

# BLS

Basic Life Support  
Quick Reference



## C-A-B

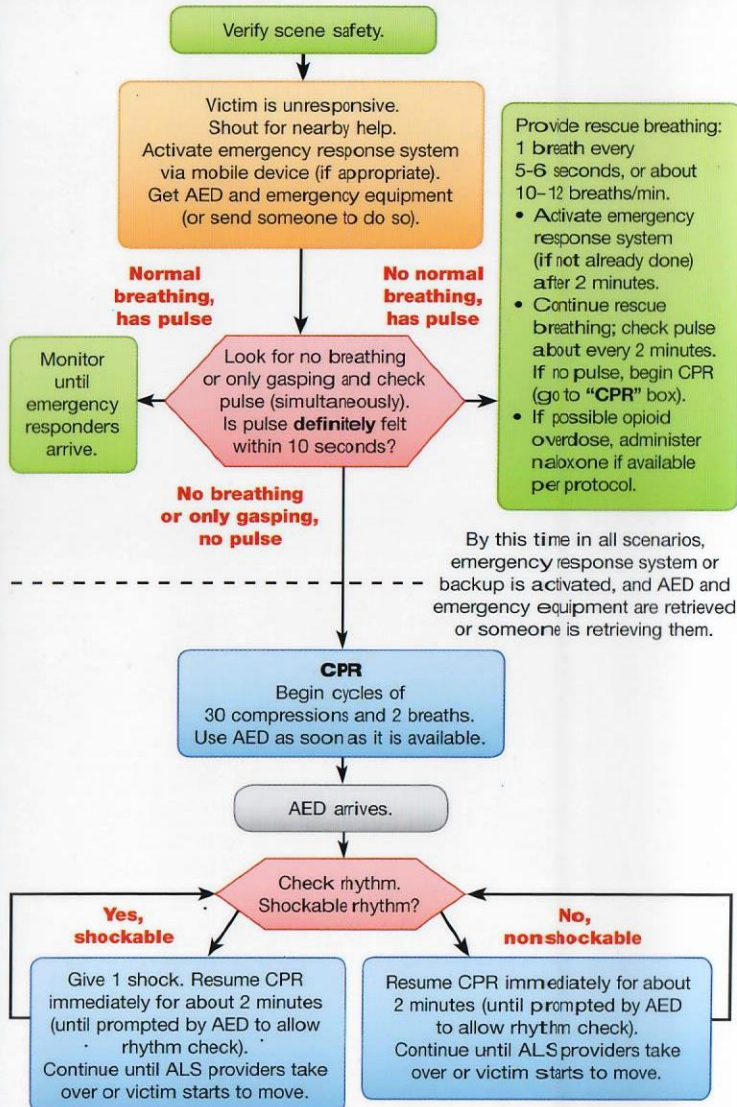


### Critical Concepts

High-quality CPR improves a victim's chances of survival. The critical characteristics of high-quality CPR include the following:

- **Start compressions within 10 seconds** of recognition of cardiac arrest.
- **Push hard, push fast:** Compress at a rate of 100 to 120/min with a depth of
  - At least 2 inches (5 cm) for adults
  - At least one third the depth of the chest, about 2 inches (5 cm), for children
  - At least one third the depth of the chest, about 1½ inches (4 cm), for infants
- **Allow complete chest recoil** after each compression.
- **Minimize interruptions** in compressions (try to limit interruptions to less than 10 seconds).
- **Give effective breaths** that make the chest rise.
- **Avoid excessive ventilation.**

