INSTRUCTOR GUIDE
PREVIEW

Basic Life Support

BLS for Healthcare Providers and Professional Rescuers

2015 GUIDELINES

AMERICAN SAFETY & HEALTH INSTITUTE

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Basic Life Support

BLS for Healthcare Providers and Professional Rescuers

Instructor Guide, *Version 8.0*

Purpose of this Guide

This ASHI *Basic Life Support Version 8.0 Instructor Guide* is solely intended to give information on the presentation and administration of ASHI Basic Life Support certified training classes. The information in this book is furnished for that purpose and is subject to change without notice.

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Program Design

Program Overview

The ASHI Basic Life Support (BLS) program is intended to assist healthcare providers, including professional rescuers, in learning or refining BLS skills for patients of all ages. These critical, potentially life-saving skills include performing high-quality cardiopulmonary resuscitation (CPR) and automated external defibrillation (AED) as a single provider and part of a team. BLS also includes knowing how to relieve foreign body airway obstruction.

Founded in basic principles of instructional design and learning theory, ASHI promotes a toolbox approach to learning. This approach gives instructors flexibility in both presentation strategies and materials in order to reach students with widely varying abilities in the countless instructional settings that exist in the real world. Basic Life Support is designed to include a significant amount of hands-on skill practice.

Program Structure

ASHI Basic Life Support contains both core and supplemental training content.

Core Training Content

The core training content is the minimum knowledge and skill content to be covered in ASHI Basic Life Support.

Supplemental Content

In addition to the core training content, ASHI Basic Life Support contains supplemental knowledge and skill content that may be added by the instructor as desired or required.

Supplemental training content is clearly identified and appropriately located throughout this Instructor Guide.

Third-Party Training Content

Additional training materials that are not produced by HSI may also be used to enhance ASHI Basic Life Support at the discretion of the training center director. These additional materials may not be used in lieu of ASHI Basic Life Support materials and may not be used to shorten or otherwise alter the core training content.

Important:

REGULATORY AGENCIES AND OTHER APPROVERS MAY REQUIRE SPECIFIC HOURS OF INSTRUCTION OR OTHER PRACTICES. INSTRUCTORS MUST BE FAMILIAR WITH AND COMPLY WITH ALL APPLICABLE LOCAL, STATE, PROVINCIAL, FEDERAL LAWS AND ADMINISTRATIVE RULES AS THEY PERTAIN TO THE APPROVAL, DELIVERY, AND ADMINISTRATION OF THIS TRAINING. HSI MAINTAINS A DATABASE OF ALL REGULATORY APPROVALS IN OTIS.

Class Types

There are 3 different class types for ASHI Basic Life Support: Initial, Renewal, and Challenge.

Initial Class

A classroom or blended learning training class for individuals who have never been certified or whose certification has expired.

Renewal Class

A classroom training class for individuals who wish to refresh skill competency and maintain certification.

Challenge

A classroom evaluation for individuals who wish to earn certification by demonstrating knowledge and skill competency without taking an initial or renewal class.

Class Methods

There are 2 methods to teaching and certifying students in ASHI Basic Life Support: instructor-led classroom training and blended learning.

Classroom Training

This is an instructor-led, in-person, classroom-based approach where the core knowledge content is provided using scenario-based video segments or a slide presentation, followed by demonstration of skills and the opportunity for instructor-facilitated student practice. There is a maximum student-to-instructor ratio of 10:1. The recommended ratio is 6:1.

Blended Learning

This is a mixed-mode approach using both online and in-person learning; core knowledge content is provided in video segments and interactive student exercises online followed by in-person skills practice.

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Training Content

Initial Classroom Class

The content of the initial class is divided into sections. Sections are further divided into lessons. Each lesson provides an approximate length, skill and/or knowledge objectives (What Students Should Learn), provides an encouraging reason for learning (Why This Topic Matters), lists required equipment, and describes the necessary instructor activities. The outline and time frame for the Initial Instructor-Led Class are provided in Part 3.

Four-Step Instructional Approach

In general, ASHI follows a basic four-step instructional approach (some lessons may include fewer or additional steps).

Step 1: Present the Knowledge Content

The program video and the program slide presentation are the primary tools provided to deliver knowledge content for the class.

Featuring scenario-based video segments, the program video provides you with a simple, engaging, and consistent approach to deliver content.

The program slide presentation allows more experienced instructors to take an active role in presenting content. Slides focus on the key points of information and allow instructors to highlight content using other delivery methods. Slide notes provide more detail on content. Instructors can use stated video-times as a guide for pacing lesson times when using the presentation.

Key points are also included for each lesson in this Instructor Guide and can be used to emphasize key content throughout the class.

Step 2: Demonstrate Skills

When demonstrating skills, a high-quality performance is essential because students will tend to copy it.

When giving a demonstration, consider using the WHOLE-PART-WHOLE method:

WHOLE: Demonstrate the entire skill, beginning to end, briefly naming each action or step.

PART: Demonstrate the skill again, step-by-step, integrating information and facts while pointing out common errors in technique. Present only the knowledge necessary to for the student to adequately perform the skill. To help, have students look at the appropriate skill guide as you demonstrate.

WHOLE: Demonstrate the entire skill again — in real-time — without comment. Perform it without remarks, interruption, or explanation. This helps students get a feel for the tempo of the skill and the opportunity to observe the sequence of actions before they practice.

Step 3: Allow Adequate Time for Students to Practice High-Quality Skills

Break students into small groups with the required equipment for the practice. Have one student act as a coach by reading the skill steps from the skill guide while another student performs the skills on a manikin or another student. Have students rotate through the roles until all have played each role.

An instructor should circulate through the classroom, answering questions, correcting errors in technique, and providing constructive feedback and positive reinforcement. Avoid anxiety-producing, perfection-oriented skill checks. A stimulating, but nonthreatening, environment is best for learning.

In addition to practicing high-quality skills, students will also participate in a high-performance CPR scenario practice with multiple providers. Students will learn and refine their ability to orchestrate their actions, much like a pit crew in a car race.

Optional Video Guided Practice

Instructors have the option to use video guided practices for chest compressions, rescue breaths, and CPR. Video guided practices allow students to practice skills in tandem with a video demonstration.

Video segments for these guided practices are provided. Each student must have a manikin when conducting a video guided practice. Instructor notes are located in this Instructor Guide where video guided practices are available.

Optional LOOP Learning System Integration

Instructors also have the option to integrate the use of the LOOP Learning System during hands-on practices for chest compression, CPR, and high-performance CPR. The LOOP can engage students in learning and help students improve performance as they practice skills.

The LOOP Learning System (sold separately) is a CPR practice aid that can provide real-time feedback to a student on compression rate, depth, and overall timing of performance. Real-time performance feedback allows for the immediate correction and reinforcement of skills. Feedback devices are recommended for the development of high-quality CPR skills.

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Step 4: Wrap It Up

Ask for and answer questions as briefly and concisely as you can. If available, finish with a short problem-solving knowledge check to help students recall key information.

The initial class proceeds lesson by lesson until its conclusion. ASHI Basic Life Support certification cards are issued to those students who have earned them.

Certification Requirements

In addition to completing the designated lessons, students must also demonstrate the minimum required skill competency using the Caring for Cardiac Arrest - Adult and Caring for Cardiac Arrest - Infant performance evaluation sheets and get a passing score on the BLS written exam to be eligible for certification.

Instructors must be current and properly authorized as an ASHI Basic Life Support instructor to issue Basic Life Support certification cards.

Initial Blended Class

About Blended Learning

Blended learning combines the convenience of online learning with face-to-face, in-class skill practice and evaluation by an authorized instructor. The platform used for the online portion of the Initial Blended Class is Otis. This web-based learning system allows for a variety of sensory interactions to provide users with a low-stress, easy-to-use, and convenient way to learn the required information. The management of blended training, including scheduling online and face-to-face sessions, is also done through Otis. Students are notified by email of enrollment in the online class. Student progress can be monitored online. For information on system requirements and how to register students for the online portion of the class contact your training center director or email customerservice@hsi.com.

