



AMERICAN SAFETY & HEALTH INSTITUTE



BASIC LIFE SUPPORT

instructor guide
Ver. 9.0, 2021

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Teamwork in High-Performance Resuscitation

HQ-CPR an essential part of high-performance resuscitation. The other necessary element is teamwork. Uncoordinated actions during resuscitation increase interruptions in compressions. Teamwork in high-performance resuscitation is similar to the orchestrated actions of individual pit crew members in a car race. An effective high-performance resuscitation team

- ▶ has clearly defined roles,
- ▶ uses clear and effective communication,
- ▶ anticipates next actions,
- ▶ minimizes interruptions in compressions, and
- ▶ consistently measures its performance and commits significant resources to improve it.

Understanding all the roles within the team is important because each team member may rotate through several of the roles. Figure 1 represents a practicable team arrangement. Positions, roles, and responsibilities are described in Table 1. These differ between in-hospital and out-of-hospital settings, between agencies and institutions, and must be adjusted to be consistent with local practices and protocols.

The CPR Coach

The “CPR Coach” is a relatively new role in many high-performance resuscitation teams. It is designed to optimize psychomotor performance. In addition to bringing, placing, and operating the AED/monitor/defibrillator, the role of CPR Coach is to encourage the team members performing chest compressions and ventilations to provide HQ-CPR. This permits the team leader to focus on higher level problem-solving necessary to properly manage the patient.¹³ Ideally, the CPR Coach is positioned directly across from the person performing chest compressions. Minimally, the CPR Coach prompts the other two team members in the resuscitation triad (or triangle) to perform high-quality chest compressions, give effective rescue breaths, switch out compressors efficiently, and perform rapid defibrillation with minimal interruption. When resources permit, the CPR Coach may also provide prompting and guidance on chest compression metrics (depth, rate, etc.) based on data displayed by a CPR feedback device or the defibrillator/monitor.

Teamwork in high-performance resuscitation is mentally and physically challenging. It requires a substantial commitment to performance improvement through training and retraining. It requires effective communication, respect, collaboration, problem-solving, and managing conflicts to improve outcomes around a shared mission and common goal: neurologically intact survival from cardiac arrest.

