



BasicPlus

CPR, AED, and
First Aid for Adults



BasicPlus CPR, AED, and First Aid for Adults **Instructor Guide, *Version 8.0***

Purpose of this Guide

This MEDIC First Aid *BasicPlus Version 8.0 Instructor Guide* is solely intended to give information on the presentation and administration of MEDIC First Aid BasicPlus CPR, AED, and First Aid certified training classes. The information in this book is furnished for that purpose and is subject to change without notice.

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PREVIEW

PART 1:
PROGRAM DESIGN AND
INSTRUCTIONAL TOOLS

PREVIEW

Program Design

Program Overview

The MEDIC First Aid BasicPlus CPR, AED, and First Aid for Adults training program is intended for individuals who are not healthcare providers or professional rescuers but desire or are required to be certified in CPR, AED, and first aid for adults. There are no class prerequisites.

The goal of this training program is to help students develop the knowledge, skills, and confidence to respond in a medical emergency. For 35 years, MEDIC First Aid Training Programs have used a scenario-based, video-directed, instructional approach that combines seeing, hearing, speaking, feeling, and doing to engage students, embrace different learning styles, and make teaching and learning easier and more enjoyable. BasicPlus is designed to include a significant amount of hands-on skill practice.

Program Structure

MEDIC First Aid BasicPlus contains both core and supplemental training content.

Core Training Content

The core training content is the minimum knowledge and skill content that is required for certification in MEDIC First Aid BasicPlus.

Supplemental Content

In addition to the core training content required for certification, MEDIC First Aid BasicPlus contains supplemental knowledge and skill content that may be added by the instructor as desired or required.

Adding supplemental training content is sometimes necessary to customize MEDIC First Aid BasicPlus to the unique conditions or potential hazards of a specific workplace or worksite. In addition, compliance with state health and safety regulations may mandate that certain topics are added to the program.

For example, in assessing workplace risks, an employer identifies a potential situation at a remote worksite that could expose workers to stinging insects. Due to long EMS response times, the employer asks the instructor to provide training in how to recognize and provide first aid treatment for insect stings. This supplemental information is added to the core training content. Adding content will add time to the training class.

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 MEDIC First Aid BasicPlus at the discretion of the training center director.

These additional materials may not be used in lieu of MEDIC First Aid BasicPlus materials and may not be used to shorten or otherwise alter the core training content required for certification.

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 MEDIC First Aid BasicPlus: 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 main methods to teaching and certifying students in MEDIC First Aid BasicPlus CPR, AED, and First Aid for Adults: instructor-led 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, followed by demonstration of skills and the opportunity for instructor-facilitated student skill practice. There is a maximum student to instructor ratio of 12:1. 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.

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.

Each lesson uses some combination of teaching tools such as video, print, demonstration, and practice. Lessons build on each other, reinforcing core knowledge and skills. Required activities of the initial class include showing the video, emphasizing key points, checking the students' knowledge, performing real-time demonstrations, and conducting small group practices using skill guides.

Video

Short, scenario-based videos are shown to ensure consistent emergency care knowledge is presented and to provide a sense of application to actual events or situations. Instructors emphasize key points as needed, ask for and briefly answer any questions. As the video presents the essential knowledge, there is no need for additional lecture.

Real-Time Demonstration

Skill development is crucial to good emergency care. When a lesson includes skill practice, the instructor performs a demonstration of the skill, modeled in real time. A real-time demonstration reinforces the approach and pacing of the skill presented on the video. A high-quality skill demonstration is important because students will model the skill, as seen, during practice. As an instructor, you should develop and maintain high-quality demonstration skills. Demonstrations should clearly emphasize the key points of the skill being covered.

Small Group Practice

Following the real-time demonstration, students are arranged in small groups of 2 or 3 with skill guides and take turns assuming the roles of first aid provider, ill or injured person, and coach. This role-play from different perspectives fosters self-discovery and naturally increases the number of repetitions, helping students integrate both knowledge and skill performance.

During small group practice, instructors assume the role of facilitator providing indirect, low-key assistance, guidance, and positive feedback.

The initial class proceeds lesson by lesson until its conclusion. MEDIC First Aid BasicPlus certification cards are issued to those students who have earned them.

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 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 to 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 and 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.

Certification Requirements

Instructors must be current and properly authorized as a MEDIC First Aid BasicPlus instructor to issue BasicPlus certification cards.