Online Portion

The online portion of a blended training class covers the essential cognitive content for the class using program video segments and interactive exercises. A passing score on the Basic Life Support Written Exam is required to successfully complete the online portion. When a student successfully completes the online portion of the class, a Recognition of Completion certificate will be made available to the student for printing and the completion will be recorded within Otis. Successful completion of the online portion is required to attend the face-to-face portion of the class for skills practice and evaluation with an instructor.

Important:

COMPLETION OF THE ONLINE PORTION ALONE DOES NOT RESULT IN CERTIFICATION. THE ONLINE PORTION IS USEFUL FOR KNOWLEDGE ACQUISITION, BUT IT DOES NOT PROVIDE ANY BENEFIT IN THE PERFORMANCE OF SKILLS. SUBSTANTIAL HANDS-ON PRACTICE IS NEEDED TO MEET BLS PSYCHOMOTOR SKILL PERFORMANCE OBJECTIVES [1]

Face-to-Face Portion

The face-to-face portion of a blended class focuses on the development of high-quality BLS skills through hands-on practice. Required activities of the face-to-face portion of the Initial Blended Class include performing instructor demonstrations and student practices and evaluations, completed just as in an Initial Instructor-Led Class.

Instructor Demonstration

The instructor performs a demonstration of the skill, using the Whole-Part-Whole method.

Student Practice and Evaluation

Following the instructor demonstration, allow adequate time for students to practice the skill. Instructors must evaluate and document adequate student skill performance.

Optional video guided practices and LOOP Learning System integrations can be considered.

Important:

THE FACE-TO-FACE PORTION OF THE BLENDED CLASS IS NOT A SIMPLE SKILLS CHECK OFF. THIS PORTION OF THE CLASS INCLUDES BOTH PRACTICE AND EVALUATION. FOR STUDENTS WHO ARE ALREADY COMPETENT IN THEIR KNOWLEDGE AND SKILLS, CONSIDER USING THE CHALLENGE OPTION.

The outline and time frame for the Initial Blended Class are provided in Part 4. The class proceeds lesson by lesson until its conclusion. ASHI Basic Life Support certification cards are issued to those students who have earned them.

Certification Requirements

The certification requirements for the Initial Blended Class are the same as for an Initial Instructor-Led Class.

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Renewal Class

The Renewal Class is designed for individuals who are currently certified and want (or are required) to refresh skill competency and maintain certification. Individuals without current certification may not participate in a Renewal Class.

Basic life support skills, and the confidence to use them, deteriorate rapidly following initial training and certification, in as few as 30 to 90 days.[2,3] Consider doing renewal training more frequently to refresh and maintain skills.

Lessons in the renewal class focus on the development of high-quality BLS skills through hands-on practice. Required activities of a Renewal Class include performing instructor demonstrations and student practices and evaluations, completed just as in the Initial Instructor-Led Class.

Optional video guided practices and the integration of the LOOP Learning System can also be considered.

The outline and time frame for the Renewal Class are provided in Part 5. The Renewal Class proceeds lesson by lesson until its conclusion. ASHI Basic Life Support certification cards are issued to those students who have earned them.

Certification Requirements

The certification requirements for the renewal class are the same as for an Initial Instructor-Led Class.

Challenge

A Challenge is an instructor-led evaluation for individuals who wish to earn ASHI Basic Life Support certification by demonstrating knowledge and skill competency without taking an initial or renewal class. Anyone is eligible to participate in a Challenge regardless of certification status.

There are no lessons or teaching in a Challenge. Participants are solely responsible to be prepared to take a Written Exam and skill test. The required instructor activities are limited to administering the Written Exam and evaluating the minimum required skill competency using the Caring for Cardiac Arrest — Adult and Caring for Cardiac Arrest — Infant performance evaluation sheets.

The outline and time frame for the Challenge are provided in Part 6. ASHI Basic Life Support certification cards are issued to those individuals who have earned them.

Instructional Tools

This ASHI Basic Life Support Instructor Guide, (integrated with pages from the Basic Life Support Student Book), video segments, presentation slides, scenario sheets, performance evaluation sheets, and online training provides the materials necessary for a properly qualified and authorized instructor to conduct the Initial, Blended, Renewal, and Challenge classes. Lesson plans are located in Parts 3 through 6.

Instructor/Training Center Portal in Otis

The instructor/training center portal in Otis provides access to the most current support documents, including performance evaluation sheets, scenario sheets, exams, supplemental skill guides, errata sheets, and more. Please see Otis for the most up-to-date information. Login to Otis at otis.hsi.com/login. If you need assistance logging into Otis, call 877-440-6049 to speak with technical support.

Student Book

The ASHI Basic Life Support Student Book is a personal student resource that covers core knowledge and skill content. Each participant should have a current print or digital Student Book readily available during and after the class.

Program Video

The ASHI Basic Life Support program video is a scenario-based visual learning tool. Video segments cover all core and supplemental training content. The video is available on digital video disc (DVD), online as a component of the blended class, and as an Otis-powered desktop or mobile application.

Program Slide Presentation

A PowerPoint* slide presentation is provided as an alternative visual tool to the program video. Designed for more experienced instructors, the presentation highlights the key points of the program content to help guide instructors in class. The program slide presentation file is available in Otis.

Skill Guides

Skill guides combine words and photographs of the correct steps of a skill or process in the proper sequence. They are visual, easy-to-use, instructional tools to be used by the instructor as a teaching aid and by students during skill practice. Skill guides are included in the Student Book and integrated into this Instructor Guide.

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* The ASHI Basic Life Support slide presentation was created using PowerPoint® presentation graphics program. PowerPoint® is a registered trademark of Microsoft Corporation in the United States and/or other countries.

Scenario Sheets

Scenario Sheets are student practice tools used to help students learn how to apply skills and make reasoned judgments and decisions in a realistic, simulated setting. An alternative to skill guides, Scenario Sheets are more suited to experienced students. Scenario Sheets and instructions for their use are available in Otis.

Performance Evaluation Sheets

Performance evaluation is a scenario-based assessment process that provides sound, fair, consistent, uniform, objective, and reliable documentation of a student's competency according to the skill criteria. Performance evaluation sheets and instructions for their use are available in Otis and included in the Otis-powered desktop or mobile application.

Written Exam

Students must take and pass the Written Exam as part of the requirements for certification in ASHI Basic Life Support.

Two Written Exam versions, an answer sheet, and answer keys are included in the program documents in Otis.

LOOP Learning System

The LOOP Learning System (sold separately) is a CPR practice aid that can increase the level of engagement of students during training.

The LOOP Learning System uses a LOOP CPR Controller, placed on a manikin chest to measure compression depth, rate, and overall timing for CPR.

The LOOP system also comes with two software programs: LOOP Rhythm and LOOP Metrics. LOOP Rhythm enhances training by using music, video, competitive scoring and other gaming concepts to create a compelling fast-paced and fun experience.

LOOP Metrics is designed for use in the hands-on practice sessions of a training class. It provides real-time performance feedback that allows for the immediate correction and improvement of skills. Skill performance is also recorded so instructors can review the results with students at the end of a practice session. The optional use of the LOOP Learning System has been integrated into the compressions, CPR, and high-performance CPR practices in this training program.

The 2015 American Heart Association Guidelines Update for CPR and ECC recommend the use of a corrective CPR feedback device during CPR training to improve skill performance.

If LOOP or a similar CPR feedback device is not available, it is recommended to use a metronome to at least provide auditory guidance on compression rate. Many free or low-cost metronome apps are available for use on mobile tablets or phones.

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Part 2:

Class Requirements and Administration

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Class Requirements

Important:

COMPLETE STANDARDS AND GUIDELINES FOR QUALITY ASSURANCE INCLUDING PROGRAM STANDARDS, CERTIFICATION STANDARDS, AND THE TERMS AND CONDITIONS FOR INSTRUCTOR AND INSTRUCTOR TRAINER AUTHORIZATION ARE LOCATED IN THE MOST RECENT VERSION OF THE HSI TRAINING CENTER ADMINISTRATION MANUAL (TCAM) AVAILABLE AT http://www.hsi.com/qualityassurance.

ALL INSTRUCTORS HAVE AGREED TO COMPLY WITH THESE STANDARDS BY SUBMITTING A SIGNED APPLICATION FOR INSTRUCTOR AUTHORIZATION.

