BOTH THESE TERMS AND CONDITIONS AND THE AMERICAN NATIONAL RED CROSS TERMS OF USE (AVAILABLE AT redcross.org/terms-of-use). YOU AGREE THAT THE INCLUDED COURSE MATERIALS ARE PROVIDED "AS IS" AND WITHOUT WARRANTIES OF ANY KIND, AND THAT **ANY ACCESS TO OR USE OF THESE COURSE MATERIALS IS AT YOUR OWN RISK.**

The following materials (including downloadable electronic materials, as applicable) including all content, graphics, images and logos, are copyrighted by, and the exclusive property of, The American National Red Cross ("Red Cross"). Unless otherwise indicated in writing by the Red Cross, the Red Cross grants you ("Recipient") the limited right to download, print, photocopy and use the electronic materials only for use in conjunction with teaching or preparing to teach a Red Cross course by individuals or entities expressly authorized by the Red Cross, subject to the following restrictions:

- The Recipient is prohibited from creating new electronic versions of the materials.
- The Recipient is prohibited from revising, altering, adapting or modifying the materials, which includes removing, altering or covering any copyright notices, Red Cross marks, logos or other proprietary notices placed or embedded in the materials.
- The Recipient is prohibited from creating any derivative works incorporating, in part or in whole, the content of the materials.
- The Recipient is prohibited from downloading the materials, or any part of the materials, and putting them on Recipient's own website or any other third-party website without advance written permission of the Red Cross.
- The Recipient is prohibited from removing these Terms and Conditions in otherwise-permitted copies, and is likewise prohibited from making any additional representations or warranties relating to the materials.

Any rights not expressly granted herein are reserved by the Red Cross. The Red Cross does not permit its materials to be reproduced or published without advance written permission from the Red Cross. To request permission to reproduce or publish Red Cross materials, please submit your written request to The American National Red Cross by going to the Contact Us page on redcross.org and filling out the General Inquiry Form.

Copyright © 2015, 2016, 2019 by The American National Red Cross. ALL RIGHTS RESERVED.

The Red Cross emblem, and the American Red Cross name and logos are trademarks of The American National Red Cross and protected by various national statutes.

Printed in the United States of America

ISBN: 978-1-73299-573-4

Science and Technical Content

The technical content within the American Red Cross Basic Life Support program is consistent with the most current science and treatment recommendations from:

- The International Liaison Committee on Resuscitation (ILCOR) 2015-2018 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations
- The 2015-2018 American Heart Association Guidelines Update for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care

Dedication

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

Acknowledgments

Many individuals shared in the development of the American Red Cross Basic Life Support program in various technical, editorial, creative and supportive ways. Their commitment to excellence made this manual possible.

American Red Cross Scientific Advisory Council

We would like to extend our gratitude to the following members of the American Red Cross Scientific Advisory Council for their guidance and review of this program:

David Markenson, M.D., MBA, FCCM, FAAP, FACEP, EMT-P

Scientific Advisory Council Chair
Chief Medical Officer, Sky Ridge Medical Center

Richard N. Bradley, MD, FACEP

Resuscitation Subcouncil Chair
Professor of Emergency Medicine and Chief of the Division of Emergency Medical Services and Disaster Medicine at McGovern Medical School, University of Texas Health Science Center

Michael G. Millin, MD, MPH, FACEP, FACEMS

Resuscitation Subcouncil Vice Chair
Associate Professor of Emergency Medicine at Johns Hopkins University School of Medicine; Medical Director of the BWI Airport Fire and Rescue Department; Medical Director of the Johns Hopkins Lifeline Transportation Program

Rita V. Burke, PhD, MPH

Assistant Professor of Research Surgery and Preventive Medicine at Keck School of Medicine of the University of Southern California and the Trauma Program at Children's Hospital Los Angeles; Co-chair of the Children in Disasters Working Group and the Pediatric Trauma Society

Pascal Cassan, MD

Head, Global Reference Centre for First Aid, International Federation of Red Cross and Red Crescent Societies (Paris)

Wendell E. Jones, MD, MBA, CPE, FACP

Chief Medical Officer, Veterans Integrated Service Network 17; Assistant Professor of Internal Medicine at the University of Texas Southwestern

Stamatios Lerakis, MD, PhD, FACC, FAHA, FASE, FASNC, FCCP

Professor of Medicine (Cardiology), Radiology and Imaging Sciences at Emory University School of Medicine; Director of Cardiac MRI and Interventional Echocardiography at Emory University Hospital; Adjunct Professor of Biomedical Engineering at Emory University and Georgia Institute of Technology

Andrew MacPherson, BSc, MD, CCFP-EM, FCFP

Emergency, Trauma and EM Physician, Associate Professor, Department of Emergency Medicine, University of British Columbia; Canadian Red Cross

Ira Nemeth, MD

Assistant Professor of Emergency Medicine, Associate Medical Director, EMS and LifeFlight, Department of Emergency Medicine, UMass Memorial Medical Center

Joseph W. Rossano, MD

Chief, Division of Cardiology, Co-Executive Director of the Cardiac Center, Jennifer Terker Endowed Chair in Pediatric Cardiology and Associate Professor of Pediatrics at the Children's Hospital of Philadelphia and the Perelman School of Medicine at the University of Pennsylvania

Content Direction

The development of this program would not have been possible without the leadership, valuable insights and dedication of the subject matter experts, who generously shared their time to ensure the highest quality program:

Jonathan L. Epstein, MEMS, NRP

Senior Director
Science, Industry and Government Relations
American Red Cross

Jannah N. Amiel, MS, BSN, RN

Nurse Educator and Consultant, tootRN™, LLC

Bob Page, M.Ed., NRP, CCP, NCEE

President, Edutainment Consulting and Seminars, LLC

Program Development

Special thanks to the program development team for their expertise and mix of patience and persistence to bring this program through to completion: Danielle DiPalma, Laura Scott, Nichole Steffens, Jennifer Surich, Victoria White, Melanie Cann, Sarah Kyle, Andrea Klingler, Maureen Pancza and Maureen Schultz.

Supporting Organizations

Thank you to the following organizations and their staffs for accommodating the Red Cross and coordinating resources for this program's video production.

- Chester County Intermediate Unit Practical Nursing Program (CCIU PNP) Learning Lab—The Technical College High School Brandywine Campus
- Independence Blue Cross Medical Simulation Center at Drexel University College of Medicine
- Jefferson Stratford Hospital
- St. Christopher's Hospital for Children

Table of Contents

Section A: Program Administration

Chapter 1

Course Overview

Course Purpose	3
Course Objectives	3
Course Participants	3
Course Prerequisites	4
Course Delivery Methods.....	4
Course Instructional Design.....	4
Participant's Materials.....	7
Instructor's Materials	7

Chapter 2

Being an American Red Cross Instructor

Instructor Requirements.....	9
Instructor Responsibilities.....	9
Maintaining Consistent Training Standards.....	10

Chapter 3

Setting Up and Running the Course

Course Lengths and Schedules.....	11
Class Size and Participant-to-Instructor Ratios	11
Classroom Space	12
Materials, Equipment and Supplies	12
Class Safety and Supervision.....	13

Chapter 4

Conducting Effective Skill Practice and Team Response Practice Scenarios

Instructor Responsibilities.....	15
Setting Up Skill Practice and Team Response Practice Scenarios.....	15
Conducting Skill Practice	16
Conducting Team Response Practice Scenarios.....	17
Providing Feedback.....	17
Evaluating Skill Performance.....	18
Coaching Versus Prompting Participants	18

Chapter 5

Course Completion

Criteria for Course Completion and Certification	19
Team Response Testing Scenarios.....	19
Final Exam.....	20
Handling Unsuccessful Course Completion	20
Acknowledging Course Completion and Awarding Certification	21

Section B: Lessons

Lesson 1

Course Introduction and Foundational Concepts 25

Introduction to Basic Life Support.....	26
Critical Thinking and Problem Solving	27
Communication	27
Teamwork.....	29

Lesson 2

Systematic Approach to Assessing, Recognizing and Caring for Adults 33

Assess, Recognize and Care for Adults.....	34
Assess	34
Recognize and Care.....	36
Adult Cardiac Chain of Survival.....	39

Lesson 3

Basic Life Support for Adults 41

High-Quality CPR for Adults.....	42
AED Use for Adults	49
BLS Team Response for Adults	51

Lesson 4

Basic Life Support for Children and Infants 55

Introduction to BLS for Children and Infants.....	56
Pediatric Cardiac Chain of Survival	56
Assess, Recognize and Care for Children and Infants	57
High-Quality CPR for Children and Infants	59
AED Use for Children and Infants.....	64
BLS Team Response for Children and Infants.....	65

Lesson 5

Obstructed Airway 67

Obstructed Airway Care for Adults and Children	68
Obstructed Airway Care for Infants.....	69

Lesson 6

Opioid Overdose 71

Opioid Overdose	72
-----------------------	----

Lesson 7

Testing and Course Wrap-Up 75

Team Response Testing Scenarios.....	76
Final Exam.....	77
Course Wrap-Up	78

Section C: Appendices

Appendix A

Skill Practice Sheets	80
Skill Practice Sheet: Single-Provider CPR for Adults	81
Skill Practice Sheet: Multiple-Provider CPR for Adults	82
Skill Practice Sheet: One-Hand Technique for Children.....	83
Skill Practice Sheet: Two-Finger Technique for Infants	83
Skill Practice Sheet: Multiple-Provider CPR for Infants.....	84
Skill Practice Sheet: Obstructed Airway Care for Adults and Children	85
Skill Practice Sheet: Obstructed Airway Care for Infants.....	86

Appendix B

Skill Competency Sheets	87
Skill Competency Sheet: BLS for Adults.....	88
Skill Competency Sheet: BLS for Infants.....	92
Skill Competency Sheet: BLS for Children	96

Appendix C

Team Response Practice Scenarios	100
Team Response Practice Scenario: Rapid Assessment for Adults.....	101
Team Response Practice Scenario: BLS for Adults	103
Team Response Practice Scenario: BLS for Children	106
Team Response Practice Scenario: BLS for Infants.....	109

Appendix D

Debriefing Tool	112
------------------------	------------

Appendix E

Team Response Testing Scenarios	113
Team Response Testing Scenario: BLS for Adults	114
Team Response Testing Scenario: BLS for Infants.....	119
Team Response Testing Scenario: BLS for Children	124

Appendix F

Participant Progress Log	129
---------------------------------	------------

Appendix G

Answer Sheet and Answer Keys	131
Answer Sheet	132
Answer Key.....	133

Appendix H

Sample Agendas	135
-----------------------	------------

Appendix I

Review Course	136
----------------------	------------

Appendix J

Challenge Course	156
-------------------------	------------

Index

Index	161
--------------	------------

Section A: Program Administration

Chapter 1: Course Overview

Chapter 2: Being an American Red Cross Instructor

Chapter 3: Setting up and Running the Course

Chapter 4: Conducting Effective Skill Practice and Team Response Practice Scenarios

Chapter 5: Course Completion

Course Overview

Course Purpose

The American Red Cross Basic Life Support (BLS) Instructor-Led Training course provides participants with the knowledge and skills they need to assess, recognize and care for patients who are experiencing respiratory arrest, cardiac arrest, airway obstruction or opioid overdose. When a patient experiences a life-threatening emergency, healthcare providers need to act swiftly and promptly. The course emphasizes providing high-quality care and integrating psychomotor skills with critical thinking and problem solving to achieve the best possible patient outcomes.

Course Objectives

It is your responsibility as an instructor to see that participants meet the objectives listed at the beginning of each lesson in this instructor's manual. After completing the course, participants will be able to:

- Apply concepts of effective teamwork when caring for a patient experiencing a life-threatening emergency.
- Integrate communication, critical-thinking and problem-solving skills during a high-performance BLS team response.
- Apply a systematic, continuous approach to assess, recognize and care for adults, children and infants experiencing a life-threatening emergency.
- Perform a rapid assessment for responsive and unresponsive adults, children and infants.
- Effectively care for adults, children and infants in respiratory arrest.
- State the principles of high-quality CPR for adults, children and infants.
- Identify BLS differences among adults, children and infants.
- Provide high-quality chest compressions for adults, children and infants.
- Deliver effective ventilations to adults, children and infants using a pocket mask and bag-valve-mask (BVM) resuscitator.
- Demonstrate effective use of an automated external defibrillator (AED) for adults, children and infants.
- Provide high-quality BLS care for adults, children and infants in single- and multiple-provider situations.
- Deliver effective abdominal thrusts, back blows and chest thrusts for adults, children and infants with airway obstruction.
- State the principles of care for a patient experiencing an opioid overdose.

Course Participants

The intended audience for this course includes:

- Medical personnel, such as physicians, nurse practitioners, nurses, physician assistants, nurse assistants, dentists, physical therapists, pharmacists and students entering the field.
- Public safety personnel and other professional responders, such as paramedics, advanced emergency medical technicians (AEMTs), emergency medical technicians (EMTs), firefighters, law enforcement, emergency medical responders (EMRs) and students entering the field.

Successful instructors understand the backgrounds of and motivation for participants and may modify their teaching style (not the course) accordingly.

- The participants could represent a broad range of backgrounds.
- They may differ in levels of age or maturity.
- They may differ in levels of education or experience.
- They may be taking this course to fulfill employment requirements.

Course Prerequisites

None.

Course Delivery Methods

There are two delivery methods for the American Red Cross Basic Life Support program:

- An instructor-led course.
- A blended learning course with an online session and in-person skills session conducted by a Red Cross-certified instructor.











This instructor's manual is intended for use with the Basic Life Support Instructor-Led Training course.

Review course and challenge options: Abbreviated versions of the instructor-led course are available, allowing experienced learners to obtain their certification in an expedited format. For more information on the review and challenge options, including course outlines, see Appendix I and Appendix J.

Course Instructional Design








The lessons within this instructor's manual use a variety of methods to meet participants' needs for consistent, high-quality instruction and accurate information. To help participants acquire new information, build correct psychomotor skills, and develop critical-thinking and problem-solving skills, traditional lectures are integrated with videos, skill practice, team response practice scenarios, Q&A activities, guided discussions and instructor demonstrations. Participant competency is assessed via team response testing scenarios and a final exam.

Icons are featured throughout the lessons to provide visual cues as to the forthcoming activity types.

Icon Key	
 Lecture	 Video
 Skill Practice	 Q&A Activity
 Practice Scenario	 Testing Scenario
 Instructor Demonstration	 Exam
 Guided Discussion	 Review

Course Activities

The following provides more information as to the activities featured in this course.

	<p>Lectures represent instructions, fundamental concepts and specific content that are essential to understanding basic life support. The lecture points are written so they can be read aloud, but the instructor can also rephrase the lecture points to fit their natural speaking style.</p>
	<p>Guided Discussions and Q&A Activities are designed to reinforce essential information that participants need to know and to enhance participant interaction and engagement, either through open-floor discussion or fast-paced quizzing. The activities are to be conducted as designed and may not be changed or omitted (unless indicated as optional).</p>
	<p>Skill Practices are the very core of the course and are focused on ensuring the participants are proficient in all BLS skills through hands-on practice with manikins in an instructor-led format.</p> <p>Two references are provided to help instructors successfully conduct the skill practice and help participants achieve skill competency:</p> <ul style="list-style-type: none">■ Skill Practice Sheets for instructors and participants■ Participant Progress Log for instructors <p>See <i>Program References</i> for more information.</p>
	<p>Practice Scenarios put BLS skills into action by challenging teams to apply what they have learned in a comprehensive, scenario-based activity.</p> <p>References are provided to help instructors successfully conduct practice scenarios and help participants achieve skill competency:</p> <ul style="list-style-type: none">■ Skill Competency Sheets for participants■ Team Response Practice Scenarios for instructors■ Participant Progress Log for instructors■ Debriefing Tool for instructors <p>See <i>Program References</i> for more information.</p>
	<p>Videos provide a review of key concepts covered in the online portion of the program and provide participants with uniformly consistent explanations and demonstrations of skills prior to skill practice. See <i>Program Materials</i> for more information on videos.</p>
	<p>Instructor Demonstrations add additional visual learning through competent demonstration of skills to be practiced.</p>
	<p>Reviews help provide a recap of what was learned previously and refresh participants' knowledge prior to skill practice.</p>

Program References

Each program activity provides a list of the references available to you to successfully conduct the activity.

The following references are located outside of the lessons themselves and must be organized and made accessible for use prior to live instruction:



- The **Course Presentation** visually supports the lessons. The corresponding slides for each activity type are clearly indicated throughout each lesson. Instructions on how to download the Basic Life Support Course Presentation for Instructor-Led Training are available on Instructor's Corner.
- The **Skill Practice Sheets** are a handy reference of the steps associated with the skill and are to be used during skill practice. These are located in Appendix A and should be copied prior to class and distributed to participants during class.
- The **Skill Competency Sheets** review the core competencies that participants are expected to achieve in each skill. These are located in Appendix B.
- The **Team Response Practice Scenarios** effectively guide you through the scenarios by providing a selection of setups to contextualize the scenarios (choose one that is appropriate for your participants' background); the path for each team member's role and action; and instructor prompts when needed to effectively continue the action at key points. These are located in Appendix C.
- The **Debriefing Tool** guides you through the necessary debriefing step that concludes each team response practice scenario. This is located in Appendix D.
- The **Participant Progress Log** helps instructors keep track of individual participation throughout the course. This is located in Appendix F.

See *Instructor's Manual: Appendices* for a complete list of items in the appendices.

Course Competency

Participants demonstrate competency throughout the Basic Life Support course by actively participating in all lesson activities.

Participants are also required to successfully complete the Team Response Testing Scenarios and final exam.

	<p>The Team Response Testing Scenarios are used for evaluation of skill competency. They provide a selection of setups to contextualize the scenarios (choose one that is appropriate for your participants' background). Also, they identify the competency for each skill, the critical actions that must be completed to pass and other actions that would not constitute a failure if missed in isolation. Participants are scored on a pass/fail basis. These are located in Appendix E.</p>
	<p>The Final Exam is administered to participants to conclude the course. The final exams are available on Instructor's Corner. You can copy and distribute the Answer Sheet to participants to complete the final exam. Two Answer Keys are provided corresponding to the two versions of the exam (version A and version B). Use the answer keys to grade the exams. The answer sheet and answer keys are located in Appendix G.</p>

Upon meeting the criteria for course completion and demonstration of competency, participants will receive a 2-year American Red Cross Basic Life Support certification. See Chapter 5, Course Completion, for more information.

Participant's Materials

Participant's Manual

The *Basic Life Support Participant's Manual* provides a reference source for participants. It consists of chapters and appendices.

■ Chapters

- Chapter 1: Foundational Concepts
- Chapter 2: Systematic Approach to Assessing, Recognizing and Caring for Adults
- Chapter 3: Basic Life Support for Adults
- Chapter 4: Basic Life Support for Children and Infants
- Chapter 5: Obstructed Airway
- Chapter 6: Opioid Overdose

Skill Sheets are integrated into corresponding chapters and provide a visual progression of how to perform the various skills associated with basic life support.

■ Appendices

- Appendix A: Common Legal Considerations
- Appendix B: Standard Precautions
- Appendix C: Basic Life Support Sequences
- Appendix D: Basic Life Support Differences Among Adults, Children and Infants
- Appendix E: Glossary
- Appendix F: Bibliography

Instructor's Materials

Instructor's Manual

The *Basic Life Support Instructor's Manual for Instructor-Led Training* is required to conduct this course. The manual is divided into sections.

- **Section A: Program Administration** contains information needed to conduct the Basic Life Support Instructor-Led Training course, including this course overview, instructor requirements and responsibilities, information about setting up and running the course, information about conducting effective skill practice and practice scenarios, and requirements for successful course completion.
- **Section B: Lessons** contains the lessons for the Basic Life Support course. They provide comprehensive instruction on each topic, including guidelines for all activities conducted in the training. For more information on the various activities, see *Course Activities* earlier in this chapter.
 - Lesson 1: Course Introduction and Foundational Concepts
 - Lesson 2: Systematic Approach to Assessing, Recognizing and Caring for Adults
 - Lesson 3: Basic Life Support for Adults
 - Lesson 4: Basic Life Support for Children and Infants
 - Lesson 5: Obstructed Airway
 - Lesson 6: Opioid Overdose
 - Lesson 7: Testing and Course Wrap-Up

■ **Section C: Appendices** includes supplemental materials to support the lessons in this course.

- Appendix A: Skill Practice Sheets
- Appendix B: Skill Competency Sheets
- Appendix C: Team Response Practice Scenarios
- Appendix D: Debriefing Tool
- Appendix E: Team Response Testing Scenarios
- Appendix F: Participant Progress Log
- Appendix G: Answer Sheet and Answer Keys
- Appendix H: Sample Agendas
- Appendix I: Review Course
- Appendix J: Challenge Course

Course Presentation

The Course Presentation provides a helpful in-class visual aid to dynamically support participants' understanding of the material as you lead them through a lesson. Lecture points, imagery, videos, group discussions, Q&A activities, and practice and testing scenario overviews are presented within the Course Presentation.

Details on how to download the Course Presentation are available on Instructor's Corner. Before conducting the program, become familiar with the presentation software and test the display of the system to be used.

Videos

The videos are an integral part of the course. Instructors are required to use the videos because they contain important information about key concepts and skills to help ensure the program objectives are met. The course cannot be conducted without the videos. They are available on DVD as well as in the Course Presentation. Videos can also be downloaded from Instructor's Corner.

Treatment Guidelines

The Treatment Guidelines provide visual flow charts of BLS care for adults, children and infants. Participants may refer to these during training and clinical practice as needed. The Treatment Guidelines are available in the back of this manual and on Instructor's Corner.

Being an American Red Cross Instructor

Instructor Requirements

Eligibility to Teach the Basic Life Support Program

Basic Life Support (BLS) instructors are eligible to teach the following American Red Cross courses and modules:

- Basic Life Support Instructor-Led Training course
- Basic Life Support Blended Learning course
- Asthma Inhaler Training
- Epinephrine Auto-Injector Training
- Bloodborne Pathogens Training
- Administering Emergency Oxygen

Maintaining Instructor Certification

Certification as an instructor is valid for 2 years. To maintain certification as an instructor, an instructor must:

- Teach or co-teach at least one Basic Life Support Instructor-Led Training course or one Basic Life Support Blended Learning course during the 2-year certification period.
- Successfully complete an online recertification assessment, including achieving a score of 80 percent or higher within 90 days of the instructor certification expiration date.
- Complete all applicable course updates prior to the update deadline.
- Maintain a Basic Life Support basic-level certification.

Eligibility to Teach Other American Red Cross Programs

American Red Cross Basic Life Support instructors may qualify to teach additional Red Cross basic-level courses after successfully completing an instructor bridge course.

Additional basic-level certifications may be necessary in addition to completing an instructor bridge course. Please check Instructor's Corner for more information on bridging options available, as well as any qualification requirements needed to complete the instructor bridge.

Instructor Responsibilities

Responsibilities as a certified Red Cross Basic Life Support instructor include:

- Providing for the health and safety of participants by always ensuring:
 - Manikins have been properly cleaned.
 - Other course equipment (medical and first aid supplies) is clean and in good working order.
 - Participants are aware of health precautions and guidelines concerning the transmission of infectious diseases.
 - All participants have the physical ability to perform each skill and know to consult the instructor if they have concerns about their physical ability to do so.
 - The classroom and all practice areas are free of hazards.

- Being familiar with and knowing how to effectively use course materials and training equipment.
- Informing participants about knowledge and skill evaluation procedures and course completion requirements.
- Creating a nonthreatening environment that is conducive to achieving the course objectives.
- Preparing participants to meet the course objectives.
- Adapting the 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.
- Guiding participants through the skills practice and practice scenarios and providing timely, positive and corrective feedback.
- Administering and evaluating the testing scenarios and final exam.
- Conducting courses in a manner consistent with course design.
- Teaching courses as designed, following all course outlines, policies and procedures as noted in the instructor documents for the course.
- Submitting completed course records within 10 working days from course completion.
- 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 while conducting Red Cross courses.
- Identifying potential instructor candidates and referring them to the appropriate Red Cross representatives.
- Abiding by the obligations in the instructor's manual, Instructor Agreement and Code of Conduct and, if applicable, the Authorized Provider or Licensed Training Provider Agreement.
- Representing the Red Cross in a positive manner.

Maintaining Consistent Training Standards

Quality, consistency and standardized delivery of programs are priorities of the American Red Cross. Red Cross courses are designed with standardized lesson plans based on well-defined objectives to provide an optimal learning experience for the variety of participants who participate in the courses. To meet the course objectives and ensure standardized course delivery, the lesson plans must be followed.

Facility availability or constraints, specific instructor-to-participant ratios, equipment-to-participant ratios or participant needs may necessitate adapting the outline while still maintaining the educational progression of the course. Adapting the training does not mean that you can add to, delete or change the content, with the exception of adapting to local protocols provided they are implemented under direction of a local medical director and do not contradict the course objectives. The course is laid out in a progressive way to allow the participants to learn in a predictable order as well as have sufficient time to practice skills.

Setting Up and Running the Course

Course Lengths and Schedules

The Basic Life Support (BLS) Instructor-Led Training course is designed to be taught in approximately 4 hours, including administering the testing scenarios and the final exam.

The times allotted in the lesson outlines include the minimum time required for covering the required activities and do not include optional activities or breaks. Course lengths are based on:

- A participant-to-instructor ratio of 9:1.
- The appropriate per-participant equipment recommendations. See *Materials, Equipment and Supplies* below for more information.

Increasing one or more of these ratios may increase the pace of the skill practice and practice scenarios but will not reduce overall course time significantly. Therefore, courses are to be scheduled and expected to run for the designated course length, at a minimum.

The lessons in the instructor's manual must be followed as closely as possible, but facility constraints, specific participant-to-instructor ratios, participant-to-equipment ratios and participant needs (e.g., breaks) may increase course length. Other factors that may influence lesson planning include the following:

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

Sample agendas are provided in Appendix H.

Class Size and Participant-to-Instructor Ratios

The Basic Life Support Instructor-Led Training course has been designed for a ratio of nine participants to one instructor (9:1). If your class is larger, you may not be able to properly supervise the course activities, such as skill practice, in the allotted time.

If a class has more than nine participants, another instructor should co-teach or the course should be extended by at least 30 minutes per every three additional participants. **NOTE: The maximum participant-to-instructor ratio for this course is 12:1;** however, that ratio will require either additional time—at least 30 minutes—above and beyond what is listed in this manual or another instructor to co-teach the course.

Likewise, if there are fewer than the minimum number of participants, you may not be able to conduct course activities properly to meet course objectives. If there are fewer than three participants, additional people certified in BLS must be added throughout the course to achieve the course objectives through practicing skills, testing and other course activities.

Classroom Space

The Basic Life Support Instructor-Led Training course requires a classroom space suitable for lecture, group discussions and Q&A activities, videos, skill practice and team response scenarios. The classroom should provide a safe, comfortable and appropriate learning environment. The room should be well lit, well ventilated and have a comfortable temperature.



Instructor's Note

If the area where skill practice, practice and testing scenarios, and instructor demonstrations will be conducted is not carpeted, provide knee protection (such as folded blankets or mats) for use by participants or request that they bring their own padding materials. Also, be mindful of any additional space considerations and equipment needs if you are conducting the course in a skill lab and working with manikins in beds.

Materials, Equipment and Supplies

The specific materials, equipment and supplies needed for each lesson are included at the beginning of the lesson. Instructors should have the specific equipment needed for the lesson ready prior to the start of the lesson. Supplies that instructors should have available include the following:

■ Materials

- *Basic Life Support Instructor's Manual for Instructor-Led Training*
- *Basic Life Support Course Presentation for Instructor-Led Training, Basic Life Support DVD or Basic Life Support for Instructor-Led Training downloadable videos*
- Final Exams A and B (one copy for each participant; available on Instructor's Corner)
- *Basic Life Support Participant's Manual* (optional)



Instructor's Note

Use of the Course Presentation is optional; however, you are required to show all the videos as indicated in the lesson plans. The videos are available on DVD as well as in the Course Presentation, or they can be downloaded from Instructor's Corner.

■ Equipment

- **CPR Manikins**
 - Adult CPR manikins (one for every two participants)
 - Infant CPR manikins (one for every two participants)
 - Child CPR manikins (optional; one for every two participants)
- **Resuscitation Masks**
 - Adult pocket masks and valves (minimum of one valve for every participant)
 - Infant pocket masks and valves (minimum of one valve for every participant)
 - Child pocket masks and valves (optional; minimum of one valve for every participant)
 - Adult BVMs (one for each manikin)
 - Infant BVMs (one for each manikin)
 - Child BVMs (optional; one for each child manikin)

- **AED**
 - AED training devices (one for every three participants)
 - AED training pads (one set of adult and one set of pediatric training pads for every three participants)
- **Additional**
 - Feedback devices (recommended but not required; one for each manikin)
 - Timing devices (optional; one for every three participants)
 - CPR boards or beds with CPR function, if applicable (one for every two participants)
 - Step stools, if applicable (two for every team)

■ **Supplies**

- Disposable latex-free gloves (optional)
- Cleaning and decontamination supplies (decontaminating solution, 4" × 4" gauze pads, soap and water, brush, basins or buckets, and any accessories that may be recommended by the manufacturer of the manikin)
- Extra manikin equipment (e.g., airways, lungs and batteries) as appropriate
- Blankets and/or mats (optional; one for each participant)
- Name tags (optional; one for each participant)

■ **Technology**

- Desktop/laptop computer or tablet with power source and speakers, projector and projection screen/area or large monitor; or, television with a DVD player
- Extension cord and grounded plug adapter, if needed



Instructor's Note

The use of gloves during training is highly recommended to reinforce the importance of standard precautions. However, you may choose to not use gloves during training and instead have participants verbalize that they are doing so during the practice and testing scenarios.

Class Safety and Supervision

As a Red Cross instructor, it is important for you to make the teaching environment as safe as possible and to protect participants from health risks. The equipment, supplies and procedures for teaching Red Cross programs are designed to:

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

Participants who feel they are at risk for injury or illness may become distracted. These same feelings may also affect your ability to teach. It is important to talk with participants who feel they are at risk and inform them of the precautions that are taken to limit and reduce the risk for injury or illness. You can take several steps to help increase class safety.

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

Health Precautions for Course Participants and Considerations for Participants with Disabilities

Provide participants information about health requirements and safety before the course begins.

People with physical disabilities or certain health conditions may hesitate to take part in skill sessions. You should suggest that these participants discuss their participation with a healthcare provider. Ask participants to tell you in advance if they are concerned about their ability to perform a specific skill.

The Red Cross advocates that instructors adjust activity levels to facilitate learning and to help meet course objectives when possible.

As a Red Cross instructor, you must attempt to protect participants against health risks, and you must do your best to safeguard participants against any risk of injury while they are engaged in skill practice. Guidance for modifications for a participant with a disability is provided in the Inclusion Resource Guide, which is available upon request from the Red Cross.

Conducting Effective Skill Practice and Team Response Practice Scenarios

Skill Practice and Team Response Practice Scenarios are the central activities that allow participants to achieve all basic life support core competencies.

They reflect a progressive method of teaching the skills needed to achieve certification and are therefore a primary concern for the instructor to ensure an effective learning experience. For maximum efficiency and the best learning outcomes, skill practice and practice scenarios should be well organized and well managed.

Instructor Responsibilities

For successful skill practice and practice scenarios, instructors must provide direction and instruction, ample practice time, encouragement and positive reinforcement, and corrective feedback.

The instructor is responsible for:

- Guiding participants through the skill or scenario as outlined in the lesson.
- Keeping the practice running smoothly.
- Ensuring that participants can see the video monitor when applicable.
- Helping participants form pairs or teams, as needed for that particular practice, and making sure that participants have the necessary equipment for practice.
- Closely supervising participants as they practice.
- Identifying errors promptly and providing appropriate individual and global feedback to help participants improve. Common errors to look for are noted in the lesson plans. You may refer to these prior to beginning and during skill practice.
- Checking each participant for skill competency.
- Maintaining a safe, positive learning environment.
- Encouraging participants to improve and maintain their skills.
- Demonstrating the skill, if directed or necessary.

Setting Up Skill Practice and Team Response Practice Scenarios

When arranging the classroom for skill practice, ensure that there is an adequate amount of equipment and supplies for the number of participants in the class. Arrange the skill practice and practice scenario areas so that each participant has ample room to view the video monitor and move about, practice the skill, ask questions and receive feedback on their performance. Also ensure all instructors can see the participants, move from person to person, and provide feedback and oversight at all times.

When using Skill Practice Sheets and Skill Competency Sheets, distribute copies to each participant to use as a guide. When participants are working in teams, encourage team communication.

When the participants are practicing on manikins, the manikins' heads should all point in the same direction, and all the participants should be in the same position next to the manikins. An exception to this setup would be if you were working in a skill lab with manikins in beds. Adjust your setup according to what best serves the learning environment.

If the participants are practicing with partners, being able to see everyone allows you to judge skill competency as well as ensure participant safety.



Instructor's Note

The lengths of the skill practice and practice scenarios are prescribed in the instructor's manual. These times are based on the complexity of the skill and the number of team members as outlined in the lesson plan.

Conducting Skill Practice

Skill practice provides participants with hands-on skill experience. For each skill, participants first watch a video segment demonstrating the skill, and then they practice the skill. The instructor guides participants through each step of the skill while checking on participants and providing feedback.

Skill practice can be used to focus on a skill or part of a skill. This approach is particularly useful for introducing new skills that build on previously learned skills. A primary example is single-provider CPR in which participants first practice compressions, then practice ventilations using a pocket mask, and then put both together in a CPR cycle.

Circulate to monitor participants' progress and provide assistance and corrective global and individual feedback as necessary. When a skill practice is performed with a partner or in a group, always encourage participants to offer each other help and feedback during the practice.

When conducting skill practice, keep the following points in mind:

- Course skills are complex. Participants often have some difficulties when they first begin.
- The skills taught may be new to most participants; therefore, participants may require frequent one-on-one attention.
- Skills are learned by hands-on practice. Immediate success in demonstrating the skill is unlikely. Refinements in technique take time and practice. The course is designed to allow participants ample time to practice skills.
- Skills require a defined sequence of movements. Participants should consistently follow this sequence when learning skills.
- Learning times for each skill practice differ, because some skills are easier than others.
- Participants have different learning rates. Take individual differences into account.
- Skills, especially the individual components, are quickly forgotten. Frequent practice improves skill retention.



Instructor's Note

For reasons of educational quality and participant safety, the following skills taught in many American Red Cross courses are practiced only on a manikin and never on a real person: ventilations, chest compressions, CPR and automated external defibrillator (AED) use.

Conducting Team Response Practice Scenarios

Through real-life situational experiences, practice scenarios allow participants to apply their newly acquired hands-on skills and work together as a team. Teams are generally organized in groups of three or more and are created to give each participant a chance to work in a BLS sequence and step into each team member role; for example, compressor, ventilator, AED operator or team leader.

Generally, all the same instructor-led principles for teaching skills as described above apply. However, scenarios introduce the concept of instructor-led *prompting* in addition to *coaching*, and this will be discussed in further detail later in this chapter.

The *practice scenarios* serve as a precursor to the *testing scenarios*, which are prompt-only activities and an essential component to achieving certification.

Providing Feedback

One of your most difficult challenges as an instructor is to ensure that participants practice correctly during skill practice and practice scenarios.

Continually monitor all participants, watching for errors participants make while practicing. A list of common errors is included in every skill practice within a lesson plan. Correct any problems you notice as soon as possible, using global or individual feedback to prevent participants from continuing to practice incorrectly.

While you are working closely with one participant, check others with an occasional glance. Encourage participants to ask questions if they are unsure how to perform any part of a skill.

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

When giving feedback, keep the following strategies in mind:

- Be specific when providing feedback.
- If the error is simple, explain directly and positively how to correct the skill performance. For example, if the participant is having trouble finding the proper hand placement for CPR, you might say, “The steps leading up to beginning CPR are good; now try finding the center of the chest for compressions. That will be the spot you want to aim for.”
- Show the participant what they should be doing. For example, in addition to telling the participant that the hands should be placed in the center of the chest for compressions, demonstrate the proper hand placement.
- Explaining why the skill should be performed in a certain way may help participants remember how to perform the skill correctly. For example, if a participant continually forgets to check for safety as part of the rapid assessment, you might remind the participant that failing to check for safety before going to another’s aid can put the provider at risk for injury or illness as well.
- If a participant has an ongoing problem with a skill, carefully observe what they are doing. Give specific instructions for performing the skill the correct way and lead the participant through the skill. It may help to have the participant state the steps back to you for reinforcement.
- Emphasize the critical performance steps, focusing on those steps that make a difference in the successful completion of a skill.
- Have the participant practice again after the corrective feedback.
- During skill practice, resist telling participants anecdotes, which can distract or confuse them.
- Remind participants what they are doing right and what they need to improve. Use phrases such as, “Your arms are lined up well, but try to keep them as straight as possible while giving compressions to help ensure that they are effective.” Help participants focus on the critical components of each skill.

