INSTRUCTOR GUIDE
PREVIEW

Child/Infant

CPR and AED Supplement

2015 GUIDELINES

MEDIC First Aid

MEDIC First Aid

An HSI Company

Child/Infant CPR and AED Supplement

Instructor Guide, *Version 8.0*

Purpose of this Guide

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

Notice of Rights

No part of this MEDIC First Aid *Child/Infant CPR and AED Supplement Version 8.0 Instructor Guide* may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage and retrieval system, without written permission from MEDIC FIRST AID International, Inc.

Trademarks

MEDIC First Aid and the MEDIC First Aid logo are registered trademarks of MEDIC FIRST AID International, Inc.

PREVIEW

MEDIC FIRST AID International, Inc.
1450 Westec Drive
Eugene, OR 97402

800-447-3177 541-344-7099

E-mail: response@hsi.com
Visit our website at hsi.com/medicfirstaid

Copyright © 2016 MEDIC FIRST AID International, Inc. All rights reserved. Printed in the United States of America.

First Edition—2016

hsi Health & Safety Institute™

Making the Workplace and Community Safer.

ISBN 978-1-936515-80-6

4385

Contents

January 2017

Part 1: Program Design and Instructional Tools **1**

Program Overview 2
Program Structure 2
Class Types 2
Class Methods 2
Training Content 2
Initial Classroom Class 2
Initial Blended Class 3
Renewal Class 4
Challenge 4
Instructional Tools 5

Part 2: Class Requirements and Administration **7**

Class Requirements 8
Learning Environment 8
Equipment and Materials List 9
Administration 10
Class Documentation 11

Part 3: Initial Training, Classroom **13**

Initial Class Outline and Time Frame 14
Introduction 15

CPR AND AED

Children and Cardiac Arrest 16
Secondary Cardiac Arrest
Pediatric Chain of Survival
Sudden Cardiac Arrest

Chest Compressions 20
Small Group Practice — Chest Compressions
Optional - Video-Guided Practice

Rescue Breaths 25
Small Group Practice — Rescue Breaths — CPR Mask and/or Rescue Breaths — CPR Shield
Optional - Video-Guided Practice

Automated External Defibrillation 30
Small Group Practice (Optional) — Using an AED

Primary Assessment — Unresponsive 34

Caring for Cardiac Arrest 38
Small Group Practice — Caring for Cardiac Arrest
Optional - Video-Guided Practice

PREVIEW

CPR and AED *(continued)*

Choking 44

Small Group Practice — Choking — Infants

Class Wrap-Up

Evaluation 49

Documentation and Certification 51

Part 4: Initial Training, Blended 53

Blended Class Outline and Time Frame

Part 5: Renewal Training, Classroom 71

Renewal Class Outline and Time Frame

Part 6: Challenge, Classroom 91

Challenge Outline and Time Frame

Appendix 97

Summary of Program Documents Found Online in Otis

Class Roster with Instructions

Sources

PREVIEW

Part 1:
Program Design and Instructional Tools

PREVIEW

Program Design

Program Overview

The MEDIC First Aid Child/Infant CPR and AED Supplement training program is intended for individuals who are not healthcare providers or professional rescuers but desire or are required to be certified in CPR and AED. Current certification in adult CPR and AED is a prerequisite for using this supplement.

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. Child/Infant CPR and AED Supplement is designed to include a significant amount of hands-on skill practice.

Program Structure

MEDIC First Aid Child/Infant CPR and AED Supplement contains only core 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 Child/Infant CPR and AED Supplement.

Third-Party Training Content

Additional training materials that are not produced by HSI may also be used to enhance MEDIC First Aid Child/Infant CPR and AED Supplement at the discretion of the training center director. These additional materials may not be used in lieu of MEDIC First Aid Child/Infant CPR and AED Supplement 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 Child/Infant CPR and AED Supplement: 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 Child/Infant CPR and AED Supplement: 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 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.

PREVIEW

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 Child/Infant CPR and AED Supplement 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.

Certification Requirements

Instructors must be current and properly authorized as a MEDIC First Aid Child/Infant CPR and AED Supplement instructor to issue Child/Infant CPR and AED Supplement 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 MUST BE SUPPLEMENTED WITH HANDS-ON PRACTICE.