### BLS Healthcare Provider Adult Cardiac Arrest Algorithm—2015 Update



### Summary of High-Quality CPR Components

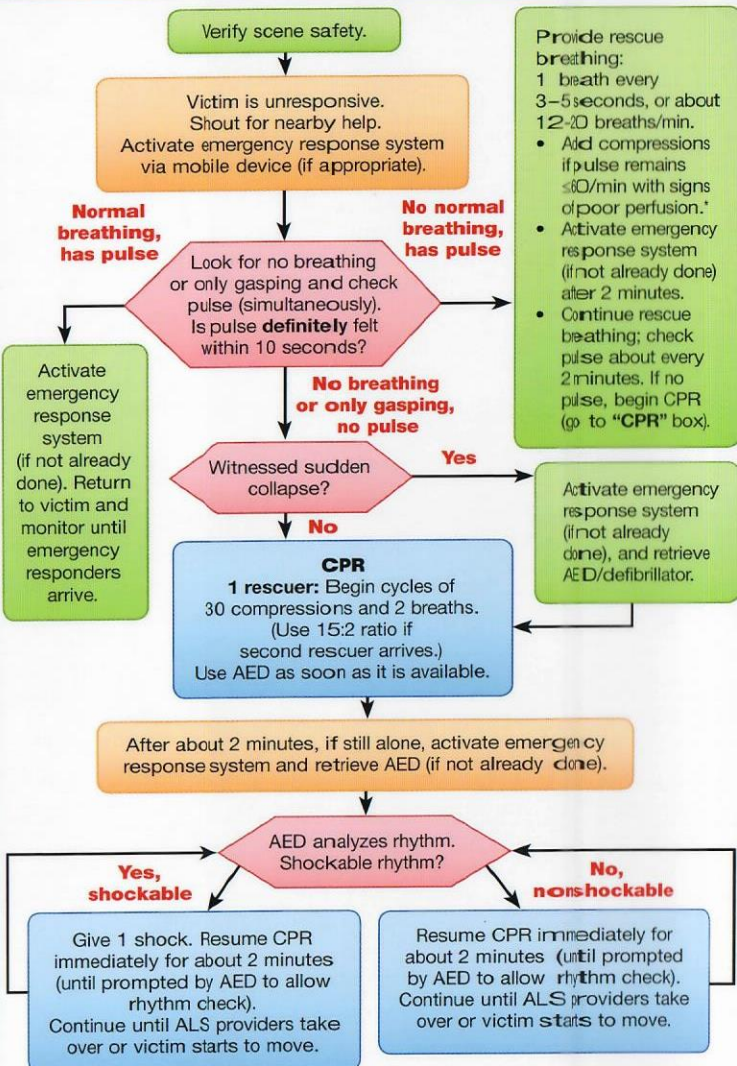
Component	Adults and Adolescents	Children (Age 1 Year to Puberty)	Infants (Age Less Than 1 Year, Excluding Newborns)
Scene safety	Make sure the environment is safe for rescuers and victim		
Recognition of cardiac arrest	Check for responsiveness No breathing or only gasping (ie, no normal breathing) No definite pulse felt within 10 seconds (Breathing and pulse check can be performed simultaneously in less than 10 seconds)		
Activation of emergency response system	If you are alone with no mobile phone, leave the victim to activate the emergency response system and get the AED before beginning CPR  Otherwise, send someone and begin CPR immediately; use the AED as soon as it is available	<b>Witnessed collapse</b> Follow steps for adults and adolescents on the left  <b>Unwitnessed collapse</b> Give 2 minutes of CPR  Leave the victim to activate the emergency response system and get the AED Return to the child or infant and resume CPR; use the AED as soon as it is available	
Compression-ventilation ratio <i>without advanced airway</i>	<b>1 or 2 rescuers</b> 30:2	<b>1 rescuer</b> 30:2  <b>2 or more rescuers</b> 15:2	
Compression-ventilation ratio <i>with advanced airway</i>	Continuous compressions at a rate of 100-120/min Give 1 breath every 6 seconds (10 breaths/min)		
Compression rate	100-120/min		
Compression depth	At least 2 inches (5 cm)*	At least one third AP diameter of chest About 2 inches (5 cm)	At least one third AP diameter of chest About 1½ inches (4 cm)
Hand placement	2 hands on the lower half of the breastbone (sternum)	2 hands or 1 hand (optional for very small child) on the lower half of the breastbone (sternum)	<b>1 rescuer</b> 2 fingers in the center of the chest, just below the nipple line  <b>2 or more rescuers</b> 2 thumb-encircling hands in the center of the chest, just below the nipple line
Chest recoil	Allow full recoil of chest after each compression; do not lean on the chest after each compression		
Minimizing interruptions	Limit interruptions in chest compressions to less than 10 seconds		

\*Compression depth should be no more than 2.4 inches (6 cm).

Abbreviations: AED, automated external defibrillator; AP, anteroposterior; CPR, cardiopulmonary resuscitation.