The certification requirement for an initial class requires students to demonstrate skill competency using skill guides, Talk-Through Scenarios, or performance evaluation. A Written Exam is not required for certification unless required by a regulatory agency or if a student is seeking certification using the Challenge option.

Important:

WHEN NOT REQUIRED, THE WRITTEN EXAM MAY BE USED AS A PRE-, POST-, OR IN-CLASS ACTIVE LEARNING TOOL. THE INDIVIDUAL'S SCORE ON AN OPTIONAL EXAM MAY NOT BE USED TO WITHHOLD A PROPERLY EARNED CERTIFICATION CARD. WHEN A WRITTEN EXAM IS NOT USED OR REQUIRED, INSTRUCTORS CAN MEASURE COGNITIVE UNDERSTANDING BY INFORMAL OBSERVATION AND QUESTIONING USING THE KNOWLEDGE CHECK FEATURE.

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. 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.¹ ONLINE TRAINING ALONE DOES NOT MEET THE FIRST AID AND CPR REQUIREMENTS OF THE US DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) STANDARDS.² ONLINE TRAINING MUST BE SUPPLEMENTED WITH HANDS-ON PRACTICE.

Face-to-Face Portion

The face-to-face portion of a blended class focuses on the development of competent skills through hands-on practice. Required activities of the face-to-face portion of the Initial Blended Class include performing real-time demonstrations and small group practices, completed just as in the Initial Instructor-Led Class.

Real-Time Demonstration

The instructor performs a demonstration of the skill, modeled in real-time.

Small Group Practice

Following the real-time demonstration, students are arranged in small groups of 2 or 3 and take turns assuming the roles of first aid provider, ill or injured person, and coach. Instructors assume the role of facilitator providing indirect, low-key assistance, guidance, and positive feedback.

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

Important:

THE FACE-TO-FACE PORTION OF THE BLENDED CLASS IS NOT INTENDED TO BE 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. MEDIC First Aid BasicPlus 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 the Initial Instructor-Led Class.

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.

CPR and first aid skills, and the confidence to use them, deteriorate rapidly following initial training and certification, in as few as 30 to 90 days.^{3,4} Consider doing renewal training more frequently to refresh and maintain skills.

Lessons in the renewal class focus on the development of competent skills through hands-on practice. Required activities of a Renewal Class include performing real-time demonstrations and small group practices, completed just as in the Initial Instructor-Led Class.

Optional video guided practices and the integration of the LOOP Learning System can 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. MEDIC First Aid BasicPlus certification cards are issued to those students who have earned them.

Certification Requirements

The Renewal Class focuses on skill competency. If new certification cards will be issued, use of the Written Exam before, during, or after skills practice is necessary to refresh students on core knowledge content not covered in the skill sessions. The instructor should use the exam as an active learning tool. That is, the exam may be given open book, or the instructor may read the questions out loud to the class and engage all students in choosing the correct answer and discussing the reasoning behind it. Scoring individual exams is not necessary unless it is required by a regulatory agency. Using an alternative method to the Written Exam that adequately covers all core knowledge content is acceptable.

Challenge

A Challenge is an instructor-led evaluation for individuals who wish to earn MEDIC First Aid BasicPlus 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 and must be prepared to take a Written Exam and skill test. The required instructor activities are limited to administering the Written Exam and carrying out skill tests using performance evaluations.

The outline and time frame for the Challenge are provided in Part 6. MEDIC First Aid BasicPlus certification cards are issued to those individuals who have earned them.

Instructional Tools

This MEDIC First Aid BasicPlus Instructor Guide, (integrated with pages from the BasicPlus Student Book), video segments, 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 evaluations, exams, supplemental skill sheets, 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 MEDIC First Aid BasicPlus Student Book is an up-to-date resource that covers the core knowledge and skill content required for certification, as well as supplemental information. Each participant should have a current print or digital Student Book readily available during and after the class.

Program Video

The MEDIC First Aid BasicPlus 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.

Skill Guides

Skill guides combine words and photographs of the correct steps of a skill 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.

Talk-Through Scenarios

Talk-Through Scenarios are small group 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, Talk-Through Scenarios are more suited to experienced students. Talk-Through Scenarios and instructions for their use are available in Otis.

