

BASIC LIFE

BASIC LIFE SUPPORT

PROVIDER MANUAL

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Compression Depth

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Interruptions in Chest Compressions

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Learning Objectives

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Learning Objectives

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Abbreviations

Abbreviation	Definition
AED	automated external defibrillator
AP	anteroposterior
BLS	Basic Life Support
CCF	chest compression fraction
CPR	cardiopulmonary resuscitation
ECG	electrocardiogram
ED	emergency department
EMS	emergency medical services
LUD	lateral uterine displacement
PAD	public access defibrillation
PPE	personal protective equipment
pVT	pulseless ventricular tachycardia
ROSC	return of spontaneous circulation
T-CPR	telecommunicator-assisted CPR

General Course Concepts

Welcome to the American Heart Association Basic Life Support (BLS) Provider Course. BLS is the foundation for saving lives after cardiac arrest. In this course, you will learn the skills of high-quality cardiopulmonary resuscitation (CPR) for victims of all ages. You will practice delivering these skills both as a single rescuer and as a member of a multirescuer team. The skills you learn in this course will enable you to

- · Recognize cardiac arrest
- · Activate the emergency response system early
- · Respond quickly and confidently

Despite important advances in prevention, sudden cardiac arrest remains a leading cause of death in many countries. About half of cardiac arrests are unwitnessed. Outcome from out-of-hospital cardiac arrest remains poor. Only about 10% of adult patients with nontraumatic cardiac arrest who are treated by emergency medical services (EMS) survive to hospital discharge.

This course will help you give victims the best chance of survival.

BLS Course Objectives

The BLS Course focuses on what you need to know to perform high-quality CPR in a wide variety of settings. You will also learn how to respond to choking and other types of life-threatening emergencies.

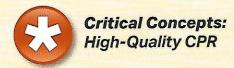
After successfully completing the BLS Course, you should be able to

- Describe the importance of high-quality CPR and its impact on survival
- · Describe all the steps in the Chains of Survival
- · Apply the BLS concepts of the Chains of Survival
- Recognize the signs of someone needing CPR
- · Perform high-quality CPR for an adult, a child, and an infant
- Describe the importance of early use of an automated external defibrillator (AED)
- Demonstrate the appropriate use of an AED
- Provide effective ventilation by using a barrier device
- Describe the importance of teams in multirescuer resuscitation
- Perform as an effective team member during multirescuer CPR
- Describe the technique for relief of foreign-body airway obstruction for an adult, a child, and an infant

Course Description

This course prepares you to perform high-quality CPR skills. CPR is a lifesaving procedur for a victim who has signs of cardiac arrest (ie, unresponsive, no normal breathing, and no pulse). The 2 key components of CPR are **chest compressions** and **breaths**.

High-quality CPR improves a victim's chances of survival. Study and practice the characteristics of high-quality CPR so that you can perform each skill effectively.



- Start compressions within 10 seconds after recognizing cardiac arrest.
- Push hard, push fast: Compress at a rate of 100 to 120/min with a depth of
 - At least 2 inches (5 cm) for adults but no more than 2.4 inches (6 cm)
 - At least one third the depth of the chest, approximately 2 inches (5 cm), for childre
- At least one third the depth of the chest, approximately 1½ inches (4 cm), for infan
- Allow complete chest recoil after each compression. Avoid leaning on the chest between compressions.
- Minimize interruptions in compressions (try to limit interruptions to less than 10 seconds).
- Give effective breaths. Deliver each breath over 1 second, enough to make the viction chest rise. Avoid excessive ventilation.

Completion Requirements

To successfully complete this course and receive your BLS course completion card, you must do the following:

- Participate in hands-on interactive demonstrations of high-quality CPR skills
- Pass the Adult CPR and AED Skills Test
- Pass the Infant CPR Skills Test
- Score at least 84% on the exam in the instructor-led course (or successfully compethe online portion of the HeartCode® BLS course)

Skills Tests

You must pass 2 skills tests to receive your BLS course completion card. During the course, you will have an opportunity to learn and practice chest compressions, bag-mas ventilation, and using an AED. After practice, your instructor will test your skills by read a brief scenario. You will be asked to respond as you would in a real-life situation. The instructor will not coach or help you during the skills tests.

Exam

The exam is open resource. This means that you may refer to print or digital resources while you are taking the exam. You may not, however, discuss the exam questions with other students or your instructor. Examples of resources that you may use include note you take in class, this Provider Manual, and the American Heart Association's Handbook Emergency Cardiovascular Care for Healthcare Providers.



Your Approach to a Resuscitation Attempt

The BLS techniques and sequences you will learn offer 1 approach to a resuscitation attempt. But every situation is unique. Your response will be determined by

- Available emergency equipment
- · Availability of trained rescuers
- · Level of training expertise
- Local protocols

Personal Protective Equipment

Personal protective equipment (PPE) helps protect rescuers from health or safety risks. PPE will vary based on situations and protocols. It can include a combination of items, such as medical gloves, eye protection, gowns/full-body suits, high-visibility clothing, safety footwear, and safety helmets.

Ask your local health authority or regulatory body about the PPE protocols for your role.

The BLS Provider Manual

Read your *BLS Provider Manual* carefully. Study the skills and lifesaving sequences. During the course, you'll apply this knowledge as a rescuer in simulated emergency scenarios. Your BLS Provider Manual can serve as a resource long after you complete your course.

Age Definitions

In this course, age definitions are as follows:

- Infants: younger than 1 year of age (excluding newly born infants in the delivery room)
- Children: 1 year of age to puberty (signs of puberty are chest or underarm hair in males; any breast development in females)
- Adults: adolescents (ie, after the onset of puberty) and older

Callout Boxes

This manual includes Critical Concepts boxes that call attention to specific content.



Critical Concepts

These boxes contain important information you must know, including specific risks associated with certain interventions and additional background on key topics.

Review Questions

Answer the review questions provided at the end of each Part. You may use these to confirm your understanding of important BLS concepts.