



FIRST AID | CPR AED

CONTENTS

First Aid CPR AED	B	Part Three: Teaching	
About This Instructor Manual	1	First Aid CPR AED	23
Keywords & Definitions	2	Training Program Structure	24
Part One: Universal Concepts	7	Main Lesson Segments	24
Procedures for First Aid CPR AED.....	8	Using Lesson Plans	25
Prevention.....	10	Using the Procedure Graphics.....	25
Infection Control	11	Class Format & Delivery Method	26
High-Quality Cardiopulmonary		Before Teaching a Class	27
Resuscitation (HQ-CPR)	12	Quality Assurance	27
First Aid/CPR AED Continuum	12	Preparing for Class	27
Constructive Feedback.....	13	Using the Class Presentations.....	27
Contextual Learning	13	Student Hands-On Practice Methods	28
Deliberate Practice	14	Conducting Video-Guided Practice.....	29
Distributive or Spaced Practice.....	14	Practicing with Skill Sheets	29
Manikins & Feedback Devices for CPR Training	14	Practicing with Scenario Sheets	30
		Evaluation	31
Part Two: Program Description.....	15	Conducting Hands-On Skill Testing	31
Program Goal	16	Individual Performance Evaluation	32
Class Goal	16	Group Performance Evaluation	33
Terminal Learning Objectives.....	17	Remediation	34
Class Audience	18	Knowledge Evaluation Is Optional	34
Class Instructor.....	18	Class Evaluation Is Required	35
Student-to-Instructor Ratio (SIR).....	18	After the Class	35
Student-to-Manikin Ratio (SMR).....	18	Documentation & Record Keeping	35
Program Design	18	At-a-Glance Class & Certification Types Tables	36
Class Format	18	Lesson & Class Duration	36
Program Flexibility	18	Durations By Format	36
Class & Certification Type Options	18	At-a-Glance: Initial Training,	
Instructional Strategy	19	Traditional Classroom	37
Instructor Proficiency.....	20	At-a-Glance: Initial Training,	
Code of Ethics for HSI Instructors	20	Blended Learning Face-to-Face Portion	40
Instructional Tools	20	At-a-Glance: Challenge	42
Lesson Objectives.....	20		
Methods	21		
Evaluation	21		
Required Training Content.....	21		
Third-Party Training Content	21		

Part Four: Lesson Plans..... 43

About the Lesson Plans & Class Types 44
About the Procedure Graphics 44

Initial Training, Traditional Classroom 45

Learning Environment 45
Classroom Space & SIR 45
Classroom Health & Safety 46
Class Preparation 46
Class Equipment & Materials Checklist
for All Class Types 48
Required Class Equipment & Materials 48
Optional Class Equipment & Materials 49

Introductory Lesson Plans 50

Introduction to Emergency Care 50
Legal Concepts 51
Roles, Responsibilities & Priorities 52
Responding to an Emergency 53
Responding to an Emergency Skill Test 56

Adult CPR AED Lesson Plans..... 58

Adult – Sudden Cardiac Arrest (SCA) 58
Adult – Chest Compressions 59
Adult – Airway, Breaths & Using a CPR Mask 61
Adult – Automated External Defibrillation
& Using an AED 63
Adult – One-Provider CPR AED 65
Adult – Additional CPR AED Considerations 67
Adult – Suspected Opioid-Associated Emergency 68
Adult – Relief of Choking 69
Adult – One-Provider CPR AED Skill Test 70

Adult First Aid Lesson Plans 72

External Bleeding 72
Shock 74
Internal Bleeding 75
Amputation 76
Impaled Objects 77
Open Chest Wound 78
Open Abdominal Injury 79
Head, Neck, or Spinal Injury 80
Eye Injuries 81
Burns 82
Bone, Joint & Muscle Injuries 83
Concussion 85
Minor Wounds 86
Tooth Injuries 87
Bleeding from the Nose 88
Altered Mental Status 89
Presyncope & Syncope 90
Stroke 91

