

Annotated Answer Key Basic Life Support Exam C

Provider manual page numbers below refer to the printed book and the eBook as viewed through the offline desktop/laptop reader, not the eBook as viewed through the mobile apps or ebooks.heart.org.

Use this scenario to answer the next 2 questions:

A 67-year-old man is found unresponsive, not breathing, and without a pulse. You and a second rescuer begin performing high-quality CPR.

1. When should rescuers switch positions during CPR?

- A. Never switch rescuers
- B. When placing the AED pads
- C. About every 2 minutes
- D. At 5-minute intervals

The correct answer is C. Rescuers should switch compressors frequently (about every 2 minutes or, if an AED is attached, when the AED is analyzing the rhythm) so that CPR quality is not reduced because of fatigue. [*BLS Provider Manual*, Part 3: BLS for Adults > Adult 2-Rescuer BLS > Effective Team Performance to Minimize Interruptions in Compressions; page 31]

2. You notice the person giving chest compressions is not allowing for complete chest recoil. What is your next course of action?

- A. Stand back and await direction from the second rescuer
- B. Tell the rescuer the compressions are wrong
- C. Immediately take over chest compressions
- D. Tell the compressor you notice decreased chest recoil

The correct answer is D. Sometimes a team member may need to correct actions that are incorrect or inappropriate. In this case, complete chest recoil is not occurring; therefore, the next course of action would be to notify the compressor of this. Any person on the team should stop someone else from making a mistake, regardless of their role on the team. [*BLS Provider Manual*, Part 5: Team Dynamics > Roles and Responsibilities > Offer Constructive Intervention; page 44]

3. “The team functions smoothly when all team members know their positions, functions, and tasks during a resuscitation attempt.” Match this statement with the most appropriate element of team dynamics listed.

- A. Clear roles and responsibilities
- B. Knowing your limitations
- C. Constructive intervention
- D. Mutual respect

The correct answer is A. During a resuscitation attempt, clear roles and responsibilities should be defined as soon as possible. The Team Leader’s role is to clearly define and delegate tasks according to each team member’s skill level. When all team members know their jobs and responsibilities, the team functions more smoothly. [*BLS Provider Manual*, Part 5: Team Dynamics > Roles and Responsibilities > Assign Roles and Responsibilities; page 43]



4. Early defibrillation is a link in the adult Chain of Survival. Why is this important to survival?
- A. It prevents respiratory arrest.
 - B. It prevents cardiac arrest.
 - C. It provides normal respiration.
 - D. It eliminates the abnormal heart rhythm.**

The correct answer is D. An AED can help terminate an abnormal rhythm and restore a regular heart rhythm. When used in combination with high-quality CPR, an AED can double (or triple) the chances of survival. [*BLS Provider Manual*, Part 2: The Chain of Survival > Chain of Survival Elements > High-Quality CPR, Including Early Defibrillation; page 8]

5. What special circumstance should a rescuer consider when using an AED?
- A. They should never use an AED on someone with an implanted pacemaker.
 - B. On a hairy chest, the pads may not stick and may fail to deliver a shock.**
 - C. AEDs can only be used while a person is submerged in water.
 - D. They should never remove a transdermal medication patch before applying AED pads.

The correct answer is B. Special circumstances may require the rescuer to take additional actions when placing AED pads on a victim who has a hairy chest. In this case, the AED pads may stick to the hair and not to the skin on the chest, making it difficult to analyze the victim's heart rhythm and deliver a shock (if needed). Most AED kits contain a razor for this reason. [*BLS Provider Manual*, Part 4: Automated External Defibrillator for Adults and Children 8 Years of Age and Older > Special Circumstances > Hairy Chest; page 40]



Use this scenario to answer the next 2 questions:

A 53-year-old woman collapses while gardening. She is unresponsive, is not breathing, and does not have a pulse. A neighbor, who is an emergency medical technician, rushes to her with an AED.

6. When the AED arrives, what is the first step for using it?

- A. Apply the pads to the chest
- B. Press the Shock button
- C. Turn on the AED**
- D. Clear the patient

The correct answer is C. The first step for using an AED (when it becomes available) is to power on the AED if needed. Some devices will power on automatically when you open the lid or case. Because AEDs vary according to the model and manufacturer, it is important to become familiar with the AED used in your particular setting. [*BLS Provider Manual*, Part 4: Automated External Defibrillator for Adults and Children 8 Years of Age and Older > Operating an AED: Universal Steps; page 35]

7. After the AED pads are attached to the person, the AED detects ventricular fibrillation. What is the next step when using an AED?