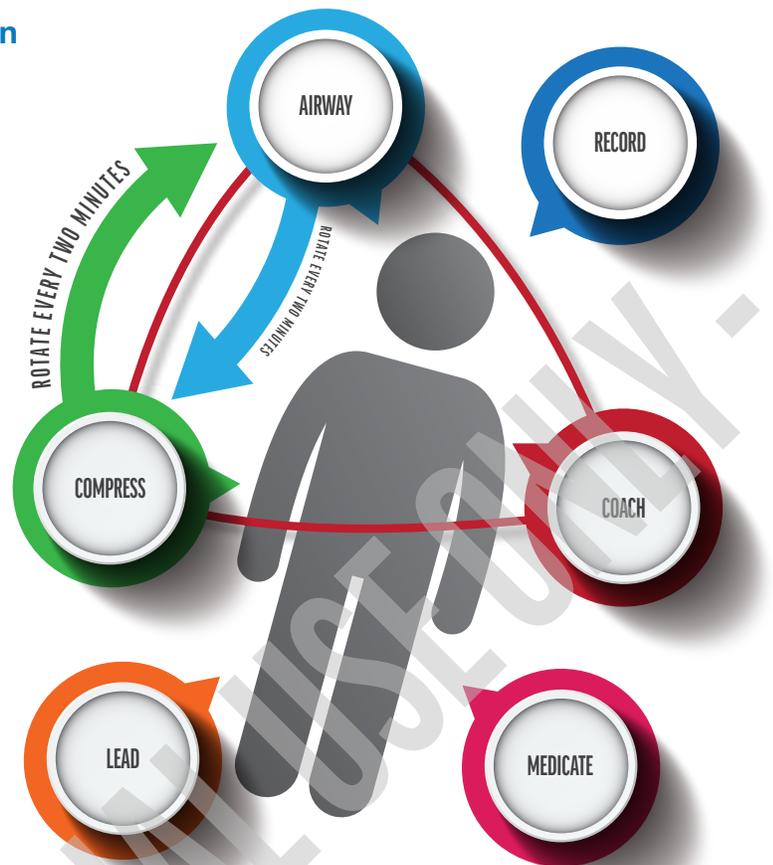


Figure 1: Team Member Positions in High-Performance Resuscitation

Table 1: Team Member Positions in High-Performance Resuscitation

	Resuscitation Triad. These three team members remain in the triangle unless it becomes unsafe.
●	This team member assesses the patient, performs compressions, and rotates with the person in the airway position every 2 minutes or sooner if tired.
●	This team member brings, places, and operates the AED/monitor/defibrillator and acts as the CPR Coach, providing real-time verbal feedback of CPR performance about compressions and ventilations.
●	This team member opens and maintains the airway, inserts airway adjuncts and provides bag-mask ventilation. This team member rotates with the person performing compressions every 2 minutes or sooner if tired.
●	This team member leads the resuscitation team, assigning roles, making treatment decisions and providing feedback to the team as needed.
●	This team member obtains vascular access and administers medications (ALS provider role).
●	This team member records the time of interventions and medications, records the frequency and duration of interruptions in compressions, and communicates these to the team members.

13 Hunt EA, Jeffers J, McNamara L, Newton H, Ford K, Bernier M, Tucker EW, Jones K, O'Brien C, Dodge P, Vanderwagen S, Salamone C, Pegram T, Rosen M, Griffis HM, Duval-Arnould J. Improved Cardiopulmonary Resuscitation Performance With CODE ACES2: A Resuscitation Quality Bundle. J Am Heart Assoc. 2018 Dec

Course Goal

The purpose of this BLS training program is for participants to gain or improve knowledge and skill proficiency in HQ-CPR skills and teamwork for the adult, child, and infant.

Terminal Learning Objectives

These objectives identify what participants will know and be able to do upon successful completion of this class.

- ▶ Recognize the elements of high-quality CPR for an adult, child, and infant, and their importance on survival from cardiac arrest.
- ▶ Identify the links in the chains of survival for inside and outside the hospital.
- ▶ Recognize how to apply the BLS procedures in the chains of survival.
- ▶ Recognize when high-quality CPR is required.
- ▶ Correctly demonstrate how to provide effective rescue breaths using a CPR mask and bag-mask device.
- ▶ Identify the steps to correctly use an AED.
- ▶ Correctly demonstrate how to use an AED.
- ▶ Perform high-quality CPR for an adult, a child, and an infant.
- ▶ Recognize the value of team roles during high-performance resuscitation.
- ▶ Correctly demonstrate how to perform CPR with two or more BLS Providers on an adult, child, or infant.
- ▶ Recognize and provide treatment for a choking adult, child, or infant.

Course Audience

Healthcare providers and other public safety professionals working a wide variety of occupational settings—in and out hospital—and individuals enrolled in healthcare and public safety career training programs.

Course Instructor

This class may only be taught by an HSI Instructor currently authorized to teach BLS.

6:1 Student-to-Instructor Ratio (SIR)

The recommended student-to-instructor ratio (SIR) is 6 students to 1 instructor (6:1). The maximum SIR is 10 students to 1 instructor (10:1). In a Performance Evaluation, the maximum SIR is 2 students to 1 instructor (2:1).

1:1 Student-to-Manikin Ratio (SMR)

For optimal practice, the recommended student-to-manikin ratio (SMR) is 1 student to 1 manikin (1:1). The maximum SMR is no more than 3 students to 1 manikin (3:1).

Course Design

This BLS program is founded on basic principles of instructional design and learning theory. It has been constructed to provide instructors with the necessary flexibility, format, tools, activities, and materials to teach students with varying BLS knowledge, skills, and experience.

Course Flexibility

HSI programs are designed to be flexible. Flexibility is “characterized by a ready capability to adapt to new, different, or changing requirements.”²¹ In the case of BLS, and whenever possible, adjust the class to reflect the student’s occupation. This also includes adjusting the class as necessary to be consistent with local medical protocol (see “Part One, Contextual Learning”).

Course Format

There are three formats by which students can gain certification in BLS using this class.

1. **Initial Training:** A traditional classroom or blended learning training class for individuals who have never been certified or whose certification has expired.
2. **Renewal Training.** A traditional classroom or RSV class for individuals who wish to refresh skill competency and maintain certification.
3. **Challenge.** A traditional classroom or RSV class for individuals who wish to earn certification by demonstrating both knowledge and skill competency without taking an initial or renewal training class.

21 “Flexible.” Merriam-Webster.com Dictionary, Merriam-Webster, <https://www.merriam-webster.com/dictionary/flexible>. Accessed 13 Jan. 2021.