Evaluating Skill Performance

Skill Practice Sheets, Team Response Practice Scenarios and Participant Progress Logs are provided in the instructor's manual to assist you in evaluating participants' mastery of the skill and keeping track of individual progress through the course. Before conducting a skill practice or practice scenario, become familiar with these references.

Instructors must focus on the successful completion of an objective as opposed to perfecting every individual skill. For example, a participant who has arthritis in their hands can still perform effective chest compressions by grasping the wrist of the hand positioned on the chest with their other hand, instead of placing one hand on top of the other and interlacing the fingers. In this example, the participant may continue the course and still receive certification, since the skills needed to prevent injury or save a life may need modification, but the result is the same. Additional information on adjustments to training can be found in the Inclusion Resource Guide available upon request from the Red Cross.

Coaching Versus Prompting Participants

The desired outcome of any American Red Cross program is for participants to demonstrate a skill correctly from beginning to end without receiving any assistance.

Because participants learn at different rates, bring different levels of knowledge to the course and learn in different ways, you will most likely need to coach or guide participants as they first learn skill elements.

Coaching occurs during skill practice and practice scenarios. It allows you to give participants information that they need to establish the sequence, timing, duration and technique for a particular skill. When coaching, provide information such as the sequence of steps in a skill. Statements such as "Perform a visual survey" or "Check the patient for responsiveness" are examples of coaching.

Prompting is a technique that is introduced first in practice scenarios. It is a natural progression from skill practice. Prompting gives participants the opportunity to put the skills they learned together and allows you to assess the participant's ability to make the right decision at the right time and give the appropriate care, particularly in a team setting.

When you prompt someone, you provide only the information necessary for the participant to make a decision and give care. For example, you would say, "The person is unresponsive" instead of "Perform a shout-tap-shout sequence."

At the end of the course, all participants must complete the Team Response Testing Scenario: BLS for Adults and Team Response Testing Scenario: BLS for Infants. These tests are designed to be **prompt-only** scenarios; no coaching is integrated into these activities and participants must act independently through the scenario.

See Chapter 5, Course Completion, for more information on the requirements for course completion.

Course Completion

Criteria for Course Completion and Certification

Many agencies, organizations and individuals look to the American Red Cross for formal training that results in certification. *Red Cross certification* means that on a particular date an instructor verified that a course participant could demonstrate competency in all required skills taught in the course.

Competency is defined as being able to demonstrate correct decision-making processes, to sequence care steps properly and to demonstrate proficiency in completing all required skills without guidance. Achieving certification does not imply any future demonstration of the knowledge or skill at the level achieved on the particular date of course completion.

On successful completion of the Basic Life Support Instructor-Led Training course, participants receive an American Red Cross Basic Life Support certification, which is valid for 2 years.

To successfully complete the Basic Life Support Instructor-Led Training course, the participant must:

- Attend the entire course and participate in all class lessons.
- Actively participate in all course activities, including assuming various roles during skill practice and practice scenarios.
- Demonstrate competency in all required skills.
- Pass the Team Response Testing Scenarios as a team leader.
- Successfully pass the final exam with a minimum grade of 84 percent.

Participants must be told of the requirements when they enroll in the course and again during the course introduction. Remember to provide ongoing individual feedback to participants about their performance throughout the course. Feedback should be ongoing so there are no surprises if a participant's performance is evaluated as unacceptable.

Team Response Testing Scenarios

The purpose of the Team Response Testing Scenarios is to ensure that participants have achieved a level of competency and retention of the skills learned in the course.

To complete the course requirements and receive a completion certificate, a participant must be able to complete all required skills during the testing scenarios without any coaching or assistance. A participant's performance is "proficient" or "not proficient" based on the performance of the critical components of a skill that are necessary to meet the objective.

During the testing scenarios, participants will be evaluated as follows:

- Team leader—Ability to complete all critical actions; act upon decisions in a timely, sequential, safe and effective manner; and demonstrate skill competency in assigned role(s).
- Team member—Active participation in team response and ability to demonstrate skill competency in assigned role(s).

Final Exam

Participants are required to pass the final exam in order to receive certification in American Red Cross Basic Life Support. Two versions of the final exam (A and B) are available. When administering the final exam, instructors must use the exam(s) provided and may not substitute exam questions. The final exams can be downloaded from Instructor's Corner.

Administering the Exam

When administering the final exam, keep these points in mind:

- The final exam consists of 25 questions.
- Participants may refer to the participant's manual or other Red Cross resources during the exam, if necessary.
- Participants must pass the final exam with an 84 percent or better.
 - If a participant fails the final exam but passed the testing scenario, a retest is allowed using the other version of the exam.
 - If they fail BOTH the testing scenario and final exam, the retest option does not apply, and the participant must retake the course.
 - If they fail the retest, the participant must retake the course.



Instructor's Note

It is acceptable for an instructor to read the exam to a participant as long as the participant determines the appropriate response.

Maintaining Exam Security

Exam security is the instructor's responsibility. It is not recommended that participants be allowed to see the final exam before it is distributed. Instruct participants to put away all course materials and mobile devices. As participants hand in their answer sheets, instructors may quickly grade the exam (using the answer keys located in Appendix G of the instructor's manual) and return it to the participant. This way, the participant can review any incorrect answers. Be sure to collect all answer sheets and exams before participants leave the class. Exams may be updated periodically, and it is the responsibility of the instructor to ensure that they are using the most current exam.

Handling Unsuccessful Course Completion

If a participant does not meet the criteria for course completion and certification, provide the participant with information about course topics and skills where remediation is needed. Advise the participant that they can repeat the course if they choose. The retest can be one-on-one with the instructor, or if the participant chooses and the other team members are available, the retest can be conducted with the entire team. If the participant is still unsuccessful, advise the participant that they can schedule a time to retake the course or work with the instructor to determine an alternate pathway to achieving certification.

Acknowledging Course Completion and Awarding Certification ■

Upon successful completion of the course and after the training has been reported, each participant will receive a course completion certificate from the American Red Cross. The course completion certificate includes the participant's name, the course name, the completion date and the certification validity period. The course completion certificate can be downloaded, printed or shared, as needed. Each American Red Cross certification contains a QR code that can be used by participants, instructors, employers or the American Red Cross to validate certificate authenticity.

Section B: Lessons

Lesson 1: Course Introduction and Foundational Concepts

Lesson 2: Systematic Approach to Assessing, Recognizing and Caring for Adults

Lesson 3: Basic Life Support for Adults

Lesson 4: Basic Life Support for Children and Infants

Lesson 5: Obstructed Airway

Lesson 6: Opioid Overdose

Lesson 7: Testing and Course Wrap-Up

Course Introduction and Foundational Concepts

LESSON LENGTH | 15 minutes

Guidance for the Instructor

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

- Discuss all points in the topics, “Introduction to Basic Life Support,” “Critical Thinking and Problem Solving,” “Communication” and “Teamwork.”
- Show the video, “Communication” (2:53).

Lesson Objectives

After completing this lesson, participants will be able to:


- Apply and integrate critical-thinking and problem-solving skills during an emergency situation.
- Demonstrate effective communication and teamwork skills when working as part of a team in an emergency.
- Apply the key skills and behaviors that are essential for successful teamwork.

Materials, Equipment and Supplies



- *Basic Life Support Course Presentation for Instructor-Led Training, Basic Life Support DVD or Basic Life Support for Instructor-Led Training downloadable videos*
- Computer or tablet with speakers, projector and projection screen or monitor

Topic | Introduction to Basic Life Support

Welcome



<p>LECTURE</p>  <p>REFERENCE Course Presentation Slides 1–3</p>	<ul style="list-style-type: none"> ■ Welcome participants and briefly introduce yourself as an American Red Cross instructor. ■ Ask participants to briefly introduce themselves. ■ Review the following information: <ul style="list-style-type: none"> ○ Facility policies and procedures ○ Locations of restrooms, water fountains and break areas ○ Where emergency exits are located as well as where automated external defibrillators (AEDs) and first aid kits are located ○ Careful and proper use of equipment for infection control, including standard precautions and manikin decontamination ■ Tell participants that if they have concerns or issues that may affect their ability to take part in the course, they should speak with you privately at the conclusion of the course introduction.
--	---

Course Purpose

<p>LECTURE</p>  <p>REFERENCE Course Presentation Slide 4</p>	<ul style="list-style-type: none"> ■ Explain to participants that the purpose of this course is to teach them the knowledge and skills they will need to care for an adult, child or infant experiencing a life-threatening emergency. To help improve patient outcomes, they will learn to: <ul style="list-style-type: none"> ○ Develop critical-thinking and problem-solving skills. ○ Use communication, teamwork and leadership skills during a high-performance team response. ○ Apply a systematic, continuous approach for rapid assessment, accurate recognition and immediate care in emergency situations. ○ Perform high-quality cardiopulmonary resuscitation (CPR) and use an AED during cardiac arrest. ○ Deliver effective ventilations during respiratory arrest. ○ Relieve an obstructed airway. ○ Manage an opioid overdose during cardiac or respiratory arrest.
<p>LECTURE</p>  <p>REFERENCE Course Presentation Slide 5</p>	<ul style="list-style-type: none"> ■ Tell participants that to receive their Basic Life Support (BLS) completion certificate, they must: <ul style="list-style-type: none"> ○ Attend the entire class session. ○ Participate in all skill practices and practice scenarios associated with this course. ○ Demonstrate competency in all required skills. ○ Successfully complete the testing scenarios and pass the final exam with a score of 84% or higher. ■ Explain to participants that their BLS certification is valid for 2 years.


Topic | Critical Thinking and Problem Solving

What Is Critical Thinking and Problem Solving?

<p>LECTURE</p>  <p>REFERENCE Course Presentation Slides 6–7</p>	<ul style="list-style-type: none"> ■ Communicate the following key points to participants: <ul style="list-style-type: none"> ○ Critical thinking and problem solving are essential skills in healthcare and especially in emergency situations. ○ <i>Critical thinking</i> refers to thinking clearly and rationally to identify the connection between information and actions. ○ When you use critical thinking, you are constantly identifying new information, adapting to the information logically in order to determine your best next actions and anticipating how those actions will affect the patient. ○ <i>Problem solving</i> refers to the ability to use readily available resources to find solutions to challenging situations or issues that arise. ○ Problem solving often requires creativity and adaptability.
<p>OPTIONAL 3 minutes</p> <p>GUIDED DISCUSSION</p>  <p>REFERENCE Course Presentation Slide 8</p>	<ul style="list-style-type: none"> ■ Conduct a guided discussion with participants. <ul style="list-style-type: none"> ○ Ask participants to consider a time they had to use critical thinking in basic life support or other emergency situations. ○ Ask one or two participants to describe what happened. Then, explain how they used critical thinking to respond. ○ Be mindful of the time during this activity.

Topic | Communication

Introduction

<p>LECTURE</p>  <p>REFERENCE Course Presentation Slides 9–10</p>	<ul style="list-style-type: none"> ■ Tell participants that communication is essential when caring for a patient who is experiencing a life-threatening emergency. <ul style="list-style-type: none"> ○ You need to communicate with your team, the patient and the patient's family or others who may present.
---	--

Communicating with the Team

VIDEO



REFERENCE

Course Presentation
Slide 11

- Inform participants that they will watch the following video to review the key components of communicating with the team.
- Show the video segment, “Communication” (2:53).
- Answer participants’ questions.

Communicating with the Family

LECTURE



REFERENCE

Course Presentation
Slides 12–13

- Communicate the following key points to participants:
 - Patients requiring resuscitation are unresponsive, making communication with the family or others who may be present very important.
 - During emergencies, people are stressed and may not always hear or understand what you are saying.
 - The following tips ensure good communication with family members:
 - Demonstrate credibility as well as confidence and empathy.
 - Build rapport and establish trust.
 - Speak slowly and in terms the family can understand.
 - Be prepared to repeat information, if necessary.
 - Be open and honest, especially about the patient’s condition. Minimize family members’ fears as necessary, but avoid giving misleading information or false hope, such as “Everything is going to be ok.”
 - Reassure the family that everything that can be done is being done.

Communicating with the Family After a Patient’s Death

OPTIONAL

2 minutes

LECTURE



REFERENCE

Course Presentation
Slide 14

- Communicate the following key points to participants:
 - Patients may not survive, despite the team’s best resuscitation attempts.
 - As a healthcare provider, you may be involved in communicating with the family about a patient’s death.
 - The following tips ensure good communication with family members after a patient’s death:
 - Provide the information honestly and with compassion, in a straightforward manner, and include information about events that may follow.
 - Allow the family to begin processing the information.
 - Allow time for the family to begin the grief process.
 - Ask whether they would like to contact or have you contact anyone, such as other family members or clergy.
 - Anticipate a myriad of reactions by family members, such as crying, sobbing, shouting, anger, screaming or physically lashing out.
 - Wait and answer any questions that the family may have.

OPTIONAL

2 minutes

LECTURE

(continued)



Instructor's Note

Keep in mind that not all participants will have a professional responsibility to communicate with a family after a patient's death. However, inform participants that awareness of these concepts is important for all, as part of a supportive team.

TIME | 5 minutes

Topic | Teamwork

Significance of Teamwork

LECTURE



REFERENCE

Course Presentation
Slides 15–16

- Communicate the following key points to participants:
 - Teamwork is crucial during resuscitation efforts.
 - Coordinated efforts improve patient outcomes.
 - As a member of the BLS team, it is important to understand the responsibilities of the team leader and other team members.

Team Leader Responsibilities

LECTURE



REFERENCE

Course Presentation
Slide 17

- Communicate the following team leader responsibilities to participants:
 - The team leader oversees the entire emergency situation and ensures that everyone works as a team to help promote the best possible outcome for the patient. The team leader:
 - Assigns and understands team roles.
 - Sets clear expectations.
 - Prioritizes, directs and acts decisively.
 - Encourages and allows team input and interaction.
 - Focuses on the big picture.
 - Monitors performance while providing support.
 - Acts as a role model.
 - Coaches the team.
 - Re-evaluates and summarizes progress.
 - Leads a debriefing session.

Team Member Responsibilities

LECTURE



REFERENCE

Course Presentation
Slide 17

- Communicate the following team member responsibilities to participants:
 - Team members provide care with skill and expertise. In addition, they:
 - Have the necessary knowledge and skills to perform their assigned role.
 - Stay in their assigned role but assist others as needed, as long as they are able to maintain their own assigned responsibilities.
 - Communicate effectively with the team leader if they:
 - Feel they cannot perform assigned roles.
 - Identify something that the team leader may have overlooked.
 - Recognize a dangerous situation or need for urgent action.
 - Focus on achieving the goals.
 - Share pertinent observations.
 - Ask relevant questions.
 - Participate in a debriefing session.

Crew Resource Management

LECTURE



REFERENCE

Course Presentation
Slide 18

- Communicate the following key points to participants:
 - Crew resource management emphasizes the use of all available resources (including people, equipment and procedures) to promote effective and efficient teamwork and reduce the likelihood of human error.
 - When following the principles of crew resource management, all members of the team demonstrate respect for one another and use clear, closed-loop communication.
 - Crew resource management centers around the team leader, who coordinates the actions and activities of team members so that the team functions effectively and efficiently.
 - It also guides the team members to communicate directly and openly with the team leader about dangerous or time-critical decisions.
 - When a problem arises, team members must get the attention of the team leader, state their concern, describe the problem as they see it and suggest a solution. The team leader then provides direction, enabling the team to work together to resolve the issue.

Practicing and Debriefing

LECTURE



REFERENCE

Course Presentation
Slide 19

- Communicate the following key points to participants:
 - Members of effective high-performance teams keep their skills and knowledge current, and they practice together regularly.
 - High-performance teams hold debriefing sessions after each resuscitation event.
 - The purpose of the debriefing session is to take a closer look at the decisions that were made and the actions that were taken with the goal of identifying opportunities for improvement at the system, team and individual levels.
 - The team leader leads the debriefing session, which typically follows a consistent format.
 - There are four components to debriefing:
 - **Review:** The team leader provides a brief recap of the emergency and the interventions that were used.
 - **Analyze:** The team reviews and evaluates the objective data obtained during the resuscitation effort.
 - **Reflect:** The team reflects on the actions they took and why, discusses the pros and cons of those actions and identifies changes that could be made to improve future outcomes.
 - **Summarize:** The team recaps the main takeaway points and develops a list of action items.
- Inform participants that they will have the opportunity to practice debriefing skills as part of the practice scenarios throughout the course.

Systematic Approach to Assessing, Recognizing and Caring for Adults

LESSON LENGTH | 25 minutes

Guidance for the Instructor

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

- Discuss all points in the topics, “Assess, Recognize and Care for Adults,” “Assess,” “Recognize and Care” and “Adult Cardiac Chain of Survival.”
- Show the videos, “Rapid Assessment for Adults” (2:48) and “Open the Airway” (1:11).
- Conduct the Team Response Practice Scenario: Rapid Assessment for Adults.

Lesson Objectives

After completing this lesson, participants will be able to:

- Apply the Assess, Recognize, and Care concept for adult patients.
- Perform a rapid assessment to determine whether the adult patient is experiencing a life-threatening emergency.
- Recognize that an adult patient is unresponsive, is in respiratory or cardiac arrest, has an obstructed airway or is experiencing an opioid overdose.
- Determine an immediate course of action based on the results of the rapid assessment.
- Identify the adult cardiac chain of survival for in-hospital and out-of-hospital patients.

Materials, Equipment and Supplies

- *Basic Life Support Course Presentation for Instructor-Led Training, Basic Life Support DVD or Basic Life Support for Instructor-Led Training downloadable videos*
- Computer or tablet with speakers, projector and projection screen or monitor
- Disposable latex-free gloves (optional)
- Adult CPR manikins (one for every two participants)
- Cleaning and decontamination supplies
- Blankets and/or mats, if applicable (optional; one for each participant)

Topic | **Assess, Recognize and Care for Adults****Emergencies Can Happen Anywhere**

LECTURE



REFERENCE

Course Presentation
Slides 20–22

- Communicate the following key points to participants:
 - As a healthcare provider, you have a duty to act when a patient experiences a life-threatening emergency in a healthcare facility.
 - Emergency situations can occur anywhere in a healthcare facility. The interventions you provide, accessible resources and equipment, and the team members available may vary depending on the location of the emergency situation.
 - Although a duty to act may not always exist when outside of a healthcare facility, being prepared and willing to respond is essential.
 - Consult your state and local rules and regulations related to liability protections and other legal considerations.

**Instructor's Note**

You may inform participants that further details on common legal considerations are available for reference in the participant's manual.

A Systematic, Continuous Approach

LECTURE



REFERENCE

Course Presentation
Slide 23

- Communicate the following key points to participants:
 - The Assess, Recognize and Care concept is a systematic, continuous approach for rapid assessment, accurate recognition and immediate care in emergency situations.
 - You will learn more about each step of the Assess, Recognize and Care concept throughout this lesson.

Topic | **Assess****Rapid Assessment for Adults**






LECTURE



REFERENCE

Course Presentation
Slides 24–25

- Explain to participants that performing a *rapid assessment* is the essential first step of the Assess, Recognize and Care concept. To perform a rapid assessment:
 - Conduct a quick visual survey of the emergency situation, including assessing for safety, obtaining an initial impression of the patient(s) and determining the need for additional resources.
 - Check for responsiveness—shout “Are you OK?” and tap the shoulder, then shout again.
 - Open the airway and simultaneously check for breathing and a carotid pulse, for at least 5 seconds but no more than 10.

<p>VIDEO</p>  <p>REFERENCE</p> <p>Course Presentation Slide 26</p>	<ul style="list-style-type: none"> ■ Tell participants that they will now watch the following video to learn more about the Assess, Recognize and Care concept. ■ Show the video segment, “Rapid Assessment for Adults” (2:48). ■ Answer participants’ questions.
<p>VIDEO</p>  <p>REFERENCE</p> <p>Course Presentation Slide 27</p>	<ul style="list-style-type: none"> ■ Explain to participants that they will now take a closer look at how to open the airway using the head-tilt/chin-lift technique and the modified jaw-thrust maneuver. ■ Show the video segment, “Open the Airway” (1:11). ■ Answer participants’ questions.
<p>LECTURE</p>  <p>REFERENCE</p> <p>Course Presentation Slide 28</p>	<ul style="list-style-type: none"> ■ Remind participants that using PPE can help prevent the spread of bloodborne pathogens that can cause disease and that may be present in blood and other body fluids. <div data-bbox="421 821 1394 1012" style="border: 1px solid #0070C0; padding: 10px;"> <p> Instructor’s Note</p> <ul style="list-style-type: none"> ■ Refer participants to other resources, such as their participant’s manual, employer’s policy or additional training (e.g. Bloodborne Pathogens Training), if they need more information. </div> <ul style="list-style-type: none"> ■ Remind participants to wear or verbalize wearing PPE as they perform skills. Although they are not <i>required</i> to wear PPE during training, they should always follow the procedures/protocols required by the clinical situation and their employer’s policy when providing patient care.
<p>DEMO</p>  <p>REFERENCE</p> <p>Course Presentation Slide 29</p>	<ul style="list-style-type: none"> ■ Orient participants to the adult manikin they will be using, including basic operations and feedback functions and/or devices.

PRACTICE SCENARIO



REFERENCES

Course Presentation
Slide 30

Skill Competency
Sheet: BLS for Adults

Team Response
Practice Scenario:
Rapid Assessment for
Adults

Debriefing Tool

Participant Progress
Log

- Begin the practice scenario for “Rapid Assessment for Adults.”
- Ask participants to find a partner and choose an adult manikin.
- Communicate the following to participants:
 - One participant will be the team leader and perform the rapid assessment.
 - The other participant will be the team member and get additional resources and an AED.
 - Then, they will switch roles.
 - Participants should help each other and provide peer feedback.



Instructor’s Note

Remind participants to decontaminate manikins before switching roles.

- Guide participants through the steps of the response using the Team Response Practice Scenario: Rapid Assessment for Adults (Appendix C).
 - Offer printouts of the Skill Competency Sheet: BLS for Adults (Appendix B).
- Give feedback during the practice scenario as needed.
- Check off each participant’s progress on the Participant Progress Log (Appendix F).
- Answer participants’ questions.
- If the team misses a critical step, provide coaching as needed to keep the scenario progressing.
- Conduct a debriefing with participants using the Debriefing Tool (Appendix D).
 - Encourage participants to raise their hand or freely call out their responses.
 - Answer participants’ questions.

TIME | 10 minutes

Topic | Recognize and Care

Recognize

LECTURE



REFERENCE

Course Presentation
Slides 31–32

- Communicate the following key points to participants:
 - The next step is to use the results of the rapid assessment to *recognize* the type and severity of the emergency condition.
 - Emergency conditions requiring basic life support may include:
 - Injury or illness.
 - Respiratory arrest.
 - Cardiac arrest.
 - Obstructed airway.
 - Opioid overdose.

Myocardial Infarction

LECTURE



REFERENCE

Course Presentation
Slides 33–36

- Communicate the following key points to participants:
 - It is important to recognize that cardiac arrest is different from myocardial infarction; however, a myocardial infarction can lead to cardiac arrest.
 - A myocardial infarction (MI) is commonly known as a heart attack.
 - MI refers to the necrosis (death) of heart tissue as a result of a loss of oxygenated blood.
 - Common signs and symptoms include:
 - 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.
 - Chest 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 altered mental status or level of consciousness.
 - Nausea or vomiting.
 - 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.
 - Stomach, back or jaw pain.
 - Unexplained fatigue or malaise.
 - Other individuals, such as those with diabetes or older adults, may present with atypical signs and symptoms.
 - These warning signs may occur with or without chest pain, but when women do experience chest pain, it may be atypical, consisting of sudden, sharp but short-lived pain outside the breastbone.



Instructor's Note

You may inform participants that further details on myocardial infarction, including care with aspirin, are available for reference in the participant's manual.

LECTURE



REFERENCE

Course Presentation
Slide 37

- Explain to participants that with accurate recognition of the emergency condition, they can now implement the proper *care*.
- Present the following information to help participants interpret rapid assessment findings, recognize life-threatening emergency conditions and understand basic care steps for each.



Instructor's Note

Depending on the background and experience of your participants, you can conduct a Guided Discussion. Present the assessment findings and ask participants to recognize the emergency condition and determine the appropriate care.

Note: Be mindful of time as this approach can take longer to implement.




- **Mr. Judson is responsive but moaning in pain and moving around in bed.**
 - Obtain his consent to provide care.
 - Reassure him.
 - Take steps to find out what occurred.
- **Mrs. Sparks is unresponsive, but breathing normally and has a pulse.** You do not suspect a head, neck, spinal or pelvic injury.
 - Activate EMS, the rapid response team or the resuscitation team as appropriate and call for an AED.
 - Place Mrs. Sparks in a side-lying recovery position, complete your patient assessment as appropriate and continue to monitor her until help arrives.



Instructor's Note

- Inform participants of the following:
 - If you suspect the patient has a head, neck, spinal or pelvic injury, avoid moving them unless it is absolutely necessary. Maintain the patient in the position in which you found them and wait for help to arrive.
 - However, if you need to leave the patient to call for help and/or get additional resources, place them in a side-lying recovery position.


- **Mr. Martel is not breathing normally (or only gasping) but has a pulse.**
 - Mr. Martel is in respiratory arrest.
 - Deliver 1 ventilation every 5 to 6 seconds; each ventilation should last about 1 second and make the chest begin to rise.
 - You will learn more about caring for respiratory arrest in the next lesson.
- **Mrs. Rigby is unresponsive, is not breathing normally (or only gasping) and does not have a pulse.**
 - Mrs. Rigby is in cardiac arrest.
 - Start CPR within 10 seconds of recognizing cardiac arrest and use an AED when it is available.
 - You will learn more about caring for cardiac arrest in the next lesson.

<p>LECTURE</p>  <p>(continued)</p>	<ul style="list-style-type: none"> ○ Mr. Huff is awake and alert, but he cannot cough, speak or breathe. <ul style="list-style-type: none"> ● Mr. Huff is choking. ● Obtain consent and immediately begin care for an obstructed airway. ● You will learn more about clearing an obstructed airway later in the course. ○ Ms. Casten is unresponsive, is not breathing normally, has a pulse and is showing signs and symptoms of an opioid overdose. <ul style="list-style-type: none"> ● Ms. Casten is experiencing a known or suspected opioid overdose. ● Care for respiratory arrest and administer naloxone following your facility protocols. ● You will learn more about managing an opioid overdose later in the course. <div style="border: 1px solid #0070C0; padding: 10px; margin-top: 10px;"> <p> Instructor's Note</p> <ul style="list-style-type: none"> ■ Inform participants of the following: <ul style="list-style-type: none"> ○ If the patient is experiencing cardiac arrest, initiate CPR and administer naloxone following your facility's protocols. </div>
<p>LECTURE</p>  <p>REFERENCE</p> <p>Course Presentation Slide 38</p>	<ul style="list-style-type: none"> ■ Communicate the following key points to participants: <ul style="list-style-type: none"> ○ Re-Assess: After providing care, it is important to re-assess the patient and the effectiveness of your interventions to determine next steps based on your findings. ○ Document: Always document care that is provided. By documenting, you establish a record of the events that took place, the care you provided and the facts you discovered.

TIME | 3 minutes

Topic | Adult Cardiac Chain of Survival

Introduction

<p>LECTURE</p>  <p>REFERENCE</p> <p>Course Presentation Slides 39–40</p>	<ul style="list-style-type: none"> ■ Communicate the following key points to participants: <ul style="list-style-type: none"> ○ The Cardiac Chain of Survival describes five actions that, when performed in rapid succession, increase the patient's likelihood of surviving sudden cardiac arrest. ○ There are two versions of the adult chain of survival: one for in-hospital and one for out-of-hospital emergency situations. ○ While the majority of cardiac arrests in the United States occur outside the hospital, it is important for you to understand the actions for an in-hospital cardiac arrest as well as out-of-hospital.
---	---

In-Hospital Adult Cardiac Chain of Survival

LECTURE



REFERENCE

Course Presentation
Slide 41

- Show participants the In-Hospital Adult Cardiac Chain of Survival. If not using the course presentation, call out each of the links of the chain provided below.

In-Hospital

- 1. Surveillance and Prevention**
- 2. Recognition of a Cardiac Emergency and Activation of the Emergency Response System**
- 3. Early CPR**
- 4. Early Defibrillation**
- 5. Integrated Post-Cardiac Arrest Care**

Out-of-Hospital Adult Cardiac Chain of Survival

LECTURE



REFERENCE

Course Presentation
Slide 42

- Explain to participants that when cardiac arrest occurs outside the hospital, the patient relies on members of the community, emergency medical services and healthcare providers to implement the Cardiac Chain of Survival.
- Show participants the Out-of-Hospital Adult Cardiac Chain of Survival. If not using the course presentation, call out each of the links of the chain provided below.
 - Be sure to point out to participants where the links are same and where they differ, as indicated.

Out-of-Hospital

- 1. Recognition of a Cardiac Emergency and Activation of the Emergency Response System**
- 2. Early CPR**
- 3. Early Defibrillation**
- 4. Advanced Life Support**
- 5. Integrated Post-Cardiac Arrest Care**



Instructor's Note

Inform participants that detailed explanations of each link are available in the participant's manual.

Basic Life Support for Adults

LESSON LENGTH | 75 minutes

Guidance for the Instructor

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

- Discuss all points in the topics, “High-Quality CPR for Adults,” “AED Use for Adults” and “BLS Team Response for Adults.”
- Show the videos, “Components of High-Quality CPR” (1:55), “Chest Compressions” (2:28), “Pocket Mask Use” (1:05), “Single-Provider CPR for Adults” (0:54), “BVM Use” (2:11), “Multiple-Provider CPR for Adults” (1:41), “AED Use for Adults” (4:09), “Measures of High-Quality CPR” (3:22) and “Bill Goodman” (2:32).
- Conduct the skill practices, “Chest Compressions,” “Pocket Mask Use,” “Single-Provider CPR for Adults,” “BVM Use” and “Multiple-Provider CPR for Adults.”
- Conduct the Team Response Practice Scenario: BLS for Adults.
- Conduct the “Challenge: BLS for Adults with CCF Calculation (optional).”

Lesson Objectives

After completing this lesson, participants will be able to:




- State the principles of high-quality CPR.
- Provide effective chest compressions.
- State the principles of delivering effective ventilations for a patient experiencing cardiac or respiratory arrest.
- Provide effective ventilations using a pocket mask or a bag-valve-mask (BVM) resuscitator.
- State the principles of caring for a patient in cardiac arrest who has an advanced airway in place.
- Effectively operate an AED and identify considerations for the safe use and maintenance.
- Work effectively as part of a high-performance resuscitation team to improve patient outcomes in the role of a team leader and team member.

Materials, Equipment and Supplies


- *Basic Life Support Course Presentation for Instructor-Led Training, Basic Life Support DVD or Basic Life Support for Instructor-Led Training downloadable videos*
- Computer or tablet with speakers, projector and projection screen or monitor
- Disposable latex-free gloves (optional)
- Adult CPR manikins (one for every two participants)
- Adult pocket masks and valves (minimum of one valve for every participant)
- Adult BVMs (one for each manikin)
- AED training devices/pads (one for every three participants)
- Cleaning and decontamination supplies
- Extra manikin equipment (e.g., airways, lungs and batteries) as appropriate.
- CPR board or bed with CPR function, if applicable (one for every two participants)
- Blankets and/or mats, if applicable (optional; one for each participant)
- Step stool, if applicable (two for every team)
- Timing device (optional; one for every two participants)

Topic | **High-Quality CPR for Adults**

Components of High-Quality CPR

<p>LECTURE</p>  <p>REFERENCE Course Presentation Slides 43–45</p>	<ul style="list-style-type: none"> ■ Communicate the following key points to participants: <ul style="list-style-type: none"> ○ Knowing how to correctly perform high-quality CPR helps you provide appropriate, effective care until the advanced cardiac life support team arrives. ○ If provided in the first few minutes of cardiac arrest, high-quality CPR can double or triple a patient’s chance of survival. ○ After recognizing that the patient is in cardiac arrest, begin CPR within 10 seconds. ○ High-quality CPR for adults includes 30 chest compressions followed by 2 ventilations. ○ When an advanced airway is in place, the 30:2 ratio does not apply. We will discuss more about advanced airways later. ○ When drowning or other hypoxic events are suspected as the cause of cardiac arrest, deliver 2 initial ventilations before starting CPR.
<p>VIDEO</p>  <p>REFERENCE Course Presentation Slide 46</p>	<ul style="list-style-type: none"> ■ Explain to participants that they will watch the following video to learn more about the components of high-quality CPR and providing CPR for adults. ■ Tell participants they may ask questions before hands-on skill practice. ■ Show the video segment, “Components of High-Quality CPR” (1:55). ■ Answer participants’ questions.
<p>LECTURE</p>  <p>REFERENCE Course Presentation Slide 47</p>	<ul style="list-style-type: none"> ■ Explain to participants that they will learn to perform high-quality CPR as a progression. They will learn to: <ul style="list-style-type: none"> ○ Perform chest compressions. ○ Deliver ventilations. ○ Use a pocket mask. ○ Perform CPR cycles as part of single-provider CPR. ○ Use a BVM resuscitator. ○ Perform CPR cycles as part of multiple-provider CPR.

Chest Compressions

<p>VIDEO</p>  <p>REFERENCE Course Presentation Slide 48</p>	<ul style="list-style-type: none"> ■ Inform participants that, as part of the progression, they will first learn more about chest compressions via video, then practice. ■ Show the video segment, “Chest Compressions” (2:28). ■ Answer participants’ questions.
--	--

SKILL PRACTICE



REFERENCES

Course Presentation
Slide 49

Skill Practice Sheet:
Single-Provider CPR
for Adults

Participant Progress
Log

- Begin the skill practice for “Chest Compressions” here.
- Ask participants to find their partners and get into position beside their manikin to prepare for the skill practice.
 - Ensure that the manikins are on a firm, flat surface.



Instructor's Note

If practicing with the manikin on a bed, tell participants to adjust the bed to an appropriate working height or use a step stool and lower the side rail closest to them. Then, place a CPR board under the manikin or enable the CPR feature on the bed.

- Communicate the following to participants:
 - Determine who will practice chest compressions first.
 - The first participant will **perform chest compressions for approximately 1 minute**.
 - Then participants will switch roles.
 - The second participant will now **perform chest compressions for approximately 1 minute**.
 - Participants should help each other count compressions and provide peer feedback.
- Guide participants through the steps of the skill using the Skill Practice Sheet: Single-Provider CPR for Adults.
 - Offer printouts from Appendix A.
- Give feedback during the skill practice as needed.
 - Reinforce the key components of high-quality chest compressions as you provide feedback.
- Common errors to look for include:
 - Giving compressions that are too shallow or too deep.
 - Interrupting compressions for too long or too frequently.
 - Incorrectly positioning the hands.
 - Failing to allow full recoil after each compression or giving compressions at an inappropriate rate.
- Check off each participant's progress on the Participant Progress Log (Appendix F).
- Answer participants' questions.

Ventilations

LECTURE



REFERENCE

Course Presentation
Slide 50

- Inform participants that, as part of the progression, they will now learn more about ventilations.
- Explain the following key points to participants:
 - Ventilations supply oxygen to a patient who is not breathing. Like compressions, ventilations require proper technique.
 - For a patient in cardiac arrest, deliver 2 ventilations that last about 1 second each and make the chest begin to rise.
 - For a patient in respiratory arrest, follow these steps:
 - Deliver 1 ventilation every 5 to 6 seconds; each ventilation should last about 1 second and make the chest begin to rise.
 - Continue ventilations.
 - Check the pulse and breathing about every 2 minutes. If you find no pulse, begin CPR.

LECTURE



(continued)

- Do not hyperventilate or overventilate the patient.
- If the chest does not rise after the first ventilation, follow these steps:
 - Reopen the airway, make a seal and try a second ventilation.
 - If the second ventilation is also not successful, move directly back to compressions and check the airway for an obstruction before attempting subsequent ventilations.
 - If an obstruction is found, remove it and attempt ventilations.

