

Lesson 2A

Learning/Testing Station: High-Quality BLS Practice

45 minutes

Learning Objective

- Perform prompt, high-quality BLS, including prioritizing early chest compressions and integrating early AED use

Instructor Tips

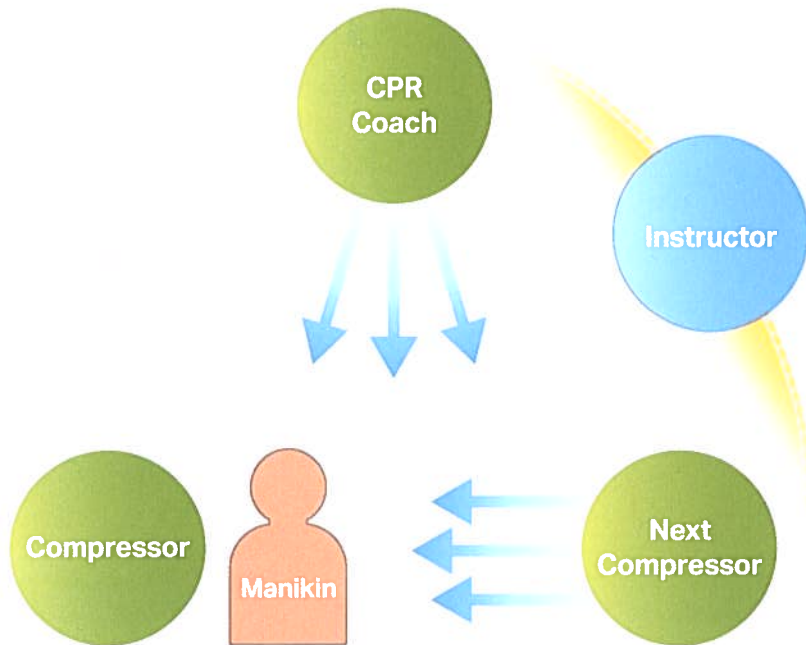
- Students should rotate through the skills station
- Tell students that the skills testing portion will happen immediately after this lesson
- Monitor the rate and depth of chest compressions with a real-time audiovisual feedback device. If possible, monitor chest recoil as well
- The students should correct their own chest compressions in response to real-time output from the feedback device
- Use peer coaching to help with feedback and to allow students to feel comfortable correcting other providers



Students Practice: Compressions

- Arrange students in groups with manikins (Figure 1)
 - 3 or fewer students per manikin
 - 1 instructor per 2 manikins

Figure 1. Positions for High-Quality BLS Learning Station with a CPR Coach.



- Students rotate through continuous compressions practice for 2 minutes on manikins, adjusting their performance according to the real-time response of the feedback device and the CPR Coach (Table 3)
 - Summarize key points
 - High-quality BLS is the foundation of resuscitation
 - High-quality CPR is the primary component in influencing survival from cardiac arrest, but there is considerable variation in monitoring, implementation, and quality improvement
 - Target CPR performance metrics include the following:
 - Push hard: Compression depth of at least 2 inches (5 cm) in adults
 - Push fast: Compression rate of 100 to 120/min
 - Allow complete chest recoil after each compression
 - Ideally, achieve a chest compression fraction (CCF) greater than 80%
 - Switch providers about every 2 minutes to avoid fatigue
- Be sure that students perform correct chest compressions throughout the practice session
- Monitor the rate and depth of chest compressions with an audiovisual feedback device. If possible, monitor chest recoil as well
- Have peers coach other students on the basis of data from the feedback device
- Give feedback during practice to the Compressor and the CPR Coach

Table 3. Student Rotations for CPR Coaches and Compressors Learning Station

Round 1	Round 2	Round 3
Student 1: Compressor	Student 1: CPR Coach	Student 1: Next Compressor
Student 2: Next Compressor	Student 2: Compressor	Student 2: CPR Coach
Student 3: CPR Coach	Student 3: Next Compressor	Student 3: Compressor



Students Practice: Two-Rescuer BLS

- Assign student numbers
- Practice session (small groups around a manikin): practice 1- and 2-rescuer sequence according to the skills testing checklist
- Have the skills testing checklist available (*ACLS Provider Manual*, handout, etc)
- Use Table 4 to assign students for 2-rescuer practice

Table 4. Two-Rescuer Practice Student Number Assignments

Person assessing and compressing	Person with AED
Student 1	Student 2
Student 2	Student 3
Student 3	Student 1

Lesson 2B

Learning/Testing Station: High-Quality BLS Testing—Testing Details

Instructor Tips

- Make sure you are familiar with how to use the skills testing checklist (refer to the instructor manual for information on how to use testing checklists)
- Complete a skills testing checklist for each student during this portion of the lesson
- Use an audiovisual feedback device to provide real-time feedback on compression quality



Test Students One at a Time

- Tell students who are not being tested to practice on another manikin in another room
- Test each student in a reasonably private environment
 - Each student must demonstrate the entire sequence of 2-rescuer BLS *without instructor prompting*
 - Fill out an Adult High-Quality BLS Skills Testing Checklist for each student
- Carefully observe the student you are testing
 - Monitor the speed and depth of chest compressions with an audiovisual performance monitoring device. If possible, monitor chest recoil as well
- If a student is unsuccessful, refer them for immediate remediation
 - Each student may retest 1 additional time during this station
 - A student who remains unsuccessful may require additional remediation (refer to the sections titled Exam and Remediation in Part 1 of the instructor manual)
- Summarize the importance of high-quality CPR to patient survival