Diabetes & Hypoglycemia 92
Seizure 93
Difficulty Breathing 94
Asthma 95
Severe Allergic Reaction 96
Adult – Relief of Choking (Adult First Aid Only) 98
Chest Pain & Heart Attack 99
Poisoning 100
Heat Emergencies 101
Cold Emergencies 102
Bites & Stings 103
Severe or Life-Threatening External
Bleeding Control Skill Test 105

Child CPR AED Lesson Plans 107

Child – Procedure for Pediatric CPR AED 107
Child – Chest Compressions 108
Child – Airway, Breaths & Using a CPR Mask 110
Child – Using an AED 112
Child – One-Provider CPR AED 114
Child – Suspected Opioid-Associated Emergency 116
Child – Relief of Choking 117
Child – One-Provider CPR AED Skill Test 118

Infant CPR AED Lesson Plans 120

Infant – Procedure for Pediatric CPR AED 120
Infant – Chest Compressions 121
Infant – Airway, Breaths & Using a CPR Mask 123
Infant – Using an AED 125
Infant – One-Provider CPR AED 127
Infant – Suspected Opioid-Associated Emergency 129
Infant – Relief of Choking 130
Infant – One-Provider CPR Skill Test 132

Conclusion Lesson Plan 134

Conclusion 134

Initial Training, Blended Learning	135	Renewal Training	185
The Online Portion of Blended Learning	135	Renewal Instructional Strategy	185
The Face-to-Face Portion of Blended Learning.....	135	Renewal with Spaced Practice	186
Class Preparation	136	First Aid Adult CPR AED Renewal Training.....	187
Class Equipment & Materials Checklist for All Class Types	138	Adult, Child & Infant CPR AED Renewal Training	187
Required Class Equipment & Materials	139	First Aid Only Renewal Training	188
Optional Class Equipment & Materials	140	Challenge	189
Introductory Lesson Plans	141	Delivery Method	189
Introduction to Blended Learning.....	141	Class Equipment & Materials Checklist for All Class Types	189
Responding to an Emergency	142	Required Class Equipment & Materials	190
Responding to an Emergency Skill Test	145	Challenge, Lesson Plan.....	191
Adult CPR AED Lesson Plans.....	147	Challenge, Knowledge & Performance Evaluation	192
Adult – Chest Compressions	147	Conclusion	193
Adult – Airway, Breaths & Using a CPR Mask	149	Part Five: Appendix	195
Adult – Automated External Defibrillation & Using an AED.....	151	Responding to an Emergency	
Adult – One-Provider CPR AED	153	Individual Performance Evaluation Sheet 1	197
Adult – One-Provider CPR AED Skill Test	155	Group Performance Evaluation Sheet 1	199
Adult First Aid Lesson Plans	157	Adult – One-Provider CPR AED	
External Bleeding	157	Individual Performance Evaluation Sheet 2.....	201
Severe or Life-Threatening External Bleeding Control Skill Test.....	159	Group Performance Evaluation Sheet 2.....	203
Child CPR AED Lesson Plans	161	Severe or Life-Threatening External Bleeding Control	
Child – Chest Compressions.....	161	Individual Performance Evaluation Sheet 3	205
Child – Airway, Breaths & Using a CPR Mask.....	163	Group Performance Evaluation Sheet 3	207
Child – Using an AED	165	Child – One-Provider CPR AED	
Child – One-Provider CPR AED.....	167	Individual Performance Evaluation Sheet 4	209
Child – One-Provider CPR AED Skill Test.....	169	Group Performance Evaluation Sheet 4	211
Infant CPR AED Lesson Plans	171	Infant – One-Provider CPR	
Infant – Chest Compressions	171	Individual Performance Evaluation Sheet 5	213
Infant – Airway, Breaths & Using a CPR Mask	173	Group Performance Evaluation Sheet 5	215
Infant – Using an AED.....	175	Student Hands-On Skill Practice & Testing Log	217
Infant – One-Provider CPR AED	177	Class Roster	218
Infant – Relief of Choking.....	179	Renewal Training: Spaced Practices Sessions Attendance Sheet.....	220
Infant – One-Provider CPR Skill Test	181	Sample Class Floor Plan.....	221
Conclusion Lesson Plan	183		
Conclusion	183		