Before Class

A few days before the class, confirm the date, location, and number of students. Ensure you have the following materials (see Equipment List for detailed information):

- Basic Life Support Instructor Guide
- Basic Life Support Student Books
- CPR manikins and AED trainers
- Gloves, CPR masks, Bag-masks
- Audio visual equipment and cables
- Class paperwork

Review this Instructor Guide, paying particular attention to the outline and time frame for the class you are teaching (Initial, Blended, Renewal, or Challenge). Review the video or slides and key points for each lesson, including any supplemental content to be added. Review all of the included instructor notes to see if you need to adjust your approach to training. Familiarize yourself with the Student Book.

Learning Environment

The ideal learning environment is comfortable, efficient, and distraction-free with sufficient space, seating, resources, and equipment. Instructors should take reasonable efforts to ensure a physically safe, comfortable and appropriate learning environment. The room should be well lit, well ventilated, and comfortable in temperature. Avoid cramped classroom setups where possible.

Classroom Space

Basic Life Support has been developed for a maximum student-to-instructor ratio of 10:1; the recommended ratio is 6:1. Personal supervision is necessary to ensure effective facilitation, assistance, guidance, and supervision. Additional equipment and the assistance of other authorized instructors are recommended for all skill sessions where possible.

The room should be large enough to accommodate chairs, tables, and skill practice space for up to 10 students. Basic Life Support requires hands-on practice and evaluation of skills. Ensure that adequate and appropriate space for these activities is provided. Allow 15 to 17 square feet per student whenever possible.[4] Avoid lecture hall type of arrangements. A sample classroom layout is available in Otis.

Classroom Safety

Make sure there are no obvious hazards in the classroom, such as extension cords that can be tripped over. Discourage students from smoking, eating, or engaging in disruptive or inappropriate behavior. Have an emergency response plan in case of serious injury or illness, including evacuation routes from the classroom. Be aware of and share with students the location of the nearest bathrooms, exit, phone, first aid kit, AED, fire alarm pull station, and fire extinguisher.

NOTICE:

WARN STUDENTS TO AVOID AWKWARD OR EXTREME POSTURES OF THE BODY. IMPROPER LIFTING AND MOVING IS A LEADING CAUSE OF BACK INJURY.

Student Illness and Other Emergencies

Advise students to not attend class if they have an illness such as influenza or a fever. Training centers should provide reasonable accommodation to students to make up class time or skill sessions. If a student has a medical emergency, instructors should provide the appropriate care and and activate the emergency response plan appropriate for the setting.

Equipment and Materials List

Some equipment and materials are required for teaching, while other materials are optional. Some materials and equipment are recommended but not required. Use the lists below to prepare the right materials and equipment for the training you are delivering. The maximum student-to-manikin/AED trainer ratio for CPR skills practice is 3:1.

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Core Content

Required

- Television with DVD player, or computer with speakers, large monitor, or projection screen
- Adult, child, and infant CPR training manikins, 1 for each group of 2 to 3 students
- AED training devices with pediatric capability and pads, 1 for each manikin
- Manikin decontamination supplies (e.g., manikin cleaning wipes, 70% ethyl alcohol)
- Adult and pediatric CPR masks, 1 for each group of 2 to 3 students, with 1 separate one-way valve for each student
- Adult and pediatric bag-mask devices, 1 for each group of 2 to 3 students.
- Nonlatex disposable gloves
- Basic Life Support Instructor Guide (print or digital), 1 for each instructor
- Basic Life Support Student Books, 1 for each student (print or digital)
- Basic Life Support program video, DVD or Otis-powered desktop, mobile application or Basic Life Support slide presentation, 1 for each class
- Basic Life Support certification cards, 1 for each student who earns one (print or digital)
- Class roster, 1 for each class (print or digital)
- Written exams A and B, 1 version for each student (print)
- Written exams answer sheets, 1 for each student (print)
- Written exams answer keys, A and B, 1 for each instructor/assistant (print)
- Performance evaluation sheets (print or digital)
  - Caring for Cardiac Arrest — Adults
  - Caring for Cardiac Arrest — Infants

Recommended

- Metronome/audio prompting device
- Pens or pencils, 1 for each student
- Blankets or mats
- Name tags or tent cards, 1 for each student
- Spare projector bulb (as needed)
- Extension cord (as needed)
- Whiteboard with dry erase pens and eraser, if available
- Large black markers for student name tags or tent cards
- Large envelope for class paperwork

Supplemental Content

If you choose to teach supplemental topics in addition to core content, additional materials may be required. Details of what equipment is required for each topic are described at the top of each topic page.

Dependent on topic

- LOOP Learning System
- Naloxone administration training devices, 1 for each group of 2–3 students

Conducting a Class

1. Arrive early. Give yourself plenty of time to get organized.
2. Circulate a sign-in sheet or the Class Roster. Be sure all students sign-in.

During Class

1. Start on time. Briefly cover class expectations: class goal, certification requirements, classroom safety, facilities, mobile phone use, and breaks.
2. Stay on track. Keep lessons within their time limits. End discussions when they are not productive or lead off class.
3. At the beginning of each lesson, briefly communicate the knowledge and skill objectives, and explain why this topic matters.
4. Show the video or slide presentation (where required) and emphasize the key points as needed. Ask for and briefly answer any questions.
5. Facilitate student practices. Answer questions and offer constructive guidance and positive feedback as appropriate.
6. Evaluate each student's ability to demonstrate the minimum required skill competency using the Caring for Cardiac Arrest - Adult and the Caring for Cardiac Arrest performance evaluation sheets.
7. Administer Written Exam.
8. Offer and collect students' Rate Your Program evaluations.
9. Identify EMS professionals who are eligible to receive CAPCE continuing education hours.
10. Upon class completion, issue Basic Life Support certification cards to those individuals who earned them.

After Class

Complete and sign the Class Roster.

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Administration

Skill Evaluation

The instructor must evaluate each student for skill competency — the ability of the individual to do the skill adequately without assistance from the instructor. Each student must be able to demonstrate skills properly according to the skill criteria as it appears on a skill guide or performance evaluation sheet.

To be eligible for certification, students need to demonstrate the minimum required skill competency using the Caring for Cardiac Arrest — Adult and Caring for Cardiac Arrest — Infant performance evaluation sheets. Performance evaluation sheets and instructions for their use are included online in Otis.

A student who has not met the minimal competency should have an opportunity for remediation and reevaluation. (This does not appy to Challenge option.)

Students who have not performed the required skills competently according to the skill criteria on the performance evaluation sheet have not successfully completed the class.

Skill Remediation

As time permits, remediation, or the correction of inadequate skill performance, should be offered to students who are experiencing skill difficulties.

Generally, address student skill problems during student practices using the gentle correction of skills and positive coaching. If possible, assist students privately during breaks, lunch, or at the end of the class.

Be polite, considerate, encouraging and professional when remediating skills.

Following remediation, reevaluate the student's skill competency according to the skill criteria as it appears on the student guide, scenario sheet, or performance evaluation sheet.

If a student requires more remediation than can be provided during a class, recommend the student attend another training class.

Written Exam

A Written Exam is required for certification for ASHI Basic Life Support

Adequate time must be provided during the class to complete the exam. Two versions of the Written Exam, along with instructions for their use are included online in Otis. An exam answer sheet is also available to help minimize the amount of paper used. Exam answer keys are provided for both exam versions to aid in exam correction.

Each student must obtain a passing score of 70% or better. The BLS exams are valid, appropriately matched to content, and consistent with established item writing standards. Subjectively raising the passing score is improper as it may result in a person who has an adequate level of knowledge competence failing the test. If a student does not pass the first Written Exam, he or she must take the alternative version. If a student does not pass the alternative version, he or she must retake the class.

ASHI is implementing open-book exams with the G2015 training programs. Open-book exams emphasize critical thinking and problem solving over recall of memorized facts and decrease test anxiety. Open-book exams mean that students may use reference materials to take exams. Reference materials include any notes taken during the class as well as the print or digital ASHI Student Book.

Although students may use reference materials while taking the exam, they should not be allowed to openly discuss the exam with other students or the instructor. Their answers should be their own. Instructors may read aloud the exam to the students as necessary without providing the answers.

