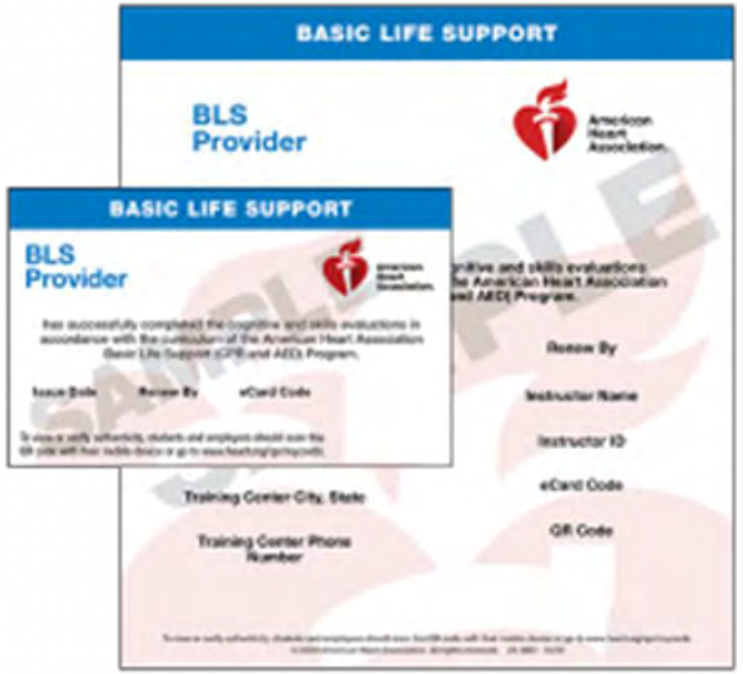
BLS Study Guide 2021



LEARNACLS, LLC.

Welcome to LearnACLS a multi-regional and international American Heart Association Training Center, the home of “Stress Free Leaning”.

If you register and pay 10 days prior to the class, you may choose to receive your course materials shipped to you for an additional $7.95. Please take the opportunity to review the materials prior to attending your course. Enclosed you will find a quick reference study guide which we have prepared to assist you in preparing for your course. This guide is not meant to replace your AHA materials but to facilitate your learning.

Upon successful course completion, including demonstration of skills competency in all learning stations and passing the skills test, bag-mask ventilation skills test, and a written test, students receive an BLS course completion card, valid for two years.

Once again thank you for choosing LearnACLS for your American Heart Association training needs. We look forward to seeing you at your class.

High quality CPR and early defibrillator is the core of BLS care in the cardiac arrest patient.

High quality CPR can be measured by, Partial End Tidal Carbon Dioxide (PETCO). A reading greater than 10 and less than 23 indicates high quality CPR. The normal PETCO is 35-45 mm HG. Any reading less than 10 indicates ineffectiveness CPR during resuscitation.

A sudden rise of PETCO towards normal is the first sign of return spontaneous circulation (ROSC).

If an AED does not analyze it is defective, do not attempt to troubleshoot.

Integration of the Rapid Response Team (RRT) or Medical Emergency Team **(**MET) facilities early identification of clinical deterioration of patients and visitors in hospital and improves overall outcome.

In Return of Spontaneous Circulation (ROSC) algorithms the first priority is to maintain airway, the overall focus is maintenance of homeostasis.

Check for pulse & breathing or abnormal breathing (5-10 seconds); Health care providers are encouraged to simultaneously perform checking for breathing and pulse.

The rate of chest compressions is 100 to 120 compressions.

Adult a depth between 2 to 2.4 inches (5-6cm); Child a depth of at least 2 inches (5cm); Infant a depth of at least 1.5inches (4cm)

Health care providers are encouraged to simultaneously perform checking for breathing and pulse.

The rate of chest compressions is 100 to 120 compressions.

HCP will provide rescue breaths for the adult at a rate of 1breath every 5-6 sec. (10-12/min); Respiratory or cardiac arrest in pediatric is one (1) breath every 2-3 seconds (20-30/minute) with or without advanced airway.

Once an advanced airway is in place continuous CPR with 1 ventilation every 6 sec. (10/min)

For infants a single rescuer may also use two thumbs or *the heel of one hand* for infant compressions.