CPR Breathing Barriers

LECTURE



REFERENCE

Course Presentation
Slides 51–53

- Communicate the following key points to participants:
 - A CPR breathing barrier protects you from coming into contact with a patient's blood, vomitus or saliva, or breathing in the patient's exhaled air.
 - CPR breathing barriers include pocket masks, BVMs and face shields.
 - If a CPR breathing barrier is not available, you may need to provide *mouth-to-mouth ventilations*:
 - Open the airway to a past-neutral position using the head-tilt/chin-lift technique; or, use the modified jaw-thrust maneuver, if you suspect a head, neck or spinal injury.
 - Pinch the patient's nose shut. Take a normal breath, make a complete seal over the patient's mouth with your mouth and blow into the patient's mouth to deliver 1 ventilation over 1 second until you see the chest begin to rise.
 - After each ventilation, break the seal and take a breath before resealing your mouth over the patient's mouth. Then deliver the next ventilation.
 - If you do not have a CPR breathing barrier and you are unable to make a complete seal over the patient's mouth, you may need to use *mouth-to-nose ventilations*:
 - With the patient's head tilted back, close the mouth by pushing up on the chin.
 - Seal your mouth around the patient's nose and breathe into the nose.
 - If possible, open the patient's mouth between ventilations to allow air to escape.

Pocket Mask Use

VIDEO



REFERENCE

Course Presentation
Slide 54

- Communicate the following key point to participants:
 - Use of a pocket mask is recommended during single-provider CPR to limit interruptions in chest compressions. This allows you to remain at the side of the patient and limit unnecessary movement, which could delay your return to chest compressions.
- Inform participants that, as part of the progression, they will now learn more about pocket mask use via video, then practice.
- Show the video segment, "Pocket Mask Use" (1:05).
- Answer participants' questions.

SKILL PRACTICE



REFERENCES

Course Presentation
Slide 55

Skill Practice Sheet:
Single-Provider CPR
for Adults

Participant Progress
Log

- Begin the skill practice, “Pocket Mask Use” here.
- Ask participants to get into position beside their manikin to prepare for the skill practice.
- Communicate the following to participants:
 - Determine who will practice using an adult pocket mask first.
 - The first participant will **deliver three sets of 2 ventilations using an adult pocket mask for approximately 1 minute.**
 - While delivering ventilations, the participant must successfully achieve chest rise.
 - Then participants will switch roles.
 - The second participant will **deliver three sets of 2 ventilations using an adult pocket mask for approximately 1 minute.**
 - Participants should help each other achieve effective ventilations through peer feedback.



Instructor's Note

Remind participants to decontaminate their manikins before each new participant's turn. Also, remind them to use their assigned pocket mask and/or valve during skill practice.

- Guide participants through the steps of the skill using the Skill Practice Sheet: Single-Provider CPR for Adults.
 - Offer printouts from Appendix A.
- Give feedback during the skill practice as needed.
 - Remind participants to avoid hyperventilation and overventilation.
- Common errors to look for include:
 - Not properly sealing the pocket mask.
 - Using an improperly sized mask for the patient.
- Check off each participant's progress on the Participant Progress Log (Appendix F).
- Answer participants' questions.



Instructor's Note

Instruct participants to stay with their partners and manikins after this skill practice to watch a brief video segment about single-provider CPR for adults and perform the subsequent skill practice.

Single-Provider CPR for Adults

VIDEO



REFERENCE

Course Presentation
Slide 56

- Inform participants that, as part of the progression, they will now learn how to perform cycles of single-provider CPR for adults via video, then practice.
- Show the video segment, “Single-Provider CPR for Adults” (0:54).
- Answer participants' questions.

SKILL PRACTICE



REFERENCES

Course Presentation
Slide 57

Skill Practice Sheet:
Single-Provider CPR
for Adults

Participant Progress
Log

- Begin the skill practice, “Single-Provider CPR for Adults” here.
- Ask participants to get into position beside their manikin to prepare for the skill practice.
- Communicate the following to participants:
 - Determine who will practice performing single-provider CPR cycles first.
 - The first participant will **perform three cycles of 30 compressions and 2 ventilations** using an adult pocket mask.
 - Then participants will switch roles.
 - The second participant will **perform three cycles of 30 compressions and 2 ventilations** using an adult pocket mask.
 - Participants should help each other count compressions and provide peer feedback.



Instructor's Note

Remind participants to decontaminate their manikins before each new participant's turn. Also, remind them to use their assigned pocket mask and/or valve during skill practice.

- Guide participants through the steps of the skill using the Skill Practice Sheet: Single-Provider CPR for Adults.
 - Offer printouts from Appendix A.
- Give feedback during the skill practice as needed.
 - Remind participants that it is critical to minimize interruptions in chest compressions to less than 10 seconds.
- Common errors to look for include:
 - Interrupting chest compressions for more than 10 seconds.
- Check off each participant's progress on the Participant Progress Log (Appendix F).
- Answer participants' questions.



Instructor's Note

Instruct participants to stay with their manikins after this skill practice to watch a brief video segment about BVM use and perform the subsequent skill practice.

BVM Use

VIDEO



REFERENCE

Course Presentation
Slides 58–59

- Communicate the following key points to participants:
 - A BVM resuscitator is a handheld device used to ventilate patients during respiratory arrest or multiple-provider CPR.
 - During single-provider CPR, use of a BVM resuscitator is **not** recommended because it will increase the time between sets of chest compressions, resulting in poor outcomes.
- Inform participants that, as part of the progression, they will now learn more about BVM use via video, then practice.
 - Show the video segment, “BVM Use” (2:11).
 - Answer participants' questions.

SKILL PRACTICE



REFERENCES

Course Presentation
Slide 60

Skill Practice Sheet:
Multiple-Provider CPR
for Adults

Participant Progress
Log

- Begin the skill practice, “BVM Use” here.
- Ask participants to get into position beside their manikins to prepare for the skill practice.
- Communicate the following to participants:
 - Determine who will manage the airway/seal the mask first and who will squeeze the bag first.
 - The first participant will **deliver three sets of 2 ventilations**. While delivering ventilations, the participant must successfully achieve chest rise.
 - Then participants will switch roles, so the other participant can practice delivering ventilations using an adult BVM.
 - The second participant will now **deliver three sets of 2 ventilations**. While delivering ventilations, the participant must successfully achieve chest rise.
 - Participants should help each other achieve effective ventilations through peer feedback.
- Guide participants through the steps of the skill using the Skill Practice Sheet: Multiple-Provider CPR for Adults.
 - Offer printouts from Appendix A.
- Give feedback during the skill practice as needed.
 - Remind participants to avoid hyperventilation and overventilation.
- Common errors to look for include:
 - Squeezing the bag with too much volume (overventilation).
 - Squeezing the bag at too fast a rate (hyperventilation).
 - Not sealing the mask properly (E-C hand position).
- Check off each participant's progress on the Participant Progress Log (Appendix F).
- Answer participants' questions.



Instructor's Note

Instruct participants to stay with their manikins after this skill practice to watch a brief video segment about multiple-provider CPR for adults and perform the subsequent skill practice.

Multiple-Provider CPR for Adults

VIDEO



REFERENCE

Course Presentation
Slide 61

- Inform participants that, as the final part of learning to perform high-quality CPR as a progression, they will now learn about multiple-provider CPR for adults via video, then practice.
- Show the video segment, “Multiple-Provider CPR for Adults” (1:41).
- Answer participants' questions.

SKILL PRACTICE



REFERENCES

Course Presentation
Slide 62

Skill Practice Sheet:
Multiple-Provider CPR
for Adults

Participant Progress
Log

- Begin the skill practice, “Multiple-Provider CPR for Adults” here.
- Ask participants to **divide into teams of three** and get into position beside their manikin to prepare for the skill practice.
- Communicate the following to participants:
 - Determine who will perform chest compressions first, who will manage the airway/ seal the mask first and who will squeeze the bag first.
 - **Perform two cycles of CPR, then smoothly switch roles** with a focus on minimizing interruptions in chest compressions to less than 10 seconds.
 - The compressor will call for a role change by saying “switch” in place of the number 1 in the beginning of the second compression cycle.
 - **Continue to provide two cycles of CPR**, switching roles until all participants have had the opportunity to provide compressions.
- Guide participants through the steps of the skill using the Skill Practice Sheet: Multiple-Provider CPR for Adults.
 - Offer printouts from Appendix A.
- Give feedback during the skill practice as needed.
 - Remind participants to avoid hyperventilation and overventilation.
- Common errors to look for include:
 - Interrupting chest compressions for more than 10 seconds.
 - Not calling for a role change at the beginning of the second compression cycle.
- Check off each participant’s progress on the Participant Progress Log (Appendix F).
- Answer participants’ questions.

Adjuncts to Ventilations

LECTURE



REFERENCE



Course Presentation
Slide 63

- Communicate the following key points to participants:
 - Adjuncts to ventilations include supplemental oxygen, basic airways and advanced airways.
 - Always follow your facility’s protocols when using adjuncts to ventilations.
 - A trained and authorized provider can provide supplemental oxygen or insert an advanced airway as long as it does not delay the administration of chest compressions or defibrillation.
 - Although a BLS provider is not always responsible for providing supplemental oxygen or inserting an airway, you do need to know how to provide ventilations when airways are in place.
 - When supplemental oxygen or a basic airway such as an oropharyngeal airway is used, CPR is performed the same way.
 - However, if an advanced airway such as an endotracheal tube is used, one provider delivers 1 ventilation every 6 seconds while another provider delivers continuous chest compressions (i.e., providers do not pause for ventilations).

Instructor’s Note

You may refer participants to the participant’s manual for more information on supplemental oxygen, basic airways and advanced airways.

Topic | **AED Use for Adults****Safe and Effective AED Use**

<p>LECTURE</p>  <p>REFERENCE Course Presentation Slides 64–65</p>	<ul style="list-style-type: none"> ■ Communicate the following key points to participants: <ul style="list-style-type: none"> ○ AEDs are portable electronic devices that automatically analyze the patient's heart rhythm and provide defibrillation, an electrical shock that may help the heart re-establish a perfusing rhythm. ○ AEDs deliver defibrillation(s) to patients with two specific arrhythmias: ventricular fibrillation (VF) and ventricular tachycardia (VT). ○ When a patient experiences cardiac arrest, an AED should be applied as soon as it is readily available. Early use of an AED greatly increases the patient's chance of survival. ○ AED models function differently. Always follow the manufacturer's instructions for the AED in use in your facility.
<p>Q&A ACTIVITY</p>  <p>REFERENCE Course Presentation Slide 66</p>	<ul style="list-style-type: none"> ■ Explain to participants that AED use is generally safe, but some common conditions may raise safety questions. ■ Conduct a Q&A activity with participants. ■ Encourage participants to raise their hand or freely call out their answers. ■ Tell participants they are free to open their participant's manual to "Safe and Effective AED Use" to help them find answers. ■ Be mindful of time during this activity. <ul style="list-style-type: none"> ○ True or False? It is safe to use an AED when caring for a woman who is pregnant. <ul style="list-style-type: none"> ● True. It is safe to use an AED on a woman who is pregnant. Remember, the baby's best chance of survival is the mother's survival. ○ True or False? An AED should be used when caring for a patient in cardiac arrest as a result of a traumatic injury. <ul style="list-style-type: none"> ● True. When a patient is experiencing cardiac arrest as a result of traumatic injuries, an AED should still be used following facility protocols. Often traumatic events are preceded by medical events. ○ True or False? You should not use an AED if a patient has a pacemaker or implantable cardioverter-defibrillator (ICD). <ul style="list-style-type: none"> ● False. You should use an AED if a patient is in cardiac arrest and has a pacemaker or ICD. However, you should adjust the pad placement to avoid placing the AED pads directly over the device, because doing so may interfere with the delivery of the shock. <i>Note:</i> A pacemaker or ICD may be placed in the right upper chest near the clavicle or in the abdomen. ○ True or False? You should remove a transdermal patch before using an AED. <ul style="list-style-type: none"> ● True. Before AED pad placement, remove the transdermal patch with a gloved hand and wipe away medication from skin. ○ True or False? If a patient has a great deal of chest hair, you should quickly shave the areas where the pads will be placed before attaching the AED pads.

Q&A ACTIVITY



(continued)

- **True.** Time is critical in a cardiac arrest situation and chest hair rarely interferes with pad adhesion. However, if the patient has a great deal of chest hair that could interfere with pad-to-skin contact, quickly shave the areas where the pads will be placed before attaching the AED pads.
- True or False? You should remove a patient's jewelry or body piercing before using an AED.
 - **False.** A patient's jewelry or body piercings do not need to be removed before using an AED, but avoid placing the AED pads directly over any metallic jewelry or piercings. Adjust pad placement if necessary.
- True or False? It is safe to use an AED around flammable or combustible materials such as free-flowing oxygen.
 - **False.** Do not use an AED around flammable or combustible materials such as free-flowing oxygen.
- True or False? If a patient is lying on a metal surface, you should not use an AED.
 - **False.** It is safe to use an AED when a patient is lying on a metal surface, as long you do not allow the AED pads to contact the metal surface and you ensure that no one is touching the patient when the shock is delivered.
- True or False? You should remove a patient from a large puddle of water before using an AED.
 - **True.** If the patient is lying in a large puddle or submerged in water, remove them from the water before using an AED. However, if they are lying in a small puddle or on a wet surface, you do not need to remove them providing you and the AED are not in the small puddle. Also, remove a patient's wet clothing from the chest and wipe the patient's chest dry before placing the AED pads. Avoid getting the AED or AED pads wet.
- True or False? It is safe to use an AED in inclement weather.
 - **True.** AEDs are safe to use in all weather conditions, including rain and snow. Provide a dry environment if possible, but do not delay defibrillation to do so. Remove a patient's wet clothing from the chest and wipe the patient's chest dry before placing the AED pads. Avoid getting the AED or AED pads wet.

Using an AED

VIDEO



REFERENCE

Course Presentation
Slide 67

- Explain to participants that they will watch the following video to learn more about AED use.
- Show the video segment, "AED Use for Adults" (4:09).
- Answer participants' questions.
- Inform participants that they will practice their AED skills in the following section, as part of "BLS Team Response for Adults."

OPTIONAL

3 minutes

DEMO




REFERENCE

Course Presentation
Slide 68


- If you are using a different AED trainer than the one depicted in the video, demonstrate how your specific AED trainer functions including pad placement and prompts.
- 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.


Topic | BLS Team Response for Adults

Understanding Key Components


<p>LECTURE</p>  <p>REFERENCE</p> <p>Course Presentation Slides 69–72</p>	<ul style="list-style-type: none"> ■ Communicate the following key points to participants: <ul style="list-style-type: none"> ○ Both single- and multiple-provider BLS are similar and follow the care steps discussed and practiced earlier in this lesson. <ul style="list-style-type: none"> ● The three main components are: rapid assessment, recognizing the problem and providing quality care. ● The 30:2 compression-to-ventilation ratio and guidelines for care when an advanced airway is in place remain the same for both. ○ However, there are key components for each. <ul style="list-style-type: none"> ● Single Provider <ul style="list-style-type: none"> ■ When you are the only provider present, you must complete the rapid assessment, perform CPR and use the AED, if one is available. ■ CPR can be exhausting, and attempts should be made to find additional resources as early as possible during the rapid assessment. ● Multiple Providers <ul style="list-style-type: none"> ■ When multiple providers are available, the first provider performs the rapid assessment and initiates CPR, starting with chest compressions. Meanwhile, another provider calls for additional resources and gets and prepares the AED, if available. If additional providers are available, they assist with ventilations. ■ The providers continue to provide high-quality CPR (30:2), switching roles every 2 minutes and integrating additional resources as appropriate. ■ Teamwork is an important aspect of BLS care when multiple providers are available.
---	---

High-Performance Resuscitation Teams



<p>LECTURE</p>  <p>REFERENCE</p> <p>Course Presentation Slide 73</p>	<ul style="list-style-type: none"> ■ Communicate the following key points to participants: <ul style="list-style-type: none"> ○ High-performance resuscitation teams work together in a well-organized effort to provide high-quality CPR during a cardiac arrest. ○ Characteristics of a high-performance team include well-defined roles and responsibilities; clear, closed-loop communication; and respectful treatment of others. ○ Coordinated, efficient, effective teamwork is essential to provide high-quality CPR, improve patient outcomes and deliver expert care. ○ Based on available resources and facility protocols, providers might fill the following roles: <ul style="list-style-type: none"> ● Team leader ● Compressor ● AED operator ● Airway manager ● Ventilator ● Recorder
---	---

<p>LECTURE</p>  <p>(continued)</p>	<ul style="list-style-type: none"> ○ Depending on the number of available resources, team members might perform more than one role (e.g., the airway manager might also operate the AED or ventilate the patient). ○ Coordination becomes even more important when other trained responders, such as an advanced life support team or code team, arrive on the scene.
--	---

Continuous Quality Improvement

<p>VIDEO</p>  <p>REFERENCE Course Presentation Slides 74–75</p>	<ul style="list-style-type: none"> ■ Communicate to participants that healthcare providers and their employers have a responsibility to ensure that they provide the highest quality CPR throughout every resuscitation event. ■ Explain to participants that they will watch the following video to learn more about measures of high-quality CPR. ■ Show the video segment, “Measures of High-Quality CPR” (3:22). ■ Answer participants’ questions.
--	--

Practice Scenario: BLS for Adults

<p>VIDEO</p>  <p>REFERENCE Course Presentation Slide 76</p>	<ul style="list-style-type: none"> ■ Show the video segment, “Bill Goodman” (2:32), which demonstrates a cardiac arrest scenario for an adult patient. ■ Tell participants that they will practice a similar sequence during the practice scenario. ■ Answer participants’ questions.
<p>PRACTICE SCENARIO</p>  <p>REFERENCES Course Presentation Slide 77 Skill Competency Sheet: BLS for Adults Team Response Practice Scenario: BLS for Adults Debriefing Tool Participant Progress Log</p>	<ul style="list-style-type: none"> ■ Begin the practice scenario, “BLS for Adults” here. ■ Ask participants to divide into teams of three and get into position beside their manikin. Each team of three participants will respond to an emergency situation as prompted. ■ Ensure that a BVM resuscitator and AED are available to each team. The BVM resuscitator should be near the patient. ■ Communicate the following to participants: <ul style="list-style-type: none"> ○ Determine who initially will be: <ul style="list-style-type: none"> ● Provider 1: Performs the rapid assessment, begins compressions and takes over ventilations. ● Provider 2: Retrieves and assembles the BVM, maintains the airway, delivers ventilations and takes over operating the AED. ● Provider 3: Calls the code, retrieves and sets up the AED and takes over compressions. ○ You will perform the team response practice scenario three times so that each participant has an opportunity to practice each role: compressor, airway manager/ventilator, AED operator.

PRACTICE
SCENARIO



(continued)

- You will be prompted with key information (e.g., when the AED is available) throughout the scenario.



Instructor's Note

Remind participants to decontaminate manikins before switching roles.

- Guide participants through the steps of the skill using the Team Response Practice Scenario: BLS for Adults (Appendix C).
 - Offer participants printouts of Skill Competency Sheet: BLS for Adults (Appendix B).
- Give feedback during the practice scenario as needed.
- If the team misses a critical step, provide coaching as needed to keep the scenario progressing.
- Check off each participant's progress on the Participant Progress Log (Appendix F).
- Conduct a debriefing with participants using the Debriefing Tool (Appendix D).
 - Encourage participants to raise their hand or freely call out their responses.
 - Answer participants' questions.

Challenge: BLS for Adults with CCF Calculation

OPTIONAL

12 minutes

PRACTICE
SCENARIO



REFERENCE

Course Presentation
Slide 78

- Ask participants to **divide into teams of three** and get into position beside their manikin.
- Communicate the following to participants:
 - This is a challenge to practice a team response directed by a team leader. The teams can practice simultaneously (preferred) or one right after the other.
 - **There will be no instructor prompting**, other than to confirm the conditions you find and that the AED is available.
 - The team leader will assign roles.



Instructor's Note

There is no Team Response Practice Scenario associated with this optional activity. You may provide a relevant setup to contextualize the activity.

- Remember, it is crucial to switch roles after every 2 minutes of compressions and ventilations, or when the performance of the compressor begins to deteriorate.
- Care is for 6 minutes, from arrival at the patient's side.
- For an additional challenge:
 - Actions related to compressions during the resuscitation will be timed, starting with the arrival of the team until the 6 minutes have passed.
 - **CCF will be calculated at the end of the scenario and results will be compared.**
 - Timing for the compressions will start with the first compression, stop when hands are off the chest and then resume when compressions begin again.

OPTIONAL

15 minutes

PRACTICE SCENARIO



(continued)



Instructor's Note

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.

- During the scenario, prompt **only** at the following times:
 - Start of scenario: "A person collapses."
 - At assessment: "There is no breathing and no pulse."
 - At 2-minute mark, send the team member acting as AED manager to arrive with the AED.
- At the end of the challenge:
 - Ask participants to total up the time for when the hands were on the chest in seconds; divide that time by 360 (6 minutes) to arrive at their team's CCF to determine whether high-quality CPR was achieved.
 - *Which team achieved the best CCF?*

Basic Life Support for Children and Infants

LESSON LENGTH | 45 minutes

Guidance for the Instructor

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

- Discuss all points covered in the topics, “Introduction to BLS for Children and Infants,” “Pediatric Cardiac Chain of Survival,” “Assess, Recognize and Care for Children and Infants,” “High-Quality CPR for Children and Infants,” “AED Use for Children and Infants” and “BLS Team Response for Children and Infants.”
- Show the videos, “Rapid Assessment for Children and Infants” (1:34), “CPR for Children” (4:11), “Single-Provider CPR for Infants” (2:43), “Multiple-Provider CPR for Infants” (2:37), “AED Use for Children and Infants” (3:06), “Theo James” (2:37) (optional) and “Olivia Martin” (2:47).
- Conduct the skill practices, “One-Hand Technique for Children” (optional), “Two-Finger Technique for Infants” and “Multiple-Provider CPR for Infants.”
- Conduct the Team Response Practice Scenario: BLS for Children (optional) and Team Response Practice Scenario: BLS for Infants.

Lesson Objectives

After completing this lesson, participants will be able to:

- Define infants, children and adolescents in relation to high-quality CPR/AED guidelines.
- Describe the Pediatric Cardiac Chain of Survival.
- Identify CPR/AED differences among adults, children and infants.
- State the principles of high-quality CPR for children and infants.
- Provide effective chest compressions for children and infants.
- Deliver effective ventilations for children and infants experiencing cardiac or respiratory arrest using a pocket mask or BVM.
- Effectively operate an AED on children and infants.
- Understand how to effectively work as a high-performance resuscitation team to improve patient outcomes.

Materials, Equipment and Supplies

- *Basic Life Support Course Presentation for Instructor-Led Training, Basic Life Support DVD or Basic Life Support for Instructor-Led Training downloadable videos*
- Computer or tablet with speakers, projector and projection screen or monitor
- Disposable latex-free gloves (optional)
- Infant CPR manikins (one for every two participants)
- Child CPR manikins (optional; one for every two participants)
- Infant pocket mask and valve (minimum of one valve for every participant)
- Child pocket mask and valve (optional; minimum of one valve for every participant)
- Infant BVMs (one for each manikin)
- Child BVMs (optional; one for each manikin)
- AED training devices with pediatric pads or settings (one for every three participants)
- Cleaning and decontamination supplies
- Extra manikin equipment (e.g., airways, lungs and batteries) as appropriate

- Blankets and/or mats, if applicable (optional; one for each participant)
- CPR board or bed with CPR function, if applicable (one for every two participants)
- Step stool, if applicable (two for every team)
- Timing device (optional; one for every three participants)



Instructor's Note

The use of a child manikin and equipment for practicing child CPR skills is highly recommended. However, you may use an adult manikin and equipment if necessary.

TIME | 1 minute

Topic | Introduction to BLS for Children and Infants

When Is a Child a Child?

LECTURE



REFERENCE

Course Presentation
Slides 79–81

- Communicate the following key points to participants:
 - An infant is defined as someone under the age of 1. When providing BLS care, follow **infant** guidelines and use appropriately sized equipment.
 - A child is defined as someone from the age of 1 to the onset of puberty as evidenced by breast development in girls and underarm hair development in boys (usually around the age of 12). When providing BLS care, follow **child** guidelines and use appropriately sized equipment. The use of pediatric versus adult AED pads or settings for children varies by age and weight.
 - An adolescent is defined as someone from the onset of puberty through adulthood. When providing BLS care, follow **adult** guidelines and use appropriately sized equipment.
 - Differences in care between children and infants will be highlighted throughout this lesson.

TIME | 2 minutes

Topic | Pediatric Cardiac Chain of Survival

Overview

LECTURE



REFERENCE

Course Presentation
Slides 82–84

- Communicate the following key points to participants:
 - The Pediatric Cardiac Chain of Survival is similar to the Adult Cardiac Chain of Survival, but it focuses on prevention as the first link.
 - Prevention is key because cardiac arrest in children often occurs as the result of a preventable injury (such as trauma, drowning, choking or electrocution).
 - The most common causes of cardiac arrest in children include respiratory emergencies, congenital heart disorders and trauma.
- Show participants the Pediatric Cardiac Chain of Survival. If not using the Course Presentation, call out each of the links of the chain provided below (e.g., Link 1: Prevention of Arrest).

LECTURE



(continued)

Pediatric Cardiac Chain of Survival

1. Prevention of Arrest
2. Early, High-Quality CPR
3. Rapid Activation of the Emergency Medical Services System or Response Team
4. Effective, Advanced Life Support
5. Integrated Post-Cardiac Arrest Care

- Explain that while the use of an AED does not appear as its own link in the Pediatric Cardiac Chain of Survival, the use of an AED is still an important component of CPR.



Instructor's Note

Inform participants that detailed explanations of each link are available in the participant's manual.

TIME | 7 minutes

Topic | Assess, Recognize and Care for Children and Infants

Rapid Assessment

VIDEO



REFERENCE

Course Presentation
Slides 85–87

- Explain to participants that rapid assessment of children and infants is a critical step to recognizing a life-threatening emergency and implementing care.
- Inform participants that they will watch the following video to review the steps for rapid assessment for children and infants.
- Show the video segment, "Rapid Assessment for Children and Infants" (1:34).
- Answer participants' questions.

Q&A ACTIVITY



REFERENCE

Course Presentation
Slide 88

- Conduct a Q&A activity with participants to review some key differences between children and infants that they learned in the video.
- Encourage participants to raise their hand or freely call out their answers.
- Be mindful of time during this activity.
 - True or False? For infants, tap the shoulder to check for responsiveness.
 - **False.** For children, tap the shoulder as you would for an adult. However, for infants, tap the bottom of their foot.
 - True or False? When opening the airway, use the head-tilt/chin-lift to a neutral position for children and infants.
 - **False.** For infants, open the airway to a neutral position using the head-tilt/chin-lift. For children, open the airway to a slightly past-neutral position.
 - True or False? When checking for pulse, check an infant's brachial pulse.
 - **True.** Check the carotid pulse for a child. For an infant, however, check the brachial pulse with two fingers on the inside of the upper arm.

Call First or Care First?

LECTURE



REFERENCE

Course Presentation
Slides 89–90

- Explain to participants that although it is rare in the professional health setting to be alone with a child or infant or to be unable to call for additional resources, you should follow certain steps if this is ever the case.
 - **Call first** for a child or an infant whom you witnessed suddenly collapse or an unresponsive child or infant with a known cardiac condition:
 - Call for help to activate EMS, the rapid response team or the resuscitation team, as appropriate, and call for an AED.
 - Then, provide care based on the conditions found.
 - **Care first** for an unresponsive child or infant whom you did not see collapse:
 - Provide 2 minutes of care based on the conditions found.
 - Then, call for help to activate EMS, the rapid response team or the resuscitation team, as appropriate, and call for an AED.
 - If you need to leave a child or infant *and* you do not suspect a head, neck, spinal, hip or pelvic injury, place them in a recovery position using the same technique you would apply for an adult. You also can hold an infant in a recovery position by:
 - Carefully positioning the infant face-down along your forearm.
 - Then supporting the infant's head and neck with your other hand while keeping the infant's mouth and nose clear.

Respiratory Arrest and Cardiac Arrest

LECTURE



REFERENCE

Course Presentation
Slide 91

- Explain to participants that care for children and infants in respiratory arrest and cardiac arrest is similar to care for adults with some modifications.
 - For a child or infant who is in *respiratory arrest* with a pulse > 60 bpm:
 - Deliver 1 ventilation every 3 to 5 seconds; each ventilation should last about 1 second and make the chest begin to rise.
 - Check the pulse and breathing about every 2 minutes. If the pulse decreases to 60 bpm or less with signs of poor perfusion, begin CPR and reassess every 2 minutes.

LECTURE



(continued)

- Follow these steps for or a child or infant who is in *respiratory arrest* with a pulse ≤ 60 bpm:
 - Begin CPR.
 - Check the pulse and breathing about every 2 minutes.
 - If the child is not breathing normally and the pulse increases to greater than 60 bpm, stop chest compressions but continue providing 1 ventilation every 3 to 5 seconds.
 - If the child is not breathing normally but has a pulse less than 60 bpm, continue CPR.
- For children and infants in *cardiac arrest*:
 - The principles of high-quality CPR are identical to adults with a focus on quality of compressions, minimizing interruptions, proper rate, full chest recoil and avoiding excessive ventilations.
 - However, key differences in CPR technique exist among adults, children and infants. These differences will be discussed in this lesson.
- Explain the following to participants:
 - If an advanced airway is in place during respiratory arrest, deliver 1 ventilation every 6 to 8 seconds.
 - If the child or infant is in cardiac arrest, one provider delivers 1 ventilation every 6 to 8 seconds while another provider performs compressions at a rate of 100 to 120 per minute. In this case, the compression-to-ventilation ratio of 15:2 does not apply because compressions and ventilations are delivered continuously with no interruptions.

TIME | 20 minutes

Topic | High-Quality CPR for Children and Infants

CPR for Children

VIDEO



REFERENCE

Course Presentation
Slides 92–93





- Explain to participants that they will watch the following video to learn more about the principles of CPR for children.
- Inform participants they will not practice this as a skill.



Instructor's Note

You have the **option** to conduct the “BLS Team Response for Children” practice scenario later in this lesson. This is a good option for training those working in the pediatric healthcare environment. If you conduct this **optional activity**, inform your participants of the forthcoming activity later in the lesson.

- Show the video segment, “CPR for Children” (4:11).
- Answer participants’ questions.

<p>Q&A ACTIVITY</p>  <p>REFERENCE Course Presentation Slide 94</p>	<ul style="list-style-type: none"> ■ Conduct a Q&A activity with participants to review some key components of child CPR that they learned in the video. ■ Encourage participants to raise their hand or freely call out their answers. ■ Be mindful of time during this activity. <ul style="list-style-type: none"> ○ True or False? Depth of compressions for children is the same as for adults. <ul style="list-style-type: none"> ● False. For children, compress to a depth of about 2 inches. For adults, compress to at least 2 inches. ○ True or False? You may use a different compression technique for a small child. <ul style="list-style-type: none"> ● True. For a smaller child, use the one-hand technique or the interlaced hands technique, which is standard for an adult. ○ True or False? Compression-to-ventilation ratio changes if there is more than one provider. <ul style="list-style-type: none"> ● True. For child or infant multiple-provider CPR, use 15:2. For an adult, the 30:2 ratio is the same for single-provider and multiple-provider CPR.
<p>OPTIONAL</p> <p>2 minutes</p> <p>DEMO</p>  <p>REFERENCE Course Presentation Slide 95</p>	<ul style="list-style-type: none"> ■ Orient participants to the child manikin they will be using, including basic operations and feedback functions and/or devices.
<p>OPTIONAL</p> <p>3 minutes</p> <p>SKILL PRACTICE</p>  <p>REFERENCES Course Presentation Slide 96</p> <p>Skill Practice Sheet: One-Hand Technique for Children</p> <p>Participant Progress Log</p>	<ul style="list-style-type: none"> ■ If participants are unfamiliar with the one-hand technique for performing compressions on smaller children, begin skill practice, “One-Hand Technique for Children,” here. ■ Ask participants to find a partner and choose a child or adult manikin. ■ Ensure that the manikins are on a firm, flat surface. <div style="border: 1px solid #0070C0; padding: 10px; margin: 10px 0;"> <p> Instructor’s Note</p> <p>If practicing with the manikin on a bed, tell participants to adjust the bed to an appropriate working height (or use a step stool) and lower the side rail closest to them. Then, place a CPR board under the manikin or enable the CPR feature on the bed.</p> </div> <ul style="list-style-type: none"> ■ Ask participants to get into position beside their manikin to prepare for the skill practice. ■ Communicate the following to participants: <ul style="list-style-type: none"> ○ Determine who will practice performing compressions first. ○ The first participant will perform chest compressions using the one-hand technique for approximately 1 minute. ○ Then participants will switch roles. ○ The second participant will perform chest compressions using the one-hand technique for approximately 1 minute. ○ Participants should help each other count compressions and provide peer feedback. ■ Guide participants through the steps of the skill using the Skill Practice Sheet: One-Hand Technique for Children. <ul style="list-style-type: none"> ○ Offer printouts from Appendix A.

OPTIONAL

SKILL PRACTICE



(continued)

- Give feedback during the skill practice as needed.
- Remind participants that it is critical to minimize interruptions in chest compressions to less than 10 seconds.
- Common errors to look for include:
 - Giving compressions that are too shallow or too deep.
 - Interrupting compressions for too long or too frequently.
 - Incorrectly positioning the hands.
- Failing to allow full recoil after each compression or giving compressions at an inappropriate rate.
- Check off each participant's progress on the Participant Progress Log (Appendix F).
- Answer participants' questions.



Instructor's Note

Tell participants to stay with their partners to do the following skill practice for the two-finger technique, as part of single-provider CPR for infants.

Single-Provider CPR for Infants

VIDEO



REFERENCE

Course Presentation
Slide 97

- Inform participants that they will now learn how to perform single-provider CPR for infants via video, then practice using the two-finger technique.
- Show the video segment, "Single-Provider CPR for Infants" (2:43).
- Answer participants' questions.

Q&A ACTIVITY



REFERENCE

Course Presentation
Slide 98

- Conduct a Q&A activity with participants to review some key components of infant CPR that they learned in the video.
- Encourage participants to raise their hand or freely call out their answers.
- Be mindful of time during this activity.
 - True or False? Depth of compressions for infants is the same as for children.
 - **False.** For infants, compress to a depth of about 1 ½ inches. For children, compress to a depth of about 2 inches.
 - True or False? Infants have different compression techniques compared to adults and children.
 - **True.** For single-provider infant CPR, use two fingers centered on the sternum just below the nipple line. With multiple providers, use the encircling thumbs technique—two thumbs centered on the sternum just below the nipple line with fingers encircling the chest.
 - True or False? Compression-to-ventilation ratio for infants during single-provider CPR is 15:2.
 - **False.** For infants, the compression-to-ventilation ratio during single-provider CPR is the same as it is for adults and children—that is, 30:2. For infant and child multiple-provider CPR, use 15:2.

DEMO



REFERENCE

Course Presentation
Slide 99

- Orient participants to the infant manikin they will be using including basic operations and feedback functions and/or devices.

SKILL PRACTICE



REFERENCES

Course Presentation
Slide 100

Skill Practice Sheet:
Two-Finger Technique
for Infants

Participant Progress
Log

- Begin the skill practice, “Two-Finger Technique for Infants” here.
- Ask participants to find a partner and choose an infant manikin.
- Ensure that the manikins are on a firm, flat surface.



Instructor's Note

If practicing with the manikin in a bed or crib, tell participants to adjust the bed or crib to an appropriate working height (or use a step stool) and lower the side rail closest to them. Then, place a CPR board under the manikin or enable the CPR feature on the bed.



- Ask participants to get into position beside their manikin to prepare for the skill practice.
- Communicate the following to participants:
 - Determine who will practice performing compressions first.
 - The first participant will **perform chest compressions using the two-finger technique for approximately 1 minute.**
 - Then participants will switch roles.
 - The second participant will **perform chest compressions using the two-finger technique for approximately 1 minute.**
 - Participants should help each other count compressions and provide peer feedback.
- Guide participants through the steps of the skill using the Skill Practice Sheet: Two-Finger Technique for Infants.
 - Offer printouts from Appendix A.
- Give feedback during the skill practice as needed.
- Remind participants that it is critical to minimize interruptions in chest compressions to less than 10 seconds.
- Common errors to look for include:
 - Interrupting chest compressions for more than 10 seconds.
 - Fingers oriented in the wrong direction.
 - Fingers are not below the nipple line.
 - Fingertips are flat on the chest.
- Check off each participant's progress on the Participant Progress Log (Appendix F).
- Answer participants' questions.



Instructor's Note




Tell participants to stay with their partners to do the following skill practice for the encircling thumbs technique, as part of multiple-provider CPR for infants.