Procedures for First Aid | CPR AED

With this revised and updated training program, we have integrated the following procedures. They are:

1. Procedure for Adult First Aid, CPR AED
2. Procedure for Adult CPR AED
3. Procedure for Pediatric CPR AED
4. Procedure for Adult First Aid
5. Procedure for Adult and Child Foreign-Body Airway Obstruction (FBAO)
6. Procedure for Infant Foreign-Body Airway Obstruction (FBAO)
7. Procedure for Severe or Life-Threatening External Bleeding Control

A procedure is “a particular way of accomplishing something or of acting.”⁹ These procedures are simple step-by-step diagrams and instructions that provide guidance for assessing, prioritizing, and performing first aid, CPR AED, foreign-body airway obstruction relief, and life-threatening external bleeding control. They are modeled after “decision tree” medical algorithms and are based on scientific evidence, national guidelines, and the consensus of experts.

⁹ “Procedure.” Merriam-Webster.com Dictionary, <https://www.merriam-webster.com/dictionary/procedure> [Retrieved 1/8/26].

Instructors must help orient each student to the procedures that are relevant for the class they are taking and the certification they are pursuing (Table 1).

#	PROCEDURE	CLASS TYPE								
		First Aid Adult CPR AED	First Aid Adult, Child, and Infant CPR AED	First Aid Adult and Child CPR AED	First Aid Adult and Infant CPR AED	First Aid	CPR AED Adult	CPR AED Adult, Child, and Infant	CPR AED Adult and Child	CPR AED Adult and Infant
1	Procedure for Adult First Aid, CPR AED	✓	✓	✓	✓					
2	Procedure for Adult CPR AED						✓	✓	✓	✓
3	Procedure for Adult First Aid					✓				
4	Procedure for Pediatric CPR AED		✓	✓	✓			✓	✓	✓
5	Procedure for Adult and Child Foreign-Body Airway Obstruction (FBAO)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	Procedure for Infant Foreign-Body Airway Obstruction (FBAO)		✓		✓			✓		✓
7	Procedure for Severe or Life-Threatening External Bleeding	✓	✓	✓	✓	✓				

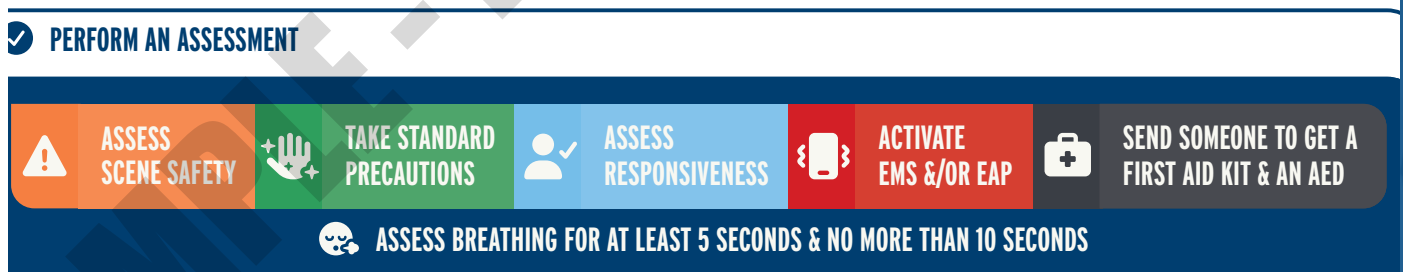
Table 1

Assessment of the scene and the person is a critical skill that applies in any emergency.

The procedures for adult first aid and CPR AED all begin with the same steps of assessment (Fig. 1):

1. Assess scene safety.
2. Take standard precautions.
3. Assess responsiveness.
4. Activate EMS and/or your emergency action plan (EAP).
5. Send someone to get the first aid kit and an AED (unless readily available to you).
6. Assess breathing for at least 5 seconds and no more than 10 seconds.

Figure 1



In the case of foreign-body airway obstruction or choking, the procedure includes assessment of a responsive person to determine if the obstruction is mild or severe.

