

CPR STUDY GUIDE

1. The compressions and ventilations ratio for ADULTS is 30:2 (one and/or two rescuers).
2. The compressions and ventilations ratio for CHILDREN AND INFANTS is 30:2 (one rescuer) and 15:2 (two rescuers).
3. The rate of compressions for ANY AGE victim is 100 per minute.
4. INFANT = under 1 year of age; CHILD = 1 year old to PUBERTY (check for breast development (in females) or under arm hair to determine puberty); ADULT = puberty and older.
5. The first step to take when you come upon a collapsed ADULT victim is to determine whether or not the person is unresponsive. If the victim is unresponsive, activate the emergency response system and get the AED and emergency equipment if available, and then return to the victim to begin CPR.
6. In infants and children respiratory arrest is more common than cardiac arrest. A person should immediately provide CPR and then activate the emergency response system (911) AFTER 5 CYCLES OF CPR.
7. One of the most important actions for successful resuscitation is immediate opening of the airway. The tongue is the most common cause of airway obstruction in an unresponsive person, and a head tilt-chin lift will move the tongue away from the back of the throat, opening the airway.
8. The most effective way to check for breathing in an unresponsive person is to use the head tilt-chin lift and LOOK to see if the patient's chest is rising, LISTEN and FEEL for the airflow through the patient's nose or throat.
9. The correct volume and duration of breaths with either mouth-to-mask or mouth-to-mouth breathing is the volume that WILL MAKE THE VICTIM'S CHEST RISE. Breaths should be delivered quickly, ONE SECOND EACH.
10. When a victim makes reflex gasping respiratory efforts (Agonal breathing) that are inadequate to support oxygenation rescue breathing should be provided. Rescue breaths for adults is 1 breath every 5-6 seconds.
11. If the chest does not rise during rescue breathing, ventilation is not effective.
12. Rescue breaths for children and infants is 1 breath every 3-5 seconds.
13. When a choking victim becomes unresponsive, you should immediately lower the victim to ground. Open the victim's mouth with tongue-jaw lift to move the tongue out of the way, and look for a foreign object in the back of the throat. IF THE OBJECT IS SEEN, perform a finger sweep to attempt to remove the foreign body. If the victim is not breathing adequately, attempt to provide rescue breaths. DO NOT PERFORM BLIND FINGER SWEEPS ON ANY AGE VICTIM. After opening the airway and looking for an object, BEGIN CPR (no more abdominal thrusts on unresponsive victim). With each opening of the airway to give breaths, look for an object, and remove if seen, before resuming CPR.
14. The best location for performing a pulse check is at the carotid artery of the neck in the adult and child victim and the brachial artery in the infant.
15. The effectiveness of chest compressions can be checked by attempting to feel a pulse at the carotid artery with each chest compression. Rescuers can become tired or decrease the force of compressions, so this assessment is an important tool to determine whether compressions are being performed properly or effectively.
16. Hand placement for ADULT & CHILD CPR is placing the heel of one hand over the center of the breastbone between the nipples and the other hand on top, unless the victim is a very small child, then use just one hand.
17. Hand placement for INFANTS is placing 2 fingers on the breastbone just below the nipple line or if there are 2 rescuers, the person doing chest compressions may use the thumb method.

18. The depth of chest compressions on an ADULT victim is 1 ½ to 2 inches. **PUSH HARD, PUSH FAST!** At the end of each compression, make sure you allow the chest to recoil or re-expand completely. Full chest recoil allows more blood to refill the heart between compressions.
19. The depth of chest compressions on INFANTS & CHILDREN is 1/3 to ½ depth of chest (AP diameter). **PUSH HARD, PUSH FAST!** Again, at the end of each compression, make sure you allow the chest to recoil or re-expand completely.
20. Whenever you suspect that an unresponsive victim has suffered a head or neck injury, you should immobilize the cervical spine and open the airway with the jaw-thrust maneuver while maintaining cervical spine immobilization.
21. The combination of immediate CPR and prompt (3-5 min) defibrillation provides the best possibility of survival after sudden cardiac arrest. The probability of successful defibrillation diminishes rapidly over time.
22. AEDs are now authorized for use in pediatric patients (between 1-8 years old) who are experiencing a cardiac arrest, meaning the child is unresponsive, not breathing, and has no signs of circulation. Pediatric pads are used. They are smaller than adult pads. However, if an AED does NOT have pediatric pads, adult pads may be used by placing one pad on the child's upper right chest, just below the collarbone and to the right of the sternum and the other pad on the left side, below the nipple. Be sure the pads do not touch. If the child's chest is too small and the pads touch, place one pad on the child's left chest and the other on the child's back, just opposite the pad on the chest. You should NEVER alter the pads with scissors to fit the child's chest.
23. Before applying an AED to a child, you still need to follow the algorithm for child CPR and perform 5 CYCLES of CPR before applying an AED on an unresponsive child.
24. NEVER USE CHILD AED PADS ON ADULT VICTIMS, ONLY USE ADULT PADS ON ADULTS!
25. Steps for using the AED: 1) Turn AED on; 2) Attach electrode pads to victim's bare chest; 3) "Clear" the victim so the AED can analyze the rhythm; 4) allow AED to analyze rhythm; 5) If AED advises a shock, clear the victim and press the SHOCK button; 6) once ONE shock has been delivered, if victim remains unresponsive, perform 2 minutes of CPR and then allow AED to re-evaluate victim. **DO NOT TAKE AED PADS OFF VICTIM'S CHEST.**
26. Your response to a victim with chest pain should be to tell them to lie down or sit quietly, then you phone 911 immediately.
27. Stroke is a major cause of disability and death in the United States. High blood pressure (hypertension) is one of the most powerful modifiable (treatable) risk factors for ischemic and spontaneous hemorrhagic stroke, and it is very common.
28. Classic signs of an acute stroke include weakness on one side of the body, facial droop or weakness, and difficulty speaking.

CPR for Adults, Children, and Infants

CPR	Adult and Older Child (puberty and older)	Child (1 year old to puberty)	Infant (less than 1 year old)
Establish that the victim does not respond Activate your Emergency Response system.	Activate your emergency response system as soon as the victim is found.	Activate your emergency response system after giving 5 cycles of CPR	
Open the airway Use head tilt-chin lift or jaw thrust.	Head tilt-chin lift (Suspected trauma: jaw thrust)		
Check breathing If the victim is not breathing, give 2 breath that make the chest rise.	Open the airway, LOOK, LISTEN, and FEEL. Take at least 5 seconds and <u>no more than 10 seconds</u> .		
First 2 breaths	Give 2 breaths (1 second each)		
Check pulse At least 5 seconds and no more than 10 seconds.	Carotid pulse (if no pulse, start CPR)	Carotid pulse (if no pulse or pulse is < 60 bpm with signs of poor perfusion, start CPR)	Brachial pulse (if no pulse or pulse is < 60 bpm with signs of poor perfusion, start CPR)
Start CPR			
<ul style="list-style-type: none"> • Compression location 	Center of breastbone between nipples		Just below nipple line on breastbone
<ul style="list-style-type: none"> • Compression method 	Heel of 1 hand, other hand on top (or 1 hand for small victims)		2 fingers (2 thumb-encircling hands for 2-rescuer CPR)
<ul style="list-style-type: none"> • Compression depth 	1 ½ to 2 inches	1/3 to ½ depth of chest	
<ul style="list-style-type: none"> • Compression rate 	100 per minute		
<ul style="list-style-type: none"> • Compression-ventilation ratio 	30:2	30:2 for 1-rescuer CPR (15:2 for 2-rescuer CPR only)	