



# 2020 AHA Adult and Pediatric CPR and AED Guidelines

## BLS/Heartsaver CPR AED Cheat Sheet

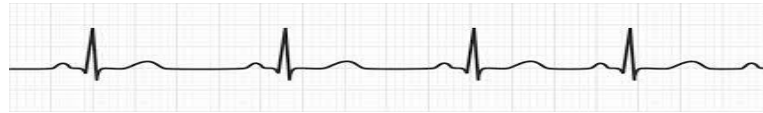
CPR	ADULT & OLDER CHILD (puberty and older)	CHILD (1 year to signs of puberty)	INFANT (up to 1 year old)
Verify Scene Safety	Do not enter an unsafe environment. Call 9-1-1		
Check victim's responsiveness	If victim is unresponsive, shout for help. Call 9-1-1 with mobile device, if available. Send someone to find an AED.		
Activate 9-1-1	If you are alone and do not have a mobile device, leave the victim to call 9-1-1 first, then look for an AED. Return to perform CPR.	If you are alone and <b>WITNESS THE COLLAPSE</b>  Leave the victim to call 9-1-1 first, and look for an AED. Return to perform CPR.	
Determine if victim is breathing & has a pulse	Simultaneously check for breathing & pulse for no more than 10 seconds. NOTE: agonal breaths are not considered signs of breathing For children and infants, a pulse rate of less than 60 beats / minute is treated as no pulse.		
	Check carotid artery on your side of the victim's the neck.		Check brachial artery on inside of the victim's upper arm near the armpit.
Rescue Breathing  If victim <b>has</b> a DEFINITE detectable pulse, but is not breathing	1 breath every 5-6 seconds Check pulse every 2 minutes.	1 breath every 3-5 seconds Check pulse again every 2 minutes If pulse less than 60 beats per minute, or perfusion remains poor, add compressions	
	For suspected opioid overdose, administer naloxone, if available		
If victim has <b>NO</b> detectable pulse: <b>Begin CPR</b> Minimize interruptions	<b>1 rescuer:</b> 30 compressions : 2 breaths <b>2+ rescuers:</b> 30 compressions : 2 breaths  Use AED as soon as it arrives	<b>1 rescuer:</b> 30 compressions : 2 breaths <b>2+ rescuers:</b> 15 compressions : 2 breaths  Use the AED as soon as it arrives	
Compression <u>rate</u>	100 - 120 compressions per minute		
Hand <u>placement</u>	2 hands on lower half of breastbone	1 hand or 2 hands on lower half of breastbone	1 rescuer: 2 fingers 2+ rescuers: 2 thumbs on center of chest, just below nipple line
Compression <u>depth</u>	2 to 2.4 inches (5-6 cm)	1/3 the depth of the chest - about 2 inches (5 cm)	1/3 the depth of the chest - about 1.5 inches (4 cm)
Chest recoil	Allow for full chest recoil after each compression		
Minimize interruptions	Limit interruptions in chest compressions to no more than 10 seconds		
Use the AED as soon as it arrives	Turn on AED and follow instructions. Never remove the AED.		

# Automated External Defibrillator (AED) Information

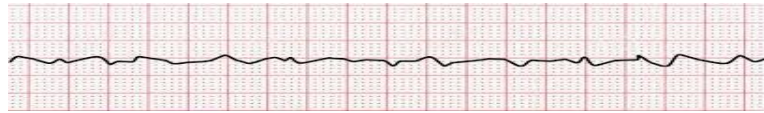
AEDs look for electrical activity in the heart. These electrical activities are known as “*rhythms*”. These are not visible on most AEDs but may be seen on cardiac monitors in the hospitals or on ambulances.

**AEDs analyze the rhythm of the heart while looking for 3 rhythms in particular. See below.**

**Example of a normal rhythm**



**1. Ventricular Fibrillation – aka V-Fib**



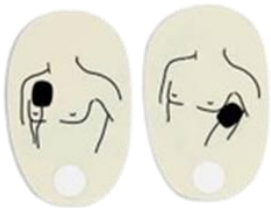
**2. Ventricular Tachycardia – aka Pulseless V-Tach**