Performance Evaluation Sheets

Instructors can use performance evaluation sheets for a more formal approach to evaluating required skills. 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 are included in the Otis-powered desktop or mobile application.

Written Exam

Unless required by a regulatory agency, it is not required for students to take and pass the Written Exam. However, the Written Exam documents are provided as an instructional tool and can be used to check student learning and effective retention of knowledge objectives.

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 and 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.

PART 2:
**CLASS REQUIREMENTS
AND ADMINISTRATION**

PREVIEW

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):

- BasicPlus Instructor Guide
- BasicPlus Student Books
- CPR manikins and AED trainers
- Gloves, dressings, and bandages
- 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 and key points for each lesson, including any supplemental content to be added. 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. Instructors must often create a makeshift classroom out of a noisy shop floor, poorly lit cafeteria, or cramped conference room. Such challenges should be anticipated and the learning environment be made as favorable as possible.

Classroom Space

BasicPlus has been developed for a maximum class size of 12 students to 1 instructor; the recommended class size is 6 students to 1 instructor. 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 12 students. BasicPlus 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.⁵ 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. ALL STUDENTS MUST PAY ATTENTION TO PROPER LIFTING AND MOVING TECHNIQUES DURING PRACTICE.

Warn students that classroom activities involving lifting and moving that may aggravate previous back injuries and they should not practice moving simulated victims if they have a history of back problems.

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 first aid care and activation of EMS.

Equipment and Materials List

Some equipment and materials are required for teaching, while other materials are optional (like the Written Exam). 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. When using a video guided practice for CPR skills, the required student-to-manikin ratio is 1:1.

Core Content

Required

- Television with DVD player, or computer with speakers, large monitor, or projection screen
- Adult CPR training manikins, 1 for each group of 2 to 3 students
- AED training devices and pads, 1 for each manikin
- Manikin decontamination supplies (ex: manikin cleaning wipes, 70% ethyl alcohol)
- CPR overlay shields, 1 for each student, or adult CPR masks, 1 for each group of 2 to 3 students, with 1 separate one-way valve for each student
- Nonlatex disposable gloves, 1 pair for each student
- 4x4 gauze dressings, at least 2 for each student
- Conforming roller bandages, 1 for each student
- Commercial tourniquet, 1 for demonstration
- BasicPlus Instructor Guide (print or digital), 1 for each instructor
- BasicPlus Student Books, 1 for each student (print or digital)
- BasicPlus program video, DVD or Otis-powered desktop or mobile application, 1 for each class
- BasicPlus certification cards, 1 for each student who fulfills the requirements (print or digital)
- Class roster, 1 for each class (print or digital)

May Be Required (Regulatory Agency/Challenge)

- 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 evaluations, 1 set for each student (print or digital)
 - Caring for Cardiac Arrest
 - Control of Bleeding

Recommended

- Talk-Through Scenario sheets, 1 set for each group of 2 to 3 students (print or digital)
 - Caring for Cardiac Arrest
 - Control of Bleeding
- Pens and pencils, 1 for each student when Written Exam is administered
- Blankets or mats, 1 for each manikin
- 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, including Written Exam answer sheets when required

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.

Required (by topic)

- LOOP Learning System
- Naloxone delivery device
- EpiPen auto-injector training device, 1 for each group of 2 to 3 students
- Epinephrine auto-injector training device, 1 for each group of 2 to 3 students
- Commercial tourniquets, 1 for each group of 2 to 3 students
- Improvised tourniquet materials, 1 for each group of 2 to 3 students
- Hemostatic dressing trainers, 1 for each group of 2 to 3 students
- Splinting materials, 1 for each group of 2 to 3 students
- Padded malleable splint, 1 for each group of 2 to 3 students
- Gel-soaked burn dressing (can be substituted by a wet pad), 1 for each group of 2 to 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 (where required) and emphasize the key points as needed. Do not lecture. Ask for and briefly answer any questions.
5. Facilitate small group practices. Answer questions and offer constructive guidance and positive feedback as appropriate.
6. Upon class completion, issue BasicPlus certification cards to those individuals who earned them.
7. Offer and collect students' Rate Your Program evaluations.

After Class

Complete and sign the Class Roster. If used, complete and sign performance evaluations.