- A. Check for a carotid pulse
- B. Follow the AED prompts**
- C. Clear the patient
- D. Press the Shock button

The correct answer is B. After the AED pads are attached to the victim's bare chest, you should follow the AED prompts. The AED will analyze the victim's heart rhythm and prompt you to deliver a shock if needed. [*BLS Provider Manual*, Part 4: Automated External Defibrillator for Adults and Children 8 Years of Age and Older > Operating an AED: Universal Steps; page 35]

8. What should you do if you need to use an AED on someone who has been submerged in water?

- A. Do not pull the person out of the water, and wipe the chest
- B. Pull the person out of the water, but do not use the AED
- C. Pull the person out of the water, and wipe the chest**
- D. Do not move the person, and do not use the AED

The correct answer is C. Special situations may require the rescuer to take additional actions when placing AED pads for a victim who is immersed in water. In this case, the victim should be pulled out of the water. If the chest is covered with some water, it should be quickly wiped before attaching the AED pads. [*BLS Provider Manual*, Part 4: Automated External Defibrillator for Adults and Children 8 Years of Age and Older > Special Circumstances > Presence of Water or Liquids; page 40]



9. Why is defibrillation important?

- A. It is not important for cardiac arrest.
- B. It prevents rearrest from occurring.
- C. There is a 100% success rate.
- D. It can restore a regular cardiac rhythm.

The correct answer is D. An AED can identify an abnormal heart rhythm that needs a shock. The AED can then deliver a shock that can convert a rhythm back to normal. [*BLS Provider Manual*, Part 4: Automated External Defibrillator for Adults and Children 8 Years of Age and Older > Defibrillation; page 33]

10. Which adult victim requires high-quality CPR?

- A. Has normal breathing and has a pulse
- B. Has no normal breathing and no pulse
- C. Has a pulse and is having trouble breathing
- D. Has a strong pulse and is breathing

The correct answer is B. A victim who is unresponsive, is not breathing, and has no pulse requires high-quality CPR. Starting high-quality CPR immediately after cardiac arrest can greatly improve a victim's chance of survival. An AED should be used as soon as it becomes available. [*BLS Provider Manual*, Part 3: BLS for Adults > Adult BLS Algorithm for Healthcare Providers; page 15]

11. Why is allowing complete chest recoil important when performing high-quality CPR?

- A. There will be a reduction of rescuer fatigue.
- B. The rate of chest compressions will increase.
- C. The heart will adequately refill between compressions.
- D. It will reduce the risk of rib fractures.

The correct answer is C. Allowing complete chest recoil (between compressions) permits blood to flow into the heart. Incomplete chest recoil is inefficient because it reduces the blood flow created by chest compressions. [*BLS Provider Manual*, Part 3: BLS for Adults > Perform High-Quality Chest Compressions > Chest Recoil; page 19]



Use this scenario to answer the next 2 questions:

A middle-aged man collapses. You and a second rescuer go to the victim and find that he is unresponsive, is not breathing, and does not have a pulse.

12. Which action is most likely to positively impact his survival?

- A. Performing high-quality CPR
- B. Providing rescue breaths
- C. Ensuring scene safety
- D. Checking the pulse frequently

The correct answer is A. Performing high-quality CPR has been shown to improve a victim's chances of survival. [*BLS Provider Manual*, Part 1: General Course Concepts > Course Description; page 2]

13. You and another rescuer begin CPR. After a few cycles, you notice the chest compression rate is slowing. What should you say to offer constructive feedback?

- A. "You need to compress at a rate of 80 to 120 per minute."
- B. "You need to compress at a rate of at least 100 per minute."
- C. "You need to compress at a rate of 100 to 120 per minute."
- D. "You need to compress at a rate of at least 120 per minute."