Consider the following tips to prevent cheating if students take the Written Exam.

1. Before distributing the exams, remind students those who are caught cheating will not receive certification cards.
2. Request a photo ID if you suspect someone may be taking the test in place of a student.
3. Inform students there is to be no talking during the exam. If a student has a question during the exam, ask that student to raise a hand and you will go to him or her.
4. For extra precaution, use both versions of the exam, alternating them between students to make copying from another student more difficult.
5. Walk around the room throughout the exam. Do not do other work while monitoring the exam.

Criteria for Certification

When the instructor determines a student has demonstrated adequate knowledge and skill competency, the instructor may issue a certification card (print or digital).

Certification means verification that on the indicated class completion date the student demonstrated achievement of the required knowledge and hands-on skill objectives to the satisfaction of a qualified and currently authorized ASHI instructor or instructor trainer.

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Certification does not guarantee future performance, or imply licensure or credentialing. Certification is documented by the legitimate issuance of a correctly completed ASHI certification card.

Important:
SEE THE MOST RECENT VERSION OF THE HSI TRAINING CENTER ADMINISTRATION MANUAL (TCAM) FOR COMPLETE PROGRAM STANDARDS REGARDING CERTIFICATION. THE TCAM IS AVAILABLE AT http://www.hsi.com/qualityassurance.

Class Documentation

All of the class documentation forms used in the ASHI Basic Life Support training program are available for download in the documents section of Otis. A complete list of those forms can be found in the Appendix of this Instructor Guide.

There may be periodic revisions or updates to the class documentation forms. Refer to Otis for the most current version.

Class Roster

The Class Roster is the principal record of training. The roster verifies student completion of the class. It also documents the Written Exam score and remediation. A complete, accurate, and legible Class Roster signed by the authorized instructor or submitted online through Otis is required for every training class. The Class Roster must be promptly delivered to the training center responsible for the class or submitted online through Otis. The training center is required to keep clear, legible and orderly class records (paper or digital) for no less than 3 years.

Written Exam

A passing score of at least 70%, or at least 21 correct questions out of 30 provided is required for certification. Passing scores are documented directly on the Class Roster. If a student does not get a passing score on an initial attempt and passes on the second attempt, record only the passing score on the Class Roster.

Performance Evaluation Sheets

Performance evaluation sheets are used to evaluate the skill competency of students for certification. Instructors document the ability of each student to successfully demonstrate the minimum required skill competency on the Class Roster.

It is highly recommended to use performance evaluation sheets as secondary documentation of student skill competency. Formal use of performance evaluation sheets may also be required by regulation or organizational policy.

For secondary documentation, the performance evaluation sheets should be filled out while the student is performing the skills. The instructor should sign and date each performance evaluation sheet. A student's performance evaluation sheets signed by the instructor should be considered important potential evidence demonstrating instructor evaluation of each student's skill competency.

Following class, any signed performance evaluation sheets should be included with the Class Roster and promptly delivered to the training center responsible for the class.

Rate Your Program Course Evaluation

Encouraging class participants to provide feedback and then using that feedback to improve instruction is an essential aspect of any quality educational effort. HSI requires that students be given the opportunity to evaluate any ASHI class using the Rate Your Program course evaluation form.

Completed course evaluations should be promptly delivered to the training center responsible for the class.

Additionally, class participants may provide Rate Your Program feedback directly to HSI http://www.hsi.com/rateyourprogram. All information obtained by HSI through this process is reviewed and shared with the training center, instructor, or instructor trainer as appropriate.

EMS Continuing Education Available

The ASHI BLS program provides approved EMS continuing education hours (CEH) accredited by the Commission on Accreditation of Pre-Hospital Continuing Education (CAPCE, formerly CECBEMS) for the classroom, blended, and renewal methods of conducting a class.

Continuing education requirements for EMS personnel vary by EMS level and individual state requirements. Most states recognize CEH for EMS personnel approved by CAPCE, for which HSI is an accredited organization. HSI has voluntarily submitted to an objective assessment of its ability to meet established standards for educational planning, implementation, and evaluation, and has been identified as meeting or exceeding those criteria.

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Important:

PER CAPCE, TRAINING CENTERS ARE REQUIRED TO MAKE CAPCE CONTINUING EDUCATION HOURS (CEH) AVAILABLE TO ALL EMS PROFESSIONALS WHO PARTICIPATE IN AN ASHI BASIC LIFE SUPPORT CLASSROOM OR BLENDED COURSE. EMS PROFESSIONALS ARE NOT OBLIGATED TO ACCEPT THE CEH.

If you have questions about issuing CAPCE continuing education hours to EMS professionals, contact your training center director or call us at 800-447-3177.

Important:

THE AWARD OF CONTINUING EDUCATION HOURS IS NOT CERTIFICATION. CERTIFICATION REQUIRES THE SUCCESSFUL COMPLETION OF A HANDS-ON SKILLS PERFORMANCE EVALUATION WITH AN AUTHORIZED INSTRUCTOR. CERTIFICATION IS DOCUMENTED BY A SEPARATELY ISSUED CERTIFICATION CARD. CONTINUING EDUCATION HOURS ARE NOT AVAILABLE TO EMS PROFESSIONALS WHO CHALLENGE THE PROGRAM.

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Part 3:
Initial Training, Classroom

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Initial Class Outline and Time Frame

Lesson	Lesson Title	Knowledge Objectives	Skill Objectives	Approximate Length (min)
Introduction	*Describe the purpose of the program, health and safety precautions, and conduct a warm-up exercise.*			5
PREPARING TO HELP				
1	Sudden Cardiac Arrest	Describe how to recognize or suspect and provide treatment for sudden cardiac arrest. Describe the links in the chain of survival for inside and outside the hospital, and for children and infants.		8
2	Secondary Cardiac Arrest	Describe how to recognize and provide treatment for secondary cardiac arrest including opioid overdose.		6
3	High-Performance CPR	Describe the qualities of high-performance CPR.		4
4	Protecting Yourself	Describe the importance of personal safety, standard precautions, and using protective barriers.		4
5	Calling for Help	Describe the steps of a BLS assessment for an unresponsive person.		2
BASIC BLS SKILLS				
6	*Supplemental Topic* CPR Feedback Devices	Describe what a CPR feedback device is and how one is used.		2
7	Chest Compressions		Correctly demonstrate high-quality chest compressions on an adult, child, and infant.	18
8	Rescue Breaths		Correctly demonstrate high-quality rescue breaths using head tilt-chin lift and a CPR mask on an adult, child, and infant. (Optional: Correctly demonstrate how to do a jaw thrust, with and without head tilt on an adult.) Correctly demonstrate high-quality rescue breaths using jaw thrust and a bag mask on an adult and infant.	30
9	Automated External Defibrillation	Describe the steps to use an AED on an adult, child, and infant.	(Optional: Correctly demonstrate how to use an AED on an adult and child.) (Instructor Note: Correctly demonstrating how to use an AED on an adult is required when using video guided practice for the Caring for Cardiac Arrest practice.)	7
10	BLS Assessment	Describe the steps of a BLS assessment. Describe how to place an unresponsive, breathing person into a side-lying recovery position.	(Optional: Correctly demonstrate how to perform a BLS assessment on an adult.)	7

Supplemental Topics are highlighted with a gray background.