Use of bag-mask ventilation is not recommended for a lone provider. Bag-mask ventilation is most effective when performed by 2 providers.

Key changes in advanced cardiovascular life support, reflecting the *2020 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care*

Basic life support skills, including effective chest compressions monitored by a CPR Coach, use of a bag-mask device with a filter and use of an (AED). For infants, a single rescuer may use two thumbs or the heel of one hand for compressions.

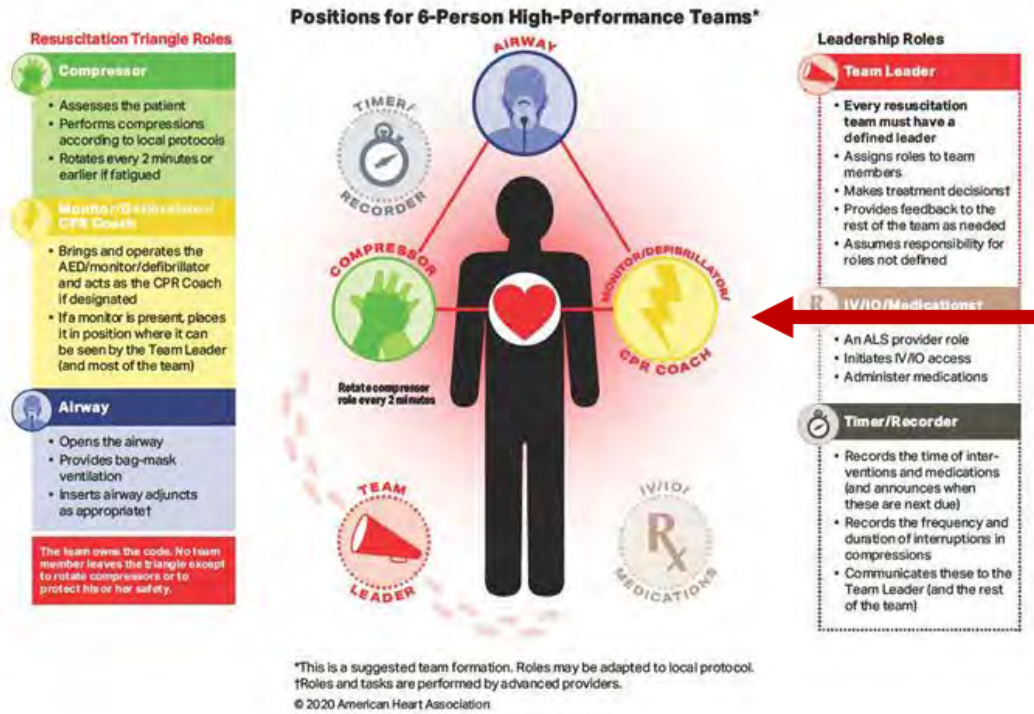
Recognition and early management of respiratory and cardiac arrest

Airway management rescue breaths for Peds is 1 breath every 2 to 3 seconds (20 to 30 breaths/min)