PREVIEW

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 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 Child/Infant CPR and AED Supplement 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 AED 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 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 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 Child/Infant CPR and AED Supplement 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 its 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 Child/Infant CPR and AED Supplement 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 Child/Infant CPR and AED Supplement certification cards are issued to those individuals who have earned them.

PREVIEW

Instructional Tools

This MEDIC First Aid Child/Infant CPR and AED Supplement Instructor Guide, (integrated with pages from the Child/Infant CPR and AED Supplement 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 Child/Infant CPR and AED Supplement 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 Child/Infant CPR and AED Supplement 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.

PREVIEW

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):

- Child/Infant CPR and AED Supplement Instructor Guide
- Child/Infant CPR and AED Supplement Student Books
- CPR manikins and AED trainers
- Gloves
- 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

Child/Infant CPR and AED Supplement 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. Child/Infant CPR and AED Supplement 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. 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.

Always use training devices during student practices. Never use a real AED unless it is specifically set up for training.

Certain psychomotor skills covered in this program are not appropriate for student-on-student practice and must be performed on training manikins designed for that purpose. This includes chest compressions, rescue breaths, AED pad placement, and abdominal thrusts.

PREVIEW

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
- Child and Infant CPR training manikins, 1 for each group of 2 to 3 students
- AED training devices and pads (Use pediatric training options if available), 1 for each manikin
- Manikin decontamination supplies (ex: manikin cleaning wipes, 70% ethyl alcohol)
- CPR overlay shields, 1 for each student, or pediatric 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
- Child/Infant CPR and AED Supplement Instructor Guide (print or digital), 1 for each instructor
- Child/Infant CPR and AED Supplement Student Books, 1 for each student (print or digital)
- Child/Infant CPR and AED Supplement program video, DVD or Otis-powered desktop or mobile application, 1 for each class
- Child/Infant CPR and AED Supplement 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
  - Choking — Infants

Recommended

- Talk-Through Scenario sheets, 1 set for each group of 2 to 3 students (print or digital)
  - Caring for Cardiac Arrest
  - Choking — Infants
- 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

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 Child/Infant CPR and AED Supplement 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.

PREVIEW

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 Child/Infant CPR and AED Supplement 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 75% 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.

PREVIEW

Class Documentation

All of the class documentation forms used in the MEDIC First Aid Child/Infant CPR and AED Supplement 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.

PREVIEW

Part 3:
Initial Training, Classroom

PREVIEW

Initial Class Outline and Time Frame

Lesson	Lesson Title	Knowledge Objectives	Skill Objectives	Approximate Length (min)
Introduction	*Describe the purpose of the program.*			3
CPR AND AED				
1	Children and Cardiac Arrest	Describe how to suspect and provide first aid treatment for secondary cardiac arrest of a child or infant. Name and explain the links in the pediatric chain of survival. Describe how to suspect and provide first aid treatment for sudden cardiac arrest of a child or infant.		4
2	Chest Compressions	Describe how to perform high-quality chest compressions for a child and infant.	Correctly demonstrate high-quality chest compressions for a child and infant.	13
3	Rescue Breaths	Describe how to perform high-quality rescue breaths using a CPR mask or shield for a child and infant.	Correctly demonstrate high-quality rescue breaths using a CPR mask or shield for a child and infant.	7
4	Automated External Defibrillation	Explain the steps to use an AED for a child or infant.	(*Optional:* Correctly demonstrate how to use an AED for a child or infant.	4
5	Primary Assessment — Unresponsive	Describe the steps of a primary assessment for an unresponsive child or infant.		3
6	Caring for Cardiac Arrest	Describe the steps for performing high-quality CPR and using an AED as a single provider for a child and infant.	Correctly demonstrate how to conduct a primary assessment, perform high-quality CPR, and use an AED as a single provider for a child and infant.	16
7	Choking	Describe how to recognize and provide first aid treatment for choking for a child and infant.	Correctly demonstrate first aid treatment for a choking infant.	10
EVALUATION				
Skill and Performance Evaluation		*Skill evaluation, required. Performance evaluation, optional, unless required.*[a]		0–60
Written Exam		*Optional, unless required.*[b]		10–20
CONCLUSION				
Documentation and Certification		*Verify class documentation and issue certification cards to students who earned them.*		5+
			Total Time[d]	65