PREVIEW

Lesson	Lesson Title	Knowledge Objectives	Skill Objectives	Approximate Length (min)
BLS CARE				
11	Caring for Respiratory Arrest		Correctly demonstrate how to determine respiratory arrest using a BLS assessment and perform rescue breathing for an adult and child.	14
12	Caring for Cardiac Arrest		Correctly demonstrate how to determine cardiac arrest using a BLS assessment, perform CPR, and use an AED as a single provider on an adult. Correctly demonstrate how to determine cardiac arrest using a BLS assessment and perform CPR as a single provider on a child and infant.	30
13	Multiple Provider Approach to CPR	Describe the qualities of high-performance CPR.	Correctly demonstrate how to perform CPR with separate providers of compressions and rescue breaths for adults and infants. Correctly demonstrate how to perform as an effective member of a resuscitation team for an adult.	37
ADDITIONAL CONSIDERATIONS				
14	***Supplemental Topic*** Administration of Naloxone with Prefilled Syringe	Explain how to administer naloxone intranasally using a prefilled syringe and mucosal atomizer device.	Correctly demonstrate how to administer naloxone intranasally using a prefilled syringe and mucosal atomizer device.	10
15	***Supplemental Topic*** Administration of Naloxone with Narcan Nasal Spray	Explain how to administer naloxone intranasally using Narcan nasal spray.	Correctly demonstrate how to administer naloxone intranasally using Narcan nasal spray.	10
16	***Supplemental Topic*** Administration of Naloxone with Evzio Auto-Injector	Explain how to administer naloxone intranasally using the Evzio auto-injector.	Correctly demonstrate how to administer naloxone intranasally using the Evzio auto-injector.	10
17	Choking	Describe how to recognize and provide treatment for a choking adult, child, or infant.	Correctly demonstrate how to perform treatment for a choking infant.	13
EVALUATION				
Performance Evaluation		*Required*		45
Written Exam		*Required*		30
CONCLUSION				
Documentation and Certification		*Verify class documentation and issue certification cards to students who earned them.*		5+
			Total Breaks[a]	15
			Total Time[b]	270

[a] Adult education guidelines recommend a break for at least 5 minutes each hour. Class timing can vary. Because of this, no specific breaks have been designated in this class outline. Class size, class location, instructor-to-student ratios, and other factors will affect the actual schedule. Breaks should be provided, but may be rearranged or combined as required or desired.

[b] Projected times for lessons take into account video run times, brief introductions and answers to questions, demonstrations, and student practices with up to 3 students in a class of 10. Stated class times are based on covering core lessons only. Lesson times are influenced by class preparation, available equipment, instructor efficiency, and number of students. These could increase the time needed to meet the core learning objectives.

PREVIEW

Introduction

Class Type: Initial

Class Method: Classroom

Length: 5 minutes

Why This Topic Matters

The class introduction is important, whether the students and instructor know each other or are meeting for the first time. The introduction helps everyone to relax, and to feel less inhibited and comfortable. The introduction sets the tone for the entire class.

Equipment

- Sign-in sheet or Class Roster, name tags or tent cards (optional), large black markers (optional)

Instructor Activities

1 Greet Students

- Arrive early. Give yourself plenty of time to get set up and organized
  - ✓ Greet students as they arrive and introduce yourself. Have them sign in on the roster.
  - ✓ Be friendly, considerate, respectful, and professional.
  - ✓ Have students complete a name tag or tent card and select a seat.

2 Begin Class

- Start on time.
  - ✓ Consider using an appropriate icebreaker as a warm-up exercise. FYI: Great ideas for these activities can be found on the internet by searching with the key word *icebreaker*.
  - ✓ Establish a connection with the students. Ask about previous training. Connect the students' experiences and knowledge to this class.
- Briefly cover class goal, agenda, certification requirements, facility and classroom safety.
  - ✓ Describe the agenda, including breaks.
  - ✓ Correctly demonstrate the following skills during student practices:
    1. High-quality chest compressions for adults, children, and infants
    2. High-quality rescue breaths using a CPR mask for adults, children, and infants
    3. High-quality rescue breaths using a bag-mask for adults and infants
    4. How to determine respiratory arrest using a BLS assessment and perform rescue breathing for an adult and child
    5. How to determine cardiac arrest using a BLS assessment, perform CPR, and use an AED as a single provider on an adult
    6. How to determine cardiac arrest using a BLS assessment and perform CPR as a single provider on a child and infant
    7. How to perform CPR with separate providers of compressions and rescue breaths for adults and infants
    8. How to perform as an effective member of a resuscitation team for an adult
    9. How to perform treatment for a choking infant
  - ✓ Outline the minimum requirements for certification:
    1. Demonstrating the minimum required skill competency using the performance evaluations sheets
    2. Earning a passing score on the Written Exam.
  - ✓ Review facility safety features. Know and share the locations of the following:
    1. Bathrooms, fire/emergency exits, fire alarm pull stations, best emergency evacuation route
    2. First aid kits, emergency oxygen, and AEDs
  - ✓ Distribute the ASHI BLS Student Book.

3 Wrap It Up

- Ask for and answer any questions before moving on to the next lesson.

PREVIEW

Sudden Cardiac Arrest

Class Method: Initial
Class Type: Classroom
Length: 8 minutes

Why This Topic Matters

Sudden cardiac arrest can happen anywhere with little or no warning. Without prompt care including cardiopulmonary resuscitation (CPR) and early defibrillation, it is unlikely the person affected will survive.

What Students Should Learn

After completing this lesson, the student should be able to state or identify the following:

- How to recognize or suspect and provide treatment for sudden cardiac arrest
- The links in the chain of survival for adults inside and outside the hospital, and for children and infants

Equipment

- Television with DVD player or computer/tablet with speakers, large monitor, or projection screen. (Will be used throughout class.)

Instructor Activities

1 Present Knowledge Content — Video or Slides

- Emphasize key points as needed.
  - ✓ Sudden Cardiac Arrest
    - – Sudden cardiac arrest occurs when the electrical system of the heart malfunctions and results in ventricular fibrillation. Forward movement of blood stops. An affected person abruptly becomes unresponsive and stops breathing.
  - ✓ Cardiopulmonary Resuscitation (CPR)
    - – CPR — a combination of chest compressions and rescue breaths — can restore limited blood flow and oxygen to the brain, but it does not address the underlying problem with the heart.
  - ✓ Early Defibrillation
    - – Defibrillation is the most effective way to end ventricular fibrillation and restore a normal heartbeat. An automated external defibrillator (AED) is a portable, computerized device that is simple to operate. The use of AEDs by emergency responders allows defibrillation to occur much earlier than before.
  - ✓ Chain of Survival
    - – Most sudden cardiac arrests occur outside of a hospital, primarily in the home. The chain of survival describes the most effective approach to manage a sudden cardiac arrest. All links in the chain must be strong in order for a person to survive.
- Ask for and briefly answer any questions.
- Refer students to pages 1–2 of the Student Book.
- Use the Knowledge Check activity to evaluate and increase retention.

2 Wrap It Up

- Ask for and answer any questions before moving on to the next lesson.

PREVIEW

Knowledge Check

What is the most effective way to end ventricular fibrillation?

Defibrillation. A controlled electrical shock is sent through the heart to stop ventricular fibrillation, allowing the heart's normal electrical activity to return and restore the normal pumping action of the heart.

Sudden Cardiac Arrest

Cardiac arrest is the loss of the heart's ability to pump blood through the body. The most dramatic occurrence, sudden cardiac arrest, can happen anywhere with little or no warning. Victims unexpectedly collapse. Breathing stops.

Sudden cardiac arrest occurs when the normal electrical impulses in the heart suddenly become disorganized. Normal mechanical contraction of the heart muscle is lost, and a chaotic, quivering condition known as ventricular fibrillation can occur. Blood flow to the body, along with the oxygen it carries, abruptly stops. Within minutes, brain cell death starts to occur from the lack of oxygen.

PREVIEW

Cardiopulmonary Resuscitation (CPR)

Cardiopulmonary resuscitation (CPR) is the immediate treatment for a suspected cardiac arrest. CPR can restore limited oxygen to the brain and other vital organs through a combination of chest compressions and rescue breaths. However, CPR alone is not enough.

Early Defibrillation

The most effective way to end fibrillation is defibrillation, using a defibrillator and electrode pads adhered to the chest. A controlled electrical shock is sent through the heart to stop ventricular fibrillation, allowing the heart's normal electrical activity to return and restore the normal pumping action of the heart.

Successful defibrillation is highly dependent on how quickly a shock can be delivered. For each minute in cardiac arrest, the chance of surviving goes down by about 10%. After as few as 10 minutes, survival is unlikely.