Multiple-Provider CPR for Infants

<p>VIDEO</p>  <p>REFERENCE</p> <p>Course Presentation Slide 101</p>	<ul style="list-style-type: none">■ Inform participants that they will now learn how to perform multiple-provider CPR for infants via video, then practice compressions using the encircling thumbs technique and ventilations.■ Show the video segment, “Multiple-Provider CPR for Infants” (2:37).■ Answer participants’ questions.
<p>SKILL PRACTICE</p>  <p>REFERENCES</p> <p>Course Presentation Slide 102</p> <p>Skill Practice Sheet: Multiple-Provider CPR for Infants</p> <p>Participant Progress Log</p>	<ul style="list-style-type: none">■ Begin the skill practice for “Multiple-Provider CPR for Infants” here.■ Ask participants to get into position beside their manikins.■ Ensure that the manikins are on a firm, flat surface.■ Communicate the following to participants:<ul style="list-style-type: none">○ Determine who will perform chest compressions first and who will deliver ventilations first.○ Perform two cycles of CPR, then smoothly switch roles with a focus on minimizing interruptions in chest compressions to less than 10 seconds.○ The compressor will call for a role change by saying “switch” in place of the number 1 in the beginning of the second compression cycle.○ Continue to provide two cycles of CPR.■ Guide participants through the steps of the skill using the Skill Practice Sheet: Multiple-Provider CPR for Infants.<ul style="list-style-type: none">○ Offer printouts from Appendix A.■ Give feedback during the skill practice as needed.<ul style="list-style-type: none">○ Reinforce the key components of high-quality chest compressions as you provide feedback.■ Common errors to look for include:<ul style="list-style-type: none">○ Giving compressions that are too shallow or too deep.○ Interrupting compressions for too long or too frequently.○ Incorrectly positioning the hands.○ Failing to allow full recoil after each compression or giving compressions at an inappropriate rate.○ Squeezing the bag with too much volume (overventilation).○ Squeezing the bag at too fast a rate (hyperventilation).○ Not sealing the mask properly (E-C hand position).■ Check off each participant’s progress on the Participant Progress Log (Appendix F).■ Answer participants’ questions.



Topic | **AED Use for Children and Infants**

Safe and Effective AED Use



<p>VIDEO</p>  <p>REFERENCE Course Presentation Slides 103–104</p>	<ul style="list-style-type: none"> ■ Inform participants that they will now learn how to use an AED for children and infants. ■ Show the video segment, “AED Use for Children and Infants” (3:06). ■ Answer participants’ questions. ■ Remind participants that they will practice their AED skills in the following section, as part of “BLS Team Response for Children and Infants.”
<p>Q&A ACTIVITY</p>  <p>REFERENCE Course Presentation Slide 105</p>	<ul style="list-style-type: none"> ■ Conduct a Q&A activity with participants to review some key components of AED use for children and infants that they learned in the video. ■ Encourage participants to raise their hand or freely call out their answers. ■ Be mindful of time during this activity. <ul style="list-style-type: none"> ○ True or False? Sabrina is 9 years old and weighs 63 pounds. When using an AED, you should apply pediatric pads or use pediatric energy levels. <ul style="list-style-type: none"> ● False. For children older than 8 or weighing more than 55 pounds or 25 kilograms, use adult AED pads or energy levels. That’s because the shock delivered with pediatric AED pads or energy levels will not be sufficient. ○ True or False? Rocco is 6 months old and weighs 17.5 pounds. When using an AED, you should use the anterior/lateral position—one pad on the right of the sternum below the right clavicle, and the other pad on the left side of the chest on the midaxillary line, a few inches below the left armpit. <ul style="list-style-type: none"> ● False. For an infant, use the anterior/posterior pad placement—one pad on the center of the infant’s chest on the sternum, and the other pad on the infant’s back between the scapulae.
<p>OPTIONAL</p> <p>2 minutes</p> <p>DEMO</p>  <p>REFERENCE Course Presentation Slide 106</p>	<ul style="list-style-type: none"> ■ If participants are unfamiliar with the specific AED trainer you are using during the practice and testing scenarios, demonstrate how it functions, including pad placement and prompts.

Topic | **BLS Team Response for Children and Infants**

Practice Scenario: BLS for Children

<p>OPTIONAL 3 minutes</p> <p>VIDEO</p>  <p>REFERENCE Course Presentation Slides 107–108</p>	<ul style="list-style-type: none"> ■ Show the video segment, “Theo James” (2:37), which demonstrates a real-time cardiac arrest scenario for a 6-year-old boy. ■ Tell participants that they will practice a similar sequence during the practice scenario. ■ Answer participants’ questions.
<p>OPTIONAL 5 minutes</p> <p>PRACTICE SCENARIO</p>  <p>REFERENCES Course Presentation Slide 109 Skill Competency Sheet: BLS for Children Team Response Practice Scenario: BLS for Children Debriefing Tool Participant Progress Log</p>	<ul style="list-style-type: none"> ■ Begin the practice scenario, “BLS for Children” here. ■ Ask participants to divide into teams of three and get into position beside their adult or child manikin. Each team of three participants will respond to an emergency situation as prompted. ■ Ensure that a pediatric BVM resuscitator and an AED with pediatric pads or setting are available to each team. ■ Communicate the following to participants: <ul style="list-style-type: none"> ○ Determine who initially will be: <ul style="list-style-type: none"> ● Provider 1: Performs the rapid assessment, begins compressions and takes over ventilations. ● Provider 2: Retrieves and assembles the BVM, maintains the airway, delivers ventilations and takes over operating the AED. ● Provider 3: Calls the code, retrieves and sets up the AED and takes over compressions. ○ You will perform the team response practice scenario three times so that each participant has an opportunity to practice each role: compressor, airway manager/ventilator, AED operator. ○ You will be prompted with key information (e.g., when the AED is available) throughout the scenario. ■ Guide participants through the steps of the skill using the Team Response Practice Scenario: BLS for Children (Appendix C). <ul style="list-style-type: none"> ○ Offer participants printouts of Skill Competency Sheet: BLS for Children (Appendix B). ■ Give feedback during the team response scenario as needed. ■ If the team misses a critical step, provide coaching as needed to keep the scenario progressing. ■ Check off each participant’s progress on the Participant Progress Log (Appendix F). ■ Conduct a debriefing with participants using the Debriefing Tool (Appendix D). <ul style="list-style-type: none"> ○ Encourage participants to raise their hand or freely call out their responses. ○ Answer participants’ questions.

Practice Scenario: BLS for Infants

<p>VIDEO</p>  <p>REFERENCE</p> <p>Course Presentation Slide 110</p>	<ul style="list-style-type: none"> ■ Show the video segment, “Olivia Martin” (2:47), which demonstrates a cardiac arrest scenario for a 10-month-old patient. ■ Tell participants that they will practice a similar sequence during the practice scenario. ■ Answer participants’ questions.
<p>PRACTICE SCENARIO</p>  <p>REFERENCES</p> <p>Course Presentation Slide 111</p> <p>Skill Competency Sheet: BLS for Infants</p> <p>Team Response Practice Scenario: BLS for Infants</p> <p>Debriefing Tool</p> <p>Participant Progress Log</p>	<ul style="list-style-type: none"> ■ Begin the practice scenario, “BLS for Infants” here. ■ Ask participants to divide into teams of three and get into position beside the infant manikin. Each team of three participants will respond to an emergency situation as prompted. ■ Ensure that an infant BVM resuscitator and an AED with pediatric pads or setting are available to each team. ■ Communicate the following to participants: <ul style="list-style-type: none"> ○ Determine who initially will be: <ul style="list-style-type: none"> ● Provider 1: Performs the rapid assessment, begins compressions and takes over ventilations. ● Provider 2: Retrieves and assembles the BVM, maintains the airway, delivers ventilations and takes over operating the AED. ● Provider 3: Calls the code, retrieves and sets up the AED and takes over compressions. ○ You will perform the team response practice scenario three times so that each participant has an opportunity to practice each role: compressor, airway manager/ventilator, AED operator. ○ You will be prompted with key information (e.g., when the AED is available) throughout the scenario. ■ Guide participants through the steps of the skill using the Team Response Practice Scenario: BLS for Infants (Appendix C). <ul style="list-style-type: none"> ○ Offer participants printouts of Skill Competency Sheet: BLS for Infants (Appendix B). ■ Give feedback during the team response scenario as needed. ■ If the team misses a critical step, provide coaching as needed to keep the scenario progressing. ■ Check off each participant’s progress on the Participant Progress Log (Appendix F). ■ Conduct a debriefing with participants using the Debriefing Tool (Appendix D). <ul style="list-style-type: none"> ○ Encourage participants to raise their hand or freely call out their responses. ○ Answer participants’ questions.

Obstructed Airway

LESSON LENGTH | 15 minutes

Guidance for the Instructor

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

- Discuss all points in the topics, “Obstructed Airway Care for Adults and Children” and “Obstructed Airway Care for Infants.”
- Show the videos, “Obstructed Airway Care for Responsive Adults and Children” (4:29) and “Obstructed Airway Care for Responsive Infants” (2:15).
- Conduct the skill practices, “Obstructed Airway Care for Adults and Children” and “Obstructed Airway Care for Infants.”

Lesson Objectives

After completing this lesson, participants will be able to:




- Care for a responsive adult or child with an obstructed airway.
- Care for an unresponsive adult or child with an obstructed airway.
- Care for a responsive infant with an obstructed airway.
- Care for an unresponsive infant with an obstructed airway.

Materials, Equipment and Supplies

- *Basic Life Support Course Presentation for Instructor-Led Training, Basic Life Support DVD or Basic Life Support for Instructor-Led Training downloadable videos*
- Computer or tablet with speakers, projector and projection screen or monitor
- Disposable latex-free gloves (optional)
- CPR infant manikins (one for every two participants)
- Cleaning and decontamination supplies

Topic | **Obstructed Airway Care for Adults and Children**

Caring for a Responsive Adult or Child

<p>LECTURE</p>  <p>REFERENCE Course Presentation Slides 112–114</p>	<ul style="list-style-type: none"> ■ Communicate the following key points to participants: <ul style="list-style-type: none"> ○ Airway obstruction is a common emergency that can lead to respiratory arrest and eventually cardiac arrest. ○ A patient who is choking typically has a panicked, confused or surprised facial expression. They may run about, flail their arms or try to get another's attention. ○ The patient may place one or both hands on their throat, commonly referred to as the universal sign of choking. ○ You may hear stridor (that is, high-pitched squeaking noises) as the patient tries to breathe, or nothing at all. ○ The patient's skin may initially appear flushed, but it will become pale or cyanotic as the body is deprived of oxygen. ○ Evidence suggests that it may take more than one technique to relieve an airway obstruction.
<p>VIDEO</p>  <p>REFERENCE Course Presentation Slide 115</p>	<ul style="list-style-type: none"> ■ Explain to participants that they will watch the following video to learn how to provide care for a responsive adult or child with an obstructed airway and may ask questions before hands-on skill practice. ■ Show the video segment, "Obstructed Airway Care for Responsive Adults and Children" (4:29). ■ Answer participants' questions.
<p>SKILL PRACTICE</p>  <p>REFERENCES Course Presentation Slide 116 Skill Practice Sheet: Obstructed Airway Care for Adults and Children Participant Progress Log</p>	<ul style="list-style-type: none"> ■ Begin the skill practice for "Obstructed Airway Care for Adults and Children." ■ Ask participants to find a partner. ■ Communicate the following to participants: <ul style="list-style-type: none"> ○ Determine who will practice simulating abdominal thrusts and back blows first. ○ The first participant will perform 5 simulated abdominal thrusts and 5 simulated back blows. ○ Then participants will switch roles. ○ The second participant will now perform 5 simulated abdominal thrusts and 5 simulated back blows. ○ DO NOT give actual back blows and abdominal thrusts to your partner. ■ Guide participants through the steps of the skill using the Skill Practice Sheet: Obstructed Airway Care for Adults and Children. <ul style="list-style-type: none"> ○ Offer printouts from Appendix A. ■ Give feedback during the skill practice as needed. ■ Common errors to look for include: <ul style="list-style-type: none"> ○ Not properly positioning the hands during back blows. ○ Not using the thumb side of the fist for abdominal thrusts. ■ Check off each participant's progress on the Participant Progress Log (Appendix F). ■ Answer participants' questions.

Caring for an Unresponsive Adult or Child

LECTURE	<ul style="list-style-type: none">■ Review the following care steps for a choking adult or child who becomes unresponsive:<ul style="list-style-type: none">○ Carefully lower them to a firm, flat surface, while protecting their head.○ Send someone to get an AED and summon additional resources (if appropriate and you have not already done so).○ Immediately begin CPR, starting with chest compressions.○ After each set of compressions, open the patient's mouth and look for the object before attempting ventilations.○ If you see the object in the patient's mouth, remove it using a finger sweep. If you do not see the object, do not perform a blind finger sweep.○ Attempt 2 ventilations. Never try more than 2 ventilations during one cycle of CPR, even if the chest does not rise.○ Continue performing CPR cycles, checking for an object before each set of ventilations.
REFERENCE Course Presentation Slide 117	



TIME | 5 minutes

Topic | **Obstructed Airway Care for Infants**

Caring for a Responsive Infant

VIDEO	<ul style="list-style-type: none">■ Explain to participants that they will watch the following video to learn about clearing the airway of a responsive infant and may ask questions before hands-on skill practice.■ Show the video segment, “Obstructed Airway Care for Responsive Infants” (2:15).■ Answer participants’ questions.
REFERENCE Course Presentation Slides 118–119	
SKILL PRACTICE	<ul style="list-style-type: none">■ Begin the skill practice for “Obstructed Airway Care for Infants.”■ Ask participants to return to their partners and choose an infant manikin.■ Communicate the following to participants:<ul style="list-style-type: none">○ Determine who will practice back blows and chest thrusts first.○ The first participant will perform 2 sets of 5 back blows and 5 chest thrusts.○ Then participants will switch roles.○ The second participant will now perform 2 sets of 5 back blows and 5 chest thrusts.○ Participants should help each other count back blows and chest thrusts and provide peer feedback.
REFERENCES Course Presentation Slide 120 Skill Practice Sheet: Obstructed Airway Care for Infants Participant Progress Log	

SKILL PRACTICE



(continued)

- Guide participants through the steps of the skill using the Skill Practice Sheet: Obstructed Airway Care for Infants.
 - Offer printouts from Appendix A.
- Give feedback during the skill practice as needed.
- Common errors to look out for include:
 - Not properly positioning the infant for back blows with the infant's head face-down and lower than their body.
 - Not properly supporting the infant's head and neck during back blows.
 - Not using the heel of hand to deliver back blows.
 - Not delivering 5 back blows between the infant's scapulae.
 - Not properly positioning the infant for chest thrusts with the infant's head face-up and lower than their body.
 - Not properly supporting the infant's head and neck during chest thrusts.
 - Not placing 2 fingers in center of infant's chest just below the nipple line.
 - Not delivering 5 chest thrusts about 1 ½ inches deep.
- Check off each participant's progress on the Participant Progress Log (Appendix F).
- Answer participants' questions.

Caring for an Unresponsive Infant

LECTURE



REFERENCE

Course Presentation
Slide 121

- Review the following care steps for a choking infant who becomes unresponsive:
 - Lower the infant onto a firm, flat surface and begin CPR.
 - After each set of compressions and before attempting ventilations, open the infant's mouth, look for an object and remove the object with your pinky, if you can see it.

Opioid Overdose

LESSON LENGTH | 5 minutes

Guidance for the Instructor

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

- Discuss all points in the topic, "Opioid Overdose."

Lesson Objectives

After completing this lesson, participants will be able to:

- Identify the signs and symptoms of opioid overdose.
- Explain the principles of administering naloxone and its importance during opioid overdose.
- Care for the patient experiencing respiratory arrest from opioid overdose.
- Care for the patient experiencing cardiac arrest from opioid overdose.

Materials, Equipment and Supplies

- *Basic Life Support Course Presentation for Instructor-Led Training*
- Computer or tablet with speakers, projector and projection screen or monitor

Topic | **Opioid Overdose****The Opioid Crisis**

LECTURE



REFERENCE

Course Presentation
Slides 122–124

- Communicate the following key points to participants:
 - The opioid crisis in the United States was officially declared a public health emergency in 2017.
 - In 2016, more than 42,000 people in the United States died from opioid overdose.
 - The rate of opioid-related emergency department visits almost doubled between 2005 and 2014.

Assess for Opioid Overdose

LECTURE



REFERENCE

Course Presentation
Slides 125–127

- Communicate the following key points to participants:
 - To quickly recognize the signs and symptoms of an opioid overdose, use the opioid overdose triad:
 - Pinpoint pupils
 - Respiratory depression
 - Unconsciousness or severe sleepiness
 - Other indicators include:
 - Cyanosis.
 - Track marks from intravenous drug use.
 - Prescription pill bottles, pipes, needles, syringes, pill powder or other drug-related items.
 - History of opioid drug abuse.
 - When assessing a patient with suspected or known opioid overdose, consider the use of more objective assessments to assess breathing, such as capnography. A normal ETCO_2 value rules out respiratory depression.
- Explain to participants the importance of ensuring their personal safety during assessment and care.
 - Avoid white powder or other potential hazards (e.g., needles) near or on patient and use personal protective equipment (PPE) according to your facility's protocols.

Recognize the Problem and Provide Care

LECTURE



REFERENCE

Course Presentation
Slide 128

- Tell participants to provide care as you would with any respiratory or cardiac arrest emergency, but call for and administer naloxone based on your facility's protocols and available resources.

Administering Naloxone

LECTURE



REFERENCE

Course Presentation
Slide 129

- Communicate the following key points to participants:
 - Trained providers should administer naloxone (also referred to by its trade name, Narcan™) when the patient is in respiratory or cardiac arrest and an opioid overdose is suspected.
 - Administer naloxone as soon as it is available; however, remember, chest compressions, ventilations and/or defibrillation are the priority over naloxone administration.
 - Although naloxone is typically administered intravenously in the hospital setting, it can be administered intranasally or intramuscularly. The adult dose is 2 mg intranasal or 0.4 mg intramuscular. You may repeat after 4 minutes.
 - Always follow facility protocols to determine dosing and timing of naloxone administration.
 - Naloxone is usually safe to administer if the person is not breathing and you cannot identify the drug overdosed. It has few adverse effects, and it can temporarily reverse the effects of opioid overdose.
 - Although no evidence supports any benefit to naloxone administration during cardiac arrest, administration of naloxone is recommended during both respiratory and cardiac arrest.
 - If the patient begins to breathe normally, check responsiveness and assess for breathing and a pulse. Then place them in a recovery position, providing you do not suspect a head, neck, spinal, hip or pelvic injury. Monitor them until emergency medical services (EMS), the rapid response team or the resuscitation team arrives.
 - Patients who respond after receiving naloxone frequently vomit and may even become violent. Be prepared to suction the airway or call for help to provide suction, but always keep your safety in mind.
 - If the patient stops responding, begin ventilations or cardiopulmonary resuscitation (CPR) as appropriate and repeat naloxone.

OPTIONAL

5 minutes

Q&A ACTIVITY



REFERENCE

Course Presentation
Slide 130

- Conduct a Q&A activity featuring true-or-false with participants.
- Encourage participants to raise their hand or freely call out their answers.
- Be mindful of time during this activity.
 - True or False? The opioid overdose triad consists of pinpoint pupils, respiratory depression, and unconsciousness or severe sleepiness.
 - **True**
 - True or False? If the patient is in respiratory arrest and experiencing an opioid overdose, deliver ventilations and then administer naloxone as soon as it is available.
 - **True**
 - True or False? Administration of naloxone for a patient experiencing an opioid overdose is recommended during respiratory arrest, but not cardiac arrest.
 - **False.** It is recommended for both respiratory and cardiac arrest.
 - True or False? High-quality CPR should be prioritized over the administration of naloxone during cardiac arrest.
 - **True**
 - True or False? You must be certain the patient is having an overdose before you administer naloxone.
 - **False**

Testing and Course Wrap-Up

LESSON LENGTH | 60 minutes

Guidance for the Instructor

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

- Conduct the Team Response Testing Scenario: BLS for Adults.
- Conduct the Team Response Testing Scenario: BLS for Infants.
- Conduct the Team Response Testing Scenario: BLS for Children (optional).
- Discuss all points in the topic, “Course Wrap-Up.”
- Administer the final exam.

Lesson Objectives

After completing this lesson, participants will be able to:

- Demonstrate high-quality CPR including effective chest compressions and ventilations for adults and infants.
- Demonstrate safe and effective use of an AED for adults and infants.
- Work effectively as part of a high-performance team to improve patient outcomes in the role of a team leader and team member.

Materials, Equipment and Supplies

- *Basic Life Support for Instructor-Led Training Course Presentation*
- Computer or tablet with speakers, projector and projection screen or monitor
- Disposable latex-free gloves (optional)
- Adult and infant CPR manikins (one for every team)
- Child CPR manikin (optional; one for every team)
- Adult and infant pocket masks and valves (one for each participant)
- Child pocket mask and valve (optional; one for each participant)
- Adult and infant BVMs (one for each manikin)
- Child BVM (optional; one for each manikin)
- AED training devices with adult and pediatric AED pads (one for each manikin)
- Cleaning and decontamination supplies
- Extra manikin equipment (e.g., airways, lungs and batteries) as appropriate
- Blankets and/or mats, if applicable (optional; one for each participant)
- CPR board or bed with CPR function, if applicable (one for every two participants)
- Step stool, if applicable (two for every team)

Topic | Team Response Testing Scenarios

Introduction

LECTURE



REFERENCE

Course Presentation
Slides 131–133



Instructor's Note

- The testing scenarios are flexible to accommodate your class size and background of participants.
 - You may evaluate up to **three** participants during a testing scenario. If you are evaluating **one** or **two** participants, you may serve as the additional provider(s) to allow for multiple-provider CPR/AED skill evaluation.
 - Each participant must be evaluated in at least two testing scenarios (one adult and one infant) and assume the role of team leader in one scenario. For **three** participants, you may opt to repeat the adult or infant scenario or incorporate the optional testing scenario, “BLS for Children.”
- Communicate the following to participants:
 - To conclude the course, **you must participate in at least two testing scenarios** (one adult and one infant) and **assume the role of team leader in one scenario**.
 - Although you may have successfully completed your two testing scenarios, you may need to rotate into an additional scenario so that another participant has an opportunity to be evaluated in the team leader role.
 - During the team response testing scenarios, you will be evaluated on:
 - Your ability as a **team leader** to identify critical decision points; act appropriately, safely and effectively; and successfully perform compressions and ventilations and the use of an AED.
 - Your active participation as a **team member** and ability to demonstrate skill competency in assigned role(s).

Administering the Team Response Testing Scenarios

TESTING SCENARIOS



REFERENCES

Course Presentation
Slide 134

Team Response
Testing Scenario: BLS
for Adults

Team Response
Testing Scenario: BLS
for Infants

Team Response
Testing Scenario: BLS
for Children (optional)

- Begin testing scenarios here.
- Ensure that adult or pediatric equipment (i.e., pocket mask, BVM resuscitator and AED) are available to each team. The pocket mask and BVM resuscitator should be near the patient.
- Ask teams to get into position beside the appropriate manikin for the given scenario—adult, infant or child. Each team will respond to an emergency situation as prompted.
- Ask participants to determine who will be team leader at the start of each scenario. Remind them that they only need to be team leader once.
- Explain to participants that they will be prompted with key information throughout the scenario; however, you will **not** provide any coaching or guidance.
- Answer participants' questions.
- Evaluate the participants using the instructor's copy of the Team Response Testing Scenario: BLS for Adults, Team Response Testing Scenario: BLS for Infants and Team Response Testing Scenario: BLS for Children, if applicable (Appendix E).
- Check off each participant's progress on the Participant's Progress Log (Appendix F).

TIME | 30 minutes

Topic | Final Exam

Introduction

LECTURE



REFERENCE

Course Presentation
Slides 135–136

- Communicate the following to participants:
 - The final exam consists of 25 questions.
 - You may refer to the participant's manual or other Red Cross resources during the exam, if necessary. However, you may not discuss the exam with other participants or the instructor.
 - You must score a minimum of 84 percent to pass the exam. This allows for a total of four incorrect answers.
 - If you do not achieve a score of 84 percent, you will have the opportunity to remediate and take another version of the exam.
 - If you pass the exam, you may review questions you missed; however, you must return graded answer sheets and written exams to the instructor.
- Explain to participants how the class will be divided, if appropriate, to facilitate a simultaneous final exam and testing scenario.



Instructor's Note

Participants must pass the final exam with a score of 84 percent or better. Refer to Chapter 5 of the Program Administration section for guidelines on retesting participants who do not pass the final exam.

Administering the Final Exam

EXAM



REFERENCES

Course Presentation
Slide 137

Final Exam A and B

Answer Sheets

Answer Keys

Participant's Manual

- Hand out exams and answer sheets. Remind participants to return these items to you once they have completed the exam, so you can grade them.



Instructor's Note

To make best use of time, you can have some participants complete the final exam while you complete the testing scenarios with other participants. However, you must maintain test security and ensure that the final exam is proctored effectively if you are conducting the testing scenarios simultaneously.

TIME | 5 minutes

Topic | Course Wrap-Up

LECTURE



REFERENCE

Course Presentation
Slide 138–139

- Explain that participants will receive a Basic Life Support certificate from the American Red Cross that is valid for 2 years.
- Make arrangements to retest any participants who did not pass the testing scenario(s) or final exam.
- Congratulate and thank participants for taking part in the American Red Cross Basic Life Support Instructor-Led course.



Instructor's Note

If a participant is unsuccessful in passing the course, have a private discussion with the participant about any course objectives that were not met and discuss additional training opportunities.

Section C: Appendices

Appendix A: Skill Practice Sheets

Appendix B: Skill Competency Sheets

Appendix C: Team Response Practice Scenarios

Appendix D: Debriefing Tool

Appendix E: Team Response Testing Scenarios

Appendix F: Participant Progress Log

Appendix G: Answer Sheet and Answer Keys

Appendix H: Sample Agendas

Appendix I: Review Course

Appendix J: Challenge Course

Skill Practice Sheets

Single-Provider CPR for Adults

Multiple-Provider CPR for Adults

One-Hand Technique for Children

Two-Finger Technique for Infants

Multiple-Provider CPR for Infants

Obstructed Airway Care for Adults and Children

Obstructed Airway Care for Infants

Skill Practice Sheet: Single-Provider CPR for Adults

Chest compressions practice: Each participant should perform chest compressions for approximately 1 minute.

Pocket mask practice: Each participant should deliver three sets of 2 ventilations.

Single-provider CPR practice: Each participant should practice three cycles of 30 compressions and 2 ventilations before switching.

Note: Participants should help each other count compressions and offer feedback.

<p>Chest Compressions</p>	<ul style="list-style-type: none"> ■ Ensure the patient is on a firm, flat surface. ■ Expose the chest. ■ Perform 30 chest compressions. <ul style="list-style-type: none"> ○ Place the heel of one hand in the center of the patient's chest on the lower half of the sternum. ○ Place your other hand on top of the first and interlace your fingers or hold them up so that they are not resting on the patient's chest. ○ Position yourself so your shoulders are directly over your hands; lock elbows. ○ Compress the chest to a depth of at least 2 inches. ○ Compress at a rate of 100 to 120 compressions per minute. ○ Allow chest to return to its normal position after each compression. <p>Note: It should take 15 to 18 seconds to perform 30 chest compressions.</p>
<p>Pocket Mask Ventilations</p>	<ul style="list-style-type: none"> ■ Select an appropriately sized mask and assemble it. ■ Seal the mask. <ul style="list-style-type: none"> ○ Starting from the bridge of the patient's nose, place the mask over the patient's nose, mouth and chin (the mask should not extend past the chin). ○ Place the "webbing" between your index finger and thumb on the top of the mask above the valve; then place your remaining fingers on the side of the patient's face. ○ Place the thumb of your other hand (the hand closest to the patient's chest) along the base of the mask while placing your bent index finger under the patient's chin. ■ Simultaneously, open the patient's airway to a past-neutral position and lift the patient's face into the mask. ■ Deliver 2 ventilations. <ul style="list-style-type: none"> ○ Take a normal breath, then make a complete seal over the mask valve with your mouth. ○ Blow into the mask to deliver 1 ventilation over 1 second, enough to make the chest begin to rise. ○ Quickly break the seal and take a breath. Then reseat your mouth over the mask valve and deliver a second ventilation.
<p>Continue CPR (30:2)</p>	<ul style="list-style-type: none"> ■ Continue CPR cycles at a compression-to-ventilation ratio of 30:2. <ul style="list-style-type: none"> ○ Provide 30 chest compressions at the proper rate and depth, using correct hand placement and allowing the chest to return to its normal position. ○ Deliver 2 ventilations that last 1 second each and make the chest begin to rise. ○ Minimize interruptions to chest compressions to less than 10 seconds.

Skill Practice Sheet: Multiple-Provider CPR for Adults

BVM practice: Each participant should deliver three sets of 2 ventilations.

Multiple-provider CPR practice: Each participant should perform two cycles of CPR. The compressor should call for the switch.

Note: Participants should help each other count compressions and offer feedback.

<p>Chest Compressions</p>	<ul style="list-style-type: none"> ■ Ensure the patient is on a firm, flat surface. ■ Expose the chest. ■ Perform 30 chest compressions. <ul style="list-style-type: none"> ○ Place the heel of one hand in the center of the patient’s chest on the lower half of the sternum. ○ Place your other hand on top of the first and interlace your fingers or hold them up so that they are not resting on the patient’s chest. ○ Position yourself so your shoulders are directly over your hands; lock elbows. ○ Compress the chest to a depth of at least 2 inches. ○ Compress at a rate of 100 to 120 compressions per minute. ○ Allow chest to return to its normal position after each compression. <p>Note: It should take 15 to 18 seconds to perform 30 chest compressions.</p>
<p>Airway Management/ BVM Seal</p>	<ul style="list-style-type: none"> ■ Select an appropriately sized BVM and assemble it. ■ Get into position behind the patient’s head. ■ Place the mask at the bridge of the nose and lower it over the nose, mouth and chin (the mask should not extend past the chin). ■ Hold the mask in place with the E-C hand position as you seal the mask. <ul style="list-style-type: none"> ○ With one hand around the mask, form an “E” with the last three fingers and a “C” with the thumb and index finger. ○ Seal the mask completely around the patient’s mouth and nose and simultaneously open the airway to a past-neutral position by lifting the jaw into the mask. ○ Maintain mask seal and open airway in a past-neutral position.
<p>BVM Ventilations</p>	<ul style="list-style-type: none"> ■ Deliver 2 ventilations. <ul style="list-style-type: none"> ○ Depress the bag about halfway to deliver a volume of 400 to 700 mL. ○ Deliver smooth, effortless ventilations that last about 1 second and make the chest begin to rise. Avoid excessive ventilation.
<p>Continue CPR (30:2)</p>	<ul style="list-style-type: none"> ■ Continue CPR cycles at a compression-to-ventilation ratio of 30:2. <ul style="list-style-type: none"> ○ Provide 30 chest compressions at the proper rate and depth, using correct hand placement and allowing the chest to return to its normal position. ○ Deliver 2 ventilations that last 1 second each and make the chest begin to rise. ○ Minimize interruptions to chest compressions to less than 10 seconds. ■ The compressor calls for a role change by saying “switch” in place of the number 1 at the beginning of the second cycle.

Skill Practice Sheet: One-Hand Technique for Children

Each participant should practice approximately 1 minute before switching.

Note: Participants should help each other count compressions and offer feedback.

Chest Compressions

- Ensure the patient is on a firm, flat surface.
- Expose the chest.
- Perform chest compressions.
 - Place one hand on the center of the child's chest, just below the nipple line on the sternum.
 - Compress the chest to a depth of about 2 inches.
 - Compress at a rate of 100 to 120 compressions per minute.
 - Allow chest to return to its normal position after each compression.

Note: It should take 15 to 18 seconds to perform 30 chest compressions.

Skill Practice Sheet: Two-Finger Technique for Infants

Each participant should practice approximately 1 minute before switching.

Note: Participants should help each other count compressions and offer feedback.

Chest Compressions

- Ensure the patient is on a firm, flat surface.
- Expose the chest.
- Perform chest compressions.
 - Place two fingers on the center of the infant's chest, just below the nipple line on the sternum. (**Note:** Fingers should be parallel to sternum.)
 - Compress the chest to a depth of about 1½ inches.
 - Compress at a rate of 100 to 120 compressions per minute.
 - Allow chest to return to its normal position after each compression.

Note: It should take 15 to 18 seconds to perform 30 chest compressions.

Skill Practice Sheet: Multiple-Provider CPR for Infants

Each participant should perform two cycles of CPR. The compressor should call for the switch.

Note: Participants should help each other count compressions and offer feedback.

<p>Chest Compressions</p>	<ul style="list-style-type: none"> ■ Ensure the patient is on a firm, flat surface. ■ Expose the chest. ■ Perform 15 chest compressions. <ul style="list-style-type: none"> ○ Place both thumbs (side-by-side) on the center of the infant's chest, just below the nipple line on the sternum. ○ Use the other fingers to encircle the infant's chest toward the back, providing support. ○ Compress the chest to a depth of about 1½ inches. ○ Compress at a rate of 100 to 120 compressions per minute. ○ Allow the chest to return to its normal position after each compression. <p>Note: It should take 7 to 9 seconds to perform 15 chest compressions.</p>
<p>Airway Management/ BVM Seal</p>	<ul style="list-style-type: none"> ■ Select an appropriately sized BVM and assemble it. ■ Get into position behind the patient's head. ■ Place the mask at the bridge of the nose and lower it over the nose, mouth and chin. ■ Hold the mask in place with the E-C hand position as you seal the mask. <ul style="list-style-type: none"> ○ With one hand around the mask, form an "E" with the last three fingers and a "C" with the thumb and index finger. ○ Seal the mask completely around the patient's mouth and nose and simultaneously open the airway to a neutral position by lifting the jaw into the mask. ○ Maintain mask seal and open airway in a neutral position.
<p>BVM Ventilations</p>	<ul style="list-style-type: none"> ■ Deliver 2 ventilations. <ul style="list-style-type: none"> ○ Depress the bag about halfway. ○ Deliver smooth, effortless ventilations that last about 1 second and make the chest begin to rise. Avoid excessive ventilation.
<p>Continue CPR (15:2)</p>	<ul style="list-style-type: none"> ■ Continue CPR cycles at a compression-to-ventilation ratio of 15:2. <ul style="list-style-type: none"> ○ Continue to provide 15 chest compressions at the proper rate and depth, using correct hand placement and allowing the chest to return to its normal position. ○ Continue to deliver 2 ventilations that last 1 second and make the chest begin to rise. ○ Minimize interruptions to chest compressions to less than 10 seconds. ■ The compressor calls for a role change by saying "switch" in place of the number 1 at the beginning of the second cycle.

Skill Practice Sheet: Obstructed Airway Care for Adults and Children

Each participant should perform 5 *simulated* abdominal thrusts and 5 *simulated* back blows.

DO NOT give actual back blows and abdominal thrusts to your partner.

Abdominal Thrusts

- Stand behind the patient, with one foot in front of the other for balance and stability. If possible, place your front foot in between the patient's feet.
- Using one or two fingers to find the patient's navel, make a fist with your other hand and place the thumb side of your fist against the middle of the abdomen, just above the navel.
- Grab your fist with your other hand.
- Give 5 quick inward and upward thrusts.
- Be sure to make each thrust a distinct attempt to dislodge the object.

Back Blows

- Position yourself to the side and slightly behind the patient.
- Provide support by placing one arm diagonally across the patient's chest.
- Then bend the patient forward at the waist so the upper body is parallel to the ground or as close as it can be.
- Using the heel of your other hand, give 5 firm back blows between the patient's scapulae.
- Make each blow a separate and distinct attempt to dislodge the object.

Skill Practice Sheet: Obstructed Airway Care for Infants

Each participant should perform two sets of 5 back blows and 5 chest thrusts.

Back Blows

- Place your forearm along the infant's back, cradling the back of the infant's head with your hand.
- Place your other forearm along the infant's front, supporting the infant's jaw with your thumb and fingers.
- Hold the infant in a face-down position along your forearm using your thigh for support and keeping the infant's head lower than their body.
- Use the heel of your hand to deliver back blows between the infant's scapulae. Keep your fingers up to avoid hitting the infant's head or neck.
- Provide 5 firm back blows, with each one separate from the others.

Chest Thrusts

- Position the infant between your forearms, support the head and neck, and turn the infant face-up.
- Then lower the infant onto your thigh with their head lower than their chest.
- Place two fingers in the center of the infant's chest, just below the nipple line.
- Deliver 5 quick chest thrusts about 1 1/2 inches deep.
- Let the chest return to its normal position, keeping your fingers in contact with the breastbone. Each chest thrust should be separate from the others.