Administration

Skill Evaluation

The instructor must evaluate each student for skill competency — the ability of the individual to do the skill adequately. Each student must be able to demonstrate the skills in the proper sequence according to the skill criteria as it appears in a skill guide, Talk-Through Scenario, performance evaluation sheet, or program standard.

Skill Remediation

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

Generally, address student skill problems throughout the class 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.

If the student is unable or unwilling to perform skills, you can issue the student a Recognition of Participation document, especially in cases where knowledge or experience is a greater goal than certification for the student.

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

Written Exam

A Written Exam is not required for certification unless required by a regulatory agency or if a student is seeking certification using the Challenge option.

Evaluation of the core knowledge objectives in BasicPlus is accomplished by informal observation and questioning throughout a training class. When a Written Exam is required, adequate time must be added to the class to complete the exam. Two versions of the Written Exam, along with instructions for their use are included online in Otis. An optional 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 72% or better. 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.

MEDIC First Aid 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 when they are required. Reference materials include any notes taken during the class as well as the print or digital MEDIC First Aid 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. Taking an exam for someone else constitutes cheating.
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 currently authorized MEDIC First Aid instructor or instructor trainer. Certification does not guarantee future performance, or imply licensure or credentialing. Certification is documented by the legitimate issuance of a correctly completed MEDIC First Aid 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 MEDIC First Aid BasicPlus training program are available for download in the documents section of Otis. 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 results of the Written Exam and remediation, if used during training. 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.

Performance Evaluation Sheet

Instructors can use performance evaluation sheets for a more formal approach to evaluating required skills. 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.

A student's performance evaluation sheet signed by the instructor should be considered important potential evidence demonstrating instructor evaluation of each student's skill competency. Although a secondary record of training, a performance evaluation sheet may be required by state regulation or organizational policy.

When used, signed performance evaluation sheets must be 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 MEDIC First Aid class using the Rate Your Program course evaluation form. When used, course evaluations must be promptly delivered to the training center responsible for the class. These forms (or summaries of them), must be maintained by the training center. 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.

Cardiac Arrest

Class Type: Initial

Class Method: Classroom

Length: 10 minutes

Why This Topic Matters

Cardiac arrest is a life-threatening condition in which the heart stops moving blood. Without immediate recognition and help from a bystander, survival is unlikely.

What Students Should Learn

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

- The main components and function of the respiratory and circulatory systems
- How to suspect and provide first aid treatment for sudden cardiac arrest
- The links in the cardiac arrest chain of survival
- How to suspect and provide first aid treatment for secondary cardiac arrest
- How to recognize and provide first aid treatment for opioid overdose

Instructor Activities

1

Show Video — (required, duration 7:43)

- Emphasize key points as needed.
 - ✓ Oxygen and the Human Body
 - The body does not store oxygen so it must continuously supply it through the combined actions of the respiratory and circulatory systems. If this process is interrupted, brain cell death will occur within minutes.
 - ✓ 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. The quicker defibrillation can occur, the greater the chance for survival. An AED allows a bystander to defibrillate much sooner than EMS.
 - ✓ Chain of Survival
 - 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.
 - ✓ 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.

- ✓ Opioid Overdose
 - The abuse of opioid 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 13–17 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 Caring for Cardiac Arrest.

2 Close

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

**Knowledge Check**

The chain of survival is often used to describe the best approach for treating sudden cardiac arrest. The first three links of the chain are typically the responsibility of a trained first aid provider. Describe those links.

1. *Early recognition of cardiac arrest and activation of EMS*
2. *Immediate CPR with high-quality chest compressions*
3. *Rapid defibrillation, or electrical shock, to the heart with an AED*

PREVIEW

NEXT CORE LESSON:

Chest Compressions

Cardiac Arrest

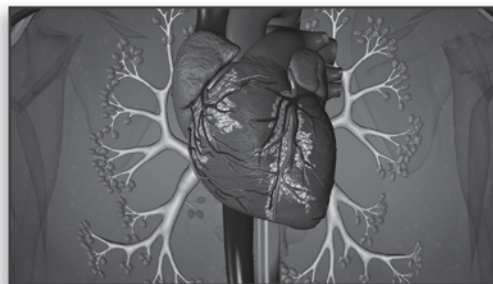


Because the human body cannot store oxygen, it must continually supply tissues and cells with oxygen through the combined actions of the respiratory and circulatory systems.