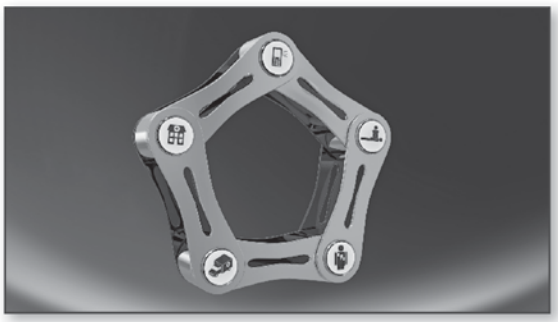
An automated external defibrillator (AED) is a portable, computerized device that is simple to operate. The use of AEDs by emergency responders and other healthcare personnel allows defibrillation to occur much earlier than before.

Turning on an AED is as simple as pushing a power button. Once on, an AED provides voice instructions to guide an operator through its use. An AED automatically analyzes the heart rhythm to determine if a shock is needed. If a shock is advised by the AED, the operator clears the person and pushes a button to deliver the shock.

Ventricular Tachycardia

Ventricular tachycardia (VT) occurs when the bottom portion of the heart beats at a very fast rate. In extreme cases, it beats so fast that the heart's ability to actually move blood forward is lost, resulting in cardiac arrest. Just as with ventricular fibrillation, high-quality CPR and early defibrillation are the indicated treatments for VT.

Chain of Survival



Immediate high-quality CPR and early defibrillation with an AED can double or even triple the likelihood for survival. Most cardiac arrests occur outside of a hospital. Most of those occur in the home.

The chain of survival is often used to describe the best approach for treating cardiac arrest. Each link in the chain is essential for a person to survive. If a single link is weak or missing, the chances for survival are greatly reduced. The greatest chance for survival exists when all the links are strong.

The chain of survival for cardiac arrests outside of a hospital consists of 5 interdependent links:

- Early recognition of cardiac arrest and prompt activation of the emergency response protocol for the setting
- Immediate CPR with high-quality chest compressions
- Rapid defibrillation, or electrical shock, to the heart
- Effective basic and advanced EMS care and transport
- Effective post-cardiac arrest care at a hospital

Cardiac arrest inside a hospital usually occurs when a known medical condition worsens. The chain of survival inside a hospital reflects how resuscitation fits into the overall picture of medical care:

- Monitoring, prevention, and treatment of prearrest conditions
- Early recognition of cardiac arrest and prompt activation of the emergency response protocol for the setting
- Immediate CPR with high-quality chest compressions
- Rapid defibrillation, or electrical shock, to the heart
- Effective post-cardiac arrest care

PREVIEW

Knowledge Check

What is the most effective way to end ventricular fibrillation?

PREPARING TO RESPOND

Secondary Cardiac Arrest

Class Method: Initial
Class Type: Classroom
Length: 6 minutes

Why This Topic Matters

Secondary cardiac arrest is the end result of the loss of breathing. Without immediate CPR and an emphasis on effective rescue breaths, it is unlikely the person affected will survive.

What Students Should Learn

After completing this lesson, the student should be able to state or identify the following:

- How to recognize and provide treatment for secondary cardiac arrest including opioid overdose

Instructor Activities

1 Present Knowledge Content — Video or Slides

- Emphasize key points as needed.
  - ✓ Secondary Cardiac Arrest
    - – Secondary cardiac arrest occurs as the end result of a loss of an airway or breathing. Without oxygen, the heart gets progressively weaker until it stops. CPR, with an emphasis on effective rescue breaths, may be the only chance to help.
    - – Common causes of secondary cardiac arrest include the following:
      a. Hazardous breathing conditions
      b. Drowning
      c. Drug overdose
  - ✓ Children and Infants
    - – Children are much more likely to experience a secondary cardiac arrest instead of a sudden one.
    - – When describing ages in relation to CPR
      a. an infant is younger than 1 year of age;
      b. a child is 1 year of age until the onset of puberty; and,
      c. an adult is from the onset of puberty and older.
  - ✓ Opioid Overdose
    - – The abuse of opioids is a serious health problem. Opioids can depress and stop breathing, resulting in secondary cardiac arrest. Naloxone is a medication that can quickly reverse opioid effects and is being made more available to those likely to be in contact with someone who may have an opioid overdose.
- Ask for and briefly answer any questions.
- Refer students to pages 3–4 of the Student Book.
- Use the Knowledge Check activity to evaluate and increase retention.

Instructor Note:
Related supplemental lessons on the administration of naloxone are included in the curriculum immediately after Multiple Provider Approach to CPR.

PREVIEW

2 Wrap It Up

- Ask for and answer any questions before moving on to the next lesson.

Knowledge Check

A 34-year-old man has been pulled out of a lake after being submerged for several minutes. Bystanders describe that he appeared to become exhausted while swimming. Why are effective rescue breaths important if your BLS assessment indicates cardiac arrest?

Drowning is a common cause of secondary cardiac arrest in which the heart becomes progressively weaker from the lack of oxygen. Immediate CPR with an emphasis on high-quality rescuer breaths may provide his only chance for survival.

PREVIEW

Secondary Cardiac Arrest

Unlike sudden cardiac arrest in which the heart is the primary problem, cardiac arrest can also be the end result of a blocked airway or loss of breathing. This is known as secondary cardiac arrest.

Problems such as hazardous breathing conditions in a confined space, drowning, and drug overdoses are all causes of secondary cardiac arrest. With no incoming oxygen, the heart progressively becomes weaker until signs of life become difficult or impossible to assess.

If the heart is simply too weak to create obvious signs of life, immediate CPR, with an emphasis on effective rescue breaths, may be the only chance to restore them.

PREVIEW

Children and Infants

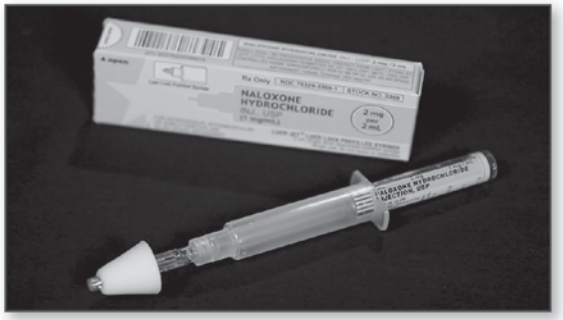
Children are more likely than adults to experience secondary cardiac arrest due to an airway or breathing problem.

When describing age groups in relation to CPR, an infant is younger than 1 year of age. A child is 1 year of age until the onset of puberty. Puberty can be identified by breast development in females and the presence of armpit hair in males. A person is considered an adult after the onset of puberty.

The chain of survival for children and infants emphasizes prevention and giving effective rescue breaths as part of CPR:

- Prevention of airway and breathing emergencies
- Early CPR, with an emphasis on effective rescue breaths, and, if needed, defibrillation with an AED
- Prompt activation of the emergency response protocol for the setting
- Effective basic and advanced EMS care and transport
- Effective post-cardiac arrest care at a hospital

Opioid Overdose



The abuse of opioid drugs is a serious and growing health problem. Increasing prescriptions for opioid pain relievers, such as hydrocodone and oxycodone, have made them more commonly available. The increased availability and use of heroin, a highly addictive opioid, is also contributing to the problem.

As a result, overdoses and deaths from prescription opioids and heroin have risen dramatically.

Opioids, taken in excess, can depress and stop breathing. Opioid overdose is a common cause of secondary cardiac arrest.

Naloxone, also known as Narcan, is a medication that can temporarily reverse the life-threatening effects of opioids. It is easy to administer, either through an auto-injector device or through an aerosol that is sprayed into the nose.

Suspicion of opioid use may present itself through questioning of bystanders, or by observation of the person and location in which he or she was found. Initiate and establish BLS care prior to using naloxone for a suspected opioid overdose.

Knowledge Check

A 34-year-old man has been pulled out of a lake after being submerged for several minutes. Bystanders describe that he appeared to become exhausted while swimming. Why are effective rescue breaths important if your BLS assessment indicates cardiac arrest?

PREVIEW

PREPARING TO RESPOND

Chest Compressions

Class Method: Initial
Class Type: Classroom
Length: 18 minutes

Why This Topic Matters

Knowing how to perform high-quality chest compressions is necessary for CPR to be effective when treating cardiac arrest.