Skill Competency Sheets

BLS for Adults

BLS for Infants

BLS for Children

Skill Competency Sheet: BLS for Adults



Participant's Note

Use this Skill Competency Sheet to guide you through the Practice Scenario and prepare for the Testing Scenario.

**Denotes Critical Action*

Action		Competencies
1	<p>Conducts visual survey:</p> <ul style="list-style-type: none"> ■ Checks surroundings for safety* ■ Gathers an initial impression, including whether there is severe, life-threatening bleeding* ■ Determines the need for additional resources 	<ul style="list-style-type: none"> ■ Sequence is not critical if all goals are accomplished and verbalized (PPE may be worn or verbalized) ■ Resources may include EMS, the rapid response team or the resuscitation team, as appropriate, and call for an AED
2	<p>Checks for responsiveness:</p> <ul style="list-style-type: none"> ■ Uses the shout-tap-shout sequence* 	<ul style="list-style-type: none"> ■ Shouts "Are you OK?" (or a reasonable facsimile) to elicit a verbal stimuli ■ Taps the patient's shoulder to elicit painful stimuli and shouts again (shout-tap-shout)
3	<p>Checks for breathing and a pulse:</p> <ul style="list-style-type: none"> ■ Opens airway ■ Checks breathing and carotid pulse simultaneously for at least 5 seconds but no more than 10* 	<ul style="list-style-type: none"> ■ Airway: Opens using head-tilt/chin-lift technique to a past-neutral position ■ Breathing/pulse check: Checks for breathing and carotid pulse simultaneously for at least 5 seconds but no more than 10
4	<p>Chest compressions:</p> <ul style="list-style-type: none"> ■ Exposes chest ■ Initiates 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* 	<ul style="list-style-type: none"> ■ Hand position: Centered on the lower half of the sternum ■ Depth: At least 2 inches ■ Number: 30 compressions ■ Rate: 100 to 120 per minute (15 to 18 seconds) ■ Full chest recoil
5	<p>Ventilations:</p> <ul style="list-style-type: none"> ■ Opens the airway* ■ Gives 2 ventilations using a pocket mask* 	<ul style="list-style-type: none"> ■ Airway: Head-tilt/chin-lift technique to a past-neutral position ■ Ventilations (2): 1 second in duration ■ Ventilations (2): Visible chest rise ■ Ventilations (2): Minimizes interruptions to less than 10 seconds
6	<p>Continues CPR:</p> <ul style="list-style-type: none"> ■ Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* ■ Opens airway ■ Gives 2 ventilations using a pocket mask 	<ul style="list-style-type: none"> ■ Hand position: Centered on the lower half of the sternum ■ Depth: At least 2 inches ■ Number: 30 compressions ■ Rate: 100 to 120 per minute (15 to 18 seconds) ■ Full chest recoil

Action	Competencies
<p>7</p> <p>Arrival of the AED and additional provider(s) (arrive at 20th compression in Step 6):</p> <ul style="list-style-type: none"> ■ Initial provider continues care* ■ Communicates with additional provider(s) ■ Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> ■ Continues care: Maintains uninterrupted CPR ■ Communicates relevant patient information including patient age if known ■ Verbalizes compression count to coordinate ventilations with additional provider(s) ■ Verbalizes coordination plan to switch compressors upon AED analysis
<p>8</p> <p>AED applied:</p> <ul style="list-style-type: none"> ■ Turns on machine ■ Attaches AED pads* ■ Continues compressions 	<ul style="list-style-type: none"> ■ AED on: Activates within 15 seconds of arrival ■ Pads: Uses anterior/lateral pad placement: 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. Or uses anterior/posterior pad placement, based on manufacturer recommendation
<p>9</p> <p>AED analysis and rotation:</p> <ul style="list-style-type: none"> ■ Ensures all providers are clear while AED analyzes and prepares for shock* ■ Says “Clear”* ■ Rotates providers during analysis to prevent fatigue ■ Prepares BVM 	<ul style="list-style-type: none"> ■ 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
<p>10</p> <p>Shock advised:</p> <ul style="list-style-type: none"> ■ Says “Clear”* ■ Presses shock button to deliver shock* 	<ul style="list-style-type: none"> ■ Clear: Ensures no one is touching the patient during analysis ■ Delivers shock: Depresses shock button within 10 seconds
<p>11</p> <p>Resumes CPR:</p> <ul style="list-style-type: none"> ■ Continues with 5 cycles of CPR (30 compressions and 2 ventilations)* ■ Performs chest compressions (Provider 2) ■ Manages airway and mask seal (Provider 1) ■ Provides ventilations using the BVM (Provider 1) ■ Continues until AED prompts 	<ul style="list-style-type: none"> ■ Resumes CPR: Immediately following shock, CPR resumed starting with compressions until prompted by the AED for analysis
<p>12</p> <p>Ventilations with a BVM:</p> <ul style="list-style-type: none"> ■ Positions self behind patient’s head ■ Uses E-C hand position ■ Seals the mask and simultaneously opens the airway to a past-neutral position ■ Compresses BVM to give 2 ventilations 	<ul style="list-style-type: none"> ■ Seal: Uses the E-C hand position ■ Airway: Maintains mask seal and open airway in a past-neutral position ■ Ventilations (2): 1 second in duration ■ Ventilations (2): Visible chest rise ■ Ventilations (2): Minimizes interruptions to less than 10 seconds ■ Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (avoiding overinflation)

Action		Competencies
13	<p>Anticipates compressor change:</p> <ul style="list-style-type: none"> Communicates with additional providers Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Verbalizes coordination plan to switch compressors prior to AED analysis
14	<p>AED analyzes:</p> <ul style="list-style-type: none"> Says “Clear”* No shock advised 	<ul style="list-style-type: none"> 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
15	<p>Resumes CPR:</p> <ul style="list-style-type: none"> Continues with 5 cycles of CPR (30 compressions and 2 ventilations)* Performs chest compressions (Provider 3) Manages airway and mask seal (Provider 1) Provides ventilations using the BVM (Provider 2) Continues until AED prompts 	<ul style="list-style-type: none"> 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 the sternum Depth: At least 2 inches Number: 30 compressions Rate: 100 to 120 per minute (15 to 18 seconds) Full chest recoil
16	<p>Anticipates compressor change:</p> <ul style="list-style-type: none"> Communicates with additional providers Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Verbalizes coordination plan to switch compressors prior to AED analysis
17	<p>AED analyzes and rotation:</p> <ul style="list-style-type: none"> Says “Clear”* No shock advised 	<ul style="list-style-type: none"> 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
18	<p>Spontaneous patient movement:</p> <ul style="list-style-type: none"> Checks for breathing and pulse 	<ul style="list-style-type: none"> Pulse check: Opens the airway and checks for breathing and carotid or femoral pulse simultaneously for at least 5 seconds but no more than 10

Overall Competencies

Leadership and Communication	<ul style="list-style-type: none">■ Communication: Accurately and effectively communicated with team members■ Coordination: Clearly and decisively directed providers through rotations of roles on AED analysis■ Feedback: Provided coaching and feedback to ensure effective performance of providers' skills
Chest Compressions	<ul style="list-style-type: none">■ Hand Position: Hands centered on the lower half of the sternum■ Depth: At least 2 inches■ Rate: 100 to 120 per minute (15 to 18 seconds for 30 compressions)■ Full chest recoil
Ventilations	<ul style="list-style-type: none">■ Length: Each ventilation should be 1 second in duration■ Visual: Chest should rise■ Time: 2 ventilations; minimizes interruptions to less than 10 seconds

Skill Competency Sheet: BLS for Infants



Participant's Note

Use this Skill Competency Sheet to guide you through the Practice Scenario and prepare for the Testing Scenario.

**Denotes Critical Action*

Action		Competencies
1	<p>Conducts visual survey:</p> <ul style="list-style-type: none"> ■ Checks surroundings for safety* ■ Gathers an initial impression, including whether there is severe, life-threatening bleeding* ■ Determines the need for additional resources ■ Obtains consent 	<ul style="list-style-type: none"> ■ Sequence is not critical if all goals are accomplished and verbalized (PPE may be worn or verbalized) ■ Resources may include EMS, the rapid response team or the resuscitation team, as appropriate, and call for an AED ■ Consent: States name, background, what they plan to do to help and asks for permission to treat
2	<p>Checks for responsiveness:</p> <ul style="list-style-type: none"> ■ Uses the shout-tap-shout sequence* 	<ul style="list-style-type: none"> ■ Shouts "Are you OK?" (or a reasonable facsimile) to elicit a verbal stimuli ■ Taps the bottom of the infant's foot to elicit painful stimuli and shouts again (shout-tap-shout)
3	<p>Checks for breathing and a pulse:</p> <ul style="list-style-type: none"> ■ Opens airway ■ Checks breathing and brachial pulse simultaneously for at least 5 seconds but no more than 10* 	<ul style="list-style-type: none"> ■ Airway: Opens using head-tilt/chin-lift technique to a neutral position ■ Breathing/pulse check: Checks for breathing and brachial pulse simultaneously for at least 5 seconds but no more than 10
4	<p>Chest compressions:</p> <ul style="list-style-type: none"> ■ Exposes chest ■ Initiates 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* 	<ul style="list-style-type: none"> ■ Hand position: Two fingers centered on the lower half of the sternum just below nipple line ■ Depth: About 1½ inches ■ Number: 30 compressions ■ Rate: 100 to 120 per minute (15 to 18 seconds) ■ Full chest recoil

Action	Competencies
<p>5 Ventilations:</p> <ul style="list-style-type: none"> ■ Opens the airway* ■ Gives 2 ventilations using a pocket mask* 	<ul style="list-style-type: none"> ■ Airway: Head-tilt/chin-lift technique to a neutral position ■ Ventilations (2): 1 second in duration ■ Ventilations (2): Visible chest rise ■ Ventilations (2): Minimizes interruptions to less than 10 seconds
<p>6 Continues CPR:</p> <ul style="list-style-type: none"> ■ Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* ■ Opens airway* ■ Gives 2 ventilations using a pocket mask* 	<ul style="list-style-type: none"> ■ Hand position: Two fingers centered on the lower half of the sternum just below nipple line ■ Depth: About 1½ inches ■ Number: 30 compressions ■ Rate: 100 to 120 per minute (15 to 18 seconds) ■ Full chest recoil
<p>7 Arrival of the AED and additional provider(s) (arrive at 20th compression in Step 6):</p> <ul style="list-style-type: none"> ■ Initial provider continues care* ■ Communicates with additional provider(s) ■ Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> ■ Continues care: Maintains uninterrupted CPR ■ Communicates relevant patient information including patient age if known ■ Verbalizes compression count to coordinate ventilations with additional provider(s) ■ Verbalizes coordination plan to switch compressors upon AED analysis
<p>8 AED applied:</p> <ul style="list-style-type: none"> ■ Turns on machine ■ Attaches AED pads* ■ Continues compressions 	<ul style="list-style-type: none"> ■ AED on: Activates within 15 seconds of arrival ■ Pads: Pad 1—center of the anterior chest; Pad 2—on infant's back between scapulae
<p>9 AED analysis and rotation:</p> <ul style="list-style-type: none"> ■ Ensures all providers are clear while AED analyzes and prepares for shock* ■ Says "Clear"* ■ Rotates providers during analysis to prevent fatigue ■ Prepares BVM 	<ul style="list-style-type: none"> ■ 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
<p>10 Shock advised:</p> <ul style="list-style-type: none"> ■ Says "Clear"* ■ Presses shock button to deliver shock* 	<ul style="list-style-type: none"> ■ Clear: Ensures no one is touching the patient during analysis ■ Delivers shock: Depresses shock button within 10 seconds

Action		Competencies
11	<p>Resumes CPR:</p> <ul style="list-style-type: none"> Continues with 10 cycles of CPR (15 compressions and 2 ventilations)* Performs chest compressions (Provider 2) Manages airway and mask seal (Provider 1) Provides ventilations using the BVM (Provider 1) Continues until AED prompts 	<ul style="list-style-type: none"> Resumes CPR: Immediately following shock, CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Two thumbs centered on the lower half of the sternum just below the nipple line Depth: About 1½ inches Number: 15 compressions Rate: 100 to 120 per minute (7 to 9 seconds) Full chest recoil
12	<p>Ventilations with a BVM:</p> <ul style="list-style-type: none"> Positions self behind patient's head Uses E-C hand position Seals the mask and simultaneously opens the airway to a neutral position Compresses BVM to give 2 ventilations 	<ul style="list-style-type: none"> Seal: Uses the E-C hand position Airway: Maintains mask seal and open airway in a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Minimizes interruptions to less than 10 seconds Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (avoiding overinflation)
13	<p>Anticipates compressor change:</p> <ul style="list-style-type: none"> Communicates with additional providers Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Verbalizes coordination plan to switch compressors prior to AED analysis
14	<p>AED analyzes:</p> <ul style="list-style-type: none"> Says "Clear"* No shock advised 	<ul style="list-style-type: none"> 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
15	<p>Resumes CPR:</p> <ul style="list-style-type: none"> Continues with 10 cycles of CPR (15 compressions and 2 ventilations)* Performs chest compressions (Provider 3) Manages airway and mask seal (Provider 1) Provides ventilations using the BVM (Provider 2) Continues until AED prompts 	<ul style="list-style-type: none"> Resumes CPR: Immediately following shock, CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Two fingers centered on the lower half of the sternum just below the nipple line Depth: About 1½ inches Number: 15 compressions Rate: 100 to 120 per minute (7 to 9 seconds) Full chest recoil
16	<p>Anticipates compressor change:</p> <ul style="list-style-type: none"> Communicates with additional providers Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Verbalizes coordination plan to switch compressors prior to AED analysis

Action		Competencies
17	AED analyzes and rotation: <ul style="list-style-type: none"> Says "Clear"* No shock advised 	<ul style="list-style-type: none"> 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
18	Spontaneous patient movement: <ul style="list-style-type: none"> Checks for breathing and pulse 	<ul style="list-style-type: none"> Pulse check: Opens the airway and checks for breathing and brachial or femoral pulse simultaneously for at least 5 seconds but no more than 10

Overall Competencies	
Leadership and Communication	<ul style="list-style-type: none"> Communication: Accurately and effectively communicated with team members Coordination: Clearly and decisively directed providers through rotations of roles on AED analysis Feedback: Provided coaching and feedback to ensure effective performance of providers' skills
Chest Compressions	<ul style="list-style-type: none"> Hand Position: Fingers/thumbs centered on the lower half of the sternum just below the nipple line Depth: About 1½ inches Rate: 100 to 120 per minute (15 to 18 seconds for 30 compressions; 7 to 9 seconds for 15 compressions) Full chest recoil
Ventilations	<ul style="list-style-type: none"> Length: Each ventilation should be 1 second in duration Visual: Chest should begin to rise Time: 2 ventilations; minimizes interruptions to less than 10 seconds

Skill Competency Sheet: BLS for Children



Participant's Note

Use this Skill Competency Sheet to guide you through the Practice Scenario and prepare for the Testing Scenario.

**Denotes Critical Action*

Action		Competencies
1	<p>Conducts visual survey:</p> <ul style="list-style-type: none"> ■ Checks surroundings for safety* ■ Gathers an initial impression, including whether there is severe, life-threatening bleeding* ■ Determines the need for additional resources ■ Obtains consent 	<ul style="list-style-type: none"> ■ Sequence is not critical if all goals are accomplished and verbalized (PPE may be worn or verbalized) ■ Resources may include EMS, the rapid response team or the resuscitation team, as appropriate, and call for an AED ■ Consent: States name, background, what they plan to do to help and asks for permission to treat
2	<p>Checks for responsiveness:</p> <ul style="list-style-type: none"> ■ Uses the shout-tap-shout sequence* 	<ul style="list-style-type: none"> ■ Shouts “Are you OK?” (or a reasonable facsimile) to elicit a verbal stimuli ■ Taps the child's shoulder to elicit painful stimuli and shouts again (shout-tap-shout)
3	<p>Checks for breathing and a pulse:</p> <ul style="list-style-type: none"> ■ Opens airway ■ Checks breathing and carotid pulse simultaneously for at least 5 seconds but no more than 10* 	<ul style="list-style-type: none"> ■ Airway: Opens using head-tilt/chin-lift technique to a slightly past-neutral position ■ Breathing/pulse check: Checks for breathing and carotid pulse simultaneously for at least 5 seconds but no more than 10
4	<p>Chest compressions:</p> <ul style="list-style-type: none"> ■ Exposes chest ■ Initiates 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* 	<ul style="list-style-type: none"> ■ Hand position: Centered on the lower half of the sternum ■ Depth: About 2 inches ■ Number: 30 compressions ■ Rate: 100 to 120 per minute (15 to 18 seconds) ■ Full chest recoil

Action	Competencies
<p>5 Ventilations:</p> <ul style="list-style-type: none"> ■ Opens the airway* ■ Gives 2 ventilations using a pocket mask 	<ul style="list-style-type: none"> ■ Airway: Head-tilt/chin-lift technique to a slightly past-neutral position ■ Ventilations (2): 1 second in duration ■ Ventilations (2): Visible chest rise ■ Ventilations (2): Minimizes interruptions to less than 10 seconds
<p>6 Continues CPR:</p> <ul style="list-style-type: none"> ■ Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* ■ Opens airway* ■ Gives 2 ventilations using a pocket mask* 	<ul style="list-style-type: none"> ■ Hand position: Centered on the lower half of the sternum ■ Depth: About 2 inches ■ Number: 30 compressions ■ Rate: 100 to 120 per minute (15 to 18 seconds) ■ Full chest recoil
<p>7 Arrival of the AED and additional provider(s) (arrive at 20th compression in Step 6):</p> <ul style="list-style-type: none"> ■ Initial provider continues care* ■ Communicates with additional provider(s) ■ Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> ■ Continues care: Maintains uninterrupted CPR ■ Communicates relevant patient information including patient age if known ■ Verbalizes compression count to coordinate ventilations with additional provider(s) ■ Verbalizes coordination plan to switch compressors upon AED analysis
<p>8 AED applied:</p> <ul style="list-style-type: none"> ■ Turns on machine ■ Attaches AED pads* ■ Continues compressions 	<ul style="list-style-type: none"> ■ AED on: Activates within 15 seconds of arrival ■ Pads: Uses anterior/lateral pad placement: 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. Or uses anterior/posterior pad placement, if the pads risk touch or recommended by the manufacturer.
<p>9 AED analysis and rotation:</p> <ul style="list-style-type: none"> ■ Ensures all providers are clear while AED analyzes and prepares for shock* ■ Says “Clear”* ■ Rotates providers during analysis to prevent fatigue ■ Prepares BVM 	<ul style="list-style-type: none"> ■ 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
<p>10 Shock advised:</p> <ul style="list-style-type: none"> ■ Says “Clear”* ■ Presses shock button to deliver shock* 	<ul style="list-style-type: none"> ■ Clear: Ensures no one is touching the patient during analysis ■ Delivers shock: Depresses shock button within 10 seconds

Action	Competencies
<p>11 Resumes CPR:</p> <ul style="list-style-type: none"> ■ Continues with 10 cycles of CPR (15 compressions and 2 ventilations)* ■ Performs chest compressions (Provider 2) ■ Manages airway and mask seal (Provider 1) ■ Provides ventilations using the BVM (Provider 1) ■ Continues until AED prompts 	<ul style="list-style-type: none"> ■ 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 the sternum ■ Depth: About 2 inches ■ Number: 15 compressions ■ Rate: 100 to 120 per minute (7 to 9 seconds) ■ Full chest recoil
<p>12 Ventilations with a BVM:</p> <ul style="list-style-type: none"> ■ Positions self behind patient's head ■ Uses E-C hand position ■ Seals the mask and simultaneously opens the airway to a slightly past-neutral position ■ Compresses BVM to give 2 ventilations 	<ul style="list-style-type: none"> ■ Seal: Uses the E-C hand position ■ Airway: Maintains mask seal and open airway in a slightly past-neutral position ■ Ventilations (2): 1 second in duration ■ Ventilations (2): Visible chest rise ■ Ventilations (2): Minimizes interruptions to less than 10 seconds ■ Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (avoiding overinflation)
<p>13 Anticipates compressor change:</p> <ul style="list-style-type: none"> ■ Communicates with additional providers ■ Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> ■ Verbalizes coordination plan to switch compressors prior to AED analysis
<p>14 AED analyzes:</p> <ul style="list-style-type: none"> ■ Says "Clear"* ■ No shock advised 	<ul style="list-style-type: none"> ■ 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
<p>15 Resumes CPR:</p> <ul style="list-style-type: none"> ■ Continues with 10 cycles of CPR (15 compressions and 2 ventilations)* ■ Performs chest compressions (Provider 3) ■ Manages airway and mask seal (Provider 1) ■ Provides ventilations using the BVM (Provider 2) ■ Continues until AED prompts 	<ul style="list-style-type: none"> ■ 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 the sternum ■ Depth: About 2 inches ■ Number: 15 compressions ■ Rate: 100 to 120 per minute (7 to 9 seconds) ■ Full chest recoil
<p>16 Anticipates compressor change:</p> <ul style="list-style-type: none"> ■ Communicates with additional providers ■ Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> ■ Verbalizes coordination plan to switch compressors prior to AED analysis

Action		Competencies
17	AED analyzes and rotation: <ul style="list-style-type: none"> Says "Clear"* No shock advised 	<ul style="list-style-type: none"> 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
18	Spontaneous patient movement: <ul style="list-style-type: none"> Checks for breathing and pulse 	<ul style="list-style-type: none"> Pulse check: Opens the airway and checks for breathing and carotid or femoral pulse simultaneously for at least 5 but no more than 10 seconds

Overall Competencies	
Leadership and Communication	<ul style="list-style-type: none"> Communication: Accurately and effectively communicated with team members Coordination: Clearly and decisively directed providers through rotations of roles on AED analysis Feedback: Provided coaching and feedback to ensure effective performance of providers' skills
Chest Compressions	<ul style="list-style-type: none"> Hand Position: Centered on the lower half of the sternum Depth: About 2 inches Rate: 100 to 120 per minute (15 to 18 seconds for 30 compressions; 7 to 9 seconds for 15 compressions) Full Chest Recoil
Ventilations	<ul style="list-style-type: none"> Length: Each ventilation should be 1 second in duration Visual: Chest should rise Time: 2 ventilations; minimizes interruptions to less than 10 seconds

Team Response Practice Scenarios

Rapid Assessment for Adults

BLS for Adults

BLS for Children

BLS for Infants

Team Response Practice Scenario: Rapid Assessment for Adults

Overview

- **Equipment:** Adult CPR manikin and chair
- **Number of Providers:** 2
- **Scenario Pathway:** Perform visual survey → Check for responsiveness → Call for additional resources and an AED → Open airway and simultaneously check for breathing and a pulse → Recognize condition and determine appropriate care

Setup

Choose one of the following scenarios and then read it aloud.

In-Hospital: *You and another healthcare provider are in the hallway of the step-down unit when you hear the sound of something clattering. You stop what you are doing and go to investigate. You find a middle-aged woman slumped over in a chair.*

Out-of-Hospital: *You and another healthcare provider are in the hallway of the assisted living facility when you hear the sound of something clattering. You stop what you are doing and go to investigate. You find an older woman slumped over in a chair.*

Public Safety: *You and your partner see a commotion on the sidewalk. You go to investigate and find a middle-aged woman slumped over on a park bench.*

Part 1: Perform Visual Survey

Provider 1

- Performs visual survey
- Checks surroundings for safety before entering
- Forms an initial impression, including whether there is severe, life-threatening bleeding
- Determines the need for additional resources
- Puts on or verbalizes putting on personal protective equipment (PPE)



Instructor's Note

The sequence of visual survey is not critical if all goals are accomplished and verbalized. Ensure that participants understand that they should verbalize each component of the visual survey each time they practice a scenario. If they are wearing PPE, they do not have to verbalize the PPE step.

Instructor Prompt: *The scene is safe and there is no life-threatening bleeding. The patient appears unresponsive. You do not suspect a head, neck or spinal injury.*


Part 2: Check for Responsiveness

Provider 1	<ul style="list-style-type: none">■ Checks for responsiveness using the shout-tap-shout sequence■ Shouts “Are you OK?” (or a reasonable facsimile) to elicit verbal stimuli■ Taps the patient’s shoulder to elicit painful stimuli and shouts again (shout-tap-shout)
Instructor Prompt: <i>The patient is unresponsive.</i>	

Part 3: Call for Additional Resources and an AED

Provider 1	<ul style="list-style-type: none">■ Instructs Provider 2 to call for additional resources and get an AED
Provider 2	<ul style="list-style-type: none">■ Repeats back instructions demonstrating closed-loop communication■ Leaves to call for additional resources and get an AED

Part 4: Open the Airway and Simultaneously Check for Breathing and a Pulse

Instructor Prompt: <i>The patient is unresponsive. You do not suspect a head, neck or spinal injury.</i>	
Provider 1	<ul style="list-style-type: none">■ Moves the patient to the floor in a supine (face-up) position■ Opens the airway to a past-neutral position using the head-tilt/chin-lift technique■ Simultaneously checks for breathing and a carotid pulse for at least 5 seconds but no more than 10
Instructor Prompt: <i>The patient is not breathing normally and does not have a pulse.</i>	
Provider 1	<ul style="list-style-type: none">■ Verbalizes “The patient is in cardiac arrest. Begin CPR.”
<div style="border: 1px solid #0070C0; padding: 10px;"><p> Instructor’s Note</p><p>To promote critical thinking and/or vary the scenario during a subsequent round, you may alternatively prompt, “The patient is not breathing normally, but has a pulse.” Provider 1 should verbalize, “The patient is in respiratory arrest. Begin ventilations.”</p></div>	
Instructor Prompt: <i>Stop CPR.</i>	

Debriefing

Guide the debriefing activity using the Debriefing Tool (Appendix D).

Team Response Practice Scenario: BLS for Adults

Overview

- **Equipment:** Adult CPR manikin, AED trainer with adult pads, adult bag-valve-mask resuscitator (BVM), CPR board or bed with CPR function (if patient is in bed)
- **Number of Providers:** 3
- **Scenario Pathway:** Rapid assessment → Two-provider CPR → Arrival and setup of AED while CPR continues → Multiple-provider CPR

Setup


Choose one of the following scenarios and then read it aloud.

In-Hospital: *You and two other healthcare providers enter Mr. Lovejoy's room. He is lying face-up in bed. He appears unresponsive and cyanotic. There are no signs of trauma.*

Out-of-Hospital: *You are assisting Mr. Dodd with his range-of-motion exercises at the physical therapy center when he suddenly collapses. He appears unresponsive and cyanotic. There are no signs of trauma. Two other healthcare providers come over to help.*

Public Safety: *You and your team respond to a 9-1-1 call at the local shopping mall. You and another team member go to the scene with the jump kit, while a third team member gets the AED and stretcher. You notice a crowd of people and a man lying on the ground. He appears unresponsive and cyanotic. There are no signs of trauma.*


Part 1: Rapid Assessment

Provider 1	<ul style="list-style-type: none">■ Performs a visual survey, including checking for safety, gathering an initial impression and determining need for additional resources <div data-bbox="451 1304 1434 1434" style="border: 1px solid #0070C0; padding: 5px;"><p> Instructor's Note</p><p>Sequence of visual survey is not critical if all goals are accomplished and verbalized.</p></div> <ul style="list-style-type: none">■ Instructs Provider 3 to call for additional resources and get an AED (as appropriate)■ Checks for responsiveness using the shout-tap-shout sequence (shoulder)■ Opens the airway to a past-neutral position using the head-tilt/chin-lift technique■ Simultaneously checks for breathing and a carotid pulse for at least 5 seconds but no more than 10
-------------------	---

Part 2: CPR Begins

Instructor Prompt: <i>The patient is not breathing normally and does not have a pulse.</i>	
Provider 1	<ul style="list-style-type: none"> ■ Ensures the patient is on a firm, flat surface. If necessary, ensures the bed is at an appropriate working height with the side rails lowered ■ Exposes the patient's chest ■ Initiates 30 chest compressions: <ul style="list-style-type: none"> ○ Hand position: Centered on the lower half of the sternum ○ Depth: At least 2 inches ○ Number: 30 compressions ○ Rate: 100 to 120 per minute ○ Full chest recoil ○ Minimizes interruptions to less than 10 seconds
Provider 2	<ul style="list-style-type: none"> ■ Selects an appropriately sized BVM and assembles it ■ Seals the mask and simultaneously opens the airway to a past-neutral position ■ Maintains mask seal and open airway with one hand using the E-C hand position
Provider 2	<ul style="list-style-type: none"> ■ Delivers 2 ventilations using BVM: <ul style="list-style-type: none"> ○ Depresses the bag about halfway to deliver each ventilation that lasts about 1 second in duration and makes the chest begin to rise ○ Avoids excessive ventilations ○ Minimizes interruptions to less than 10 seconds
Provider 1 and Provider 2	<ul style="list-style-type: none"> ■ Perform 3 full cycles of CPR

Part 3: AED Arrives

Instructor Prompt (at the beginning of 3 rd cycle): <i>Provider 3 has arrived with the AED.</i>	
Provider 3	<ul style="list-style-type: none"> ■ Verbalizes they have the AED and additional resources are on the way ■ Turns on the AED and attaches the AED pads, while CPR continues <div style="border: 1px solid blue; padding: 10px; margin-top: 10px;"> <p> Instructor's Note</p> <p>To promote critical thinking and/or vary the scenario during a subsequent round, you may additionally prompt, "The patient's chest is excessively hairy." Before applying the AED pad, Provider 3 should verbalize, "Shaving the patient's chest."</p> <p>Or, you may prompt, "Low-battery warning light comes on." Provider 3 should identify the need for a replacement AED battery or new AED, then continue with AED use.</p> </div>
Provider 1 and Provider 2	<ul style="list-style-type: none"> ■ Continue CPR until the AED is ready to analyze the rhythm
Provider 1	<ul style="list-style-type: none"> ■ Anticipates compressor change: <ul style="list-style-type: none"> ○ Communicates with team members ○ Prepares for rotation upon AED analysis

Part 4: AED Analyzes and Shocks

AED Prompt: <i>Analyzing heart rhythm. Do not touch the patient.</i>	
Provider 3	<ul style="list-style-type: none">■ Verbalizes “clear” and ensures no one is touching the patient during analysis■ Moves to a hovering position. Hovers hands a few inches above chest during analysis to prepare for CPR
Provider 1	<ul style="list-style-type: none">■ Clears the patient and prepares to deliver ventilations
Provider 2	<ul style="list-style-type: none">■ Clears the patient and prepares to manage the airway and operate the AED
AED Prompt: <i>Shock advised. Don't touch patient. Press flashing shock button.</i>	
Provider 2	<ul style="list-style-type: none">■ Verbalizes “clear” and ensures no one is touching the patient during analysis■ Immediately delivers shock

Part 5: CPR Resumes

AED Prompt: <i>Shock delivered. Begin CPR.</i>	
Provider 3	<ul style="list-style-type: none">■ Immediately following shock, resumes CPR starting with 30 compressions. Minimizes interruptions to less than 10 seconds once a shock is advised
Provider 2	<ul style="list-style-type: none">■ Seals the mask with both hands using the E-C hand position and simultaneously opens the airway to a past-neutral position
Provider 1	<ul style="list-style-type: none">■ Delivers 2 ventilations using a BVM:<ul style="list-style-type: none">○ Depresses the bag about halfway to deliver each ventilation that lasts about 1 second in duration and makes the chest begin to rise○ Avoids excessive ventilations○ Minimizes interruptions to less than 10 seconds
Instructor Prompt (after 2nd cycle): <i>Stop CPR.</i>	

Debriefing

Guide the debriefing activity using the Debriefing Tool (Appendix D).

Team Response Practice Scenario: BLS for Children

Overview

- **Equipment:** Child CPR manikin (or adult), AED trainer with pediatric pads, pediatric bag-valve-mask resuscitator (BVM), CPR board or bed with CPR function (if patient is in bed)
- **Number of Providers:** 3
- **Scenario Pathway:** Rapid assessment → Delivery of ventilations for respiratory arrest → Breathing and pulse check → Two-provider CPR → Breathing and pulse check → Arrival and setup of AED while CPR continues

Setup

Choose one of the following scenarios and then read it aloud.

In-Hospital: *You are making rounds on a pediatric medical-surgical unit when you hear a man crying out for help. You and two other healthcare providers enter the patient's room and notice a 5-year-old girl who appears unresponsive and cyanotic. There are no signs of trauma.*

Out-of-Hospital: *While waiting for a post-operative follow-up appointment with the pediatric cardiac surgeon, a 5-year-old girl collapses in the waiting room. Her father cries out for help. You and two other healthcare providers are nearby at the time of the event. The child appears unresponsive and cyanotic. There are no signs of trauma.*

Public Safety: *You and your team respond to a 9-1-1 call at a local park. A 5-year-old girl has collapsed on the playground. As you approach the scene, you hear a man crying out for help and notice a child lying face-up on the ground. The child appears unresponsive and cyanotic. There are no signs of trauma.*



Instructor's Note

You or another participant may serve as the patient's parent.

Part 1: Rapid Assessment

Provider 1

- Performs a visual survey, including checking for safety, gathering an initial impression and determining need for additional resources



Instructor's Note

Sequence of visual survey is not critical if all goals are accomplished and verbalized.

- Obtains consent to provide care
- Instructs **Provider 3** to call for additional resources and get an AED
- Checks for responsiveness using the shout-tap-shout sequence (shoulder)
- Opens the airway to a slightly past-neutral position using the head-tilt/chin-lift technique
- Simultaneously checks for breathing and a carotid pulse for at least 5 seconds but no more than 10

Part 2: Ventilations Begin

Instructor Prompt: *The child is not breathing normally, but has a pulse (64 bpm).*

Provider 2	<ul style="list-style-type: none"> ■ Selects an appropriately sized BVM and assembles it ■ Seals the mask and simultaneously opens the airway to a slightly past-neutral position ■ Maintains mask seal and open airway with one hand using the E-C hand position
Provider 1	<ul style="list-style-type: none"> ■ Delivers ventilations using BVM: <ul style="list-style-type: none"> ○ Delivers 1 ventilation every 3 to 5 seconds ○ Depresses the bag about halfway to deliver each ventilation that lasts about 1 second in duration and makes the chest begin to rise

Part 3: CPR Begins

Instructor Prompt (after the team has delivered 8 to 10 ventilations): *Two minutes have now passed.*

Provider 1	<ul style="list-style-type: none"> ■ Simultaneously checks for breathing and a carotid pulse for at least 5 seconds but no more than 10
<p>Instructor Prompt: <i>The patient is not breathing normally, but she has a slow, weak pulse (50 bpm) and shows signs of poor perfusion.</i></p>	
Provider 1	<ul style="list-style-type: none"> ■ Ensures the patient is on a firm, flat surface. If necessary, ensures the bed is at an appropriate working height with the side rails lowered ■ Exposes the child's chest ■ Initiates 15 chest compressions: <ul style="list-style-type: none"> ○ Hand position: Centered on the lower half of the sternum ○ Depth: About 2 inches ○ Number: 15 compressions ○ Rate: 100 to 120 per minute ○ Full chest recoil ○ Minimizes interruptions to less than 10 seconds
Provider 2	<ul style="list-style-type: none"> ■ Seals the mask with one hand using the E-C hand position and simultaneously opens the airway to a slightly past-neutral position ■ Delivers 2 ventilations using BVM: <ul style="list-style-type: none"> ○ Depresses the bag about halfway to deliver each ventilation that lasts about 1 second in duration and makes the chest begin to rise ○ Avoids excessive ventilations ○ Minimizes interruptions to less than 10 seconds
Provider 1 and Provider 2	<ul style="list-style-type: none"> ■ Perform 3 full cycles of CPR

Part 4: AED Arrives

Instructor Prompt: *Another 2 minutes have passed and now the child is not breathing normally and does not have a pulse. Provider 3 has arrived with the AED.*

Provider 3

- Verbalizes they have the AED and additional resources are on the way
- Turns on the AED and attaches the AED pads, while CPR continues

**Provider 1 and
Provider 2**

- Continue CPR until the AED is ready to analyze the rhythm

Provider 1

- Anticipates compressor change:
 - Communicates with **team members**
 - Prepares for rotation upon AED analysis

Instructor Prompt (after AED pads are applied): *Stop CPR.*

Debriefing

Guide the debriefing activity using the Debriefing Tool (Appendix D).

Team Response Practice Scenario: BLS for Infants

Overview

- **Equipment:** Infant CPR manikin, AED trainer with pediatric pads, infant pocket mask, infant bag-valve-mask resuscitator (BVM)
- **Number of Providers:** 3
- **Scenario Pathway:** Rapid assessment → Two-provider CPR → Arrival and setup of AED while CPR continues → Analysis → Shock advised → Switch positions → Multiple-provider CPR

Setup

Choose one of the following scenarios and then read it aloud.