[a] At a minimum, skill competency is visually evaluated by instructors during the required student practices for the class. A performance evaluation can be used to provide a more formal approach to skill evaluation. When a performance evaluation is not required by a regulatory agency, it is optional

[b] When a Written Exam is not required by a regulatory agency, it is optional. The optional exam may be used before, during or after class as an active learning tool; however, the participant's score on an optional exam may not be used to withhold a properly earned certification card.

[c] Adult education guidelines recommend a break for at least 5 minutes each hour. Class timing can vary widely depending on the age groups covered. 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 periods should be provided, but may be rearranged or combined as required or desired.

[d] 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. Lesson times are influenced by class preparation, available equipment, and instructor efficiency. These could increase the time needed to meet the learning objectives.

PREVIEW

Children and Cardiac Arrest

Class Type: Initial

Class Method: Classroom

Length: 4 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:

- How to suspect and provide first aid treatment for secondary cardiac arrest for a child and infant
- The links in the pediatric cardiac arrest chain of survival
- How to suspect and provide first aid treatment for sudden cardiac arrest for a child and infant

Equipment

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

Instructor Activities

1 Show Video — (required, duration 2:48)

- Emphasize key points as needed.
  - ✓ Secondary Cardiac Arrest
    - – Cardiac arrest as a secondary result of the loss of breathing, such as in suffocation or drowning. This is the most likely type of cardiac arrest in children.
    - – With no incoming oxygen, the heart progressively becomes weaker until signs of life become difficult or impossible to assess.
    - – If a child's heart is 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.
    - – CPR skills vary a bit, depending on age.
      a. An infant is younger than 1 year of age.
      b. A child is 1 year of age until the onset of puberty. Puberty can be estimated by breast development in females and the presence of armpit hair in males.
      c. An adult is from the onset of puberty and older.
  - ✓ Pediatric Chain of Survival
    - – The pediatric chain of survival is often used to describe the best approach for treating a child in cardiac arrest.
      a. Prevention of the typical causes for airway and breathing emergencies
      b. Early CPR, with an emphasis on effective rescue breaths
      c. Prompt activation of EMS to quickly get professional care
      d. Effective basic and advanced EMS care and transport, and
      e. Effective post-cardiac arrest care at a hospital

PREVIEW

- ✓ Sudden Cardiac Arrest
  - Although rare, children can experience sudden cardiac arrest with ventricular fibrillation due to existing heart problems or an accident such as a blow to the chest or an electrocution.
  - When available, include the use of an AED when cardiac arrest of a child or infant occurs.
  - Children are more likely to experience a secondary cardiac arrest instead of a sudden one. An emphasis on delivering high-quality rescue breaths during CPR is important.
- Ask for and briefly answer any questions.
- Refer students to pages 2–3 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

The pediatric chain of survival is often used to describe the best approach for treating secondary cardiac arrest of a child or infant. Since secondary cardiac arrest is a result of the loss of breathing, resulting in a weakened heart and the inability to detect signs of life, how is CPR described as a link in the chain?

Early CPR, with an emphasis on effective rescue breaths.

PREVIEW

NEXT LESSON:
Chest Compressions

Children and Cardiac Arrest

Secondary Cardiac Arrest

Cardiac arrest in children is usually the end result of the loss of breathing. This is known as secondary cardiac arrest.

Causes of secondary cardiac arrest include the following:

- Hazardous breathing conditions
- Sudden Infant Death Syndrome (SIDS)
- Suffocation
- Entrapment
- Drowning
- Choking
- Drug overdoses

PREVIEW

With no incoming oxygen, the heart progressively becomes weaker until signs of life become difficult or impossible to assess.

When a child's heart is too weak to create obvious signs of life, early CPR, with an emphasis on effective rescue breaths, offers the best chance for survival.[1]

CPR AND AED

CPR skills vary a bit, depending on age. 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 estimated by breast development in females and the presence of armpit hair in males.
- An adult is from the onset of puberty and older.