What Students Should Learn

After completing this lesson, the student should be able to state or identify the following:

- How to perform high-quality chest compressions on an adult, child, and infant

After completing this lesson, the student should be able to demonstrate correctly the following:

- High-quality chest compressions on an adult, child, and infant

Equipment

- Disposable gloves, adult, child, and infant CPR manikins, metronome/audio prompting device (optional), LOOP Learning System (optional)

Instructor Activities

1 Present Knowledge Content — Video or Slides

- Emphasize key points as needed.
  - ✓ Chest Compressions
    - – External compression of the chest increases pressure inside the chest and heart, forcing blood to move from the chest to the rest of the body.
    - – Quality matters. The better you compress, the greater the influence on survival.
      a. Compress deeply, more than 2 inches.
      b. Compress fast, between 100 and 120 times per minute.
      c. Do not lean on the chest between compressions; allow the chest to fully recoil.
      d. Minimize interruptions while doing compressions.
    - – When compressing properly you may hear or feel changes in just wall. This is normal.
  - ✓ Children and Infants
    - – Chest compressions for children and infants are similar to adults but less forceful. Child compressions can be done with either one or both hands.
    - – Infant compressions are done using 2 fingertips, just below the nipple line.
    - – With two or more providers, encircle sides of infant's chest with your hands and use thumb tips to compress lower third of breastbone.
- Ask for and briefly answer any questions.
- Refer students to pages 10–12 of the Student Book.
- Use the Knowledge Check activity to evaluate and increase retention.

2 Demonstrate Skills

- Provide WHOLE-PART-WHOLE demonstration of Skill Guide 1 — **Chest Compressions** doing separate demonstrations for an adult, child, and infant.
- Demonstrate whole skill with brief comments, demonstrate again step-by-step with comments, and demonstrate whole skill again without comment.

PREVIEW

3 Student Practice

- Arrange students into pairs or small groups. Have one student act as a coach by reading the skill steps from the skill guide while another student performs chest compressions for each age group on an appropriate manikin.
- Have students rotate through the roles until all have played each role.
- Circulate through the groups looking for competent performance. Use positive coaching and gentle correction to improve student skills.

Instructor Note:

Have each student perform at least 2 sets of 30 compressions for the adult, child and infant practices.

Consider using a metronome as an auditory guide to set the required compression rate. Free or low-cost metronome apps are available for your mobile phone or tablet.

Optional — Integrating the LOOP Learning System

- When available, the LOOP Learning System can be integrated into the chest compression practice to help improve the quality of compression skills.
  - ✓ Instructors can simply have students use LOOP devices when going through the practice as described above and allow for the real-time feedback and correction of skills. Practice sessions are recorded for review.
  - ✓ An alternative is to use LOOP devices after the described practice to provide additional practice with feedback, correction, and review.

Optional — Video Guided Practice

- Instructors have the option to use Video Guided Practice: Chest Compressions for each age group instead of the student practice described above. Arrange students so each has a manikin and a clear view of the video screen.
  - ✓ Explain to students that they will perform skills along with the video demonstration.
  - ✓ When everyone is ready, play the video.
  - ✓ Circulate through the students looking for competent performance. Use positive coaching and gentle correction to improve skills.
  - ✓ If additional practice is needed, run the practice again.

PREVIEW

4 Evaluation

- Confirm each student demonstrates the correct steps and decision-making tasks in the proper sequence as defined by the skill criteria in the skill guides.

5 Wrap It Up

- Ask for and answer any questions before moving on to the next lesson.

Knowledge Check

What are the 4 measures of high-quality chest compressions for an adult?

1. *Compress deeply, more than 2 inches.*
2. *Compress fast, between 100 and 120 times per minute.*
3. *Do not lean on the chest between compressions.*
4. *Minimize interruptions while doing compressions.*

Chest Compressions

There are basic CPR skills used to provide the most effective approach to cardiac arrest.

These include the following:

- High-quality chest compressions
- High-quality rescue breaths using a CPR mask or bag-mask device
- Use of an automated external defibrillator
- Checking for life-threatening emergencies using a BLS assessment

External compression of the chest increases pressure inside the chest and directly compresses the heart, forcing blood to move from the chest to the lungs, heart, brain, and the rest of the body.

Focus on high-quality techniques:

- Compress deeply, more than 2 inches. It is likely you will not compress deep enough. While injury could occur from deeper compressions, do not let the fear of this affect compression depth.
- Compress fast, between 100 and 120 times per minute. Do not let a higher compression speed result in a shallower compression depth.
- Do not lean on the chest between compressions. Allow the chest wall to fully recoil, or rebound, at the top of each compression.
- Minimize interruptions when doing compressions. Blood pressure is created and maintained with ongoing compressions. When compressions stop, pressure is quickly lost and has to slowly be built up again.

CPR on a Firm Surface

Compression of the chest increases the internal pressure of the chest and heart, forcing blood out into other areas of the body. Placing a person on a firm surface is essential for compressions to be effective. If a person is on a soft surface, such as a mattress, compression of the chest is compromised.

Full Recoil of the Chest

Allowing the chest to fully return, or recoil, to its normal position at the top of each compression is a measure of high-quality compressions. Full recoil allows the heart to refill more completely between compressions and increases overall blood flow.

PREVIEW

BASIC BLS SKILLS

When compressing properly, you may hear and feel changes in the chest wall. This is normal. Forceful external chest compressions may cause chest injury but are critical if the person is to survive. Reassess your hand positioning and continue compressions.

As an alternative approach, you can grasp the wrist of one hand with the other when it is difficult to compress with the heels of both hands.

Compression Injury

Minor injury could result from deeper compressions. On an adult, this begins to occur at compression depths greater than 2.4 inches.

Children and Infants

The compression technique for a child is similar to that of adults, but less forceful. Push deep, straight down $^1/_3$ depth of the chest, or about 2 inches. For smaller children, the heel of one hand can be used to compress.

Compressions on a larger child can be tiring. If needed, use both hands to perform compressions.

When doing chest compressions on an infant with 2 or more providers, encircle the sides of the chest with your hands and use your thumb tips to compress the lower third of the breastbone. Push deep, at least $^1/_3$ depth of the chest or about $1^1/_2$ inches.

PREVIEW

Knowledge Check

What are the 4 measures of high-quality chest compressions for an adult?

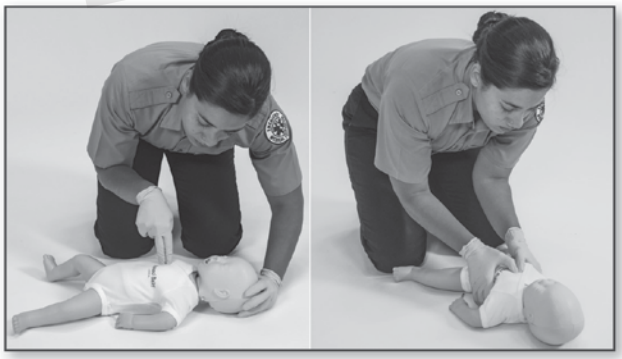
Chest Compressions

Adult

- Position person face up on a firm, flat surface. Kneel close to chest. Place heel of one hand on center of chest, on lower half of breastbone. Place heel of other hand on top of and parallel to first.
- Position your shoulders directly above your hands. Lock your elbows. Bending at waist, use upper body weight to push.
- Push deep, straight down at least 2 inches. Lift hands and allow chest to fully recoil. Move immediately into next compression. Compress fast, at a rate of 100–120 times per minute.

Child

- Position child face up on a firm, flat surface. Kneel close to chest. Place heel of one hand on lower half of breastbone, just above point where ribs meet.
- Position your shoulder directly above your hand. Lock your elbow. Bending at waist, use upper body weight to push.
- Push deep, straight down $^1/_3$ depth of chest, or about 2 inches. Lift hand and allow chest to fully recoil. Move immediately into next compression. Compress fast, at a rate of 100–120 times per minute.
- If needed, use 2 hands to compress.



Infant

- Position infant face up on a firm, flat surface. Place 2 fingertips on breastbone just below nipple line.
- Push deep, at least $^1/_3$ depth of chest, or about $1^1/_2$ inches. Lift fingers and allow chest to fully recoil. Move immediately into next compression. Compress fast, at a rate of 100–120 times per minute.
- When doing chest compressions with 2 or more providers, encircle the sides of the chest with your hands and use your thumb tips to compress the lower third of the breastbone.