In-Hospital: *The parent of a 6-month-old on the pediatric floor screams out from the patient's room for help. As you enter the room, the parent is holding their baby and tells you that the baby isn't moving and doesn't appear to be breathing. Two other providers enter the room.*

Out-of-Hospital: *A parent with a 6-month-old infant in a stroller is waiting at the pharmacy. While reaching down to put away a toy, the parent notices that the infant is not moving and doesn't appear to be breathing. The parent picks up the infant, screams out for help. You and two other pharmacists respond.*

Public Safety: *You and your team arrive at the home of a 6-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 and a team member enter the house with the jump kit, while a third team member gets the AED and stretcher. The parent is holding the infant when you enter the home.*



Instructor's Note

You or another participant may serve as the patient's parent. During the practice scenario, the parent may cry and hover.

Part 1: Rapid Assessment

Provider 1

- Performs a visual survey, including checking for safety, gathering an initial impression and determining need for additional resources



Instructor's Note

Sequence of visual survey is not critical if all goals are accomplished and verbalized.

- Instructs **Provider 3** to call for additional resources and get an AED (as appropriate)
- Obtains consent to provide care
- Checks for responsiveness using the shout-tap-shout sequence (bottom of foot)
- Opens the airway to a neutral position using the head-tilt/chin-lift technique
- Simultaneously checks for breathing and a brachial pulse for at least 5 seconds but no more than 10

Part 2: CPR Begins

Instructor Prompt: <i>The infant is not breathing normally and does not have a pulse.</i>	
Provider 1	<ul style="list-style-type: none"> ■ Ensures the infant is on a firm, flat surface. If necessary, ensures the bed is at an appropriate working height with the side rails lowered ■ Exposes the infant's chest ■ Initiates 15 chest compressions using the encircling-thumbs technique: <ul style="list-style-type: none"> ○ Hand position: Two thumbs centered on the lower half of the sternum just below the nipple line ○ Depth: About 1½ inches ○ Number: 15 compressions ○ Rate: 100 to 120 per minute ○ Full chest recoil ○ Minimizes interruptions to less than 10 seconds
Provider 2	<ul style="list-style-type: none"> ■ Selects an appropriately sized BVM and assembles it ■ Seals the mask and simultaneously opens the airway to a neutral position ■ Maintains mask seal and open airway with one hand using the E-C hand position
Provider 2	<ul style="list-style-type: none"> ■ Delivers 2 ventilations using a BVM: <ul style="list-style-type: none"> ○ Depresses the bag about halfway to deliver each ventilation that lasts about 1 second in duration and makes the chest begin to rise ○ Avoids excessive ventilation ○ Minimizes interruptions to less than 10 seconds
Provider 1 and Provider 2	<ul style="list-style-type: none"> ■ Perform 3 full cycles of CPR

Part 3: AED Arrives



Instructor's Note

To promote critical thinking and/or vary the scenarios during a subsequent round, you may prompt the parent to scream louder and attempt to pick up the infant when they see the AED. Provider 2 or 3 should communicate with and comfort the parent, while holding them back.

Instructor Prompt (at the beginning of 3 rd cycle): <i>Provider 3 has arrived with the AED.</i>	
Provider 3	<ul style="list-style-type: none"> ■ Verbalizes they have the AED and that help is on the way ■ Turns on the AED and attaches the AED pads, while CPR continues
Provider 1 and 2	<ul style="list-style-type: none"> ■ Continue CPR until the AED is ready to analyze the rhythm
Provider 1	<ul style="list-style-type: none"> ■ Anticipates compressor change: <ul style="list-style-type: none"> ○ Communicates with team members ○ Prepares for rotation upon AED analysis

Part 4: AED Analyzes and Shocks

AED Prompt: <i>Analyzing heart rhythm. Do not touch the patient.</i>	
Provider 3	<ul style="list-style-type: none"> ■ Verbalizes “clear” and ensures no one is touching the infant during analysis ■ Moves to a hovering position for the encircling-thumbs technique. Hovers thumbs a few inches above chest during analysis to prepare for CPR
Provider 1	<ul style="list-style-type: none"> ■ Clears the patient and prepares to deliver ventilations
Provider 2	<ul style="list-style-type: none"> ■ Clears the patient and prepares to manage the airway and operate the AED
AED Prompt: <i>Shock advised. Don't touch patient. Press flashing shock button.</i>	
Provider 2	<ul style="list-style-type: none"> ■ Verbalizes “clear” and ensures no one is touching the infant during analysis ■ Immediately delivers shock

Part 5: CPR Resumes

AED Prompt: <i>Shock delivered. Begin CPR.</i>	
Provider 3	<ul style="list-style-type: none"> ■ Immediately following shock, resumes CPR starting with 15 compressions. Minimizes interruptions to no more than 10 seconds once a shock is advised
Provider 2	<ul style="list-style-type: none"> ■ Seals the mask with both hands using the E-C hand position and simultaneously opens the airway to a neutral position
Provider 1	<ul style="list-style-type: none"> ■ Delivers 2 ventilations using a BVM: <ul style="list-style-type: none"> ○ Depresses the bag about halfway to deliver each ventilation that lasts about 1 second in duration and makes the chest begin to rise ○ Avoids excessive ventilation ○ Minimizes interruptions to less than 10 seconds
Instructor Prompt (after 2nd cycle): <i>Stop CPR.</i>	

Debriefing

Guide the debriefing activity using the Debriefing Tool (Appendix D).

Debriefing Tool

Review

- Set the stage for a positive debriefing experience by reminding team members that the purpose of the debriefing session is not to focus on individual errors or shortcomings or to cast blame. Rather, the focus should be on identifying what the team did well, identifying opportunities for improvement and understanding the factors that led to the decisions that were made.
- Ask team members, “How did you feel while you were participating in the scenario?” Acknowledge team members’ responses.
- Review the emergency scenario and the interventions that were used.

Analyze

- Ask the Team Leader to provide the objective data that was collected during the scenario.
- Ask team members, “What can this objective data tell us about the team’s performance? What went well? Are there aspects that could be improved upon next time?”
- Provide feedback based on the team members’ responses and your observations.

Reflect

- Have team members reflect on their performance by asking questions such as:
 - “Did team members communicate clearly with each other? If not, what could team members have done differently to improve communication?”
 - “Did team members demonstrate understanding of their roles and responsibilities?”
 - “Did team members feel empowered to speak up if a problem arose, or to correct a potential error? Did team members ask for and/or offer assistance as needed?”
 - “Is there anything team members would do differently to provide care for this patient? If so, what, and why? What factors contributed to the decisions that were made at the time?”
- Provide feedback based on the team members’ responses and your observations.

Summarize

- Have team members recap their main takeaway points from the scenario.
- Ask team members, “Do you see any opportunities for improving the team’s performance? If so, what changes could you make (at the individual, team or system level) to facilitate improvement?”
- Provide feedback based on the team members’ responses and your observations.

Team Response Testing Scenarios

BLS for Adults

BLS for Infants

BLS for Children

Team Response Testing Scenario: BLS for Adults

Provider 1: _____

Provider 2: _____

Provider 3: _____

Setup

Choose one of the following scenarios and then read it aloud.

- **In-Hospital:** *You are in the step-down unit. As you approach your patient, Mrs. Hoover, in her room, you notice she is not moving or reacting to your knock or greeting. She looks ashen. There are no signs of trauma.*
- **Out-of-Hospital:** *You are working at the pharmacy counter of a drug store and you notice a customer collapse to the ground. You approach the person while your colleague is nearby ready to help. They are not moving and do not appear to be breathing. There are no signs of trauma.*
- **Public Safety:** *You are called to the gym where an individual has collapsed on the racquetball court. You and your partner arrive on the scene and you notice the individual is lying motionless on the ground. There are no signs of trauma.*

Skill Competency Checklist

*Denotes Critical Action

Action	Competencies	Provider		
		1	2	3
1 Conducts visual survey: <ul style="list-style-type: none"> ■ Checks surroundings for safety* ■ Gathers an initial impression, including whether there is severe, life-threatening bleeding* ■ Determines the need for additional resources 	<ul style="list-style-type: none"> ■ Sequence is not critical if all goals are accomplished and verbalized (PPE may be worn or verbalized) ■ Resources may include EMS, the rapid response team or the resuscitation team, as appropriate, and call for an AED 			
2 Checks for responsiveness: <ul style="list-style-type: none"> ■ Uses the shout-tap-shout sequence* 	<ul style="list-style-type: none"> ■ Shouts "Are you OK?" (or a reasonable facsimile) to elicit a verbal stimuli ■ Taps the patient's shoulder to elicit painful stimuli and shouts again (shout-tap-shout) 			

Action	Competencies	Provider		
		1	2	3
3 Checks for breathing and a pulse: <ul style="list-style-type: none"> Opens airway Checks breathing and carotid pulse simultaneously for at least 5 seconds but no more than 10 * 	<ul style="list-style-type: none"> Airway: Opens using head-tilt/chin-lift technique to a past-neutral position Breathing/pulse check: Checks for breathing and carotid pulse simultaneously for at least 5 seconds but no more than 10 			
4 Chest compressions: <ul style="list-style-type: none"> Exposes chest Initiates 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* 	<ul style="list-style-type: none"> Hand position: Centered on the lower half of the sternum Depth: At least 2 inches Number: 30 compressions Rate: 100 to 120 per minute (15 to 18 seconds) Full chest recoil 			
5 Ventilations: <ul style="list-style-type: none"> Opens the airway* Gives 2 ventilations using a pocket mask* 	<ul style="list-style-type: none"> Airway: Head-tilt/chin-lift technique to a past-neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Minimizes interruptions to less than 10 seconds 			
6 Continues CPR: <ul style="list-style-type: none"> Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* Opens airway Gives 2 ventilations using a pocket mask 	<ul style="list-style-type: none"> Hand position: Centered on the lower half of the sternum Depth: At least 2 inches Number: 30 compressions Rate: 100 to 120 per minute (15 to 18 seconds) Full chest recoil 			
7 Arrival of the AED and additional provider(s) (arrive at 20th compression in Step 6): <ul style="list-style-type: none"> Initial provider continues care* Communicates with additional provider(s) Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Continues care: Maintains uninterrupted CPR Communicates relevant patient information including patient age if known Verbalizes compression count to coordinate ventilations with additional provider(s) Verbalizes coordination plan to switch compressors upon AED analysis 			

Action	Competencies	Provider		
		1	2	3

 **Instructor's Note**


When assessing an individual participant, an untrained responder delivers the AED. Provider 1 should move directly to Step 8 and apply the AED and provide care based on no additional provider being present.

8	<p>AED applied:</p> <ul style="list-style-type: none"> ■ Turns on machine ■ Attaches AED pads* ■ Continues compressions 	<ul style="list-style-type: none"> ■ AED on: Activates within 15 seconds of arrival ■ Pads: Uses anterior/lateral pad placement: 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. Or uses anterior/posterior pad placement, based on manufacturer recommendation. 			
9	<p>AED analysis and rotation:</p> <ul style="list-style-type: none"> ■ Ensures all providers are clear while AED analyzes and prepares for shock* ■ Says “Clear”* ■ Rotates providers during analysis to prevent fatigue ■ Prepares BVM 	<ul style="list-style-type: none"> ■ 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 			
10	<p>Shock advised:</p> <ul style="list-style-type: none"> ■ Says “Clear”* ■ Presses shock button to deliver shock* 	<ul style="list-style-type: none"> ■ Clear: Ensures no one is touching the patient during analysis ■ Delivers shock: Depresses shock button within 10 seconds 			

 **Instructor's Note**

STOP here when assessing an individual participant and move to Step 18.

11	<p>Resumes CPR:</p> <ul style="list-style-type: none"> ■ Continues with 5 cycles of CPR (30 compressions and 2 ventilations)* ■ Performs chest compressions (Provider 2) ■ Manages airway and mask seal (Provider 1) ■ Provides ventilations using the BVM (Provider 1) ■ Continues until AED prompts 	<ul style="list-style-type: none"> ■ 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 the sternum ■ Depth: At least 2 inches ■ Number: 30 compressions ■ Rate: 100 to 120 per minute (15 to 18 seconds) ■ Full chest recoil 			
----	---	---	--	--	--

Action	Competencies	Provider		
		1	2	3
12 Ventilations with a BVM: <ul style="list-style-type: none"> Positions self behind patient's head Uses E-C hand position Seals the mask and simultaneously opens the airway to a past-neutral position Compresses BVM to give 2 ventilations 	<ul style="list-style-type: none"> Seal: Uses the E-C hand position Airway: Maintains mask seal and open airway in a past-neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Minimizes interruptions to less than 10 seconds Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (avoiding overinflation) 			
13 Anticipates compressor change: <ul style="list-style-type: none"> Communicates with additional providers Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Verbalizes coordination plan to switch compressors prior to AED analysis 			
14 AED analyzes: <ul style="list-style-type: none"> Says "Clear"* No shock advised 	<ul style="list-style-type: none"> 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 			
<div style="border: 1px solid #0070C0; padding: 10px;">  Instructor's Note STOP here when assessing two participants and move to Step 18. </div>				
15 Resumes CPR: <ul style="list-style-type: none"> Continues with 5 cycles of CPR (30 compressions and 2 ventilations)* Performs chest compressions (Provider 3) Manages airway and mask seal (Provider 1) Provides ventilations using the BVM (Provider 2) Continues until AED prompts 	<ul style="list-style-type: none"> 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 the sternum Depth: At least 2 inches Number: 30 compressions Rate: 100 to 120 per minute (15 to 18 seconds) Full chest recoil 			

Action	Competencies	Provider		
		1	2	3
16 Anticipates compressor change: <ul style="list-style-type: none"> Communicates with additional providers Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Verbalizes coordination plan to switch compressors prior to AED analysis 			
17 AED analyzes and rotation: <ul style="list-style-type: none"> Says "Clear"* No shock advised 	<ul style="list-style-type: none"> 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 			
18 Spontaneous patient movement: <ul style="list-style-type: none"> Checks for breathing and pulse 	<ul style="list-style-type: none"> Pulse check: Opens the airway and checks for breathing and carotid or femoral pulse simultaneously for at least 5 seconds but no more than 10 			

Overall Competencies		Provider		
		1	2	3
Leadership and Communication <ul style="list-style-type: none"> Communication: Accurately and effectively communicated with team members Coordination: Clearly and decisively directed providers through rotations of roles on AED analysis Feedback: Provided coaching and feedback to ensure effective performance of providers' skills 				
Chest Compressions <ul style="list-style-type: none"> Hand Position: Hands centered on the lower half of the sternum Depth: At least 2 inches Rate: 100 to 120 per minute (15 to 18 seconds for 30 compressions) Full Chest Recoil 				
Ventilations <ul style="list-style-type: none"> Length: Each ventilation should be 1 second in duration Visual: Chest should rise Time: 2 ventilations; minimizes interruptions to less than 10 seconds 				

P: Pass; F: Fail

Instructor Name: _____

Instructor Signature: _____ Date: _____

Team Response Testing Scenario: BLS for Infants

Provider 1: _____

Provider 2: _____

Provider 3: _____

Setup

Choose one of the following scenarios and then read it aloud.

- **In-Hospital:** You are transferring an infant to the pediatric unit. While in the elevator, you notice that the infant is no longer moving their arms or legs and does not appear to be breathing. There are no signs of trauma.
- **Out-of-Hospital:** You are working at a pediatrician's office and hear a mother scream that her baby is not breathing. You approach the mother and her 6-month-old infant while your colleague is nearby ready to help. The infant is not moving and ashen. There are no signs of trauma.
- **Public Safety:** You and your partner are called to the home of an ill child with a change in behavior. On arrival, you find a 6-month-old infant in his dad's arms. The dad states that the child was crying until about a minute ago. You notice the infant is not breathing. There are no signs of trauma.

Skill Competency Checklist

*Denotes Critical Action

Action	Competencies	Provider		
		1	2	3
1 Conducts visual survey: <ul style="list-style-type: none"> ■ Checks surroundings for safety* ■ Gathers an initial impression, including whether there is severe, life-threatening bleeding* ■ Determines the need for additional resources ■ Obtains consent 	<ul style="list-style-type: none"> ■ Sequence is not critical if all goals are accomplished and verbalized (PPE may be worn or verbalized) ■ Resources may include EMS, the rapid response team or the resuscitation team, as appropriate, and call for an AED ■ Consent: States name, background, what they plan to do to help and asks for permission to treat 			
2 Checks for responsiveness: <ul style="list-style-type: none"> ■ Uses the shout-tap-shout sequence* 	<ul style="list-style-type: none"> ■ Shouts "Are you OK?" (or a reasonable facsimile) to elicit a verbal stimuli ■ Taps the bottom of the infant's foot to elicit painful stimuli and shouts again (shout-tap-shout) 			

Action	Competencies	Provider		
		1	2	3
3 Checks for breathing and a pulse: <ul style="list-style-type: none"> Opens airway Checks breathing and brachial pulse simultaneously for at least 5 seconds but no more than 10* 	<ul style="list-style-type: none"> Airway: Opens using head-tilt/chin-lift technique to a neutral position Breathing/pulse check: Checks for breathing and brachial pulse simultaneously for at least 5 seconds but no more than 10 			
4 Chest compressions: <ul style="list-style-type: none"> Exposes chest Initiates 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* 	<ul style="list-style-type: none"> Hand position: Two fingers centered on the lower half of the sternum just below nipple line Depth: About 1 ½ inches Number: 30 compressions Rate: 100 to 120 per minute (15 to 18 seconds) Full chest recoil 			
5 Ventilations: <ul style="list-style-type: none"> Opens the airway* Gives 2 ventilations using a pocket mask* 	<ul style="list-style-type: none"> Airway: Head-tilt/chin-lift technique to a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Minimizes interruptions to less than 10 seconds 			
6 Continues CPR: <ul style="list-style-type: none"> Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* Opens airway Gives 2 ventilations using a pocket mask 	<ul style="list-style-type: none"> Hand position: Two fingers centered on the lower half of the sternum just below the nipple line Depth: About 1 ½ inches Number: 30 compressions Rate: 100 to 120 per minute (15 to 18 seconds) Full chest recoil 			
7 Arrival of the AED and additional provider(s) (arrive at 20th compression in Step 6): <ul style="list-style-type: none"> Initial provider continues care* Communicates with additional provider(s) Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Continues care: Maintains uninterrupted CPR Communicates relevant patient information including patient age if known Verbalizes compression count to coordinate ventilations with additional provider(s) Verbalizes coordination plan to switch compressors upon AED analysis 			

Action	Competencies	Provider		
		1	2	3

 **Instructor's Note**


When assessing an individual participant, an untrained provider delivers the AED. The initial provider should move directly to Step 8 and apply the AED and provide care based on no additional provider being present.

8	AED applied: <ul style="list-style-type: none"> Turns on machine Attaches AED pads* Continues compressions 	<ul style="list-style-type: none"> AED on: Activates within 15 seconds of arrival Pads: Pad 1—center of the anterior chest; Pad 2—on infant's back between scapulae 			
9	AED analysis and rotation: <ul style="list-style-type: none"> Ensures all providers are clear while AED analyzes and prepares for shock* Says "Clear"* Rotates providers during analysis to prevent fatigue Prepares BVM 	<ul style="list-style-type: none"> Clear: Ensures no one is touching the patient during analysis Rotation: Switches compressor during analysis, moves to head and foot position for encircling thumbs technique Hover: Hovers hands (new compressor) a few inches above chest during analysis to prepare for CPR 			
10	Shock advised: <ul style="list-style-type: none"> Says "Clear"* Presses shock button to deliver shock* 	<ul style="list-style-type: none"> Clear: Ensures no one is touching the patient during analysis Delivers shock: Depresses shock button within 10 seconds 			

 **Instructor's Note**

STOP here when assessing an individual participant and move to Step 18.

11	Resumes CPR: <ul style="list-style-type: none"> Continues with 10 cycles of CPR (15 compressions and 2 ventilations)* Performs chest compressions (Provider 2) Manages airway and mask seal (Provider 1) Provides ventilations using the BVM (Provider 1) Continues until AED prompts 	<ul style="list-style-type: none"> Resumes CPR: Immediately following shock, CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Two thumbs centered on the lower half of the sternum just below the nipple line Depth: About 1 1/2 inches Number: 15 compressions Rate: 100 to 120 per minute (7 to 9 seconds) Full chest recoil 			
----	---	--	--	--	--

Action	Competencies	Provider		
		1	2	3
12 Ventilations with a BVM: <ul style="list-style-type: none"> Positions self behind patient's head Uses E-C hand position Seals the mask and simultaneously opens the airway to a neutral position Compresses BVM to give 2 ventilations 	<ul style="list-style-type: none"> Seal: Uses the E-C hand position Airway: Maintains mask seal and open airway in a neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Minimizes interruptions to less than 10 seconds Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (avoiding overinflation) 			
13 Anticipates compressor change: <ul style="list-style-type: none"> Communicates with additional providers Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Verbalizes coordination plan to switch compressors prior to AED analysis 			
14 AED analyzes: <ul style="list-style-type: none"> Says "Clear"* No shock advised 	<ul style="list-style-type: none"> 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 			
<div style="border: 1px solid #0070C0; padding: 10px;">  Instructor's Note STOP here when assessing two participants and move to Step 18. </div>				
15 Resumes CPR: <ul style="list-style-type: none"> Continues with 10 cycles of CPR (15 compressions and 2 ventilations)* Performs chest compressions (Provider 3) Manages airway and mask seal (Provider 1) Provides ventilations using the BVM (Provider 2) Continues until AED prompts 	<ul style="list-style-type: none"> Resumes CPR: Immediately following shock, CPR resumed starting with compressions until prompted by the AED for analysis Hand position: Two thumbs centered on the lower half of the sternum just below the nipple line Depth: About 1 1/2 inches Number: 15 compressions Rate: 100 to 120 per minute (7 to 9 seconds) Full chest recoil 			

Action	Competencies	Provider			
		1	2	3	
16	Anticipates compressor change: <ul style="list-style-type: none"> Communicates with additional providers Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Verbalizes coordination plan to switch compressors prior to AED analysis 			
17	AED analyzes and rotation: <ul style="list-style-type: none"> Says "Clear"* No shock advised 	<ul style="list-style-type: none"> 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 			
18	Spontaneous patient movement: <ul style="list-style-type: none"> Checks for breathing and pulse 	<ul style="list-style-type: none"> Pulse check: Opens the airway and checks for breathing and brachial or femoral pulse simultaneously for at least 5 seconds but no more than 10 			

Overall Competencies		Provider		
		1	2	3
Leadership and Communication	<ul style="list-style-type: none"> Communication: Accurately and effectively communicated with team members. Coordination: Clearly and decisively directed providers through rotations of roles on AED analysis. Feedback: Provided coaching and feedback to ensure effective performance of providers' skills. 			
Chest Compressions	<ul style="list-style-type: none"> Hand Position: Fingers/thumbs centered on the lower half of the sternum just below the nipple line Depth: About 1 ½ inches Full chest recoil Rate: 100 to 120 per minute (15 to 18 seconds for 30 compressions; 7 to 9 seconds for 15 compressions) 			
Ventilations	<ul style="list-style-type: none"> Length: Each ventilation should be 1 second in duration Visual: Chest should rise Time: 2 ventilations; minimizes interruptions to less than 10 seconds 			

P: Pass; F: Fail

Instructor Name: _____

Instructor Signature: _____ Date: _____

Team Response Testing Scenario: BLS for Children

Provider 1: _____

Provider 2: _____

Provider 3: _____

Setup

Choose one of the following scenarios and then read it aloud.

- **In-Hospital:** *You are working in the emergency department. A man runs in holding a small child shouting, "Help. My grandson stopped breathing." The child is not moving and does not appear to be breathing. There are no signs of trauma.*
- **Out-of-Hospital:** *You are working at an outpatient clinic when someone pulls into the parking lot honking the horn. A distressed young woman gets out of the car shouting, "My daughter is not moving." You see a small child in the back of the car. The child is motionless and blue around the face. There are no signs of trauma.*
- **Public Safety:** *You and your partner are called to a local baseball complex. As you arrive on scene, you notice a crowd of people gathering. You find a 7-year-old boy on the ground. His father is hovering over him. He is not moving and appears cyanotic. There are no signs of trauma.*

Skill Competency Checklist


*Denotes Critical Action


Action	Competencies	Provider		
		1	2	3
1 Conducts visual survey: <ul style="list-style-type: none"> ■ Checks surroundings for safety* ■ Gathers an initial impression, including whether there is severe, life-threatening bleeding* ■ Determines the need for additional resources ■ Obtains consent 	<ul style="list-style-type: none"> ■ Sequence is not critical if all goals are accomplished and verbalized (PPE may be worn or verbalized) ■ Resources may include EMS, the rapid response team or the resuscitation team, as appropriate, and call for an AED ■ Consent: States name, background, what they plan to do to help and asks for permission to treat 			
2 Checks for responsiveness: <ul style="list-style-type: none"> ■ Uses the shout-tap-shout sequence* 	<ul style="list-style-type: none"> ■ Shouts "Are you OK?" (or a reasonable facsimile) to elicit a verbal stimuli ■ Taps the child's shoulder to elicit painful stimuli and shouts again (shout-tap-shout) 			

Action	Competencies	Provider		
		1	2	3
<p>3 Checks for breathing and a pulse:</p> <ul style="list-style-type: none"> Opens airway Checks breathing and carotid pulse simultaneously for at least 5 seconds but no more than 10 * 	<ul style="list-style-type: none"> Airway: Opens using head-tilt/chin-lift technique to a slightly past-neutral position Breathing/pulse check: Checks for breathing and carotid pulse simultaneously for at least 5 seconds but no more than 10 			
<p>4 Chest compressions:</p> <ul style="list-style-type: none"> Exposes chest Initiates 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* 	<ul style="list-style-type: none"> Hand position: Centered on the lower half of the sternum Depth: About 2 inches Number: 30 compressions Rate: 100 to 120 per minute (15 to 18 seconds) Full chest recoil 			
<p>5 Ventilations:</p> <ul style="list-style-type: none"> Opens the airway* Gives 2 ventilations using a pocket mask* 	<ul style="list-style-type: none"> Airway: Head-tilt/chin-lift technique to a slightly past-neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Minimizes interruptions to less than 10 seconds 			
<p>6 Continues CPR:</p> <ul style="list-style-type: none"> Gives 30 chest compressions using correct hand placement at the proper rate and depth, allowing for full chest recoil* Opens airway* Gives 2 ventilations using a pocket mask* 	<ul style="list-style-type: none"> Hand position: Centered on the lower half of the sternum Depth: About 2 inches Number: 30 compressions Rate: 100 to 120 per minute (15 to 18 seconds) Full chest recoil 			
<p>7 Arrival of the AED and additional provider(s) (arrive at 20th compression in Step 6):</p> <ul style="list-style-type: none"> Initial provider continues care* Communicates with additional provider(s) Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Continues care: Maintains uninterrupted CPR Communicates relevant patient information including patient age if known Verbalizes compression count to coordinate ventilations with additional provider(s) Verbalizes coordination plan to switch compressors upon AED analysis 			

 **Instructor's Note**

When assessing an individual participant, an untrained provider delivers the AED. The initial provider should move directly to Step 8 and apply the AED and provide care based on no additional provider being present.

Action	Competencies	Provider		
		1	2	3
8 AED applied: <ul style="list-style-type: none"> Turns on machine Attaches AED pads* Continues compressions 	<ul style="list-style-type: none"> AED on: Activates within 15 seconds of arrival Pads: Uses anterior/lateral pad placement: 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. Or uses anterior/posterior pad placement, if the pads risk touch or recommended by the manufacturer. 			
9 AED analysis and rotation: <ul style="list-style-type: none"> Ensures all providers are clear while AED analyzes and prepares for shock* Says “Clear”* Rotates providers during analysis to prevent fatigue Prepares BVM 	<ul style="list-style-type: none"> 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 			
10 Shock advised: <ul style="list-style-type: none"> Says “Clear”* Presses shock button to deliver shock* 	<ul style="list-style-type: none"> Clear: Ensures no one is touching the patient during analysis Delivers shock: Depresses shock button within 10 seconds 			
<div style="border: 1px solid #0070C0; padding: 10px;">  Instructor's Note STOP here when assessing an individual participant and move to Step 18. </div>				
11 Resumes CPR: <ul style="list-style-type: none"> Continues with 10 cycles of CPR (15 compressions and 2 ventilations)* Performs chest compressions (Provider 2) Manages airway and mask seal (Provider 1) Provides ventilations using the BVM (Provider 1) Continues until AED prompts 	<ul style="list-style-type: none"> 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 the sternum Depth: About 2 inches Number: 15 compressions Rate: 100 to 120 per minute (7 to 9 seconds) Full chest recoil 			

Action	Competencies	Provider		
		1	2	3
12 Ventilations with a BVM: <ul style="list-style-type: none"> Positions self behind patient's head Uses E-C hand position Seals the mask and simultaneously opens the airway to a slightly past-neutral position Compresses BVM to give 2 ventilations 	<ul style="list-style-type: none"> Seal: Uses the E-C hand position Airway: Maintains mask seal and open airway in a slightly past-neutral position Ventilations (2): 1 second in duration Ventilations (2): Visible chest rise Ventilations (2): Minimizes interruptions to less than 10 seconds Ventilations (2): Bag squeezed enough to make chest rise; does not fully squeeze bag (avoiding overinflation) 			
13 Anticipates compressor change: <ul style="list-style-type: none"> Communicates with additional providers Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Verbalizes coordination plan to switch compressors prior to AED analysis 			
14 AED analyzes: <ul style="list-style-type: none"> Says "Clear"* No shock advised 	<ul style="list-style-type: none"> 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 			
<div style="border: 1px solid blue; padding: 10px;">  Instructor's Note STOP here when assessing two participants and move to Step 18. </div>				
15 Resumes CPR: <ul style="list-style-type: none"> Continues with 10 cycles of CPR (15 compressions and 2 ventilations)* Performs chest compressions (Provider 3) Manages airway and mask seal (Provider 1) Provides ventilations using the BVM (Provider 2) Continues until AED prompts 	<ul style="list-style-type: none"> 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 the sternum Depth: About 2 inches Number: 15 compressions Rate: 100 to 120 per minute (7 to 9 seconds) Full chest recoil 			

Action	Competencies	Provider			
		1	2	3	
16	Anticipates compressor change: <ul style="list-style-type: none"> Communicates with additional providers Prepares for rotation upon AED analysis 	<ul style="list-style-type: none"> Verbalizes coordination plan to switch compressors prior to AED analysis 			
17	AED analyzes and rotation: <ul style="list-style-type: none"> Says "Clear"* No shock advised 	<ul style="list-style-type: none"> 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 			
18	Spontaneous patient movement: <ul style="list-style-type: none"> Checks for breathing and pulse 	<ul style="list-style-type: none"> Pulse check: Opens the airway and checks for breathing and carotid or femoral pulse simultaneously for at least 5 but no more than 10 seconds 			

Overall Competencies		Provider		
		1	2	3
Leadership and Communication	<ul style="list-style-type: none"> Communication: Accurately and effectively communicated with team members. Coordination: Clearly and decisively directed providers through rotations of roles on AED analysis. Feedback: Provided coaching and feedback to ensure effective performance of providers' skills. 			
Chest Compressions	<ul style="list-style-type: none"> Hand Position: Centered on the lower half of the sternum Depth: About 2 inches Full Chest Recoil Rate: 100 to 120 per minute (15 to 18 seconds for 30 compressions; 7 to 9 seconds for 15 compressions) 			
Ventilations	<ul style="list-style-type: none"> Length: Each ventilation should be 1 second in duration Visual: Chest should rise Time: 2 ventilations; minimizes interruptions to less than 10 seconds 			

P: Pass; F: Fail

Instructor Name: _____

Instructor Signature: _____ Date: _____

Participant Progress Log

Name of Participant:	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
	Skills									
Chest Compressions										
Pocket Mask Use										
Single-Provider CPR for Adults										
BVM Use										
Multiple-Provider CPR for Adults										
One-Hand Technique for Children (optional)										
Two-Finger Technique for Infants										
Multiple-Provider CPR for Infants										
Obstructed Airway Care for Adults and Children										
Obstructed Airway Care for Infants										
Practice Scenarios										
Team Response Practice Scenario: Rapid Assessment for Adults										

Team Response Practice Scenario: BLS for Adults										
Team Response Practice Scenario: BLS for Children (optional)										
Team Response Practice Scenario: BLS for Infants										

Testing Scenarios

Team Response Testing Scenario: BLS for Adults										
Team Response Testing Scenario: BLS for Infants										
Team Response Testing Scenario: BLS for Children (optional)										

Final Exam

Final Exam A										
Final Exam B										

Answer Sheet and Answer Keys

Answer Sheet

Answer Key

- Exam A
- Exam B

Answer Sheet

Name: _____ Date: _____

Exam (A) (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)

21. (A) (B) (C) (D)

22. (A) (B) (C) (D)

23. (A) (B) (C) (D)

24. (A) (B) (C) (D)

25. (A) (B) (C) (D)

Sample Agendas

Required Content Only	
<ul style="list-style-type: none"> ■ Participant-to-instructor ratio: 9:1 ■ Participant-to-manikin ratio: 2:1 ■ Participant-to-resuscitation mask ratio: 1:1 ■ Total classroom time: 4 hours 15 minutes 	
15 minutes	Lesson 1: Course Introduction and Foundational Concepts
25 minutes	Lesson 2: Systematic Approach to Assessing, Recognizing and Caring for Adults
75 minutes	Lesson 3: Basic Life Support for Adults
10 minutes	Break
45 minutes	Lesson 4: Basic Life Support for Children and Infants
15 minutes	Lesson 5: Obstructed Airway
5 minutes	Lesson 6: Opioid Overdose
5 minutes	Break
60 minutes	Lesson 7: Testing and Course Wrap-Up
Required and Optional Content	
<ul style="list-style-type: none"> ■ Participant-to-instructor ratio: 9:1 ■ Participant-to-manikin ratio: 2:1 ■ Participant-to-resuscitation mask ratio: 1:1 ■ Total classroom time: 5 hours 	
20 minutes	Lesson 1: Course Introduction and Foundational Concepts <ul style="list-style-type: none"> ■ Optional: Critical Thinking Guided Discussion ■ Optional: Communicating with the Family after a Patient's Death
25 minutes	Lesson 2: Systematic Approach to Assessing, Recognizing and Caring for Adults
90 minutes	Lesson 3: Basic Life Support for Adults <ul style="list-style-type: none"> ■ Optional: AED demo ■ Challenge: BLS for Adults with CCF Calculation
10 minutes	Break
60 minutes	Lesson 4: Basic Life Support for Children and Infants <ul style="list-style-type: none"> ■ Optional: One-Hand Technique for Children ■ Optional: AED demo ■ Optional: BLS Team Response for Children
15 minutes	Lesson 5: Obstructed Airway
10 minutes	Lesson 6: Opioid Overdose <ul style="list-style-type: none"> ■ Optional: Naloxone, Q&A activity
10 minutes	Break
60 minutes	Lesson 7: Testing and Course Wrap-Up

Review Course

The purpose of the Basic Life Support 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 complete the knowledge and skill evaluation. The responsibility for preparing for the testing scenario and final exam is shared by the instructor and the participants.

To be eligible to participate in the review course, the participant must possess an American Red Cross Basic Life Support 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.

If the participants fail the review course, they may remediate and retest. If they fail the retest, they may retake the review course or participate in the full course.

Introduction to Basic Life Support Review Course

LESSON LENGTH | 5 minutes

Guidance for the Instructor

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

- Review all points in the topics, “Welcome” and “Course Purpose.”

Lesson Objectives


After completing this lesson, participants will be able to:

- State the course purpose.
- Identify the course completion requirements.