Using the Class Presentations

In addition to this Instructor Guide, HSI provides the BLS Initial Class Presentation, which supports and enhances training in a classroom (Fig.1). The HSI BLS Initial Class Presentation contains all the necessary elements to teach the initial class, including cognitive and skill practice videos. As a convenience, a separate BLS class presentation includes only the skill practice lessons that are required in Blended or Renewal classes.

To use these tools, Instructors download the Class Presentations from Otis for playback on a computer, or live-stream the presentation through an internet connection with sufficient bandwidth during class. While an Instructor may opt to teach BLS using a class DVD with this guide, HSI recommends all instructors become familiar with and use the Class Presentations. Instructors using the HSI BLS Class Presentations will benefit by having the most up-to-date class training materials available.

The HSI BLS Initial Class Presentation contains several slides to pace each lesson. The lesson title slide provides you the opportunity to introduce the lesson, describe the enabling objectives, and tell the students why the topic matters. The next slide contains the video for the lesson. For lessons that include skills, the next slide is the “Student Hands-On Practice” slide. These slides contain an embedded Video-Guided Practice, Skill Sheet, and Scenario Sheet. You choose the element you wish to use. This allows you to select the standard (video-guided hands-on practice or a small group practice using Skill Sheets) or experienced (guided problem-solving exercise with Scenario Sheets) approach.

Student Hands-On Practice Methods

Student hands-on practice may take different forms depending on what the instructor chooses. That choice may be influenced by several factors: the experience level of the instructor and the students, the number of students, the class format, and the delivery method.

[See Examples on Next Page](#)

Conducting Video-Guided Practice

Video-Guided Practice can only be used in a traditional classroom setting, not via RSV. Optimally, using a 1:1 Student-to-Manikin Ratio, students are arranged in the classroom facing a video monitor or computer projection with a screen large enough that all can easily see it. Instruct students to position themselves with a manikin and any necessary equipment to be ready to practice. Once the students are ready, the instructor plays the video practice. The instructor should be able to directly observe students as they practice on their manikins along with the video. Following the video, instructors provide corrective feedback. If more practice is needed to help students gain HQ-CPR skills, instructors should repeat the practice or can select another method for repeat skill practice.

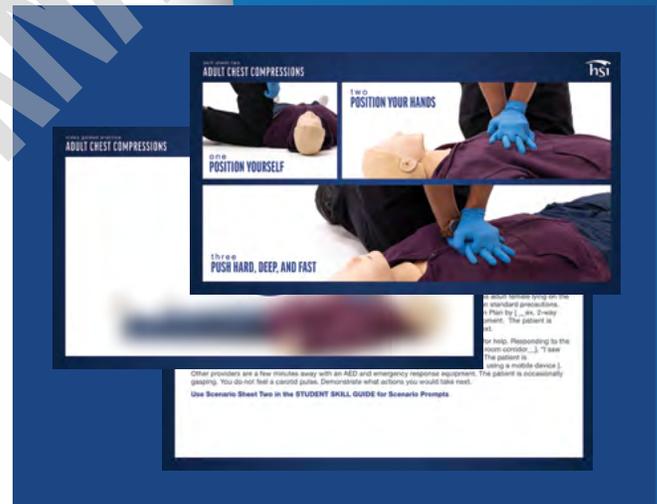
Figure 1



Slide #1: Begin the Lesson



Slide #2: Play the Video



Slide #3: Choose a Practice Method Type



Slide #4: Wrap Up

INFANT BLS PERFORMANCE EVALUATION



Student Name: _____ Class Date: _____

Out-of-Hospital Setting

You are a BLS Provider responding alone to a call for a “baby who is not breathing.” As you reach the scene, an obviously distraught teenager hands you a limp, mottled infant, pleading, “Please help... he’s not breathing!” You have appropriate PPE, including a pediatric CPR mask. Demonstrate what actions you would take next.

In-Hospital/Clinic Setting

You have just arrived at work and parked your car. As you walk through the facility parking lot in your scrubs, another vehicle screeches to a stop just feet away. The passenger door opens and a frightened looking teenager steps out and runs toward you. The person hands you a limp, mottled infant, pleading, “Please help... he’s not breathing!” You have appropriate PPE, including a pediatric CPR mask. Demonstrate what actions you would take next.