**3. Asystole – aka Flatline**



***To convert V-Fib or Pulseless V-Tach into a normal rhythm, the patient must be defibrillated, or “shocked”.***



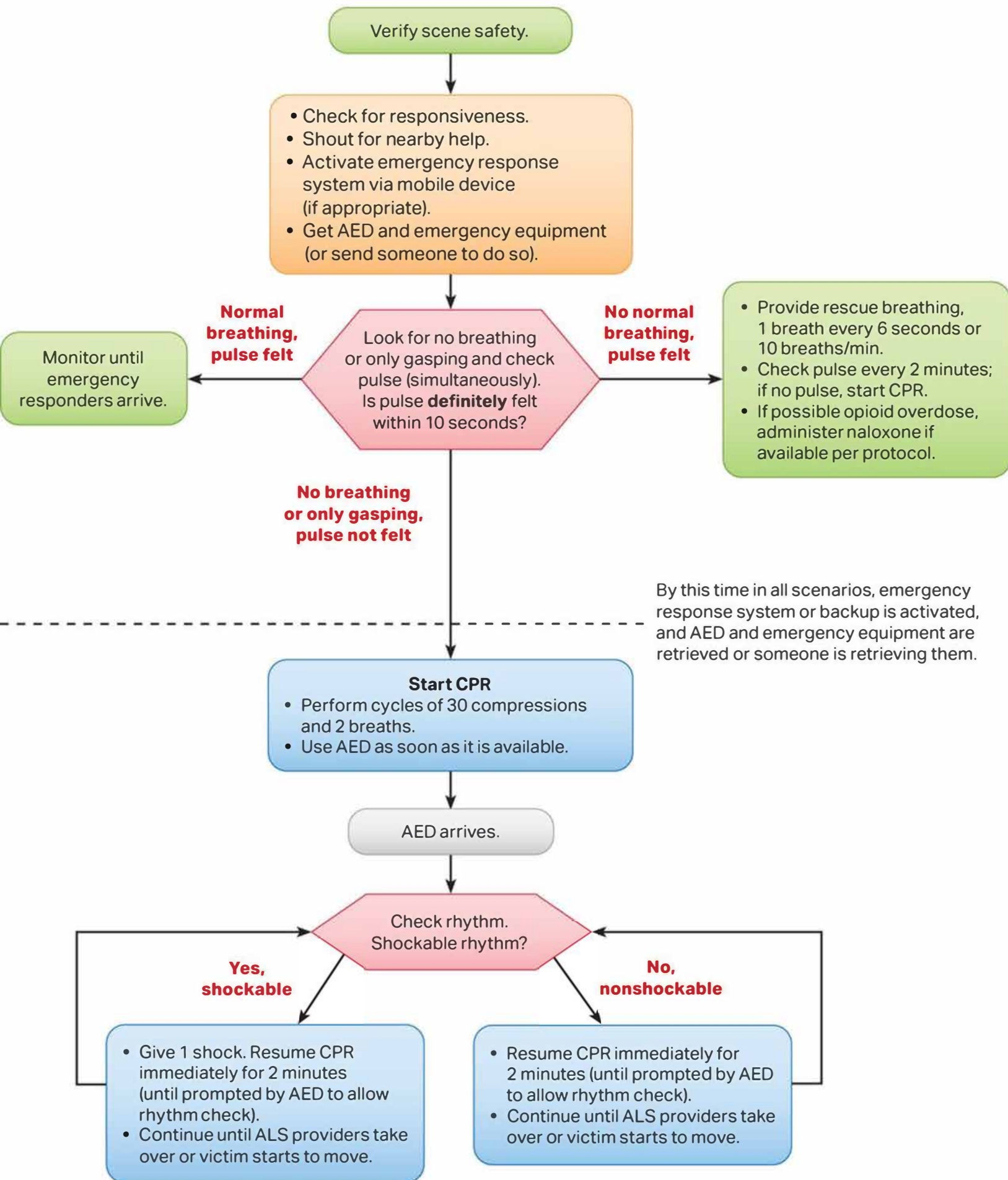
When defibrillating/shocking an **ADULT**, the AED will shock with **200 Joules**.



When defibrillating/shocking a **PEDIATRIC**, the AED pads allow a **Joules rate of 2-4 joules/Kg**.

To convert pounds to Kg:  
Pounds  $\div$  2.2  $=$  Kg

## Adult Basic Life Support Algorithm for Healthcare Providers



## Pediatric Basic Life Support Algorithm for Healthcare Providers—2 or More Rescuers