It is important to emphasize that while these steps are listed in sequence, in a real emergency, they may need to be carried out in a different order or performed simultaneously (especially when multiple providers are available). The steps of assessment and the procedures are intended as decision-making guidance and not an inflexible sequence of steps that must be strictly adhered to.

AT-A-GLANCE CLASS & CERTIFICATION TYPES TABLES

The following tables provide direction on class and certification types by segment, subcategory, lesson title, and approximate duration, and include a reference to the procedures to be used accompanying that class type. Required lessons and skill tests are noted by an “●” for each class type. A “★” indicates a required student hands-on practice.

Skill tests may be done at the end of each associated lesson, segment, or collectively at the end of the class. A lesson plan, with directions for facilitating a skill test, is at the end of each of the first five main lesson segments.

Lesson & Class Duration

Duration is the estimated length of time it takes to teach each lesson or a complete class. Duration is based on the learning objectives; what learners must know and do. Lesson and class duration can vary due to many factors, including instructor proficiency, type of skill practice method used, number of training manikins and devices, type of skill testing method used (individual or group), number of students, etc. These factors can increase or decrease the time needed to meet the learning objectives. Consequently, lesson

and class durations are approximated over a range rather than by a single, precise time.

Lesson time ranges account for a brief introduction to the objectives, the class presentation (video content), questions and answers, hands-on skill practice, skill testing (where applicable), and a brief wrap up. Student hands-on skill practice time is based on a 1:1 student-to-manikin ratio. The low end of the range is primarily influenced by using group skill testing (6:1 SIR), while the high end of the range is based on individual skill testing (1:1 SIR). A standard buffer of 10-20% has been added for transitions (such as pausing video to clarify, moving into small groups, setting up, and re-setting equipment). Lesson time ranges are rounded to the nearest whole minute. Class time ranges are rounded to the nearest full, half, or quarter hour. They are based on a 6:1 student-to-instructor ratio (SIR). Additional time must be added for the optional written exam and/or skill practices.

Adult education guidelines generally recommend taking short breaks during instruction to maintain focus and process new information. Instructors should offer short breaks, such as 15-minute break near the midpoint of the class.

Durations By Method

	TRADITIONAL CLASSROOM	BLENDED LEARNING	CHALLENGE	
CERTIFICATION TYPE	First Aid Adult CPR AED	3h 00m – 5h 00m	15m – 30m	
	First Aid Adult, Child, and Infant CPR AED	4h 30m – 7h 15m	15m – 30m	
	First Aid Adult and Child CPR AED	3h 45m – 6h 00m	15m – 30m	
	First Aid Adult and Infant CPR AED	3h 45m – 6h 15m	15m – 30m	
	First Aid	2h 15m – 3h 45m	0h 30m – 1h 00m	15m – 30m
	CPR AED Adult	1h 15m – 2h 15m	0h 30m – 1h 15m	15m – 30m
	CPR AED Adult, Child, and Infant	2h 45m – 4h 30m	1h 30m – 3h 00m	15m – 30m
	CPR AED Adult and Child	2h 00m – 3h 30m	1h 00m – 2h 00m	15m – 30m
CPR AED Adult and Infant	2h 00m – 3h 30m	1h 00m – 2h 15m	15m – 30m	