Lesson 3A

Learning/Testing Station: Airway Management Practice

45 minutes

Learning Objectives

- Recognize respiratory arrest
- Perform early management of respiratory arrest

Instructor Tips

- Use a stopwatch/timer or feedback device to make sure students are ventilating at appropriate rates and volumes
- High-quality chest compressions and defibrillation are the highest priorities. As soon as enough personnel are available, initiate ventilation and oxygenation to support the resuscitation
- Make sure students are not ventilating too quickly or forcefully (about half-a-bag squeeze over 1 second)
- Healthcare providers often deliver excessive ventilation during CPR, particularly when an advanced airway is in place. Excessive ventilation is harmful because it
 - Increases intrathoracic pressure and impedes venous return and therefore decreases cardiac output, cerebral blood flow, and coronary perfusion
 - Causes air trapping, leading to increased end-expiratory lung volume
 - Increases the risk of regurgitation and aspiration in patients without an advanced airway
- For the *respiratory arrest* cases, you need to use only the lead-in and initial information to lead the student through the bag-mask ventilation and OPA/NPA skills testing. You may use the whole respiratory scenario if you want to go deeper into respiratory distress, respiratory failure, and respiratory arrest. However, to accommodate this approach, you will need to expand the airway management station



Students Practice: Airway Management

- Assign student numbers
- Practice session (small groups around a manikin): **practice OPA and NPA insertion, discuss oxygen and suction, and practice 1- and 2-rescuer bag-mask ventilation**
- Students practice 1-rescuer bag-mask ventilation
- Organize students for 2-rescuer bag-mask ventilation practice as in Figure 2 and Table 5

Figure 2. Positions for Airway Management Learning and Testing Station with a CPR Coach.

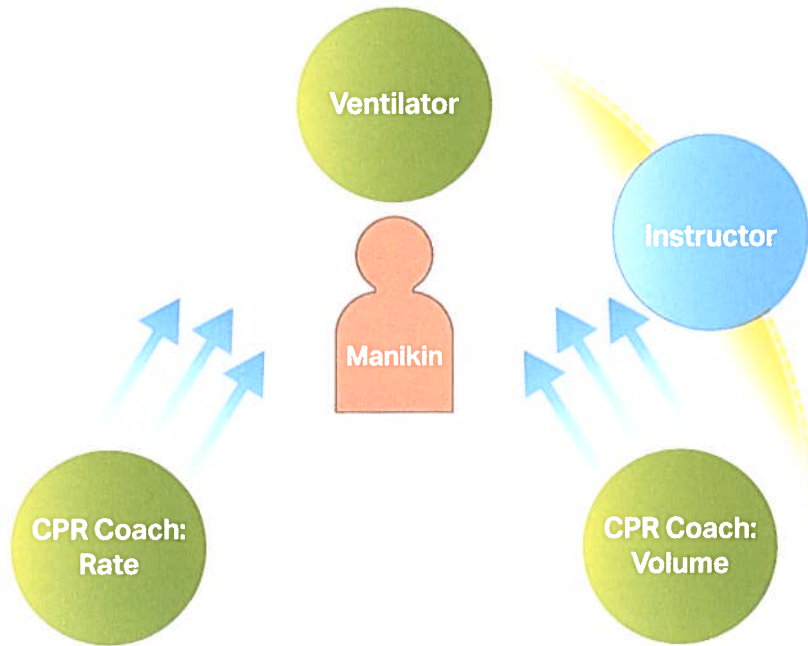


Table 5. Student Assignments for Airway Management Practice

Person squeezing the bag	Person holding the mask
Student 1	Student 2
Student 2	Student 3
Student 3	Student 1

Lesson 3B

Learning/Testing Station:

Airway Management Testing—Testing Details



Test Students One at a Time

- Advise students that they will be tested on bag-mask ventilation with OPA/NPA insertion skills
- Present the respiratory case scenario (case scenarios can be found in Appendix of the instructor manual or in the Instructor Reference Material)
- Each student manages a complete airway case (testing session)
 - Perform a full assessment
 - Begin ventilation without delay
 - Insert an OPA or an NPA
 - Connect the bag-mask device to oxygen and adjust the flow rate to the appropriate level
 - Give bag-mask ventilation with the OPA/NPA for 1 minute (skills test)
 - Rate (once every 6 seconds)
 - Speed (squeeze the bag for 1 second)
 - Volume (about half a bag)
 - Check off student's skills on the skills testing checklist as each student demonstrates adequate management of the respiratory case
 - **Monitor ventilation with a stopwatch/timer or feedback device** to make sure students are ventilating at appropriate rates and at appropriate volumes, if that information is available

Lesson 3C

Learning/Testing Station: Airway Management—Student Practice Details (Optional)

Instructor Tips

- This portion of the lesson is optional
 - Whether or not you teach this lesson will depend on the makeup of your class. That is why it is important to ask students at the beginning of the class to introduce themselves and provide information about their occupations



Students Practice: Advanced Airway Insertion (Optional, Based on Students' Scope of Practice)

Students practice performing ventilations with a simulated advanced airway in place (depending on manikin limitations, instructors may use a standard manikin with a bag-mask device rather than a bag connected to a simulated airway tube)

- Rotate through all students performing ventilation
- Optional advanced airway device modules
 - Laryngeal Tube
 - Laryngeal Mask Airway
 - Endotracheal Tube