BLS Procedure	BLS Provider Action (Performance Criteria)	Instructor Prompt	Check Off
Performs Assessment	<ul style="list-style-type: none"> ▶ Assesses scene safety. ▶ Takes standard precautions. ▶ Assesses responsiveness. ▶ Activates EMS and/or EAP. ▶ Gets an AED and emergency response equipment (or sends someone else to get them). 	<p>“Scene is safe.”</p> <p>“Patient is unresponsive.”</p> <p>“EMS/EAP activated.”</p> <p>▶ “A person nearby witnessed what happened. They will call 911 and get help.”</p>	
Assesses Breathing & Pulse	<ul style="list-style-type: none"> ▶ Assesses breathing and brachial pulse at the same time for no more than 10 seconds. 	<p>▶ “Not breathing. No pulse felt.”</p>	
Starts High-Quality CPR	<ul style="list-style-type: none"> ▶ Positions patient on firm flat surface. <ul style="list-style-type: none"> › Performs 30 chest compressions. › Positions two fingers or two thumbs on breastbone, just below nipple line. › Compresses at least 1/3 depth of chest or about 1½ inches (4 cm). › Compresses at a rate of 100–120 times per minute (in no less than 15 and no more than 18 seconds). ▶ Allows chest to fully recoil at top of compressions. 		
Gives Rescue Breaths	<ul style="list-style-type: none"> ▶ Seals CPR mask against patient’s face. ▶ Opens airway using the head tilt–chin lift maneuver. ▶ Gives two rescue breaths. ▶ Ensures each breath is 1 second in length. ▶ Creates visible rise of chest, but no more. ▶ Resumes high-quality chest compressions in less than 10 seconds. 		

Continued on Next Page >

PRACTICE & ASSESS

 **Conduct a Hands-On Student Practice**

- ▶ Explain the hands-on practice method you are using.
- ▶ Run a **Video-Guided Practice** or practice with:
Optional: Skill Sheet 12: Infant Assessment or **Scenario Sheet 12: Infant BLS**

 **Assess Students**

- ▶ Look for correct skill performance by students.
- ▶ Use positive coaching and gentle correction to improve student skills.
- ▶ Ensure adequate practice time for students to gain skill proficiency.

WRAP UP

 **Encourage Constructive Feedback as Needed**

Instructors and students provide specific and constructive feedback to each other and to their peers.

 **Reinforce Key Points as Needed**

1. There are three main elements of the infant BLS procedure:
 - a. Assessment of the scene and patient,
 - b. Actions based on the presence or absence of normal breathing and a pulse, and
 - c. Use of an AED.
2. If the scene is not safe, do not enter it until hazards have been minimized or eliminated.
3. If the scene is safe, assess responsiveness. Gently tap the victim and ask loudly, “Are you okay?”
4. If the infant is unresponsive, call 911 to activate EMS using a mobile device and/or activate your EAP. If you don’t have a mobile phone nearby, bring the infant with you to activate.
5. Take no more than 10 seconds to simultaneously assess breathing and the infant’s brachial pulse. Then, take action based on the presence or absence of normal breathing and pulse.

 **Ask a Review Question as Needed**

You and another BLS Provider have responded to a call for a 5-month-old infant with trouble breathing. The scene is safe. You have taken standard precautions. The infant is unresponsive and gasping. You have activated EMS and/or activate your EAP. A weak brachial pulse at about 40 beats per minute is felt. Other BLS Providers are a few minutes away with an AED. What should you do?

- a. **Start high-quality CPR.**
- b. Maintain an open airway.
- c. Reassess responsiveness, airway, breathing, and pulse.
- d. Provide bag-mask ventilation and check the pulse every 2 minutes.

 **Ask For & Answer Questions Before Moving on to the Next Lesson**

lesson twenty-one

INFANT COMPRESSIONS

PREPARE



Duration:
5 Minutes



Class Format: Initial Training
Delivery Method: Traditional Classroom



Equipment and Materials

Please refer to the Preparation Checklist for required, optional, and additional class materials and equipment for Initial Training, Traditional Classroom.

PRESENT



Begin the Lesson



What Students Should Learn

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

- ▶ Recognize high-quality infant chest compressions.
- ▶ Correctly demonstrate high-quality infant chest compressions.



Why This Topic Matters

As in the adult and child procedure, high-quality chest compressions are the foundation of high-quality CPR.



Play the Video

PRACTICE & ASSESS



Conduct a Hands-On Student Practice

- ▶ Explain the hands-on practice method you are using.
- ▶ Run a **Video-Guided Practice** or practice with:
Skill Sheet 13: Infant Chest Compressions or **Scenario Sheet 13: Infant BLS**



Assess Students

- ▶ Look for correct skill performance by students.
- ▶ Use positive coaching and gentle correction to improve student skills.
- ▶ Ensure adequate practice time for students to gain skill proficiency.