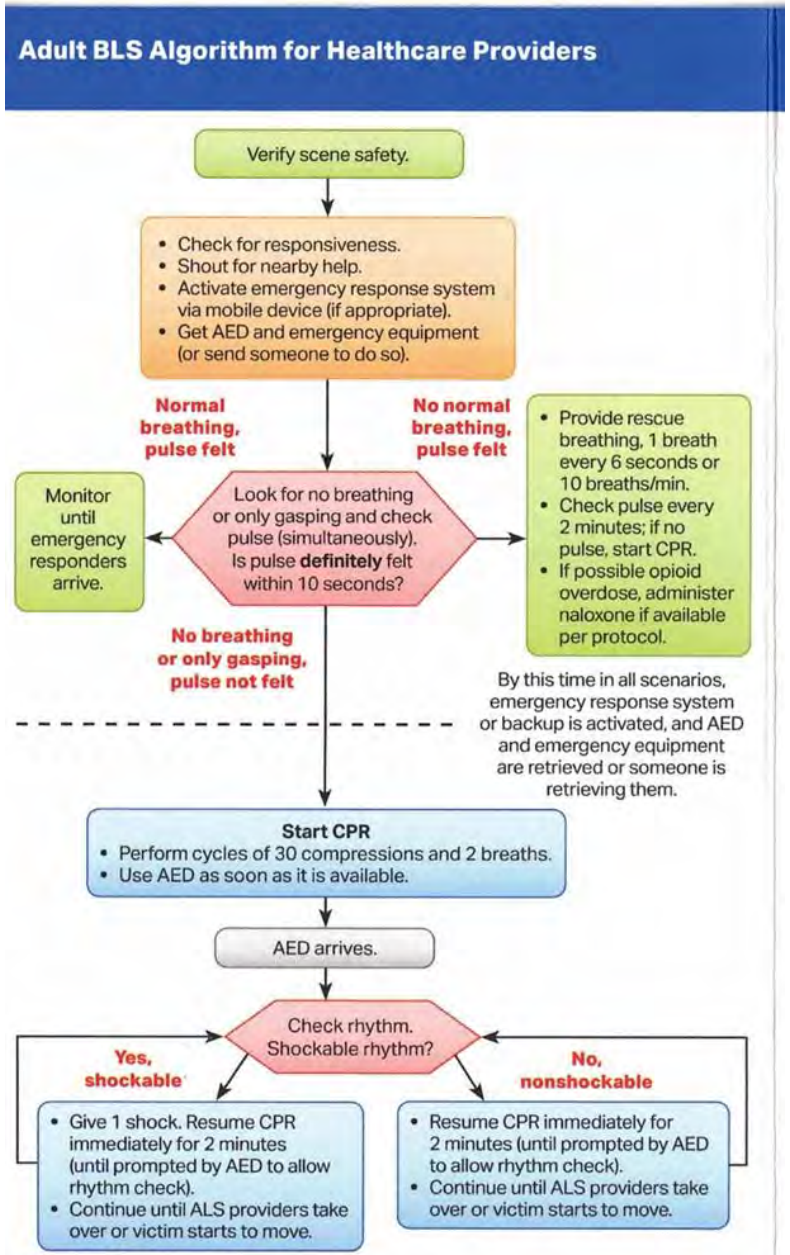
Effective communication as a member and leader of a resuscitation team