The correct answer is C. Sometimes a team member may need to correct actions that are incorrect or inappropriate. In this case, you notice the chest compression rate is slowing. You should remind the other rescuer that a compression rate of 100 to 120/min should be used. Any person on the team should stop someone else from making a mistake, regardless of their role on the team. [*BLS Provider Manual*, Part 5: Team Dynamics > Roles and Responsibilities > Offer Constructive Intervention; page 44]



Use this scenario to answer the next 2 questions:

An 8-month-old infant is eating and suddenly begins to cough. The infant is unable to make any noise shortly after. You pick up the infant and shout for help.

14. You have determined that the infant is responsive and choking with a severe airway obstruction. How do you relieve the airway obstruction?

- A. Give abdominal thrusts
- B. Give sets of 5 back slaps and 5 chest thrusts**
- C. Begin 2 thumb–encircling hands chest compressions
- D. Encourage the infant to cough

The correct answer is B. To relieve choking in a responsive infant, give alternating sets of 5 back slaps and 5 chest thrusts. [*BLS Provider Manual*, Part 11: Choking Relief for Adults, Children, and Infants > Choking Relief in Infants > Responsive Infant; page 89]

15. The infant becomes unresponsive. Which action do you perform to relieve choking in an unresponsive infant?

- A. Perform CPR, and look in the mouth for the obstructing object before you give each breath**
- B. Attempt a blind finger sweep when giving breaths to remove the obstructing object
- C. Give sets of 5 back slaps and 5 chest thrusts
- D. Give sets of 5 abdominal thrusts and 5 back slaps

The correct answer is A. If an infant victim becomes unresponsive, stop giving back slaps and begin CPR, starting with compressions. Additionally, each time you open the airway, look for the obstructing object in the back of the throat. If you see an object and can easily remove it, remove it. [*BLS Provider Manual*, Part 11: Choking Relief for Adults, Children, and Infants > Choking Relief in Infants > Unresponsive Infant; page 90]

16. What ratio for compressions to breaths should be used for 1-rescuer infant CPR?

- A. Give 15 compressions to 2 breaths
- B. Give 20 compressions to 2 breaths
- C. Give 5 compressions to 1 breath
- D. Give 30 compressions to 2 breaths**

The correct answer is D. For 1-rescuer infant CPR, the correct compression-to-ventilation ratio is 30:2. [*BLS Provider Manual*, Part 6: BLS for Infants and Children > Perform High-Quality Chest Compressions > Compression-to-Ventilation Ratio; page 52]

17. When you are performing CPR on an unresponsive person whom you know is choking, what modification should you incorporate?

- A. There are no modifications to CPR for an unresponsive choking victim.
- B. You should attempt a jaw thrust instead of a head tilt–chin lift.
- C. Each time you open the airway, you look for the obstructing object.
- D. You do not give breaths to an unresponsive choking victim.

The correct answer is C. Each time you open the airway to give breaths, open the victim's mouth wide and look for the object. If you see an object that can be easily removed, remove it with your fingers. If you do not see an object, continue CPR. [*BLS Provider Manual*, Part 11: Choking Relief for Adults, Children, and Infants > Choking Relief in an Unresponsive Adult or Child; page 88]

18. How can rescuers ensure that they are providing effective breaths when using a bag-mask device?

- A. Observing the chest rise with each breath
- B. Always having oxygen attached to the bag
- C. Delivering breaths quickly and forcefully
- D. Allowing air to release around the mask

The correct answer is A. Squeeze the bag to give breaths while watching for visible chest rise. Deliver each breath over 1 second, with or without supplemental oxygen. [*BLS Provider Manual*, Part 3: BLS for Adults > Bag-Mask Devices > Bag-Mask Ventilation Technique (1 Rescuer); page 27]

19. Which characteristics of chest compressions in high-quality CPR are given to a child?

- A. At least one third the depth of the chest, approximately 2 inches (5 cm)
- B. At least one fourth the depth of the chest, approximately 1½ inches (4 cm)
- C. At least two thirds the depth of the chest, approximately 4 inches (10 cm)
- D. At least one half the depth of the chest, approximately 3 inches (8 cm)

The correct answer is A. The correct compression depth for a child victim is at least one third the AP diameter of the chest, or approximately 2 inches (5 cm). [*BLS Provider Manual*, Part 6: BLS for Infants and Children > Perform High-Quality Chest Compressions > Compression Depth; page 52]



Use this scenario to answer the next 2 questions:

A 9-year-old child has suddenly collapsed. After confirming that the scene is safe, a single rescuer determines that the child is in cardiac arrest, shouts for nearby help, and activates the emergency response system by using his mobile device. He immediately begins performing high-quality CPR. Two additional rescuers immediately arrive to assist in the resuscitation attempt.