Pediatric Chain of Survival

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

- Prevention of the typical causes for airway and breathing emergencies
- Early CPR, with an emphasis on effective rescue breaths
- Prompt activation of EMS to quickly get professional care
- Effective basic and advanced EMS care and transport, and
- Effective post-cardiac arrest care at a hospital

Sudden Cardiac Arrest in Children

Although rare, children can experience sudden cardiac arrest with ventricular fibrillation due to existing heart problems or an accident such as a blow to the chest or an electrocution. When available, include the use of an AED when cardiac arrest of a child or infant occurs.

PREVIEW

Knowledge Check

The pediatric chain of survival is often used to describe the best approach for treating secondary cardiac arrest of a child or infant. Since secondary cardiac arrest is a result of the loss of breathing, resulting in a weakened heart and the inability to detect signs of life, how is CPR described as a link in the chain?

Chest Compressions

Class Type: Initial
Class Method: Classroom
Length: 13 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 for a child and infant

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

- High-quality chest compressions for a child and infant

Equipment

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

Instructor Activities

1 Show Video — (required, duration 1:39)

- 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.
      b. Compress fast.
      c. Allow the chest wall to fully recoil between compressions.
    - – Children
      a. Kneel close to the chest and use the heel of one hand on the breastbone just above the point where the ribs meet.
      b. Compress deeply. Using the heel of one hand, press straight down at least one-third the full depth of the chest, or about two inches.
      c. Compress fast, between 100 and 120 times per minute.
      d. Do not lean on the chest between compressions.
      e. Compressions can be tiring. Use two hands to perform compressions if needed, in order to maintain quality.
    - – Infants
      a. Use the tips of two fingers just below an imaginary line drawn between the nipples.
      b. Compress deeply, at least one-third the full depth of the infant's chest, or about 11/2 inches.
      c. Compress fast, between 100 and 120 times per minute.
- Ask for and briefly answer any questions.
- Refer students to pages 4–6 of the Student Book.
- Use the Knowledge Check activity to evaluate and increase retention.

PREVIEW

2 Demonstrate Skills

- Perform a Real-Time Demonstration of Skill Guide 1 — **Chest Compressions — Children** and **Skill Guide 2 — Chest Compressions — Infants.**
- 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.
- Practice both child and infant skills.

Instructor Note:

Have students practice at least 2 sets of 30 chest compressions each during the practice for a child and an infant.

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 — **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.

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 guide.

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 for a child?

1. *Compress deeply, at least $^1/_3$ the full depth of the chest, or about 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 LESSON:
Rescue Breaths

Chest Compressions

The compression technique for children is similar to that of adults. You can use the heel of one hand on the lower half of the breastbone to compress the chest of a child. If this is difficult, or you are getting tired, use two hands to perform compressions.

Use the tips of two fingers on the breastbone, just below the nipple line, to compress the chest of an infant.

PREVIEW

Knowledge Check

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

CPR AND AED

Chest Compressions — Children

PositionYour Hand(s)

- 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. Use both hands if needed.

Position Your Body

- Bring your body up and over chest so your shoulders are directly above your hand. Straighten your arm and lock your elbow.

Compress

- Bending at waist, use upper body weight to push straight down $^1/_3$ depth of chest, or about 2 inches.
- Lift your hand and allow chest to return fully to its normal position. Move immediately into downstroke of next compression.
- Avoid leaning on chest at top of each compression.
- Continue compressions at a rate of 100–120 times per minute.

PREVIEW

Chest Compressions — Infants

Positioning

- Position infant face up on a firm, flat surface.
- Place 2 fingertips on breastbone just below nipple line.

Compress

- Compress at least $^1/_3$ depth of chest, or about $1^1/_2$ inches.
- Lift fingers and allow chest to return fully to its normal position. Move immediately into downstroke of next compression.
- Continue compressions at a rate of 100–120 times per minute.

PREVIEW

SKILL GUIDE 2

MEDIC First Aid

An HSI Company

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

Child/Infant

CPR and AED Supplement

hsi Health & Safety Institute™

Making the Workplace and Community Safer.

ISBN 978-1-936515-80-6
© 2016 MEDIC FIRST AID International, Inc.