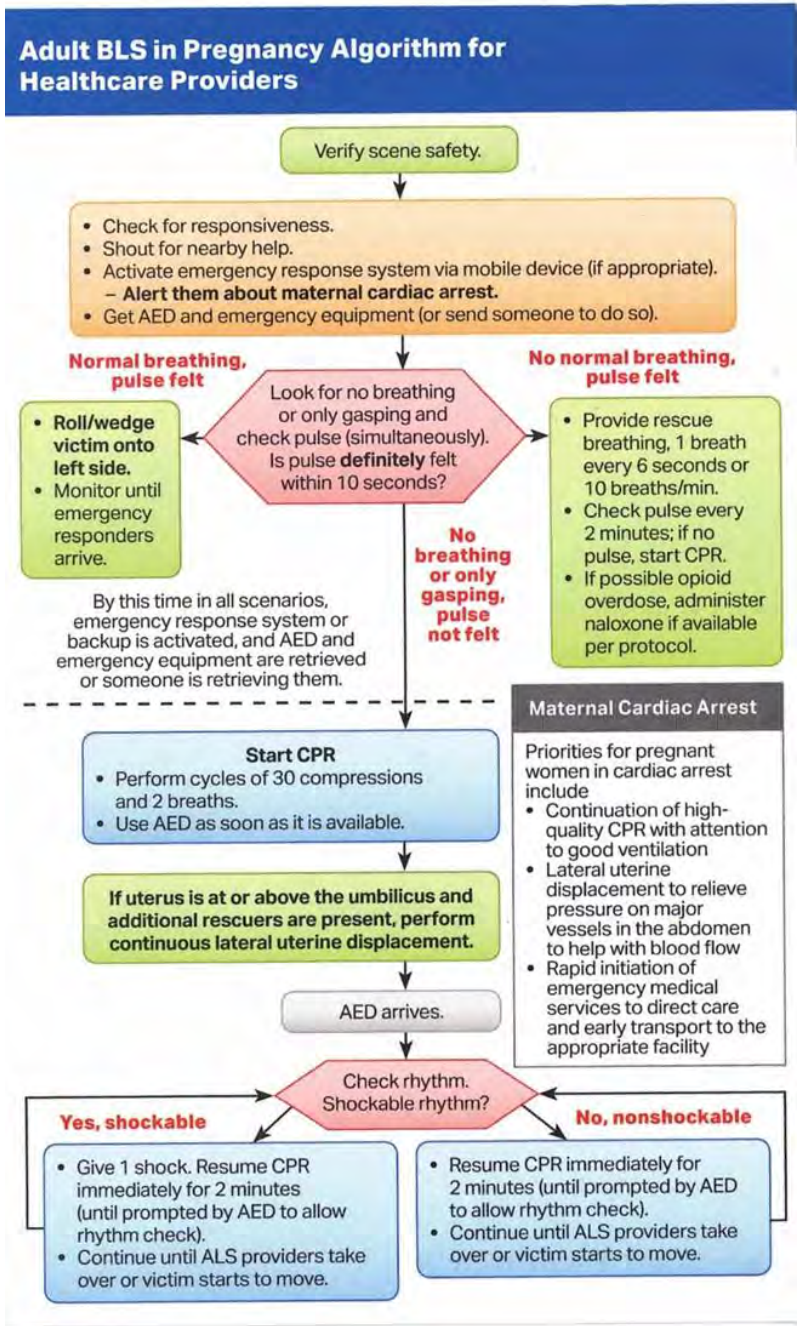
Effective Resuscitation Team Dynamics

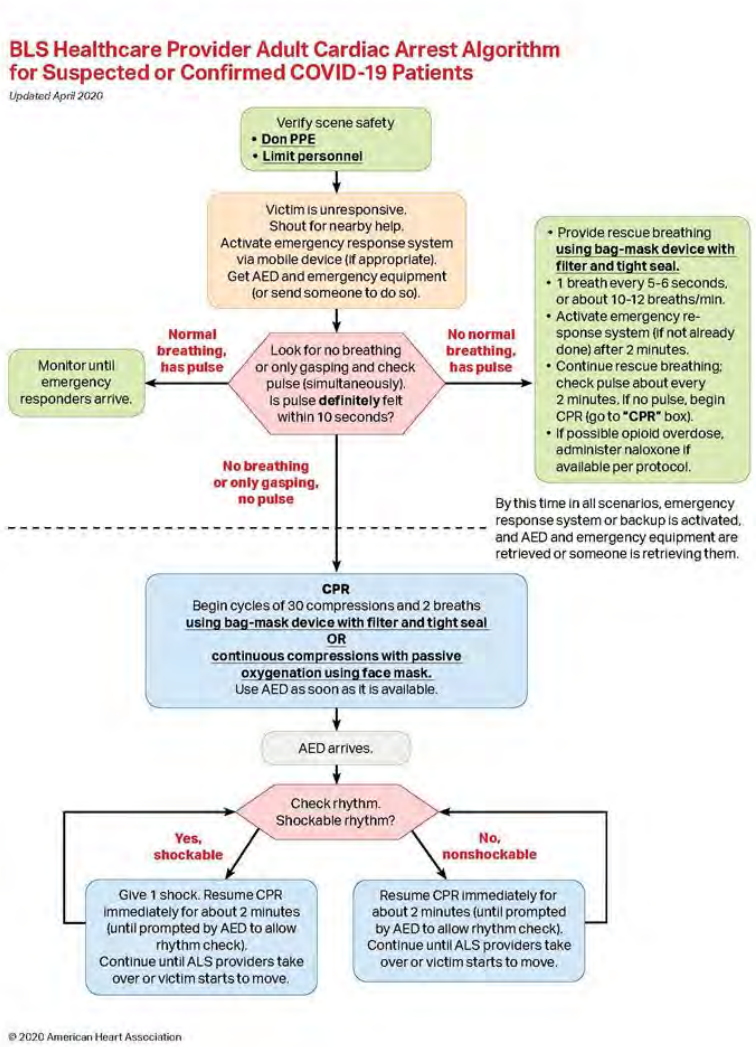
Booster sessions (**every 90 days**) is recommended when a massed learning approach was used for resuscitation training. A spaced learning approach is recommended over a massed learning approach..