Oxygen and the Human Body

The respiratory system includes the lungs and the airway, the passage from the mouth and nose to the lungs. Expansion of the chest during breathing causes suction, which pulls outside air containing oxygen through the airway and into the lungs. Relaxation of the chest increases the pressure within and forces used air to be exhaled from the lungs.

The circulatory system includes the heart and a body-wide network of blood vessels. Electrical impulses stimulate contractions of the heart to create pressure that pushes blood throughout the body. Blood vessels in the lungs absorb oxygen from inhaled air. The oxygen-rich blood goes to the heart, then out to the rest of the body.



Large vessels called arteries carry oxygenated blood away from the heart. Arteries branch down into very small vessels that allow oxygen to be absorbed directly into body cells so it can be used for energy production. Veins return oxygen-poor blood back to the heart and lungs, where the cycle repeats.

The brain is especially sensitive to a lack of oxygen. When oxygen is cut off to the brain, brain cell damage, and death, can occur within a matter of minutes.

Sudden Cardiac Arrest (SCA)

Cardiac arrest is the loss of the heart's ability to pump blood to the body. The most dramatic occurrence, sudden cardiac arrest, can happen with little or no warning. Victims abruptly become unresponsive and collapse. Abnormal gasping can occur. Breathing may stop completely.

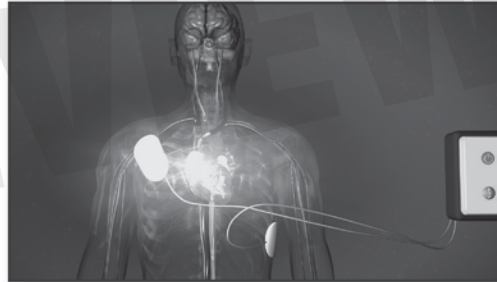
The most likely cause of sudden cardiac arrest is an unexpected disruption to the heart's electrical system, in which normally organized electrical pulses within the heart become disorganized and a chaotic quivering condition known as ventricular fibrillation occurs. Blood flow to the body, along with the oxygen it carries, stops. Without blood flow, brain damage occurs rapidly and quickly leads to death.

Cardiopulmonary Resuscitation (CPR)

Cardiopulmonary resuscitation (CPR) is the immediate treatment for a suspected cardiac arrest. CPR allows a bystander to restore limited oxygen to the brain 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 applied 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 blood flow.



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

Simply activating EMS will not help. Even in the best EMS systems, the amount of time it takes from recognition of the arrest to EMS arriving at the side of the injured or ill person is usually longer than 10 minutes.

An automated external defibrillator (AED) is a small, portable, computerized device that is simple for anyone to operate. Bystander use of AEDs has been growing steadily, with common placements of the devices in public locations such as airports and hotels, and workplaces in general.



Turning on an AED is as simple as opening a lid or pushing a power button. Once it is on, an AED provides voice instructions to guide you through its attachment and use.

An AED automatically analyzes the heart rhythm, determines if a shock is needed, and charges itself to be ready to defibrillate. An operator simply pushes a button to deliver the shock when prompted by the AED.

Chain of Survival

The chain of survival is often used to describe the best approach for treating sudden 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:

- Early recognition of cardiac arrest and activation of EMS
- 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



Secondary Cardiac Arrest

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

Problems such as hazardous breathing conditions in a confined space, drowning, and drug overdoses can result in 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.

Opioid Overdose

The abuse of opioid drugs to get a euphoric high 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 use of heroin, a highly addictive opioid, also contributes to the problem.

As a result, the number of overdoses and deaths from prescription opioids and heroin has increased dramatically. Opioids, taken in excess, can depress and stop breathing. Opioid overdose is a clear 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. Naloxone is becoming more readily available to lay providers.

It is reasonable to provide education and training on responding to suspected opioid overdoses, including the administration of naloxone, to those most likely to be involved with this type of emergency. Laws regarding first aid administration of naloxone vary by city and state. As with Good Samaritan laws, know the laws in your area.



Knowledge Check

The chain of survival is often used to describe the best approach for treating sudden cardiac arrest. The first three links of the chain are typically the responsibility of a trained first aid provider. Describe those links.