WRAP UP



Encourage Constructive Feedback as Needed

Instructors and students provide specific and constructive feedback to each other and to their peers.



Reinforce Key Points as Needed

1. For infant chest compressions, use one of three hand-position techniques:
 - a. 2-Finger Technique
 - b. 2-Thumb Encircling-Hands Technique
 - c. Heel of One Hand Technique
2. Whichever technique you use, push hard, straight down, to compress the chest approximately 1 ½ inches (4 cm). This depth should be at least one third the diameter of the infant's chest.
3. At the end of each compression, allow complete chest recoil.
4. Compress the chest at a rate of 100-120 compressions per minute. Minimize interruptions.



Ask a Review Question as Needed

This technique may be useful for larger infants or when the BLS Provider has difficulty compressing the appropriate depth.

- a. The 2-Finger Technique
- b. The 2-Hands Technique
- c. **The Heel of One Hand Technique**
- d. The 2-Thumb Encircling-Hands Technique



Ask For & Answer Questions Before Moving on to the Next Lesson

lesson ten

CHILD BLS PROCEDURE/ASSESSMENT

PREPARE



Duration:
3 Minutes



Class Format: Initial Training
Delivery Method: Blended Learning



Equipment and Materials

Please refer to the Preparation Checklist for required, optional, and additional class materials and equipment for Initial Training, Blended Learning.

PRESENT



Begin the Lesson



What Students Should Learn

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

- ▶ Identify the main elements of the child BLS procedure.
- ▶ Explain how to assess the scene and child patient.
- ▶ Correctly demonstrate how to assess the scene and child patient as a single BLS Provider. (Optional)



Why This Topic Matters

The child BLS procedure is a step-by-step guide used to improve and standardize decisions when responding to a potential pediatric cardiac arrest. It can help reduce potential errors in the delivery of BLS.



Instructional Notes

1. It may be helpful to have students take a minute or two on their own to look over the complete *Procedure for Pediatric Basic Life Support* graphic in the Skill Guide.
2. The optional skill practice for this lesson is designed to emphasize the important first steps in the child BLS procedure; Assessment (the top box in the procedure).
3. The specific skills for taking action based the presence or absence of normal breathing and pulse will follow in later lessons.

PRACTICE & ASSESS

 **Conduct a Hands-On Student Practice**

- ▶ Explain the hands-on practice method you are using.
- ▶ Run a **Video-Guided Practice** or practice with:
Optional: Skill Sheet 10: Child Assessment or **Scenario Sheet 10: Child BLS**

 **Assess Students**

- ▶ Look for correct skill performance by students.
- ▶ Use positive coaching and gentle correction to improve student skills.
- ▶ Ensure adequate practice time for students to gain skill proficiency.

WRAP UP

 **Encourage Constructive Feedback as Needed**

Instructors and students provide specific and constructive feedback to each other and to their peers.

 **Reinforce Key Points as Needed**

1. There are three main elements of the child BLS procedure:
 - a. Assessment of the scene and patient,
 - b. Actions based the presence or absence of normal breathing and a pulse, and
 - c. Use of an AED.
2. If the scene is not safe, do not enter it until hazards have been minimized or eliminated.
3. If the scene is safe, assess responsiveness. Tap or squeeze the patient’s shoulder and ask loudly, “Are you okay?”
4. If the patient is unresponsive, call 911 to activate EMS using a mobile device or activate your EAP.
5. Take no more than 10 seconds to simultaneously assess breathing and the child’s carotid or femoral pulse.
6. Then, take action based the presence or absence of normal breathing and pulse.

 **Ask a Review Question as Needed**

A BLS Provider should simultaneously assess the patients breathing and carotid or femoral pulse. This assessment should take no longer than ___ seconds.

- a. 5
- b. 10**
- c. 15
- d. 20

 **Ask For & Answer Questions Before Moving on to the Next Lesson**

lesson eleven

CHILD CPR: MULTIPLE BLS PROVIDERS**PREPARE****Duration:**
6 Minutes**Class Format: Initial Training**
Delivery Method: Blended Learning**Equipment and Materials**

Please refer to the Preparation Checklist for required, optional, and additional class materials and equipment for Initial Training, Blended Learning.

