

BLS for Healthcare Providers Study Guide and Pretest



Vanderbilt Resuscitation Program

Adult CPR

■ 1-Rescuer CPR Sequence

- check for responsiveness
- if no response, activate 911 and get the AED
- open the airway
- look, listen, & feel for breathing
- no breathing, give 2 breaths
- check carotid pulse
- no pulse, begin chest compressions
- continue 30 compressions and 2 breaths until the AED arrives, ALS takes over, or the victim moves

Reminders

- Take 5-10 seconds to check for breathing and pulse
- Ensure chest rises with each breath
- Place hands in the center of the chest for compressions
- Allow chest to recoil completely or return to its normal position
- Compression rate: 100/minute
- Compress 1 1/2 to 2 inches

Child CPR

■ 1-Rescuer CPR Sequence

- check for responsiveness
- yell for help but don't leave the victim
- open the airway
- look, listen, & feel for breathing
- no breathing, give 2 breaths
- check carotid pulse
- no pulse, begin chest compressions
- continue 30 compressions and 2 breaths for 5 cycles or 2 minutes
- if still no response, activate 911 and get the AED

Reminders

- Take 5-10 seconds to check for breathing and pulse
- Ensure chest rises with each breath
- Place hands in the center of the chest for compressions
- Use 1 or 2 hands for compressions
- Allow chest to recoil completely
- Compression rate: 100/minute
- Compress $\frac{1}{3}$ to $\frac{1}{2}$ the depth of the chest
- Phone 911 after 5 cycles of CPR if you are alone

Infant CPR

■ 1-Rescuer CPR Sequence

- check for responsiveness
- yell for help but don't leave the victim
- open the airway
- look, listen, & feel for breathing
- no breathing, give 2 breaths
- check brachial pulse
- no pulse, begin chest compressions
- continue 30 compressions and 2 breaths for 5 cycles or 2 minutes
- if still no response, activate 911

Reminders

- Take 5-10 seconds to check for breathing and pulse
- Ensure chest rises with each breath
- Perform compressions using 2 fingers placed 1 finger width below the nipple line
- Allow chest to recoil completely
- Compression rate: 100/minute
- Compress $\frac{1}{3}$ the depth of the chest
- Phone 911 after 5 cycles of CPR if you are alone
- No AED use for infants

2-Rescuer CPR

	Adult	Child	Infant
Compressions and Ventilation Ratio with 2 Rescuers	30:2	15:2	15:2

The compression and ventilation ratio changes when performing 2-rescuer CPR on children and infants.

Infant 2-rescuer CPR

The rescuer performing chest compressions will switch to the two thumb-encircling hand technique.



Relief of Choking

■ Responsive Adult/Child

- Abdominal thrusts until object is removed or victim becomes unresponsive



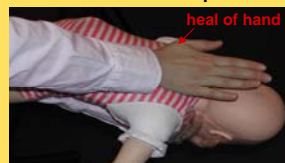
■ Unresponsive Adult/Child

- Lower them to the ground and begin the steps of CPR
- Look in the mouth before each breath
- If you see the object, you can remove it
- Don't forget to call 911 and get the AED

Relief of Choking

■ Responsive Infant

- Alternate 5 back blows and 5 chest thrusts until object is removed or victim becomes unresponsive

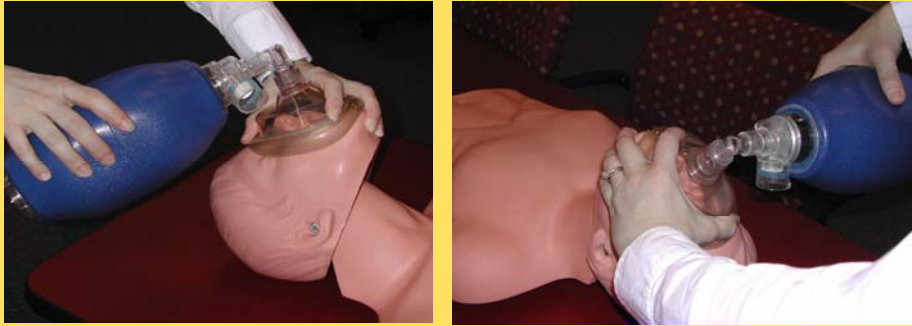


■ Unresponsive Infant

- Place them on a hard, flat surface and begin the steps of CPR
- Look in the mouth before each breath
- If you see the object, you can remove it
- Don't forget to call 911

Bag Mask Ventilation

- Position yourself above the victim's head
- Place the mask on the face
- Use the E-C technique to hold mask on face
- Perform a head tilt
- Squeeze bag to give breaths and watch for chest rise