At-a-Glance: Initial Training, Traditional Classroom

★ TOPIC REQUIRES HANDS-ON SKILL PRACTICE

		CLASS & CERTIFICATION TYPE								
		First Aid Adult CPR AED	First Aid Adult, Child, and Infant CPR AED	First Aid Adult and Child CPR AED	First Aid Adult and Infant CPR AED	First Aid	CPR AED Adult	CPR AED Adult, Child, and Infant	CPR AED Adult and Child	CPR AED Adult and Infant
PROCEDURE REFERENCE	Procedure for Adult First Aid, CPR AED	●	●	●	●					
	Procedure for Adult CPR AED						●	●	●	●
	Procedure for Adult First Aid					●				
	Procedure for Pediatric CPR AED		●	●	●			●	●	●
	Procedure for Adult and Child Foreign-Body Airway Obstruction (FBAO)	●	●	●	●	●	●	●	●	●
	Procedure for Infant Foreign-Body Airway Obstruction (FBAO)		●		●			●		●
	Procedure for Severe, Life-Threatening External Bleeding	●	●	●	●	●				
INTRODUCTORY	Introduction to Emergency Care	●	●	●	●	●	●	●	●	●
	Legal Concepts	●	●	●	●	●	●	●	●	●
	Roles, Responsibilities, and Priorities	●	●	●	●	●	●	●	●	●
	Responding to an Emergency	★	★	★	★	★	★	★	★	★
ADULT CPR AED	Adult – Sudden Cardiac Arrest (SCA)	●	●	●	●		●	●	●	●
	Adult – Chest Compressions	★	★	★	★		★	★	★	★
	Adult – Airway, Breaths, and Using a CPR Mask	★	★	★	★		★	★	★	★
	Adult – Automated External Defibrillation and Using an AED	★	★	★	★		★	★	★	★
	Adult – One-Provider CPR AED	★	★	★	★		★	★	★	★
	Adult – Additional CPR AED Considerations	●	●	●	●		●	●	●	●
	Adult – Suspected Opioid-Associated Emergency	●	●	●	●		●	●	●	●
	Adult – Relief of Choking	●	●	●	●		●	●	●	●

CONTINUED ON NEXT PAGE ↓

PART FOUR

LESSON PLANS

SAMPLE - INTERNAL USE ONLY

About the Lesson Plans & Class Types

Mixing and matching lesson plans provides instructors a great deal of flexibility to meet the needs of students. Instructors select, omit, or combine the main lesson segments to produce the following class types and certifications:

1	First Aid Adult CPR AED
2	First Aid Adult, Child, and Infant CPR AED
3	First Aid Adult and Child CPR AED
4	First Aid Adult and Infant CPR AED
5	First Aid
6	CPR AED Adult
7	CPR AED Adult, Child, and Infant
8	CPR AED Adult and Child
9	CPR AED Adult and Infant

For a summary of required lessons, see Part Three: Teaching First Aid | CPR AED and the At-a-Glance Class and Certification Type tables, beginning on page [23](#).

As described in Part Three (Program Flexibility), the foundation of this training program is the First Aid | Adult CPR AED class type.

This instructor guide and the class presentations place the pediatric CPR AED lessons after the Adult First Aid lesson segment. This allows an instructor to teach the foundational Adult CPR AED and Adult First Aid lesson segments and then choose to add the Child CPR AED and/or Infant CPR AED lesson segments for students who require or desire certification in pediatric CPR AED.

About the Procedure Graphics

Trained first aid and/or CPR AED providers should follow established procedures for first aid and CPR AED. This step-by-step guidance for performing first aid and CPR AED is based on scientific evidence, national guidelines, and the consensus of experts. In this training program, this guidance is represented by procedure graphics found in the *HSI First Aid | CPR AED Skill Guide*:

1. Procedure for Adult First Aid, CPR AED
2. Procedure for Adult CPR AED
3. Procedure for Pediatric CPR AED
4. Procedure for Adult First Aid
5. Procedure for Adult and Child Foreign-Body Airway Obstruction (FBAO)
6. Procedure for Infant Foreign-Body Airway Obstruction (FBAO)
7. Procedure for Severe or Life-Threatening External Bleeding Control

An instructor note in each lesson indicates which procedure graphics an instructor should refer to, depending on which class type is being taught. See Part Three: Teaching First Aid | CPR AED and the At-a-Glance Class and Certification Type tables, beginning on page [23](#).

INITIAL TRAINING, TRADITIONAL CLASSROOM

The following matters apply to initial training in traditional classrooms for all class types.

Learning Environment

The ideal traditional classroom 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.

Nevertheless, instructors must often create a makeshift classroom out of a noisy shop floor, cafeteria, conference room, or even outdoor spaces. Such challenges should be anticipated, and the learning environment made as favorable as possible. With personal safety and professionalism in mind, HSI strongly advises against conducting traditional classroom classes in the instructor's home, particularly private, one-to-one classes. Whenever possible, training should take place in a professional business or education setting, public meeting space, or via RSV.