Materials, Equipment and Supplies

- *Basic Life Support Course Presentation for Instructor-Led Training, Basic Life Support DVD or Basic Life Support for Instructor-Led Training downloadable videos*
- Computer or tablet with speakers, projector and projection screen or monitor

Topic | Welcome

<p>LECTURE</p>  <p>REFERENCE Course Presentation Slides 140–141</p>	<ul style="list-style-type: none">■ Welcome participants and briefly introduce yourself as an American Red Cross instructor.■ Ask participants to briefly introduce themselves.■ Review the following information:<ul style="list-style-type: none">○ Facility policies and procedures○ Locations of restrooms, water fountains and break areas○ Where emergency exits are located as well as where automated external defibrillators (AEDs) and first aid kits are located○ Careful and proper use of equipment for infection control, including standard precautions and manikin decontamination■ Tell participants that if they have concerns or issues that may affect their ability to take part in the course, they should speak with you privately at the conclusion of the course introduction.
--	---

Topic | Course Purpose

<p>LECTURE</p>  <p>REFERENCE Course Presentation Slide 142</p>	<ul style="list-style-type: none">■ Explain to participants that the purpose of this review course is to review the key points of basic life support and demonstrate skill competency during team response scenarios. To help improve patient outcomes, they will:<ul style="list-style-type: none">○ Further develop critical-thinking and problem-solving skills.○ Use communication, teamwork and leadership skills during a high-performance team response.○ Apply a systematic, continuous approach for rapid assessment, accurate recognition and immediate care in emergency situations.○ Perform high-quality cardiopulmonary resuscitation (CPR) and use an AED during cardiac arrest.○ Deliver effective ventilations during respiratory arrest.○ Relieve an obstructed airway.○ Manage an opioid overdose during cardiac or respiratory arrest.
<p>LECTURE</p>  <p>REFERENCE Course Presentation Slide 143</p>	<ul style="list-style-type: none">■ Tell participants that to receive their Basic Life Support (BLS) certificate, they must:<ul style="list-style-type: none">○ Attend the entire class session.○ Participate in all practice scenarios associated with this course.○ Demonstrate competency in all required skills.○ Successfully complete the testing scenarios and pass the final exam with a score of 84% or higher.■ Explain to participants that their BLS certification is valid for 2 years.

BLS Care for Adults

LESSON LENGTH | 30 minutes

Guidance for the Instructor

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

- Review all points in the topics, “Assess, Recognize and Care for Adults,” “Rapid Assessment for Adults,” “Recognize and Care” and “BLS Team Response for Adults.”
- Show the videos, “Bill Goodman” (2:32) and “Obstructed Airway Care for Responsive Adults and Children” (4:29).
- Conduct the Team Response Practice Scenario: BLS for Adults.

Lesson Objectives

After completing this lesson, participants will be able to:


- Apply the Assess, Recognize and Care concept for adult patients.
- Perform a rapid assessment to determine whether the adult patient is experiencing a life-threatening emergency.
- Recognize that an adult patient is experiencing a life-threatening emergency.
- Determine an immediate course of action based on the results of the rapid assessment.
- State the principles of high-quality CPR.
- Provide effective chest compressions.
- State the principles of delivering effective ventilations for a patient experiencing cardiac or respiratory arrest.
- Provide effective ventilations using a pocket mask or a bag-valve-mask (BVM) resuscitator.
- Care for a patient in cardiac arrest who has an advanced airway in place.
- Effectively operate an AED and identify considerations for the safe use and maintenance.
- Work effectively as part of a high-performance resuscitation team to improve patient outcomes in the role of a team leader and team member.
- Care for a responsive adult or child with an obstructed airway.
- Care for an adult or child who becomes unresponsive as a result of an obstructed airway.
- Explain the principles of administering naloxone and its importance during opioid overdose.
- Care for the patient experiencing respiratory arrest from opioid overdose.
- Care for the patient experiencing cardiac arrest from opioid overdose.

Materials, Equipment and Supplies


- *Basic Life Support Course Presentation for Instructor-Led Training, Basic Life Support DVD or Basic Life Support for Instructor-Led Training downloadable videos*
- Computer or tablet with speakers, projector and projection screen or monitor
- Disposable latex-free gloves (optional)
- Adult CPR manikins (one for every three participants)

- Adult pocket masks and valves (minimum of one valve for every participant)
- Adult BVMs (one for each manikin)
- AED training devices/pads (one for every three participants)
- Cleaning and decontamination supplies
- Extra manikin equipment (e.g., airways, lungs and batteries) as appropriate
- CPR board or bed with CPR function, if applicable (one for every two participants)
- Blankets and/or mats, if applicable (optional; one for each participant)
- Step stool, if applicable (two for every team)
- Timing device (optional; one for every two participants)


Topic | Assess, Recognize and Care for Adults

<p>REVIEW</p>  <p>REFERENCE Course Presentation Slides 144–145</p>	<ul style="list-style-type: none"> ■ Remind participants that the Assess, Recognize and Care concept is a systematic, continuous approach for rapid assessment, accurate recognition and immediate care in emergency situations.
---	---

Topic | Rapid Assessment for Adults

<p>REVIEW</p>  <p>REFERENCE Course Presentation Slide 146</p>	<ul style="list-style-type: none"> ■ Remind participants that performing a rapid assessment is the essential first step of the Assess, Recognize and Care concept. To perform a rapid assessment: <ul style="list-style-type: none"> ○ Conduct a quick visual survey of the emergency situation, including assessing for safety, obtaining an initial impression of the patient(s) and determining the need for additional resources. ○ Check for responsiveness—shout “Are you OK?” and tap the shoulder, then shout again. ○ Open the airway and simultaneous check for breathing and a carotid pulse for at least 5 seconds but no more than 10. ■ Tell participants they will practice rapid assessment as part of the Team Response Practice Scenarios.
--	--

Topic | Recognize and Care

<p>REVIEW</p>  <p>REFERENCE Course Presentation Slide 147</p>	<ul style="list-style-type: none"> ■ Remind participants that the next step is to use the results of the rapid assessment to recognize the emergency condition and implement proper care. ■ Tell participants that you will present assessment findings for several patient scenarios and ask them to identify the emergency condition and determine the appropriate care. <ul style="list-style-type: none"> ○ Encourage participants to raise their hand or freely call out their answers. ○ Allow students time to respond, but prompt students as needed to ensure all key points are conveyed. ○ Be mindful of time during this activity.
--	--

Illness or Injury

GUIDED DISCUSSION



REFERENCE

Course Presentation
Slide 148

- Mrs. Sparks is unresponsive but is breathing normally and has a pulse. You do not suspect a head, neck, spinal or pelvic injury. How should you respond?
 - Activate EMS, the rapid response team or the resuscitation team as appropriate and call for an AED.
 - Complete your patient assessment as appropriate.
 - Place Mrs. Sparks in a side-lying recovery position, complete your patient assessment as appropriate and continue to monitor her until help arrives.



Instructor's Note

Remind participants of the following: If you suspect the patient has a head, neck, spinal or pelvic injury, avoid moving them unless it is absolutely necessary. Maintain the patient in the position in which you found them and wait for help to arrive. However, if you need to leave the patient to call for help and/or get additional resources, place them in a side-lying recovery position.

Respiratory Arrest

GUIDED DISCUSSION



REFERENCE

Course Presentation
Slide 149

- Mr. Martel is not breathing normally (or only gasping) but has a pulse. How should you respond?
 - Mr. Martel is in respiratory arrest.
 - Deliver 1 ventilation every 5 to 6 seconds. Each ventilation should last about 1 second and make the chest begin to rise. Avoid excessive ventilation.
 - Continue ventilations.
 - Check the pulse and breathing about every 2 minutes. If you find no pulse, begin CPR.

Cardiac Arrest

GUIDED DISCUSSION



REFERENCE

Course Presentation
Slide 150

- Mrs. Rigby is unresponsive, is not breathing normally (or only gasping) and does not have a pulse. You and two other providers are with the patient. What are the components of high-quality CPR when caring for this patient?
 - Mrs. Rigby is in cardiac arrest.
 - Call for help to activate emergency medical services (EMS), the rapid response team or the resuscitation team, as appropriate. Send for an AED.
 - Start high-quality CPR within 10 seconds of recognizing cardiac arrest.
 - Hand position: Centered on the lower half of the sternum
 - Depth: At least 2 inches
 - Rate: 100 to 120 per minute (15 to 18 seconds)
 - Full chest recoil
 - Compression-to-ventilation ratio: 30:2
 - Each ventilation should last 1 second and make the chest begin to rise. Avoid excessive ventilation.
 - Minimize interruptions to less than 10 seconds.

GUIDED
DISCUSSION

(continued)



- How would you respond if Mrs. Rigby's chest did not rise after the first ventilation?
 - Reopen the airway, make a seal and try a second ventilation.
 - If the second ventilation is also not successful, move directly back to compressions and check the airway for an obstruction before attempting subsequent ventilations.
 - If an obstruction is found, remove it and attempt ventilations.
- True or False? If a hypoxic event is the suspected cause of cardiac arrest, you should deliver 2 initial ventilations before starting CPR.
 - **True.** When drowning or other hypoxic events are suspected as the cause of cardiac arrest, deliver 2 initial ventilations before starting CPR.
- Another provider arrives with the AED, while the team is performing high-quality CPR. What steps should the team take to integrate the AED?
 - The AED operator sets up the AED and applies pads while the team continues CPR.
 - The AED operator places the pads in the anterior/lateral position or according to the manufacturer's recommendation.
 - The team clears the patient during analysis and shock (if advised). The compressor hovers over the chest during analysis and shock to minimize interruptions of chest compressions.
 - After the shock or if no shock advised, the team immediately resumes CPR.

Cardiac Arrest with an Advanced Airway in Place

GUIDED
DISCUSSION



REFERENCE

Course Presentation
Slide 151

- Ms. Walsh is unresponsive, is not breathing normally and does not have a pulse. She has an endotracheal tube in place. How should you respond?
 - Ms. Walsh is in cardiac arrest.
 - Begin CPR immediately.
 - One provider delivers 1 ventilation every 6 seconds.
 - A second provider performs continuous chest compressions. (Providers do not pause for ventilations.)

Obstructed Airway



GUIDED
DISCUSSION




REFERENCE

Course Presentation
Slide 152

- Mr. Huff is awake and alert, but he cannot cough, speak or breathe. How should you respond?
 - Mr. Huff is choking.
 - Call for additional resources and an AED.
 - Obtain consent and immediately begin care for an obstructed airway.
 - Perform abdominal thrusts.
 - If abdominal thrusts do not dislodge the object or you cannot perform abdominal thrusts, attempt the following: back blows; chest thrusts; basic and advanced airway management techniques; or a series of 5 back blows and 5 abdominal or chest thrusts.


<p>GUIDED DISCUSSION</p> <p><i>(continued)</i></p> 	<ul style="list-style-type: none"> ■ While you are providing care for Mr. Huff, he becomes unresponsive. How should you respond? <ul style="list-style-type: none"> ○ Gently lower the patient to the ground and immediately begin CPR, starting with chest compressions. ○ After each set of compressions, open the patient's mouth and look for the object before attempting ventilations. If you see the object in the patient's mouth, remove it using a finger sweep. If you do not see the object, do not perform a blind finger sweep. ○ Continue performing CPR cycles, checking for an object before each set of ventilations (as needed).
<p>VIDEO</p>  <p>REFERENCE</p> <p>Course Presentation Slide 153</p>	<ul style="list-style-type: none"> ■ Explain to participants that they will watch the following video to review how to provide care for a responsive adult or child with an obstructed airway. ■ Show the video segment, "Obstructed Airway Care for Responsive Adults and Children" (4:29). ■ Answer participants' questions.

Opioid Overdose

<p>GUIDED DISCUSSION</p>  <p>REFERENCE</p> <p>Course Presentation Slide 154</p>	<ul style="list-style-type: none"> ■ Ms. Casten is unresponsive, is not breathing normally but has a pulse. Your assessment findings reveal pinpoint pupils, respiratory depression, unconsciousness and track marks on her arms. How should you respond? <ul style="list-style-type: none"> ○ Ms. Casten is experiencing respiratory arrest due to a suspected opioid overdose. ○ Care for respiratory arrest and administer naloxone following your facility's protocols. Remember, caring for respiratory arrest is the priority over administering naloxone. ○ Patients who respond after receiving naloxone frequently vomit and may even become violent. Be prepared to suction the airway or call for help to provide suction, but always keep your safety in mind. ■ True or False? If Ms. Casten were experiencing a cardiac arrest and an opioid overdose, you should not administer naloxone. <ul style="list-style-type: none"> ○ False. The administration of naloxone is recommended during both respiratory and cardiac arrest.
---	---

Topic | BLS Team Response for Adults

Significance of Teamwork

<p>REVIEW</p>  <p>REFERENCE</p> <p>Course Presentation Slides 155-156</p>	<ul style="list-style-type: none"> ■ Review the following key points with participants: <ul style="list-style-type: none"> ○ Teamwork is crucial during resuscitation efforts. ○ Coordinated efforts improve patient outcomes. ○ Team communication is essential when caring for a patient who is experiencing a life-threatening emergency. Closed-loop communication is an important communication technique used to prevent misunderstandings. The receiver confirms that the message has been received and understood. ■ As a member of the BLS team, it is important to understand the responsibilities of the team leader and other team members.
--	---

Team Leader Responsibilities

GUIDED DISCUSSION



REFERENCE

Course Presentation
Slide 157

- Remind participants that the team leader oversees the entire emergency situation and ensures that everyone works as a team to help promote the best possible outcome for the patient. Ask them to identify the responsibilities of the team leader. Answers might include:
 - Assigns and understands team roles
 - Sets clear expectations
 - Prioritizes, directs and acts decisively
 - Encourages and allows team input and interaction
 - Focuses on the big picture
 - Monitors performance while providing support
 - Acts as a role model
 - Coaches the team
 - Re-evaluates and summarizes progress
 - Leads a debriefing session

Team Member Responsibilities

GUIDED DISCUSSION



REFERENCE

Course Presentation
Slide 157

- Remind participants that team members provide care with skill and expertise. Ask them to identify the responsibilities of the team members. Answers might include:
 - Have the necessary knowledge and skills to perform their assigned role
 - Stay in their assigned role but assist others as needed, as long as they are able to maintain their own assigned responsibilities
 - Communicate effectively with the team leader if they:
 - Feel they are lacking any knowledge or skills to perform assigned roles
 - Identify something that the team leader may have overlooked
 - Recognize a dangerous situation or need for urgent action
 - Focus on achieving the goals
 - Share pertinent observations
 - Ask relevant questions
 - Participate in a debriefing session

High-Performance Resuscitation Teams

REVIEW







REFERENCE

Course Presentation
Slide 158

- Review the following key points with participants:
 - High-performance resuscitation teams work together in a well-organized effort to provide high-quality CPR during a cardiac arrest. Characteristics of a high-performance team include well-defined roles and responsibilities; clear, closed-loop communication; and respectful treatment of others.
 - Based on available resources and facility protocols, providers might fill one or more of the following roles:
 - Team leader
 - Compressor
 - AED operator
 - Airway manager
 - Ventilator
 - Recorder

Practice Scenario: BLS for Adults

<p>VIDEO</p>  <p>REFERENCE</p> <p>Course Presentation Slide 159</p>	<ul style="list-style-type: none">■ Show the video segment, “Bill Goodman” (2:32), which is an adult cardiac arrest scenario.■ Tell participants that they will practice a similar sequence during the practice scenario.■ Answer participants’ questions.
<p>DEMO</p>  <p>REFERENCE</p> <p>Course Presentation Slide 160</p>	<ul style="list-style-type: none">■ As needed, orient participants to the adult manikin they will be using, including basic operations and feedback functions and/or devices.■ Demonstrate how your specific AED trainer functions, including pad placement and AED prompts.
<p>PRACTICE SCENARIO</p>  <p>REFERENCES</p> <p>Course Presentation Slide 161</p> <p>Skill Competency Sheet: BLS for Adults</p> <p>Team Response Practice Scenario: BLS for Adults</p> <p>Debriefing Tool</p> <p>Participant Progress Log</p>	<ul style="list-style-type: none">■ Begin the practice scenario, “BLS for Adults” here.■ Ask participants to divide into teams of three and get into position beside their manikin. Each team of three participants will respond to an emergency situation as prompted.■ Ensure that a BVM resuscitator and AED are available to each team. The BVM resuscitator should be near the patient.■ Communicate the following to participants.<ul style="list-style-type: none">○ Determine who initially will be:<ul style="list-style-type: none">● Provider 1: Performs the rapid assessment, begins compressions and takes over ventilations.● Provider 2: Retrieves and assembles the BVM, maintains the airway, delivers ventilations and takes over operating the AED.● Provider 3: Calls the code, retrieves and sets up the AED and takes over compressions.○ You will perform the team response practice scenario three times so that each participant has an opportunity to practice each role: compressor, airway manager/ventilator, AED operator.○ You will be prompted with key information (e.g., when the AED is available). <div data-bbox="421 1402 1436 1545" style="border: 1px solid #0070C0; padding: 10px;"><p> Instructor’s Note</p><p>Remind participants to decontaminate manikins before switching roles.</p></div> <ul style="list-style-type: none">■ Guide participants through the steps of the skill using the Team Response Practice Scenario: BLS for Adults (Appendix C).<ul style="list-style-type: none">○ Offer participants printouts of Skill Competency Sheet: BLS for Adults (Appendix B).■ Give feedback during the practice scenario as needed.■ If the team misses a critical step, provide coaching as needed to keep the scenario progressing.■ Check off each participant’s progress on the Participant Progress Log (Appendix F).■ Conduct a debriefing with participants using the Debriefing Tool (Appendix D). If there are multiple teams of three in the group, combine the teams together for the debriefing session.<ul style="list-style-type: none">○ Encourage participants to raise their hand or freely call out their responses.○ Answer participants’ questions.

Challenge: BLS for Adults with CCF Calculation

OPTIONAL

12 minutes

PRACTICE SCENARIO



REFERENCE

Course Presentation
Slide 162

- Ask participants to **divide into two teams** and get into position beside their manikin.
- Communicate the following to participants.
 - This is a challenge to practice a team response directed by a team leader. The teams can practice simultaneously (preferred) or one right after the other.
 - **There will be no instructor prompting**, other than to confirm the conditions you find and that the AED is available.
 - The team leader will assign roles.
 - Remember, it is crucial to switch roles after every 2 minutes of compressions and ventilations, or when the performance of the compressor begins to deteriorate.



Instructor's Note

There is no Team Response Practice Scenario associated with this optional activity. You may provide a relevant setup to contextualize the activity.

- Care is provided for 6 minutes, from arrival at the patient's side.
 - Actions related to compressions during the resuscitation will be timed, starting with the arrival of the team until the 6 minutes have passed.
 - **CCF will be calculated at the end of the scenario and results will be compared.**
 - Timing for the compressions will start with the first compression, stop when hands are off the chest and then resume when compressions begin again.



Instructor's Note

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.

- During the scenario, prompt **only** at the following times:
 - Start of scenario: "A person collapses."
 - At assessment: "There is no breathing and no pulse."
 - At 2-minute mark, when the team member acting as AED manager arrives with the AED.
- At the end of the challenge:
 - Ask participants to total up the time for when the hands were on the chest in seconds and divide that time by 360 (6 minutes) to arrive at their team's CCF to determine whether high-quality CPR was achieved.
 - *Which team achieved the best CCF?*
 - Conduct a debriefing that highlights how the teams can improve their hands-on times.

BLS for Children and Infants

LESSON LENGTH | 30 minutes

Guidance for the Instructor

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

- Review all points covered in the topics, “Differences Among Adults, Children and Infants,” “Rapid Assessment” and “BLS Team Response for Children and Infants.”
- Show the videos, “Theo James” (2:37) (optional), which demonstrates a child in cardiac arrest; and “Olivia Martin” (2:47), which demonstrates an infant in cardiac arrest.
- Conduct Team Response Practice Scenario: BLS for Children (optional) and Team Response Practice Scenario: BLS for Infants.

Lesson Objectives

After completing this lesson, participants will be able to:

- Define adolescents, children and infants, in relation to high-quality CPR/AED guidelines.
- Identify CPR/AED differences among adults, children and infants.
- State the principles of high-quality CPR for children and infants.
- Provide effective chest compressions.
- State the principles of delivering effective ventilations for a patient experiencing cardiac or respiratory arrest.
- Provide effective ventilations using a pocket mask or a bag-valve-mask (BVM) resuscitator.
- Care for a patient in cardiac arrest who has an advanced airway in place.
- Effectively operate an AED on children and infants.
- Understand how to effectively work as a high-performance resuscitation team to improve patient outcomes.
- Care for a responsive infant with an obstructed airway.
- Care for an infant who has an obstructed airway and becomes unresponsive.



Materials, Equipment and Supplies

- *Basic Life Support Course Presentation for Instructor-Led Training, Basic Life Support DVD or Basic Life Support for Instructor-Led Training downloadable videos*
- Computer or tablet with speakers, projector and projection screen or monitor
- Disposable latex-free gloves (optional)
- Infant CPR manikins (one for every three participants)
- Child CPR manikins (optional; one for every three participants)
- Infant pocket mask and valve (minimum of one valve for every participant)
- Child pocket mask and valve (optional; minimum of one valve for every participant)
- Infant BVMs (one for each manikin)
- Child BVMs (optional; one for each manikin)
- AED training devices with pediatric pads or settings (one for every three participants)


- Cleaning and decontamination supplies
- Extra manikin equipment (e.g., airways, lungs and batteries) as appropriate
- Blankets and/or mats, if applicable (optional; one for each participant)
- CPR board or bed with CPR function, if applicable (one for every two participants)

Topic | Differences Among Adults, Children and Infants

Introduction

<p>REVIEW</p>  <p>REFERENCE</p> <p>Course Presentation Slides 163–165</p>	<ul style="list-style-type: none"> ■ Remind participants of the following key points: <ul style="list-style-type: none"> ○ Children and infants, just like adults, may experience life-threatening respiratory or cardiac emergencies. ○ Although the differences in basic life support (BLS) care for children and infants may seem subtle, it is important to understand them in order to achieve the best possible outcomes.
<p>REVIEW</p>  <p>REFERENCE</p> <p>Course Presentation Slide 166</p>	<ul style="list-style-type: none"> ■ Tell participants that you will present the assessment findings for each patient and ask them to identify the emergency condition and determine the appropriate care. <ul style="list-style-type: none"> ○ Encourage participants to raise their hand or freely call out their answers. ○ Allow students time to respond, but prompt students as needed to ensure all key points are conveyed. ○ Be mindful of time during this activity.

Defining Adolescents, Children and Infants

<p>GUIDED DISCUSSION</p>  <p>REFERENCE</p> <p>Course Presentation Slide 167</p>	<ul style="list-style-type: none"> ■ You initiate CPR on Owen, a 12-month-old male patient. Which BLS guideline should you follow? <ul style="list-style-type: none"> ○ In this case, follow child BLS guidelines. ○ 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. ○ An infant is considered to be from birth to the age of 1 year. ■ Aaliyah is in cardiac arrest. She is 11 years old, weighs 97 pounds and shows signs of puberty including breast development. Which BLS guidelines should you follow? <ul style="list-style-type: none"> ○ In this case, follow adult BLS guidelines. ○ An adolescent is defined as someone from the onset of puberty through adulthood.
--	--

Topic | Rapid Assessment

GUIDED DISCUSSION



REFERENCE

Course Presentation
Slide 168

- Andres is a 6-month-old patient weighing 17 pounds. You find him motionless. How should you check for responsiveness?
 - For an infant: Shout “Are you OK?” and tap the **bottom of the foot**, then shout again.
 - For a child: Shout “Are you OK?” and tap the **shoulder**, then shout again.
- Andres is unresponsive. You must now simultaneously check for breathing and a pulse. You do not suspect a head, neck or spinal injury. How should you open his airway? Which pulse area would you check?
 - Airway:
 - For an infant, open the airway to a **neutral position** using the head-tilt/chin-lift technique.
 - For a child, open the airway to a **slightly past-neutral position** using the head-tilt/chin-lift technique.
 - Breathing/pulse check:
 - For an infant, simultaneously check breathing and a **brachial pulse** for at least 5 seconds but no more than 10.
 - For a child, simultaneously check breathing and a **carotid pulse** for at least 5 seconds but no more than 10.
- You come upon a child who has collapsed. The child is not breathing normally and does not have a pulse. You are alone and have no immediate access to a phone or other form of communication. Which action would you do first?
 - For unwitnessed sudden collapse of a child, such as this, **first perform 2 minutes of CPR. Then leave to call for additional resources.**
 - However, for a witnessed sudden collapse or known cardiac condition of a child, **leave to call for additional resources. Then begin CPR.**

Respiratory Arrest

GUIDED DISCUSSION



REFERENCE

Course Presentation
Slide 169

- Caitlin is an unresponsive 4-year-old child. Her pulse rate is 65 bpm, but she is not breathing normally. You must initiate care. True or False? Even though her parents are present, consent is implied.
 - **False.** For minors, consent from a parent or guardian is required when present. To obtain consent, state who you are, what you observe and what you 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.
- After obtaining consent, what are your next steps?
 - Call for help to activate EMS, the rapid response team or the resuscitation team, as appropriate, and call for an AED.
 - Provide care for respiratory arrest.
 - Deliver **1 ventilation every 3 to 5 seconds**; each ventilation should last about 1 second and make the chest begin to rise.
 - Check the pulse and breathing about every 2 minutes.
- After 2 minutes of delivering ventilations to Caitlin, you stop to check her breathing and pulse. You note that she is not breathing normally but her pulse has decreased to 58 bpm with signs of poor perfusion. What are the appropriate actions to take?
 - Begin CPR.
 - Check the pulse and breathing about every 2 minutes.
 - If Caitlin is not breathing normally and her pulse increases to greater than 60 bpm, stop chest compressions but continue providing 1 ventilation every 3 to 5 seconds.
 - However, if she is not breathing normally but has a pulse less than 60 bpm, continue CPR.

Cardiac Arrest

GUIDED DISCUSSION



REFERENCE

Course Presentation
Slide 170

- You are alone and performing CPR on Natalie, a 3-month-old infant. What are the components of high-quality CPR caring for this patient as a single provider?
 - **Single-Provider CPR for Infants**
 - Hand position: **Two fingers centered on the lower half of the sternum just below nipple line**
 - Depth: **About 1½ inches**
 - Rate: 100 to 120 per minute (15 to 18 seconds)
 - Full chest recoil
 - Compression-to-ventilation ratio: **30:2**
 - Avoid excessive ventilation. Each ventilation should last 1 second and make the chest begin to rise.
 - Minimize interruptions to less than 10 seconds.
 - While performing CPR on Natalie, another provider arrives. What are the components of high-quality CPR when caring for this patient with multiple providers?
 - **Multiple-Provider CPR for Infants**
 - Hand position: **Two thumbs centered on the lower half of the sternum just below the nipple line**
 - Depth: **About 1½ inches**
 - Rate: 100 to 120 per minute (7 to 9 seconds)
 - Full chest recoil
 - Compression-to-ventilation ratio: **15:2**
 - Avoid excessive ventilation. Each ventilation should last 1 second and make the chest begin to rise.
 - Minimize interruptions to less than 10 seconds.
 - You and another provider are performing CPR on Luke, a 5-year-old child. What are the components of high-quality CPR when caring for this patient with multiple providers?
 - **Single-Provider CPR for Children**
 - Hand position: **Centered on the lower half of the sternum**
 - Depth: **About 2 inches**
 - Rate: 100 to 120 per minute (15 to 18 seconds)
 - Full chest recoil
 - Compression-to-ventilation ratio: **30:2**
 - Avoid excessive ventilation. Each ventilation should last 1 second and make the chest begin to rise.
 - Minimize interruptions to less than 10 seconds.
 - Sadie is a 2½-year-old child weighing 28 pounds. True or False? To perform high-quality chest compressions, you may need to use a one-hand technique.
 - **True.** For smaller children, such as Sadie, you may need to use the one-hand technique.

GUIDED DISCUSSION

(continued)



- Sadie has an advanced airway in place. When you and another provider are performing CPR, how would you modify care?
 - Begin CPR immediately.
 - One provider delivers 1 ventilation every 6 to 8 seconds.
 - A second provider performs continuous chest compressions. (Providers do not pause for ventilations.)
- You are performing CPR on Lucy, an 11-month-old infant. A second provider prepares to apply the AED pads. How should he place the pads?
 - **Anterior/posterior placement** (i.e., one pad on the middle of chest, the other on the back between scapulae)
- True or False? If pediatric AED pads aren't available, it would be safe to use adult AED pads on Lucy.
 - **True.** If pediatric AED pads aren't available or the AED doesn't have a pediatric setting, it is safe to use adult AED pads or adult levels of energy on an infant or child 8 or younger or weighing less than 55 pounds or 25 kilograms.
- Paloma is 8 years old and weighs 62 pounds. Single-provider CPR is in progress and you have just arrived with the AED. The AED includes adult and pediatric pads. True or False? You should set up the AED and apply the pediatric AED pads while CPR continues.
 - **False.** Although you should set up the AED and apply the pads while CPR continues to minimize interruptions in chest compressions, do not use pediatric AED pads or energy levels on Paloma because the shock delivered will not be sufficient. For children older than 8 or weighing more than 55 pounds or 25 kilograms, such as Paloma, you should use adult AED pads or energy levels.
- When you attempt to apply the adult AED pads, you realize they will touch one another on Paloma's chest. True or False? Instead of the anterior/lateral position, you should use the anterior/posterior position for AED pad placement.
 - **True.** For children, use anterior/lateral pad placement; or use anterior/posterior pad placement if the pads risk touching each other or the AED model uses this type of pad placement.

Obstructed Airway

GUIDED DISCUSSION







REFERENCE

Course Presentation
Slide 171




- Joey is a 5-year-old boy with an obstructed airway. True or False? It may be better to kneel behind him rather than stand to perform abdominal thrusts.
 - **True.** If the patient with an obstructed airway is a child or shorter than you, it may be better to kneel behind them rather than stand to perform abdominal thrusts.
- Georgette is a responsive 7-month-old infant with an obstructed airway. What technique should you use to clear Georgette's airway?
 - **Obtain consent** from the parent or legal guardian if present.
 - **Deliver 5 back blows.**
 - If back blows do not dislodge the object, **deliver 5 chest thrusts.**
 - Continue to **deliver sets of 5 back blows and 5 chest thrusts** until:
 - The object is forced out.
 - The infant can cough, cry or breathe.
 - The infant becomes unresponsive.
- While caring for Georgette, she becomes unresponsive. You have initiated CPR. You must now look in her mouth for the object that is obstructing the airway. If seen, how should you remove the object?
 - After each set of compressions, look in Georgette's mouth for the object and if you can see it, remove it using a **pinky sweep**. If you cannot see an object, never perform a blind pinky sweep.

Practice Scenario: BLS for Children

<p>OPTIONAL 3 minutes</p> <p>VIDEO </p> <p>REFERENCE Course Presentation Slides 172–173</p>	<ul style="list-style-type: none"> ■ Show the video segment, “Theo James” (2:37), which demonstrates a real-time cardiac arrest scenario for a 6-year-old boy. ■ Answer participants’ questions. ■ Tell participants they will practice multiple-provider CPR for children as part of the Team Response Practice Scenario.
<p>OPTIONAL 2 minutes</p> <p>DEMO </p> <p>REFERENCE Course Presentation Slide 174</p>	<ul style="list-style-type: none"> ■ As needed, orient participants to the child manikin they will be using, including basic operations and feedback functions and/or devices. ■ Demonstrate how your specific AED trainer functions, including pediatric settings, pediatric pads, pad placement and any pediatric specific prompts.
<p>OPTIONAL 2 minutes</p> <p>PRACTICE SCENARIO </p> <p>REFERENCES Course Presentation Slide 175 Team Response Practice Scenario: BLS for Children Skill Competency Sheet: BLS for Children Debriefing Tool Participant Progress Log</p>	<ul style="list-style-type: none"> ■ Begin the practice scenario, “BLS for Children” here. ■ Ask participants to divide into teams of three and get into position beside their child (or adult) manikin. Each team of three participants will respond to an emergency situation as prompted. ■ Ensure that a pediatric BVM resuscitator and an AED with pediatric pads or setting are available to each team. ■ Communicate the following to participants. <ul style="list-style-type: none"> ○ Determine who initially will be: <ul style="list-style-type: none"> ● Provider 1: Performs the rapid assessment, begins compressions and takes over ventilations. ● Provider 2: Retrieves and assembles the BVM, maintains the airway, delivers ventilations and takes over operating the AED. ● Provider 3: Calls the code, retrieves and sets up the AED and takes over compressions. ○ You will perform the team response practice scenario three times so that each participant has an opportunity to practice each role: compressor, airway manager/ventilator, AED operator. ○ You will be prompted with key information (e.g., when the AED is available) throughout the scenario. ■ Guide participants through the steps of the skill using the Team Response Practice Scenario: BLS for Children (Appendix C). <ul style="list-style-type: none"> ○ Offer participants printouts of Skill Competency Sheet: BLS for Children (Appendix B). ■ Give feedback during the team response scenario as needed. ■ If the team misses a critical step, provide coaching as needed to keep the scenario progressing.

<p>OPTIONAL</p> <p>2 minutes</p> <p>PRACTICE SCENARIO</p> <p><i>(continued)</i></p> 	<ul style="list-style-type: none"> ■ Check off each participant's progress on the Participant Progress Log (Appendix F). ■ Conduct a debriefing with participants using the Debriefing Tool (Appendix D). If there are multiple teams of three in the group combine the teams together for the debriefing session. <ul style="list-style-type: none"> ○ Encourage participants to raise their hand or freely call out their responses. ○ Answer participants' questions.
---	---

Practice Scenario: BLS for Infants

<p>VIDEO</p>  <p>REFERENCE Course Presentation Slide 176</p>	<ul style="list-style-type: none"> ■ Show the video segment, "Olivia Martin" (2:47), which demonstrates a cardiac arrest scenario for a 10-month-old patient. ■ Answer participants' questions. ■ Tell participants they will practice multiple-provider CPR for infants as part of the Team Response Practice Scenarios.
<p>DEMO</p>  <p>REFERENCE Course Presentation Slide 177</p>	<ul style="list-style-type: none"> ■ As needed, orient participants to the infant manikin they will be using including basic operations and feedback functions and/or devices. ■ Demonstrate how your specific AED trainer functions, including pediatric settings, pediatric pads, pad placement and AED prompts.
<p>PRACTICE SCENARIO</p>  <p>REFERENCES Course Presentation Slide 178 Team Response Practice Scenario: BLS for Infants Skill Competency Sheet: BLS for Infants Debriefing Tool Participant Progress Log</p>	<ul style="list-style-type: none"> ■ Begin the practice scenario, "BLS for Infants" here. ■ Ask participants to divide into teams of three and get into position beside their infant manikin. Each team of three participants will respond to an emergency situation as prompted. ■ Ensure that an infant BVM resuscitator and an AED with pediatric pads or settings are available to each team. ■ Communicate the following to participants. <ul style="list-style-type: none"> ○ Determine who initially will be: <ul style="list-style-type: none"> ● Provider 1: Performs the rapid assessment, begins compressions and takes over ventilations. ● Provider 2: Retrieves and assembles the BVM, maintains the airway, delivers ventilations and takes over operating the AED. ● Provider 3: Calls the code, retrieves and sets up the AED and takes over compressions. ○ You will perform the team response practice scenario three times so that each participant has an opportunity to practice each role: compressor, airway manager/ventilator and AED operator. ○ You will be prompted with key information (e.g., when the AED is available) throughout the scenario. ■ Guide participants through the steps of the skill using the Team Response Practice Scenario: BLS for Children (Appendix C). <ul style="list-style-type: none"> ○ Offer participants printouts of Skill Competency Sheet: BLS for Children (Appendix B).

PRACTICE SCENARIO

(continued)



- Give feedback during the team response scenario as needed.
- If the team misses a critical step, provide coaching as needed to keep the scenario progressing.
- Check off each participant's progress on the Participant Progress Log (Appendix F).
- Conduct a debriefing with participants using the Debriefing Tool (Appendix D). If there are multiple teams of three in the group combine the teams together for the debriefing session.
 - Encourage participants to raise their hand or freely call out their responses.
 - Answer participants' questions.

Skill Practice: Obstructed Airway Care for Infants

SKILL PRACTICE



REFERENCES

Course Presentation
Slide 179

Skill Practice Sheet:
Obstructed Airway
Care for Infants

Participant Progress
Log

- Begin the skill practice for "Obstructed Airway Care for Infants."
- Ask participants to return to their teams and infant manikins.
- Communicate the following to participants.
 - Determine who will practice back blows and chest thrusts first.
 - The first participant will perform 2 sets of 5 back blows and 5 chest thrusts. Then participants will switch roles until everyone has practiced two sets of 5 back blows and 5 chest thrusts.
 - Participants should help each other count back blows and chest thrusts and provide peer feedback.
- Guide participants through the steps of the skill using the Skill Practice Sheet: Obstructed Airway Care for Infants.
 - Offer printouts from Appendix A.
- Give feedback during the skill practice as needed.
- Common errors to look out for include:
 - Not properly positioning the infant for back blows with the infant's head face-down and lower than their body.
 - Not properly supporting the infant's head and neck during back blows.
 - Not using the heel of hand to deliver back blows.
 - Not delivering 5 back blows between the infant's scapulae.
 - Not properly positioning the infant for chest thrusts with the infant's head face-up and lower than their body.
 - Not properly supporting the infant's head and neck during chest thrusts.
 - Not placing 2 fingers in center of infant's chest just below the nipple line.
 - Not delivering 5 chest thrusts about 1 1/2 inches deep.
- Check off each participant's progress on the Participant Progress Log (Appendix F).
- Answer participants' questions.