PRESENT**Begin the Lesson****What Students Should Learn**

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

- ▶ Explain how to provide child CPR with two or more BLS Providers.
- ▶ Correctly demonstrate how to perform child CPR with two or more BLS Providers.

**Why This Topic Matters**

It is common for multiple providers to respond to a potential cardiac arrest.

**Instructional Notes**

1. The skill practice for this lesson is for coordinating compressions, ventilations with a bag-mask device, and switching roles between multiple BLS Providers.
2. If there is only one student in the class, the instructor will need to play the role of a second BLS Provider.
3. If you prefer, you can conduct the Adult BLS Performance Evaluation after this lesson or do it later in Segment 6: Required Knowledge and Skill Evaluation.
4. Remind students to routinely decontaminate their hands with an alcohol-based hand sanitizer and clean and disinfect the manikin after each student practices or at the end of a scenario.

PRACTICE & ASSESS

 **Conduct a Hands-On Student Practice**

- ▶ Explain the hands-on practice method you are using.
- ▶ Run a **Video-Guided Practice** or practice with:
Skill Sheet 11: Child CPR with Bag-Mask Device, 2 BLS Providers or
Scenario Sheet 11: Child BLS

 **Assess Students**

- ▶ Look for correct skill performance by students.
- ▶ Use positive coaching and gentle correction to improve student skills.
- ▶ Ensure adequate practice time for students to gain skill proficiency.

WRAP UP

 **Encourage Constructive Feedback as Needed**

Instructors and students provide specific and constructive feedback to each other and to their peers.

 **Reinforce Key Points as Needed**

1. Provider 1: Deliver high-quality compressions.
 - a. Position yourself and place 1 or 2 hands on the center of the chest.
 - b. Compress fast, at a rate of 100-120 times per minute.
 - c. Compress hard, at least 2 inches (5 cm).
 - d. Allow complete chest recoil at the top of each compression.
 - e. Do not lean on the chest between compressions.
 - f. Perform 15 compressions. Count out loud.
2. Provider 2: Deliver effective breaths.
 - a. Use a pediatric bag-mask device.
 - b. Open the airway and give 2 rescue breaths.
 - c. Deliver each breath over 1 second in length while watching for chest rise.
 - d. Encourage the compressor to perform high-quality compressions: fast, hard, and with complete recoil.
3. Provider 1 & 2: Repeat CPR cycles of 15 compressions and 2 breaths for two minutes.
 - a. Switch positions. Try to minimize interruptions to compressions to less than 10 seconds.

 **Ask a Review Question as Needed**

When ventilating a child with a bag-mask device, give 1 breath every 2-3 seconds. Deliver each breath over ____ second(s) in length while watching for chest rise.

- a. .5
- b. 1**
- c. 1.5
- d. 2

 **Ask For & Answer Questions Before Moving on to the Next Lesson**

RENEWAL TRAINING

To renew means to repeat. The Renewal Class is a repetition of BLS skills to refresh maintain competency. To recertify is the process of being certified again. Recertification requires evaluation of knowledge and skill. The Renewal Class is both retraining and recertification. It is for individuals who are currently certified and desire (or are required) to refresh BLS skill competency and maintain certification. Individuals with expired certification (beyond the current 2-year standard) may not participate in a renewal class.

The Renewal Class is generally shorter than the Initial Class because of its skill-focus. However, it is well established that BLS skills deteriorate in 3 to 6 months after training.⁵⁰ For that reason, we recommend that renewal training not be offered as a single class near the end of the 2-year certification period, but rather, be broken up into a number of shorter, interrupted, skill-focused training sessions over a longer period of time (spaced practice). This has been shown to improve both skill retention and performance.⁵¹ When it is feasible, retraining and recertification in a single class every 2 years (Full Renewal Class, Example 1) should be replaced or supplemented with training that focuses on skills and confidence building every 3-6 months (Partial Renewal Class, Example 2).⁵²

Example 1: 2-Year Biennial Renewal

Month Year	BLS Class Format	Segments Taught
October 2021	Full Initial Class	All, 1-7
October 2023	Full Renewal Class	All, 1-7

Example 2: 2-Year Semi-Annual Renewal (spaced practice)

Month Year	BLS Class Format	Segments Taught
October 2021	Full Initial Class	All, 1-7
April 2022	Partial Renewal Class	1 & 2
October 2022	Partial Renewal Class	3
April 2023	Partial Renewal Class	4
October 2023	Partial Renewal Class	5, 6, 7