PREVIEW

Chest Compressions

Class Type: Initial

Class Method: Classroom

Length: 12 minutes

Why This Topic Matters

Knowing how to perform high-quality chest compressions is necessary for CPR to be effective for 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

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

- High-quality chest compressions

Equipment

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

Instructor Activities

1

Show Video — (required, duration 2:13)

- 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.
 - Compress deeply.
 - Compress fast.
 - Allow the chest wall to fully recoil between compressions.
- Ask for and briefly answer any questions.
- Refer students to pages 18–20 of the Student Book.
- Use the Knowledge Check activity to evaluate and increase retention.

2

Demonstrate Skills

- Perform a Real-Time Demonstration of Skill Guide # 2 — Chest Compressions
- If necessary, demonstrate again with explanation.

3 Small Group 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 on a 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 students practice at least 2 sets of 30 chest compressions each during the practice.

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 instead of the small group 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 you feel additional practice is needed, run the practice again.

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 guide, Talk-Through Scenario, or performance evaluation sheet.

5 Close

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



Knowledge Check

What are the 3 measures of high-quality chest compressions?

1. Compress deeply, more than 2 inches.
2. Compress fast, between 100 and 120 times per minute.
3. Get close but do not lean on chest, and allow the chest to fully recoil.

NEXT CORE LESSON:
Rescue Breaths

Chest Compressions



There is a set of basic CPR skills used to provide the most effective approach to cardiac arrest.

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, brain, and the rest of the body.

Quality matters. The better you compress, the greater the influence on survival. 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 shallower compression depth.
- Allow the chest wall to fully recoil, or rebound, between compressions. Avoid leaning on the chest at the top of each compression.



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.



Knowledge Check

What are the 3 measures of high-quality chest compressions?

PREVIEW

Chest Compressions



Position Your Hands

- 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 your other hand on top of and parallel to first. You can interlace your fingers to keep them off chest.



Position Your Body

- Bring your body up and over chest so your shoulders are directly above your hands. Straighten your arms and lock your elbows.



Compress

- Bending at the waist, use upper body weight to push straight down at least 2 inches.
- Lift hands and allow chest to fully return to its normal position. Move immediately into downstroke of next compression.
- Avoid leaning on chest at the top of each compression.
- Continue compressions at a rate of 100–120 times per minute.

Primary Assessment — Unresponsive Person

Class Type: Initial

Class Method: Classroom

Length: 5 minutes

Why This Topic Matters

The primary assessment helps a first aid provider quickly identify immediate life-threatening problems.

What Students Should Learn

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

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

Instructor Activities

1

Show Video — (required, duration 2:49)

- Emphasize key points as needed.
 - ✓ Primary Assessment—Unresponsive Person
 - A primary assessment is a simple way to quickly identify if a life-threatening condition is present
 - The basic steps of a primary assessment are as follows:
 - a. Check for responsiveness.
 - b. If unresponsive, activate EMS and get an AED, if one is available.
 - c. Assess for normal breathing.
 - Provide the care indicated by the assessment:
 - a. If not breathing or only gasping, perform CPR beginning with compressions.
 - b. If breathing normally and uninjured, place the person in a side-lying recovery position to protect the airway.
 - i. Keep head, neck, and torso aligned during roll; end with face and torso angled forward. Use arms and legs to provide stability.
 - Weak, irregular gasping can occur early in cardiac arrest; this provides no usable oxygen and is not normal.
 - Ask for and briefly answer any questions.
 - Refer students to pages 31–34 of the Student Book.
 - Use the Knowledge Check activity to evaluate and increase retention.

2

Demonstrate Skills

- Perform a Real-Time Demonstration of Skill Guide 6 — Primary Assessment — Unresponsive Person.
- If necessary, demonstrate again with explanation.
- The small group practice for Primary Assessment — Unresponsive Person is incorporated in Caring for Cardiac Arrest.

3

Close

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

NEXT CORE LESSON:
Caring for Cardiac Arrest



Knowledge Check

A fellow employee collapses near you during a staff meeting. As a trained first aid provider you move to help. You kneel next to him, squeeze his shoulder, and loudly ask, “Are you all right?” He is unresponsive, so you direct other employees to activate EMS and get the company’s AED. You look closely at the face and chest for breathing; he makes a brief gasping snort, but then remains still. 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.