Testing and Course Wrap Up

LESSON LENGTH | 60 minutes



Instructor's Note

Refer to Lesson 7: Testing and Course Wrap-Up to conduct the testing scenarios and administer the final exam.

Challenge Course

The purpose of the Basic Life Support Challenge course is to give individuals the opportunity to demonstrate knowledge and skill competency outside a formal class setting. Preparing for the testing scenario and final exam is the responsibility of the participant.

The challenge course option is available to all individuals with a current Basic Life Support certificate and those who do not hold a certificate.

Participants who hold a current Basic Life Support certificate may challenge as often as courses are available and their certificate remains valid. Participants who do not possess a current Basic Life Support certificate may only challenge once.

If they do not pass the challenge course, they should be referred to a full course. They should not be allowed to attempt a challenge again, nor are they eligible to participate in the review course.

Introduction to Basic Life Support Challenge Course

LESSON LENGTH | 5 minutes

Guidance for the Instructor

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

- Review all points in the topics, “Welcome” and “Course Purpose.”

Lesson Objectives

After completing this lesson, participants will be able to:

- State the course purpose.
- Identify the course completion requirements.



Topic | **Welcome**

LECTURE



- Welcome participant(s) and briefly introduce yourself as an American Red Cross instructor.
- Ask participant(s) to briefly introduce themselves.
- Review the following information:
 - Facility policies and procedures
 - Locations of restrooms, water fountains and break areas
 - Where emergency exits are located as well as where automated external defibrillators (AEDs) and first aid kits are located
 - Careful and proper use of equipment for infection control, including standard precautions and manikin decontamination
- Tell participants that if they have concerns or issues that may affect their ability to take part in the course, they should speak with you privately at the conclusion of the course introduction.

Course Purpose

<p>LECTURE</p> 	<ul style="list-style-type: none">■ Explain the following key points to participants:<ul style="list-style-type: none">○ The purpose of this challenge is to demonstrate knowledge and skill competency outside a formal class setting.○ Preparing for the challenge (i.e., the skill and knowledge evaluations) is their responsibility.○ To help improve patient outcomes, they will:<ul style="list-style-type: none">● Use communication, teamwork and leadership skills during a high-performance team response.● Apply a systematic, continuous approach for rapid assessment, accurate recognition and immediate care in emergency situations.● Perform high-quality cardiopulmonary resuscitation (CPR) and use an AED during cardiac arrest emergencies.
<p>LECTURE</p> 	<ul style="list-style-type: none">■ Tell participants that to receive their Basic Life Support (BLS) certificate, they must:<ul style="list-style-type: none">○ Demonstrate competency in all required skills.○ Successfully complete the testing scenarios and pass the final exam with a score of 84% or higher.■ Explain to participants that their BLS certification is valid for 2 years.

Testing and Course Wrap-Up

LESSON LENGTH | Variable



Instructor's Note

Refer to Lesson 7: Testing and Course Wrap-Up to conduct the testing scenarios and administer the final exam. The length of time to complete this lesson for the challenge depends on the ability of individuals to complete the testing scenario and final exam.

Index

- Abdominal thrusts, 85
- Adjuncts to ventilations
 - for adult, 48
- Adolescent, definition of, 56
- Adult Cardiac Chain of Survival, 39–40
 - in-hospital, 40
 - out-of-hospital, 40
- Advanced airway, 48, 142
- AED
 - for adult, 49–50
 - for children and infants, 64
 - safety of, 49–50, 64
- Airway
 - advanced, 48, 142
 - opening of
 - adult, 82, 140
 - child, 149
 - infant, 84, 149
- Assess, Recognize and Care concept, 34–39
 - for adult, 140
 - for children and infants, 57–59
- Automated external defibrillator. *See* AED

- Back blows, 85–86
- Bag-valve-mask (BVM) resuscitator, 82, 84
 - in adult, 46–47
- Basic life support (BLS), 26
 - for children and infants, 55–56
 - team response
 - for adult, 51–54
 - for child, 65–66
- BLS. *See* Basic life support
- Breathing/pulse check
 - for adult, 140
 - for child, 149
 - for infant, 149
- BVM. *See* Bag-valve-mask resuscitator

- Call first vs. care first, 58
- Cardiac arrest
 - in adult, 141–142
 - in child, 150–151
 - caring for, 58–59
 - in infant, 150–151
 - caring for, 58–59
- Cardiac Chain of Survival
 - adult, 39–40
 - pediatric, 56–57
- Cardiopulmonary resuscitation. *See* CPR
- Certification, Basic Life Support
 - criteria for, 19
 - for instructors, maintenance of, 9
- Challenge course outline, 157–159
- Chest compressions
 - on adult, 42–43, 81–82
 - on children, 83
 - on infants, 83–84
- Chest thrusts, 86

- Child, definition of, 56
- Choking
 - universal sign for, 68
- Classroom space, 12
- Class safety and supervision, 13
- Class size, 11
- Coaching vs. prompting, 18
- Communication, 27–29
 - after death, 28–29
 - with family, 28
 - with team, 28
- Compressions. *See* Chest compressions
- Compression-to-ventilation ratio, 81–84
- Consent, 92, 96, 119, 124, 149
- Course(s), Basic Life Support
 - activity types, 5
 - awarding certification for the successful completion of, 21
 - criteria for completion of, 19
 - delivery methods, 4
 - instructional design approach to, 4–6
 - instructor-led training
 - introduction to, 26
 - purpose of, 26
 - sample agenda for, 135
 - instructor's materials for, 7–8
 - lengths and schedules of, 11
 - objectives of, 3
 - participant's materials for, 7
 - purpose of, 3
 - unsuccessful completion of, 20
 - wrap-up, 78
- CPR
 - components of high-quality CPR, 42
 - for adults
 - multiple-provider, 47–48
 - single-provider, 45–46
 - for children, 59–61
 - for infants
 - multiple-provider, 63
 - single-provider, 61–62
- Crew resource management, 30
- Critical thinking and problem solving, 27

- Debriefing, 31
- Debriefing Tool, 112
- Drowning, 42, 56, 142

- E-C hand position, 82, 84
- Exam. *See* Final exam

- Face-up position. *See* Supine position
- Feedback
 - instructor, 17

Final exam, 20, 77–78
 administering, 6, 20, 78
 answer key, 133–134
 answer sheet, 132
 maintaining security of, 20

Head-tilt/chin-lift technique, 44, 58, 102

Heart attack. *See* Myocardial infarction

High-performance resuscitation team, 26, 31, 51, 144

High-quality CPR
 for adult, 42–50
 for child, 59–63
 for infant, 59–63

Infant, definition of, 56

Injury
 in adult, 141

Instructor
 requirements, 9
 responsibilities, 9–10, 15

Materials, equipment and supplies, 12–13

MI. *See* Myocardial infarction

Myocardial infarction (MI), 37

Naloxone (Narcan), administering, 73

Obstructed airway
 in adult, 68–69, 142–143
 in child, 68–69, 151
 in infant, 69–70, 151
 skill practice, 153–154

Opioid overdose, 71–73, 143
 assessing for, 72
 care for, 72–73

Participant Progress Log, 129–130

Participants
 engagement with, 5
 health precautions for, 9, 14
 ratio of instructors to, 11
 types and backgrounds of, 3
 with disabilities, 14

Pediatric Cardiac Chain of Survival, 56–57

Personal protective equipment (PPE), 101

Pocket mask
 in adult, 44–45

Practice scenarios. *See* Team response practice scenarios

Program references, 6

Prompting, 18

Rapid assessment
 for adult, 34–36, 140
 for child, 149
 for children and infants, 57–58
 for infant, 149

Respiratory arrest
 in adult, 141
 in child, 149
 in children and infants
 caring for, 58–59

Review course outline, 136–155

Scenarios. *See* Team response practice scenarios;
 Team response testing scenarios

Skill competency sheets
 BLS for Adults, 88–91
 BLS for Children (Optional), 96–99
 BLS for Infants, 92–95

Skill performance
 evaluation of, 19

Skill practice, 15–18
 conducting, 16
 evaluation of performance in, 18
 introduction to, 15
 setting up, 15–16

Skill practice sheets
 Multiple-Provider CPR for Adults, 82
 Multiple-Provider CPR for Infants, 84
 Obstructed Airway for Adults and Children, 85
 Obstructed Airway for Infants, 85
 One-Hand Technique for Children, 83
 Single-Provider CPR for Adults, 81
 Two-Finger Technique for Infants, 83

Skill sheets. *See* Skill competency sheets; Skill practice sheets

Supine position, 102

Team leader, 29, 144

Team member, 30, 144

Team response practice scenarios, 15–18
 BLS for Adults, 103–105
 BLS for Children (Optional), 106–108
 BLS for Infants, 109–111
 conducting, 17
 Rapid Assessment, 101–102
 setting up, 15–16

Team response testing scenarios, 19, 76–77
 administering, 77
 BLS for Adults, 114–118
 BLS for Children, 124–128
 BLS for Infants, 119–123

Teamwork, 29–31

Training standards, 10

Ventilations
 in adult, 43–44
 with pocket mask, 44, 81
 with BVM, 82, 84

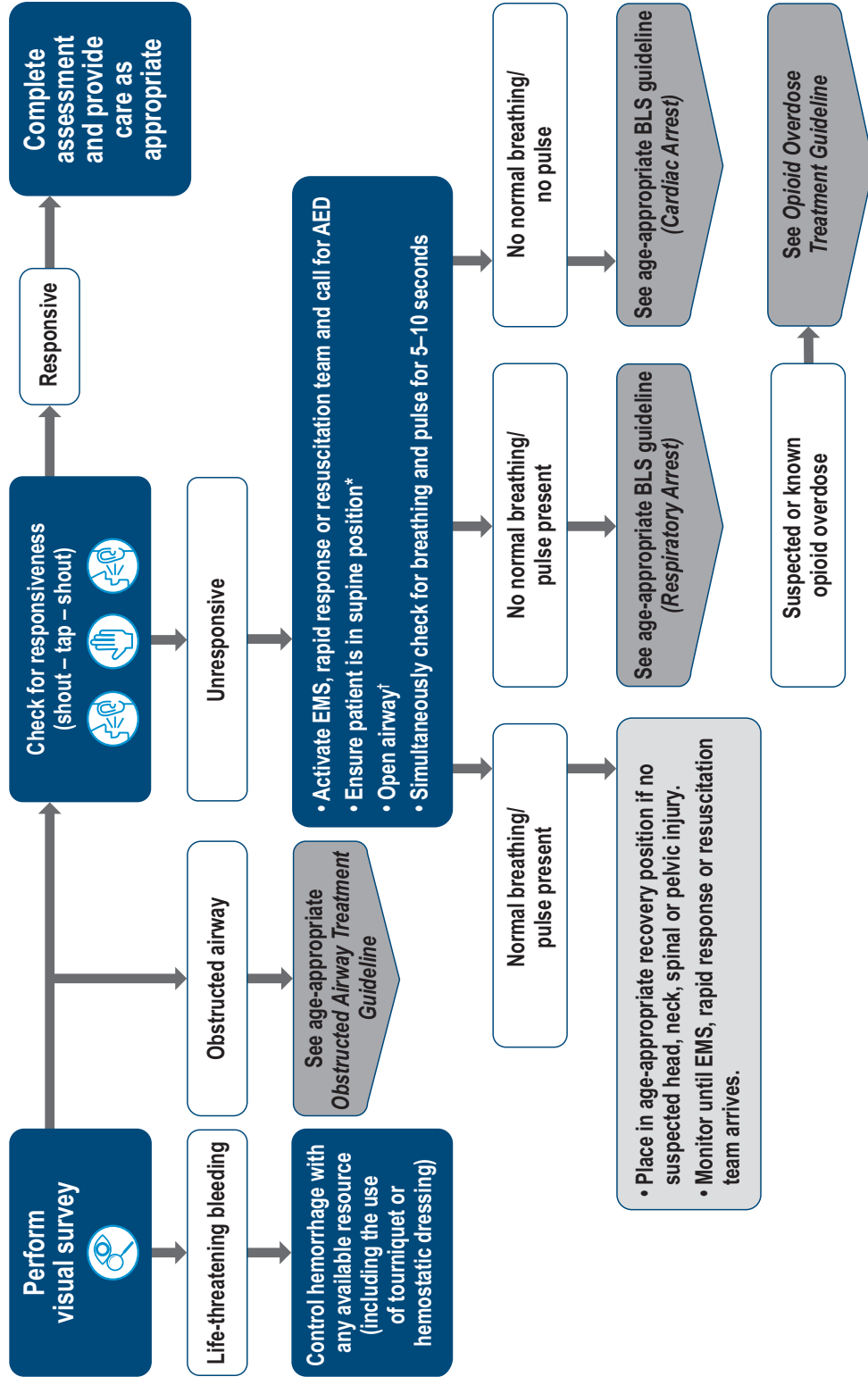


American Red Cross
Training Services

Basic Life Support

Treatment Guidelines

RAPID ASSESSMENT



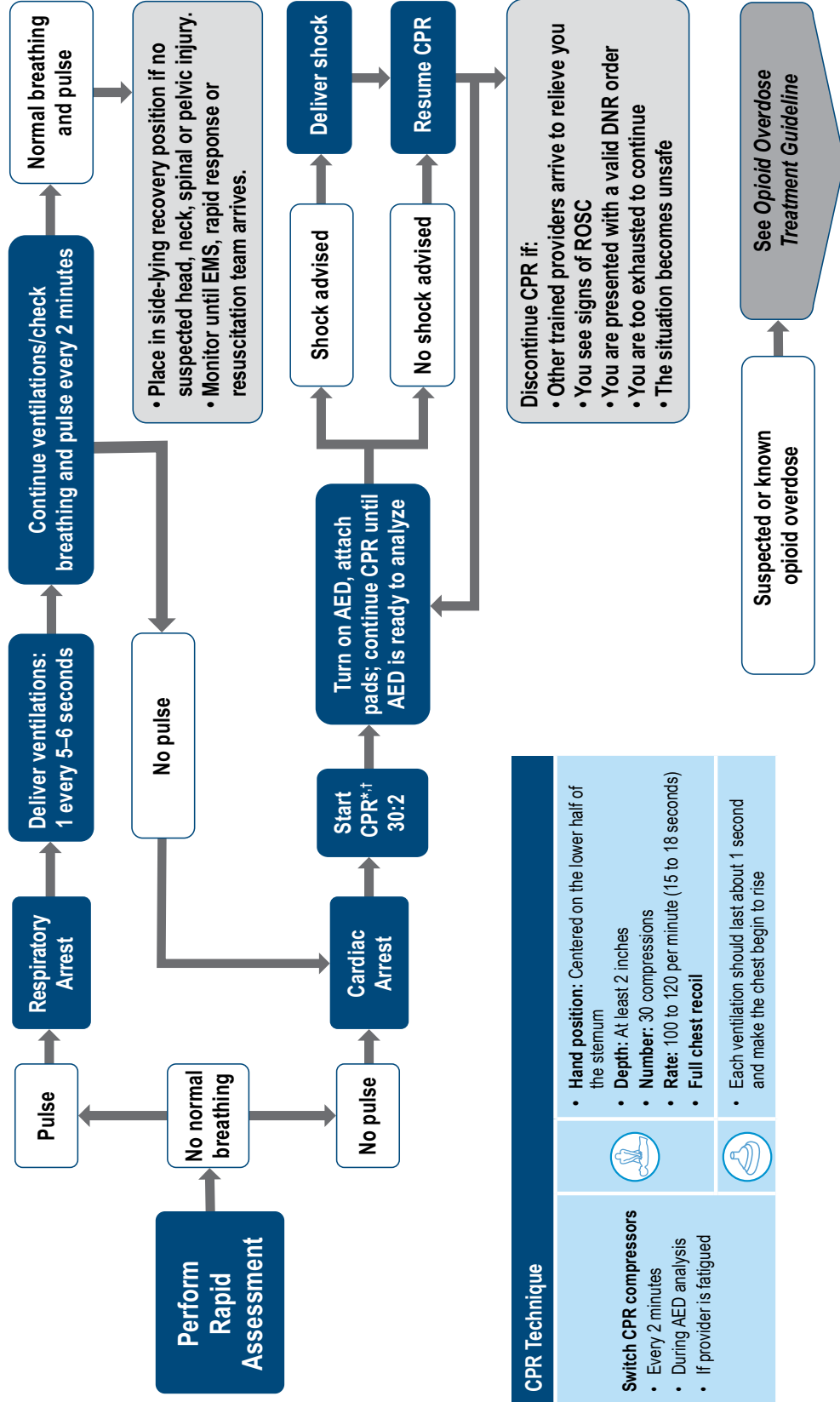
*If patient is face-down, roll them on their back, taking care not to create or worsen an injury.

†Use head-tilt/chin-lift technique or modified jaw-thrust maneuver to open airway if you suspect a head, neck or spinal injury.

© 2019 by The American National Red Cross. ALL RIGHTS RESERVED



BLS: ADULTS



CPR Technique

Switch CPR compressors

- Every 2 minutes
- During AED analysis
- If provider is fatigued



- **Hand position:** Centered on the lower half of the sternum
- **Depth:** At least 2 inches
- **Number:** 30 compressions
- **Rate:** 100 to 120 per minute (15 to 18 seconds)
- **Full chest recoil**



- Each ventilation should last about 1 second and make the chest begin to rise

*If an advanced airway is in place, one provider delivers 1 ventilation every 6 seconds. At the same time, a second provider performs compressions at a rate of 100 to 120 per minute. In this case, the compression to ventilation ratio of 30:2 does not apply because compressions and ventilations are delivered continuously with no interruptions.

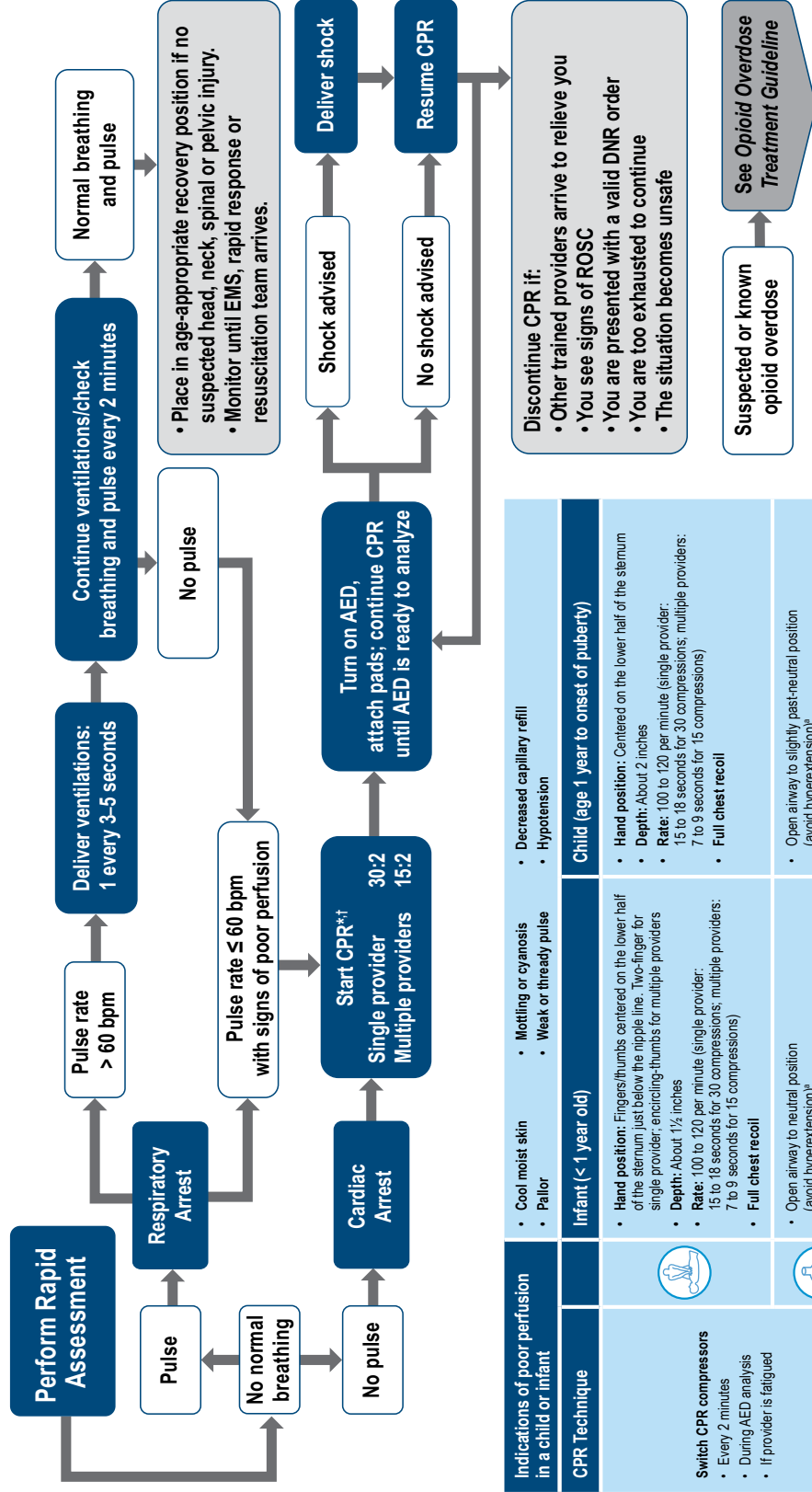
†If drowning or other hypoxic event is the suspected cause of cardiac arrest, deliver 2 initial ventilations before starting CPR.


© 2019 by The American National Red Cross. ALL RIGHTS RESERVED



American Red Cross
Training Services

BLS: CHILDREN AND INFANTS



Indications of poor perfusion in a child or infant	Infant (< 1 year old)	Child (age 1 year to onset of puberty)
<ul style="list-style-type: none"> Cool moist skin Pallor 	<ul style="list-style-type: none"> Mottling or cyanosis Weak or thready pulse 	<ul style="list-style-type: none"> Decreased capillary refill Hypotension
	<ul style="list-style-type: none"> Hand position: Fingers/thumbs centered on the lower half of the sternum just below the nipple line. Two-finger for single provider; encircling-thumbs for multiple providers Depth: About 1½ inches Rate: 100 to 120 per minute (single provider); 15 to 18 seconds for 30 compressions; multiple providers: 7 to 9 seconds for 15 compressions Full chest recoil 	<ul style="list-style-type: none"> Hand position: Centered on the lower half of the sternum Depth: About 2 inches Rate: 100 to 120 per minute (single provider); 15 to 18 seconds for 30 compressions; multiple providers: 7 to 9 seconds for 15 compressions Full chest recoil
<ul style="list-style-type: none"> Switch CPR compressors Every 2 minutes During AED analysis If provider is fatigued 	<ul style="list-style-type: none"> Open airway to neutral position (avoid hyperextension)* Each ventilation should last about 1 second and make the chest begin to rise. 	<ul style="list-style-type: none"> Open airway to slightly past-neutral position (avoid hyperextension)* Each ventilation should last about 1 second and make the chest begin to rise.

*Use modified jaw-thrust technique instead if you suspect head, neck or spinal injury.

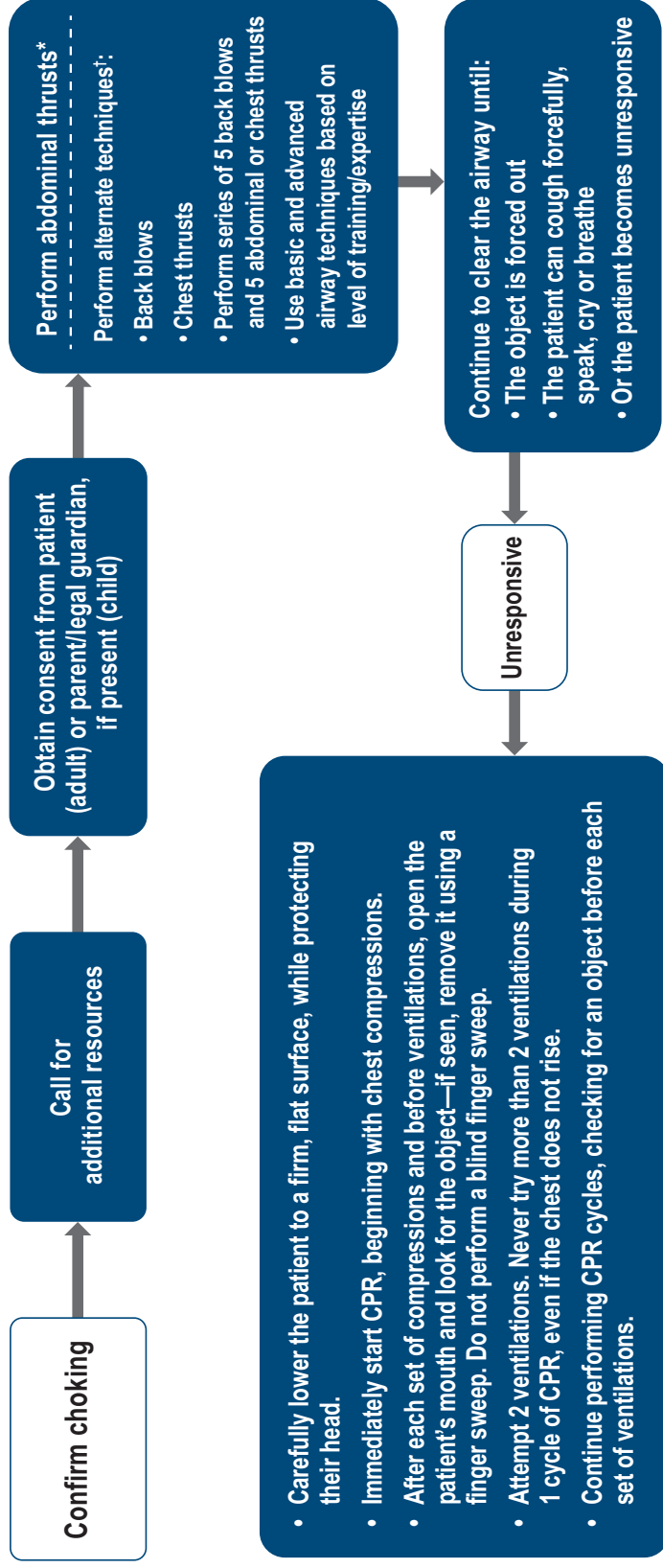
*If an advanced airway is in place, one provider delivers 1 ventilation every 6–8 seconds. At the same time, a second provider performs compressions at a rate of 100 to 120 per minute. In this case, the compression to ventilation ratio of 15:2 for multiple-provider CPR does not apply because compressions and ventilations are delivered continuously with no interruptions.

†If drowning or other hypoxic event is the suspected cause of cardiac arrest, deliver 2 initial ventilations before starting CPR.

© 2019 by The American National Red Cross. ALL RIGHTS RESERVED



OBSTRUCTED AIRWAY: ADULTS AND CHILDREN



Compressions:Ventilations

Adults	Children (age 1 year to onset of puberty)	
Single or multiple providers	30:2	30:2
		Multiple providers 15:2

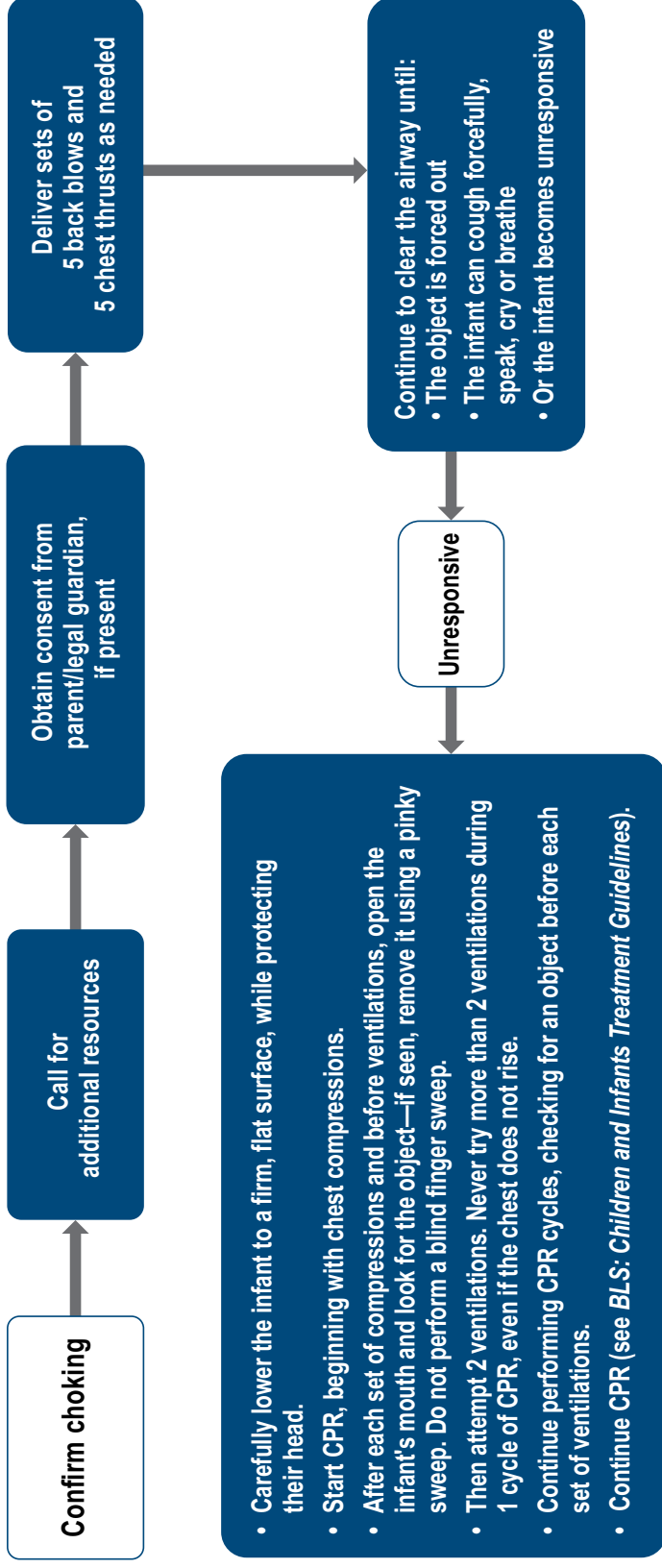
*Perform alternate techniques (chest thrusts, abdominal thrusts and back blows) if you cannot reach around the patient, if the patient might be pregnant, if the patient is in a bed or wheelchair with features that make abdominal thrusts difficult to do or abdominal thrusts are not effective in dislodging the object.

†If the patient is a young child or is in a wheelchair, you may need to kneel to perform chest thrusts, abdominal thrust and back blows.

© 2019 by The American National Red Cross. ALL RIGHTS RESERVED



OBSTRUCTED AIRWAY: INFANTS (< 1 YEAR OLD)

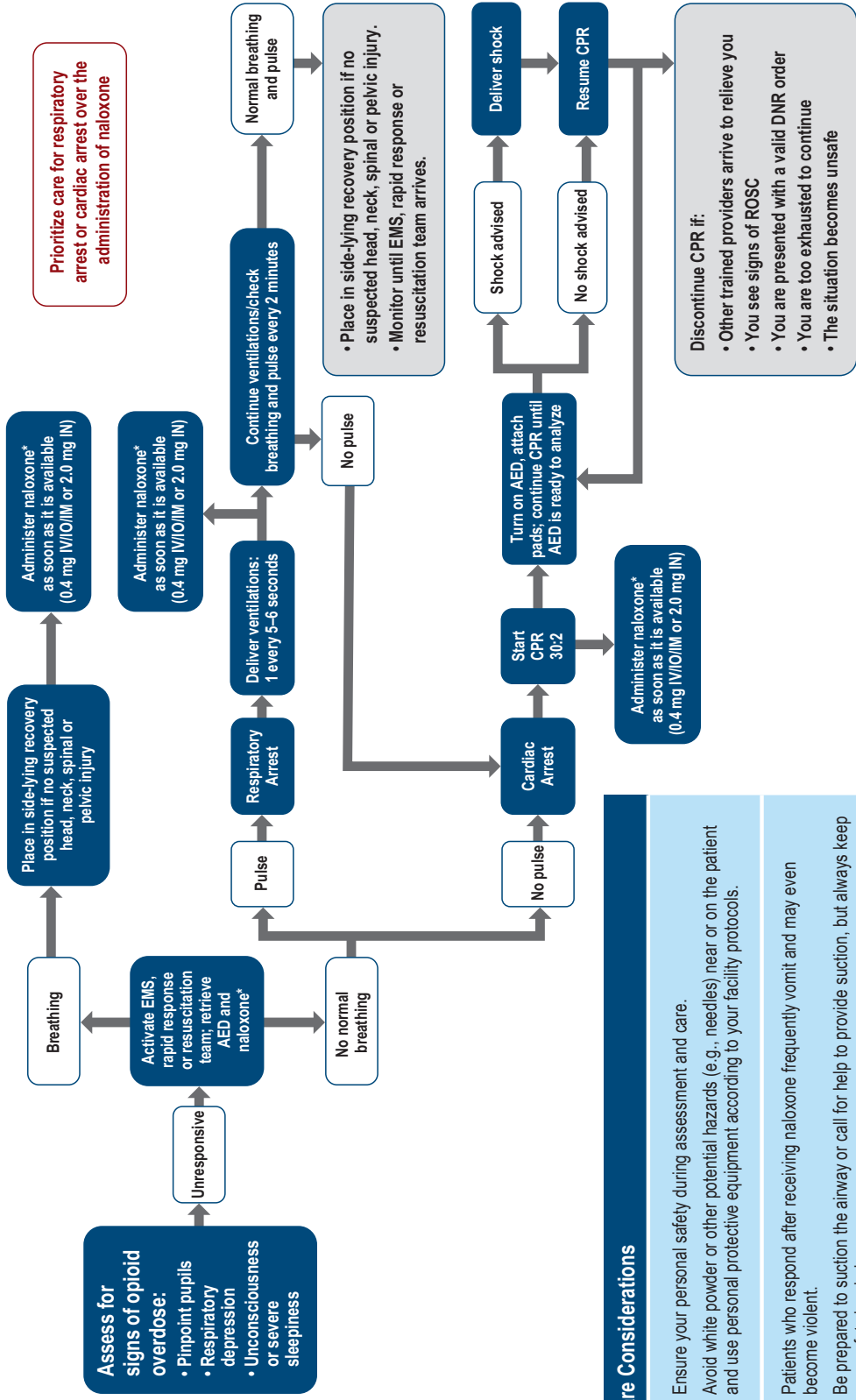


Compressions: Ventilations

Begin CPR within 10 seconds	
Single provider	30:2
Multiple providers	15:2



OPIOID OVERDOSE: ADULTS



Care Considerations

- Ensure your personal safety during assessment and care.
- Avoid white powder or other potential hazards (e.g., needles) near or on the patient and use personal protective equipment according to your facility protocols.
- Patients who respond after receiving naloxone frequently vomit and may even become violent.
- Be prepared to suction the airway or call for help to provide suction, but always keep your safety in mind.



*Follow facility protocols to determine dosing and timing of naloxone.
© 2019 by The American National Red Cross. ALL RIGHTS RESERVED



American Red Cross
Training Services

American Red Cross Training Services and the Scientific Advisory Council

Since 1909, the American Red Cross has provided best-in-class safety training and certification, enabling customers to learn the skills required for effective response in the event of an emergency.

Behind every course stands a team of experts ensuring what is taught is based on the latest science and best in emergency response. This team, known as the American Red Cross Scientific Advisory Council, is a panel of 50+ nationally recognized experts from a variety of scientific, medical and academic disciplines.

With members from a broad range of professional specialties, the Council has an important advantage: a broad, multidisciplinary expertise in evaluating new emergency response techniques, along with a rigorous review process. Additionally, with on-the-ground experience, its members bring the know-how for real-world emergencies. The Council provides authoritative guidance on first aid, CPR, emergency treatments, rescue practices, emergency preparedness, aquatics, disaster health, nursing, education and training.

**We encourage you to visit our Scientific Advisory Resource Center
at [redcross.org/science](https://www.redcross.org/science)**

The technical content within this Red Cross program is consistent with the most current science and treatment recommendations from:

- The International Liaison Committee on Resuscitation (ILCOR) 2015-2018 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations.
- The 2015-2018 American Heart Association Guidelines Update for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care.

Mission

The American Red Cross prevents and alleviates human suffering in the face of emergencies by mobilizing the power of volunteers and the generosity of donors.