Example 3: 2-Year Quarterly Renewal (spaced practice)

Month Year	BLS Class Format	Segments Taught
October 2021	Full Initial Class	All, 1-7
January 2022	Partial Renewal Class	1, 2, 3
April 2022	Partial Renewal Class	4, 5
July 2022	Partial Renewal Class	1, 2, 3
October 2022	Partial Renewal Class	4, 5
January 2023	Partial Renewal Class	1, 2, 3
April 2023	Partial Renewal Class	4, 5
July 2023	Partial Renewal Class	1, 2, 3
October 2023	Partial Renewal Class	4, 5, 6 & 7

50 Kovács E, et al. The timing of testing influences skill retention after basic life support training: a prospective quasi-experimental study. *BMC Med Educ.* 2019 Dec 4;19(1):452. doi: 10.1186/s12909-019-1881-7

51 Cheng A, et al. Resuscitation Education Science: Educational Strategies to Improve Outcomes from Cardiac Arrest: A Scientific Statement From the American Heart Association. *Circulation.* 2018 Aug 7;138(6):e82-e122. doi: 10.1161/CIR.0000000000000583.

52 Riggs M, Franklin R, Saylany L. Associations between cardiopulmonary resuscitation (CPR) knowledge, self-efficacy, training history and willingness to perform CPR and CPR psychomotor skills: A systematic review. *Resuscitation.* 2019 May;138:259-272.]

Renewal Instructional Strategy

When teaching a renewal class, we recommend first trying the Experienced Approach. For skill practice, students are arranged in small groups of three with a manikin. They use the Scenario Sheets to prompt each other through a guided problem-solving scenario. If it becomes clear after the first scenario practice that the students' skills are substandard, we recommend changing to the standard approach to focus on improving their skills using either a Video-Guided Practice or an instructor demonstration followed by small group practice with Skill Sheets.

Renewal Recertification Strategy

Just as in an initial BLS certification, knowledge and skill evaluation is required for recertification. Students must demonstrate knowledge competency by obtaining a passing score of 74% or better on the 21-question BLS exam and demonstrate skill competency as indicated by the skill criteria on the "Adult BLS" and "Infant BLS" Performance Evaluation Sheets. The required knowledge and skill evaluation need only be done once by each student. They may complete both at any time during renewal prior to expiration of their certification card.

The best way to handle the BLS exam is for each student to complete the HSI BLS Exam online. Because the BLS exam is open-book, students may use their BLS Student Book as a reference while taking the online exam. The online exam can be completed prior to the renewal skills session, eliminating the class time required to have students complete the exam in person (and permitting them to complete the online exam at their own pace). To offer the BLS exam online to your students, log in to Otis to purchase credits, then create and schedule the exam.

Note: Only the HSI BLS Exam may be used. It is a violation of HSI quality assurance standards to use any other exam, including exams created by the Training Center or instructor, or to post the exam to an intranet or the Internet. Using any other exam invalidates the certification card and is grounds for suspension or revocation or Training Center approval and/or instructor authorization.

CLASS PREPARATION

About a Month or Two Before Class

- ✓ Secure a classroom with an adequate space and learning environment.
- ✓ Confirm the date, location, and number of students.
- ✓ Reserve training equipment for the class.
- ✓ Schedule and confirm additional HSI authorized BLS instructors as required/preferred.
- ✓ If offering the BLS Exam online, log in to Otis to purchase credits, then create and schedule the exam.
- ✓ If using RSV for the practical skills session, log in to Otis to purchase RSV credits and set up an RSV session.

About Three Weeks Before Class

- ✓ Send a pre-Class letter or email to each student that:
 - › Confirms the class location, agenda, and time.
 - › Reviews any pertinent recommendations from local, state, or federal health authorities that affects what participants should expect in the classroom setting.
 - › Requests that they reschedule their training if they may have been exposed to an infectious disease; are experiencing fever, coughing, shortness of breath, diarrhea, fatigue, or muscle aches; or if they have open wounds or sores on their hands or mouth.
 - › Describes the steps you take protect students and help ensure a safe and healthy learning environment (hand hygiene, cleaning and disinfecting of surfaces and equipment, physical distancing, etc.)
 - › Reminds them to wear loose, comfortable clothing suitable for skill practice.
 - › Advises them to let you know if they have a physical disability and what reasonable accommodations may be necessary (see Americans with Disabilities Act in the TCAM for more).
 - › Provides your contact information.