20. What actions should occur next to support a team-based resuscitation attempt?

- A. Two rescuers should alternate using the AED and giving breaths.
- B. Two rescuers should operate the AED while the third rescuer gives breaths.
- C. Two rescuers should alternate giving high-quality chest compressions.
- D. One rescuer should give CPR while the other 2 wait for advanced life support to arrive.

The correct answer is C. To reduce rescuer fatigue, switch compressors every 5 cycles (about 2 minutes) or sooner if needed. Take less than 5 seconds to switch. [*BLS Provider Manual*, Part 3: BLS for Adults > Adult 2-Rescuer BLS > Effective Team Performance to Minimize Interruptions in Compressions; page 31]

21. Two rescuers begin high-quality CPR while the third rescuer leaves to get the AED. What action supports 2-rescuer CPR?

- A. Alternating the AED role every 2 minutes
- B. Alternating the compressor role every 2 minutes
- C. Alternating giving shocks every 3 cycles
- D. Alternating giving rescue breaths every 3 cycles

The correct answer is B. To reduce rescuer fatigue, switch compressors every 5 cycles (about 2 minutes) or sooner if needed. To minimize interruptions in compressions, when an AED is present, perform the switch when the AED is analyzing the rhythm. Take less than 5 seconds to switch. [*BLS Provider Manual*, Part 3: BLS for Adults > Adult 2-Rescuer BLS > Effective Team Performance to Minimize Interruptions in Compressions; page 31]

22. While performing high-quality CPR on an adult, what action should you ensure is being accomplished?

- A. Allowing the chest to recoil to at least 1 inch
- B. Placing hands on the upper third of the sternum
- C. Maintaining a compression rate of 90 to 120/min
- D. Compressing to a depth of at least 2 inches

The correct answer is D. When performing chest compressions on an adult (or adolescent), a compression depth of at least 2 inches (5 cm) should be used. [*BLS Provider Manual*, Part 3: BLS for Adults > Chest Compression Technique; page 20]



23. A victim with a foreign-body airway obstruction becomes unresponsive. What is your first course of action?

- A. Start CPR, beginning with chest compressions
- B. Roll the victim over and perform back blows
- C. Perform abdominal thrusts
- D. Perform blind finger sweeps

The correct answer is A. Choking victims with severe airway obstruction may worsen and become unresponsive. If this occurs, then high-quality CPR must be started immediately, beginning with chest compressions. [*BLS Provider Manual*, Part 11: Choking Relief for Adults, Children, and Infants > Choking Relief in an Unresponsive Adult or Child; page 88]

24. "Members of the team know their boundaries and ask for help before the resuscitation attempt worsens." Match this statement with the most appropriate element of team dynamics listed.

- A. Knowledge sharing
- B. Summarizing and reevaluation
- C. Constructive intervention
- D. Knowing your limitations

The correct answer is D. Every member on the team should know their limitations, and the Team Leader should be aware of them. Each team member should ask for assistance and advice early, not when the situation starts to get worse. [*BLS Provider Manual*, Part 5: Team Dynamics > Roles and Responsibilities > Know Your Limitations; page 44]

25. You witness someone suddenly collapse. The person is unresponsive, you hear gasping sounds, and there is no pulse. You phone 9-1-1. What should you do next?

- A. Begin CPR; the gasps are not normal breathing
- B. Give rescue breaths only; the gasps are not normal breathing
- C. Begin CPR even though gasping is normal breathing
- D. Monitor the patient; the gasps are considered normal breathing

The correct answer is A. The gasps described in this question are most likely agonal gasps. Agonal gasps are not considered normal breathing and are a sign of cardiac arrest. High-quality CPR should be started immediately. [*BLS Provider Manual*, Part 3: BLS for Adults > High-Quality CPR Skills: Adults > Assess for Breathing and a Pulse > Critical Concepts: Agonal Gasps; page 17]