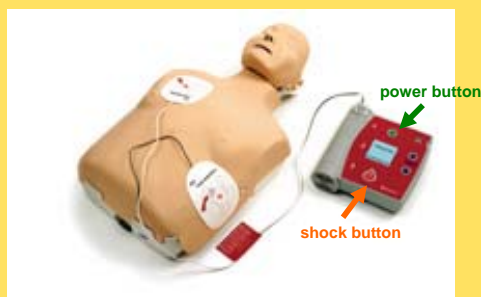
Automated External Defibrillator (AED)

AEDs are computerized devices that allow laypersons to attempt defibrillation safely. Here are a few facts about defibrillation:

- It is the most effective treatment for Ventricular Fibrillation, the most common initial rhythm present in a victim of sudden cardiac arrest.
- The probability of successful defibrillation decreases rapidly over time

Use of an AED

- Power on the AED
- Apply pads to the victim's bare chest
- Plug the pads into the AED
- "Clear" the victim and allow it to analyze
- If a shock is advised, "clear" the victim again and press the shock button



	Adult (puberty and older)	Child (1 year to puberty)	Infant (less than 1 year)
Activate 911	as soon as victim is found	if alone, after 5 cycles of CPR	
Check Pulse	Carotid		Brachial
Compression Location	Center of the chest between the nipples		Just below the nipple line
Compression Method	heel of 1 hand with the other on top	same as adult or heel of 1 hand for small children	2 fingers (2 hands encircling-thumb for 2-rescuer)
Compression Rate	100 per minute		
Compression-Ventilation Ratio	30:2 (1 or 2 rescuer)	30:2 for 1 rescuer 15:2 for 2 rescuer	
AED	yes (adult pads only)	yes (child pads preferable. If none, use adult)	no

Class Information

- Books are available for check-out from Eskind Library (across from the Round Wing)
- Our office is difficult to find so please print a [map](#). On average, we are a 15 minute walk from VUMC. You may also take the [Purple Shuttle](#) to Memorial Gym.
- Please park in your regular space. Parking is also available in the [2525 garage](#), but you will be charged.

BLS for Healthcare
Providers Pretest

Instructions

- Choose the best answer.
- You may return to the study guide for remediation at any point.
- The study guide and pretest are provided as another method of review prior to taking the live course. They are not all inclusive nor are they intended to replace the live course.

1. The correct rate of administering compressions is _____ compressions per minute.

- a. 30
- b. 2
- c. 100
- d. 60

2. The correct compression-ventilation ratio for 1-rescuer child CPR is ___ compressions and ___ breaths.

- a. 100:2**
- b. 30:2**
- c. 5:1**
- d. 15:2**

3. To relieve choking in a responsive infant, you should perform:

- a. 30 chest thrusts**
- b. 10 back blows**
- c. abdominal thrusts**
- d. 5 back blows, 5 chest thrusts**

4. How do you know that your rescue breath is effective?

- a. you see the chest rise**
- b. you see the stomach rise**
- c. you feel the breath go in**
- d. there is no way to know**

5. To relieve choking in a responsive adult or child, you should perform:

- a. CPR**
- b. abdominal thrusts**
- c. back blows only**
- d. 5 back blows, 5 chest thrusts**

6. When do you start cycles of chest compressions and breaths for an adult?

- a. after establishing that the victim is unresponsive, not breathing, and does not have a pulse**
- b. after establishing the victim is unresponsive**
- c. when the victim has a pulse but is not breathing**
- d. after 2 minutes of breaths only**

7. When do you phone the emergency response number if you are alone with an unresponsive infant?

- a. after 5 cycles of CPR**
- b. after 1 cycle of CPR**
- c. immediately**
- d. after you give 2 breaths**

8. Early defibrillation for adults is important because:

- a. it will “jump start” the heart**
- b. atrial fibrillation is the most frequent rhythm present**
- c. the chance of success diminishes rapidly over time**
- d. cardioversion is the mostly effective treatment for cardiac arrest**

9. The best way to allow the chest to recoil after each chest compression is to:

- a. keep the chest pressed down about ½ inch between compressions**
- b. completely remove your hands from the chest after each chest compressions**
- c. keep the chest slightly compressed at all times**
- d. take your weight off your hands so the chest returns to its normal position**

10. The correct compression-ventilation ratio for 2-rescuer infant CPR is ____ compressions and ____ breaths.

- a. 30:2**
- b. 15:2**
- c. 5:1**
- d. 15:1**

Answers

- | | |
|------|-------|
| 1. c | 6. a |
| 2. b | 7. a |
| 3. d | 8. c |
| 4. a | 9. d |
| 5. b | 10. b |