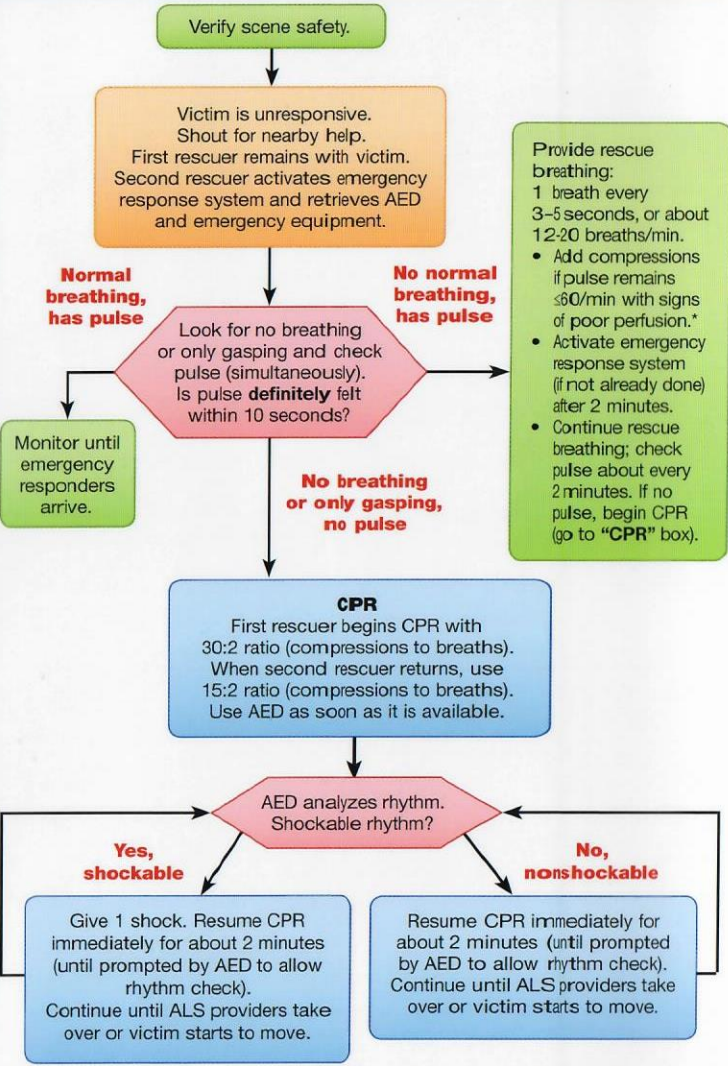


# BLS Healthcare Provider Pediatric Cardiac Arrest Algorithm for the Single Rescuer—2015 Update



\*Signs of poor perfusion may include cool extremities, decrease in responsiveness, weak pulses, paleness, mottling (patchy skin appearance), and cyanosis (turning blue).

# BLS Healthcare Provider Pediatric Cardiac Arrest Algorithm for 2 or More Rescuers—2015 Update



\*Signs of poor perfusion may include cool extremities, decrease in responsiveness, weak pulses, paleness, mottling (patchy skin appearance), and cyanosis (turning blue).

# Relief of Foreign-Body Airway Obstruction

Adults and Adolescents	Children (Age 1 Year to Puberty)	Infants (Age Less Than 1 Year)
<ol style="list-style-type: none"> <li>Ask "Are you choking?" If the victim nods "yes" and cannot talk, severe airway obstruction is present. Take steps immediately to relieve the obstruction.</li> <li>Give abdominal thrusts/Heimlich maneuver or chest thrusts for pregnant or obese victims.</li> <li>Repeat abdominal thrusts (or chest thrusts if the victim is pregnant or obese) until effective or the victim becomes unresponsive.</li> </ol>	<ol style="list-style-type: none"> <li>Ask "Are you choking?" If the victim nods "yes" and cannot talk, severe airway obstruction is present. Take steps immediately to relieve the obstruction.</li> <li>Give abdominal thrusts/Heimlich maneuver.</li> <li>Repeat abdominal thrusts until effective or the victim becomes unresponsive.</li> </ol>	<ol style="list-style-type: none"> <li>If the victim cannot make any sounds or breathe, severe airway obstruction is present.</li> <li>Give up to 5 back slaps and up to 5 chest thrusts.</li> <li>Repeat step 2 until effective or the victim becomes unresponsive.</li> </ol>
<b>Victim becomes unresponsive</b> <ol style="list-style-type: none"> <li>Activate the emergency response system via mobile device (if appropriate) or send someone to do so. After about 2 minutes of CPR, if you are alone with no mobile device, leave the victim to activate the emergency response system (if no one has already done so).</li> <li>Lower the victim to the floor. Begin CPR, starting with chest compressions. Do not check for a pulse.</li> <li>Before you deliver breaths, look into the mouth. If you see a foreign body that can be easily removed, remove it.</li> <li>Continue CPR until advanced providers arrive.</li> </ol>		