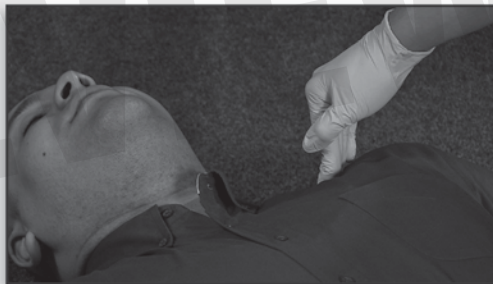
Primary Assessment — Unresponsive Person



The primary assessment is a simple way to quickly identify if a life-threatening condition is present. It is the initial approach to anyone suspected of being ill or injured.

The steps of the primary assessment are always the same:

- If it is safe to provide care, check for responsiveness.
- If unresponsive, activate EMS and get an AED, if one is available.
- Check for normal breathing.
- If normal breathing is found, place an uninjured person in a recovery position.
- If the person is not breathing or only gasping, perform CPR.



If you determine a person is unresponsive, send a bystander to activate EMS and get an AED. If you are alone, do this yourself and quickly return to the person.

If you have a mobile phone, use it to activate EMS. The speaker function will allow you to follow instructions from an EMS dispatcher while providing care.

To check for normal breathing, quickly look at the face and chest. Take no longer than 10 seconds. Normal breathing is effortless, quiet, and regular. If you are unsure, assume breathing is not normal.

Weak, irregular gasping, snorting, or gurgling sounds can occur early in cardiac arrest. These actions provide no usable oxygen. This is not normal breathing.

If the person is not breathing, or only gasping, perform CPR, beginning with compressions.

When an unresponsive person is breathing normally, and uninjured, place him or her in a side-lying recovery position to help protect the airway.

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 the breathing of anyone placed in the recovery position. The person's condition could quickly become worse and require additional care.



Knowledge Check

A fellow employee collapses near you during a staff meeting. As a trained first aid provider, you move to help. You kneel next to him, squeeze his shoulder, and loudly ask, "Are you all right?" He is unresponsive, so you direct other employees to activate EMS and get the company's AED. You look closely at the face and chest for breathing; he makes a brief gasping snort, but then remains still. What do you do next?

Primary Assessment — Unresponsive Person



Assess Scene

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



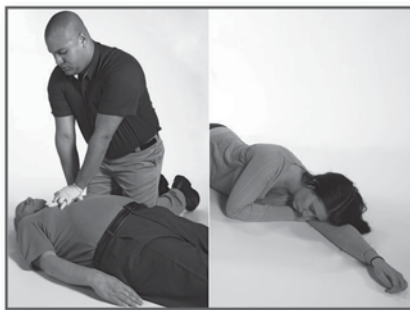
Check for Response

- Tap or squeeze shoulder and ask loudly, "Are you all right?"
- If unresponsive, have someone activate EMS and get an AED.



Look for Normal Breathing

- Position person face-up on a firm, flat surface.
- Look at face and chest for normal breathing. Take no longer than 10 seconds. If unsure, assume breathing is not normal.
- Weak, irregular gasping, snorting, or gurgling is not normal breathing.



Provide Indicated Care

- If person is not breathing, or only gasping, perform CPR, beginning with compressions.
- If normal breathing is found, place an uninjured person in recovery position.

Recovery Position



Prepare

- Place arm nearest you up alongside head.
- Bring far arm across chest and place back of hand against cheek.
- Grasp far leg just above knee and pull it up so the foot is flat on ground.



Roll

- Grasping shoulder and hip, roll person toward you in a single motion, keeping head, shoulders, and body from twisting.
- Roll far enough for face to be angled toward ground.



Stabilize

- Position elbow and legs to stabilize head and body. Ensure there is no pressure on chest that restricts breathing.
- Make sure head ends up resting on extended arm and head, neck, and body are aligned.
- If person has been seriously injured, do not move unless fluids are in airway, or you need to leave to get help.

Pain, Severe Pressure, or Discomfort in the Chest

Class Type: Initial

Class Method: Classroom

Length: 5 minutes

Why This Topic Matters

Pain, severe pressure, or discomfort in the chest can be a warning sign of a serious underlying medical condition that requires professional medical care.