Classroom Space & SIR

Allow at least 15 to 17 square feet per student whenever possible.³⁴ Students should have adequate space for individual and/or small group activities using manikins and equipment. In a maximum capacity traditional initial or renewal class, the room should be large enough to accommodate chairs, tables, and skill practice space for up to 12 students per instructor and no more than 3 students to 1 manikin. Research has shown that as the size of the student group increases, the ability of instructors to detect performance errors decreases. For this reason, we strongly recommend a maximum student-to-instructor ratio (SIR) of 6:1 for CPR AED courses.³⁵

³⁴ Laird, Holton, Naquin. Approaches to Training and Development: Third Edition Revised and Updated (New Perspectives in Organizational Learning, Performance, and Change) 2003.

³⁵ Nabecker S, Huwendiek S, Theiler L, Huber M, Petrowski K, Greif R. The effective group size for teaching cardiopulmonary resuscitation skills - A randomized controlled simulation trial. Resuscitation. 2021 Aug; 165:77-82. Available: <https://pubmed.ncbi.nlm.nih.gov/34107336/> [Retrieved 1/23/2026]

Required Class Equipment & Materials

The table below lists required equipment and materials for all class types by main lesson segment.

EQUIPMENT/MATERIALS	MAIN LESSON SEGMENT				
	INTRODUCTORY	ADULT CPR AED	ADULT FIRST AID	CHILD CPR AED	INFANT CPR AED
CPR manikins, minimum 1 for each 3 students (1:1 recommended)		<input type="checkbox"/> ADULT		<input type="checkbox"/> ADULT/CHILD	<input type="checkbox"/> INFANT
CPR manikin cleaning and disinfecting wipes		<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
AED training device with pads, minimum 1 for each 3 students		<input type="checkbox"/> ADULT PADS		<input type="checkbox"/> ADULT or PED PADS	<input type="checkbox"/> PEDIATRIC PADS
CPR mask and one-way disposable mouthpiece with valve for CPR mask, 1 for each student		<input type="checkbox"/> ADULT		<input type="checkbox"/> ADULT/CHILD	<input type="checkbox"/> INFANT
Stopwatch (online, smartphone app, or handheld digital) for CPR AED skill tests, minimum 1 per instructor		<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Performance Evaluation 1: Responding to an Emergency (individual – 1 per student, or the group performance evaluation sheet and student hands-on skill practice and testing log)	<input type="checkbox"/>				
Performance Evaluation 2: Adult – One-Provider CPR AED (individual – 1 per student, or the group performance evaluation sheet and student hands-on skill practice and testing log)		<input type="checkbox"/>			
Performance Evaluation 3: Severe or Life-Threatening External Bleeding Control (individual – 1 per student, or the group performance evaluation sheet and student hands-on skill practice and testing log)			<input type="checkbox"/>		
Performance Evaluation 4: Child – One-Provider CPR AED (individual – 1 per student, or the group performance evaluation sheet and student hands-on skill practice and testing log)				<input type="checkbox"/>	
Performance Evaluation 5: Infant – One-Provider CPR (individual – 1 per student, or the group performance evaluation sheet and student hands-on skill practice and testing log)					<input type="checkbox"/>
10-pack of clean 4" x 4" gauze sponges, minimum 1 for each 3 students			<input type="checkbox"/>		
Clean elastic or self-adhesive roller bandage, minimum 1 for each 3 students			<input type="checkbox"/>		

FIRST AID | CPR AED

INSTRUCTOR GUIDE, VERSION 10.0



MEDIC
First Aid

**AMERICAN SAFETY &
HEALTH INSTITUTE**



HSI is the successor organization to American Safety and Health Institute (ASHI), MEDIC First Aid, and EMS Safety.

Health & Safety Institute

1450 Westec Drive
Eugene, OR 97402

800-447-3177
541-344-7099

E-mail: response@HSI.com

Visit our website at HSI.com

Copyright © 2026 Health & Safety Institute
All rights reserved. Printed in the United States of America.

First Edition—2026

ISBN 978-1-945991-74-5

HSI First Aid | CPR AED Instructor Guide, Version 10.0