PREVIEW

SKILL GUIDE 1

BLS Assessment

Class Method: Initial
Class Type: Classroom
Length: 7 minutes

Why This Topic Matters

The BLS assessment helps a BLS provider quickly identify the need for resuscitation.

What Students Should Learn

After completing this lesson, the student should be able to state or identify the following:

- The steps of a BLS assessment for an unresponsive person
- How to place an unresponsive, breathing person into a side-lying recovery position

Equipment

- Disposable gloves, adult CPR manikins (optional)

Instructor Activities

1 Present Knowledge Content — Video or Slides

- Emphasize key points as needed.
  - ✓ BLS Assessment
    - – A BLS assessment is a simple way to quickly identify if resuscitation is required.
    - – The basic steps of a primary assessment are as follows:
      a. Ensure the scene is safe.
      b. Assess for responsiveness.
      c. Assess for breathing and pulse at the same time.
      d. If needed, activate the emergency response protocol for your setting.
    - – Weak, irregular gasping can occur early in cardiac arrest; this provides no usable oxygen and is not normal.
    - – Provide the care indicated by the assessment:
      a. If not breathing or only gasping, and the pulse is clearly felt, perform rescue breathing, or ongoing rescue breaths.
      b. If not breathing or only gasping, and no pulse, perform CPR beginning with compressions.
  - ✓ Recovery Position
    - – If breathing normally with a pulse and uninjured, place the person in a side-lying recovery position to protect the airway.
    - – Keep head, neck, and torso aligned during roll; end with face and torso angled forward. Use arms and legs to provide stability.
- Ask for and briefly answer any questions.
- Refer students to pages 24–27 of the Student Book.
- Use the Knowledge Check activity to evaluate and increase retention.

2 Demonstrate Skills

- Provide WHOLE-PART-WHOLE demonstration of Skill Guide 7 — **BLS Assessment** doing a demonstration for an adult and Skill Guide 8 — **Recovery Position** doing a demonstration for an adult
- Demonstrate whole skill with brief comments, demonstrate again step-by-step with comments, and demonstrate whole skill again without comment.

PREVIEW

3 Student Practice (Optional)

- Arrange students into pairs or small groups. Have one student act as a coach by reading the skill steps from the skill guide while another student performs a BLS assessment for an adult on another person or manikin.
- Have students rotate through the roles until all have played each role.
- Circulate through the groups looking for competent performance. Use positive coaching and gentle correction to improve student skills.

Instructor Note:

The student practice for BLS Assessment is optional because the practices for Caring for Respiratory Arrest and Caring for Cardiac Arrest will include the BLS Assessment.

Although there is not an associated skill practice, a skill guide is provided to detail the steps of the Recovery Position.

4 Wrap It Up

- Ask for and answer any questions before moving on to the next lesson.

Knowledge Check

You have responded to someone complaining of severe pressure in the chest. As you are talking to the person, he suddenly slumps onto the floor. You kneel next to him, squeeze his shoulder, and loudly ask, "Are you all right?" He is unresponsive, so you look closely at the face and chest for breathing and feel for a carotid pulse; he makes a brief gasping snort, but then remains still. You cannot feel a pulse within 10 seconds. What do you do next?

Perform CPR immediately, starting with compressions. Irregular gasping, snorting, or gurgling sounds do not provide oxygen and do not indicate normal breathing.

PREVIEW

BLS Assessment

The BLS assessment is a simple way to quickly identify if resuscitation is required. It is the same for all ages and is performed quickly.

Ensure the scene is safe. Before anything else, pause and assess the scene for hazards. If the scene is not safe, do not enter until hazards have been minimized or eliminated. Take standard precautions to prevent contact with blood or other potentially infectious materials.

Assess responsiveness. If it is safe, check for responsiveness. Tap or squeeze the person's shoulder and ask loudly, "Are you all right?" For an infant, tap the foot.

Assess for breathing and pulse. If unresponsive, quickly look at the person's chest and face for signs of normal breathing. At the same time check for a pulse.

Normal breathing is effortless, quiet, and regular. Weak, irregular gasping, snorting, or gurgling sounds, known as agonal breaths, can occur early in cardiac arrest. These actions provide no usable oxygen. This is not normal breathing.

Check the carotid pulse in the neck. Take at least 5 but no longer than 10 seconds to assess breathing and pulse. If you are unsure, assume they are absent.

Activate the emergency response protocol for your setting and get an AED. If not already being done, tell another person to activate the protocol and get an AED. Relay what you have found so it can be passed on.

PREVIEW

BASIC BLS SKILLS

Checking Pulses

Locate the bony Adam's apple with your fingers. Slide them into the groove between the windpipe and the muscle on the side of the neck closest to you. For a child, check the carotid pulse or femoral pulse in the leg. Place your fingers just below the middle of the crease where the leg and torso meet. For infants, feel for the brachial pulse on the inside of the upper arm. Lay your fingers across the arm and compress inward.

Activating Additional Resources

The need to activate additional resources is an important part of the BLS assessment. Unlike lay providers, who simply need to activate emergency medical services (EMS), the additional resources needed by BLS providers can vary, depending on the circumstance. In most cases, the actions to take are already established through emergency response protocols. Because of this, the point at which you activate additional resources in a BLS assessment is highly dependent on the situation and your local protocols.

When Alone

If you are alone and have witnessed a sudden collapse, activate your emergency response protocol and get an AED yourself. Quickly return to the person. This action is the same regardless of the age of the person.

If you are alone and did not witness the collapse, or you highly suspect a secondary cause such as drowning, suffocation, or opioid overdose, provide about 2 minutes of CPR before leaving to activate your protocol and get an AED yourself. This is the most likely situation encountered with children.

Modification for Drowning

Due to the hypoxic nature of drowning, the BLS assessment is modified slightly. Once a person is removed from the water, immediately assess for normal breathing and pulse. If breathing is absent or only gasping, provide 2 initial rescue breaths that make the chest visibly rise. If the pulse is clearly felt continue with rescue breathing. If a pulse is absent, or if you are not certain, begin CPR. Attach an AED as soon as one is available.

Your assessment of the person and situation will determine the care you provide. If the person is breathing normally, and uninjured, place him or her in a side-lying recovery position.

If the person is not breathing or only gasping, but definitely has a pulse, he or she is in respiratory arrest. The indicated care is rescue breathing, which is ongoing rescue breaths provided without chest compressions.

If the person is not breathing, or only gasping, and does not have a pulse, he or she is in cardiac arrest. The indicated care is CPR, a repeating combination of chest compressions and rescue breaths.

Recovery Position

The recovery position helps protect the airway by using gravity to drain fluids from the mouth and keep the tongue from blocking the airway.

Frequently assess and monitor the person's breathing. The condition can quickly become worse and require additional care.

PREVIEW

Knowledge Check

You have responded to someone complaining of severe pressure in the chest. As you are talking to the person, he suddenly slumps onto the floor. You kneel next to him, squeeze his shoulder, and loudly ask, "Are you all right?" He is unresponsive, so you look closely at the face and chest for breathing and feel for a carotid pulse; he makes a brief gasping snort, but then remains still. You cannot feel a pulse within 10 seconds. What do you do next?

BLS Assessment

Assess Scene

- Pause and assess scene for safety.
- If unsafe, or if it becomes unsafe at any time, GET OUT!

Check for Response

- Tap or squeeze shoulder and ask loudly, "Are you all right?"
- For an infant, tap the foot.
- If alone, shout out for help.
- Position person face-up on a firm, flat surface.

Check Breathing and Pulse

- Look at face and chest for normal breathing. If unsure, assume breathing is not normal.
- Weak, irregular gasping, snorting, or gurgling is not normal breathing.
- At same time check for a carotid pulse. For infant, check brachial pulse.
- Take at least 5 seconds and no longer than 10 to check breathing and pulse.

Provide Indicated Care

- If not already done, activate emergency response protocol and get an AED.
- No response, with normal breathing and pulse? Place in recovery position.
- No response with breathing absent and pulse present? Begin rescue breathing.
- No response with normal breathing and pulse absent? Begin CPR.

PREVIEW

SKILL GUIDE 7

INSTRUCTOR GUIDE

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