A Few Days Before Class

- ✓ If you may have been exposed to an infectious disease; are experiencing fever, coughing, shortness of breath, diarrhea, fatigue, or muscle aches; or if have open wounds or sores on your hands or mouth, find another instructor to teach the class or reschedule it.
- ✓ Make sure you have adequate copies of essential Class paperwork (or access to electronic versions), including:
 - › HSI BLS CAPCE Data Collection Form (for awarding EMS Provider Continuing Education Hours, as needed), and/or
 - › HSI AGD PACE Verification of Participation Document and HSI Academy of General Dentistry (AGD) Continuing Education Class Roster (for awarding Continuing Dental Education, as needed).
- ✓ Briefly review the Traditional Classroom, Renewal Training Lesson Plans.
- ✓ Confirm your internet connection will be available to log in to Otis if you plan to stream the BLS Class Presentation or download it to the HSI Instructor Desktop Video Player or Mobile App and verify the media plays as expected.

Day of Class

- ✓ Arrive early. Give yourself plenty of time to get set up and organized.
- ✓ Greet students as they arrive, introducing yourself to each one.
 - › Be friendly, considerate, respectful, and professional.
 - › Have students sign in on a sign-in sheet or the HSI BLS Class Roster.
 - › Have students complete a name tag or tent card and select a seat.
- ✓ Begin class. Start on time.
- ✓ Briefly cover class goal, agenda, breaks, certification requirements, facility and classroom safety.
 - › Know and share the locations of the following: bathrooms, fire/emergency exits, fire alarm pull stations, best emergency evacuation route, first aid kits, emergency oxygen, and closest AED.
- ✓ Distribute the HSI BLS Skill Guide.

PREPARATION CHECKLIST

Required Class Materials

- HSI BLS Instructor Guide with Lesson Plans, one per instructor.
- HSI BLS Class Roster, 1 copy.
- HSI Spaced Practice Sessions, Attendance Sheet (if using spaced practice, see Appendix).
- HSI Skill Guide, minimum 1 for each 3 students.
- HSI BLS Performance Evaluations, 1 copy Adult BLS and 1 Infant BLS per student
- HSI BLS Written Exam A and Answer Sheet, 1 copy per student (If not offering the BLS exam online).
- HSI BLS Written Exam B, and Answer Sheet, enough copies for student retakes, as needed, or to alternate between students.
- HSI BLS Written Exam Answer Key, 1 for each version of the exam.

Required Class Equipment

- CPR manikins, minimum 1 adult and 1 infant for each 3 students.
- CPR manikin cleaning and disinfecting wipes.
- Alcohol-based hand sanitizer, 1 pump bottle or similar for each 3 students.
- AED Trainer with adult and pediatric pads, minimum 1 for each 3 students.
- CPR mask and one-way disposable mouthpiece with valve for CPR mask, 1 for each student.
- Bag-mask device, minimum 1 adult and 1 pediatric for each 3 students.
- Stopwatch for Adult BLS Performance Evaluation, minimum 1 per instructor (online, smartphone app, or handheld digital).

Additional Class Equipment, Supplemental Topics

- Naloxone administration training device, minimum 1 for each 3 students.

Optional Class Equipment

(Strongly Recommended)

- Desktop or laptop computer (Windows or Mac), or smartphone or tablet, 1 per instructor (optional).
- Internet connection (for streaming), HSI Instructor Desktop Video Player or HSI Instructor Mobile App with downloaded HSI BLS Class Presentation, Skill Practice Lessons for Renewal/Blended/RSV and video monitor or computer projector (optional).
- Disposable gloves (nonlatex), minimum 1 pair for each student.
- Surgical mask or N95 respirator, minimum 1 for each student.
- CPR feedback devices, minimum 1 per manikin.
- Stopwatches for high-performance CPR team practice, minimum 2 for each 4 students (online, smartphone app, or handheld digital).
- Metronomes, minimum 1 for each 3 students (smartphone app, or traditional).
- HSI "Rate Your Program" Class Evaluation, 1 paper copy per student.

Additional Recommended Tools

- Pens or pencils, 1 for each student.
- Blankets, kneeling pads or mats, 1 for each 3 students.
- Name tags or tent cards, 1 for each student.
- Spare projector bulb (as needed).
- Extension cord(s).
- Multi strip power surge protector.
- Whiteboard with dry erase pens and eraser.
- Large black markers for student name tags or tent cards.
- Large envelope for class paperwork.



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isbn: 978-1-945991-35-6