What Students Should Learn

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

- How to recognize and provide first aid treatment for chest pain, pressure, or discomfort

Instructor Activities

1 Show Video — (required, duration 2:44)

- Emphasize key points as needed.
 - ✓ Pain, Severe Pressure, or Discomfort in the Chest
 - Acute coronary syndrome (ACS) occurs when there is reduced blood flow to the tissues of the heart. Often described as a heart attack, ACS is a serious condition that can result in significant damage to the heart.
 - Someone with ACS will generally experience pain, pressure, or discomfort in the chest.
 - Women often do not experience chest discomfort and may describe indigestion, weakness, or fatigue.
 - Signs of ACS include shortness of breath, nausea, and lightheadedness. Arm and back pain can occur. The skin may become pale, cool, and sweaty.
 - Do not try to transport the person to a hospital yourself. Activate EMS immediately.
 - A person who is having a heart attack may deny it. This is a common occurrence in this situation. Accept it, but never let this alter your approach to care.
 - Allow the person to find a position of comfort. Calm, comfort, and reassure.
 - The early administration of aspirin — 1 adult (325 mg) or 2–4 low-dose (80 mg) — can be life saving for a person having a heart attack.
 - Do not encourage aspirin use if you are uncertain or uncomfortable with giving the aspirin.
 - Someone with a heart condition may carry a prescribed medication known as nitroglycerin. If so, assist the person in taking it.
 - Be prepared for the possibility of sudden cardiac arrest, and the need for CPR and the use of an AED.
- Ask for and briefly answer any questions.
- Refer students to pages 87–88 of the Student Book.
- Use the Knowledge Check activity to evaluate and increase retention.

2 Close

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



Knowledge Check

True or false? A person who is having a heart attack may deny it.

True. This is a common occurrence in this situation. Accept it, but never let this alter your approach to care.

NEXT
Poisoning

Pain, Severe Pressure, or Discomfort in the Chest



Acute coronary syndrome (ACS) occurs when there is reduced blood flow to the tissues of the heart. Often described as a heart attack, ACS is a serious condition that can result in significant damage to the heart.

Someone with ACS will generally experience pain, pressure, or discomfort in the chest, although women often do not experience chest pain and may describe indigestion, weakness, or fatigue. Shortness of breath, nausea, and lightheadedness can also occur. The person may experience pain in the arms or back. The person's skin may become pale, cool, and sweaty.

A person who has had previous heart problems is at risk for reoccurrence. Ask the person or any bystanders about prior problems, or medications being taken.

If you suspect a heart-related problem, do not try to transport the person to a hospital yourself. Activate EMS immediately, even if the person does not want you to. While waiting for EMS to arrive, follow these guidelines:

- If an AED is available, have someone get it so that it's nearby if needed.
- Allow the person to find the most comfortable position in which to breathe.
- Loosen tight clothing.
- Calm, comfort, and reassure the person.

- A person who is having a heart attack may deny it. This is a common occurrence in this situation. Accept it, but never let this alter your approach to care.
- The early administration of aspirin can be life-saving for a person having a heart attack. Encourage the person to chew and swallow 1 adult (325 mg), or 2 to 4 low-dose (81 mg) “baby” aspirin.
- Do not encourage aspirin use if the person has an allergy to aspirin, evidence of a stroke, a recent bleeding problem, the pain does not appear to be related to the heart, or if you are uncertain or uncomfortable with giving the aspirin.
- Someone with a heart condition may carry a prescribed medication known as nitroglycerin. If so, assist the person in the self-administration of it.



Whenever a heart attack is suspected, be prepared for the possibility of sudden cardiac arrest, and the need for CPR and the use of an AED. Continue to reassure the person until another provider or EMS personnel take over.

HEART DISEASE

Heart disease, through heart attacks and strokes, is the leading cause of death for men and women in the United States. Statistics indicate more than 1 in 4 deaths was related to heart disease; half of the deaths were women.

A healthy lifestyle can lower the risk of heart disease:

- Follow a healthy diet to prevent or reduce high blood pressure and high blood cholesterol
- Maintain a healthy weight
- Control alcohol intake
- Don't smoke
- Exercise regularly



Knowledge Check

True or false? A person who is having a heart attack may deny it.



MEDIC FIRST AID International, Inc.
1450 Westec Drive
Eugene, OR 97402 USA
800-447-3177 ■ 541-344-7099 ■ 541-344-7429 fax
hsi.com/medicfirstaid

BasicPlus

CPR, AED, and
First Aid for Adults



Health & Safety Institute
We Make Protecting and Saving Lives Easy®
MEDIC First Aid is a member of the HSI family of brands.