Monitor; CPR Coach


Adult BLS Algorithm for Healthcare Providers
Verify scene safety.
• Check for responsiveness.
• Shout for nearby help.
• Activate emergency response system via mobile device (if appropriate).
• Get AED and emergency equipment (or send someone to do so).
Normal breathing, pulse felt
No normal breathing, pulse felt
Monitor until emergency responders arrive.
Look for no breathing or only gasping and check pulse (simultaneously). Is pulse definitely felt within 10 seconds?
• Provide rescue breathing, 1 breath every 6 seconds or 10 breaths/min.
• Check pulse every 2 minutes; if no pulse, start CPR.
• If possible opioid overdose, administer naloxone if available per protocol.
No breathing or only gasping, pulse not felt
By this time in all scenarios, emergency response system or backup is activated, and AED and emergency equipment are retrieved or someone is retrieving them.
Start CPR
• Perform cycles of 30 compressions and 2 breaths.
• Use AED as soon as it is available.
AED arrives.
Check rhythm. Shockable rhythm?
Yes, shockable
No, nonshockable
• Give 1 shock. Resume CPR immediately for 2 minutes (until prompted by AED to allow rhythm check).
• Continue until ALS providers take over or victim starts to move.
• Resume CPR immediately for 2 minutes (until prompted by AED to allow rhythm check).
• Continue until ALS providers take over or victim starts to move.


Adult BLS in Pregnancy Algorithm for Healthcare Providers
Verify scene safety.
• Check for responsiveness.
• Shout for nearby help.
• Activate emergency response system via mobile device (if appropriate).
– Alert them about maternal cardiac arrest.
• Get AED and emergency equipment (or send someone to do so).
Normal breathing, pulse felt
No normal breathing, pulse felt
• Roll/wedge victim onto left side.
• Monitor until emergency responders arrive.
Look for no breathing or only gasping and check pulse (simultaneously). Is pulse definitely felt within 10 seconds?
• Provide rescue breathing, 1 breath every 6 seconds or 10 breaths/min.
• Check pulse every 2 minutes; if no pulse, start CPR.
• If possible opioid overdose, administer naloxone if available per protocol.
No breathing or only gasping, pulse not felt
By this time in all scenarios, emergency response system or backup is activated, and AED and emergency equipment are retrieved or someone is retrieving them.
Start CPR
• Perform cycles of 30 compressions and 2 breaths.
• Use AED as soon as it is available.
If uterus is at or above the umbilicus and additional rescuers are present, perform continuous lateral uterine displacement.
AED arrives.
Check rhythm. Shockable rhythm?
Yes, shockable
No, nonshockable
• Give 1 shock. Resume CPR immediately for 2 minutes (until prompted by AED to allow rhythm check).
• Continue until ALS providers take over or victim starts to move.
• Resume CPR immediately for 2 minutes (until prompted by AED to allow rhythm check).
• Continue until ALS providers take over or victim starts to move.
Maternal Cardiac Arrest
Priorities for pregnant women in cardiac arrest include
• Continuation of high-quality CPR with attention to good ventilation
• Lateral uterine displacement to relieve pressure on major vessels in the abdomen to help with blood flow
• Rapid initiation of emergency medical services to direct care and early transport to the appropriate facility


BLS Healthcare Provider Adult Cardiac Arrest Algorithm for Suspected or Confirmed COVID-19 Patients
Updated April 2020
Verify scene safety
• Don PPE
• Limit personnel
Victim is unresponsive. Shout for nearby help. Activate emergency response system via mobile device (if appropriate). Get AED and emergency equipment (or send someone to do so).
• Provide rescue breathing using bag-mask device with filter and tight seal.
• 1 breath every 5-6 seconds, or about 10-12 breaths/min.
• Activate emergency response system (if not already done) after 2 minutes.
• Continue rescue breathing; check pulse about every 2 minutes. If no pulse, begin CPR (go to "CPR" box).
• If possible opioid overdose, administer naloxone if available per protocol.
Normal breathing, has pulse
No normal breathing, has pulse
Monitor until emergency responders arrive.
Look for no breathing or only gasping and check pulse (simultaneously). Is pulse definitely felt within 10 seconds?
No breathing or only gasping, no pulse
By this time in all scenarios, emergency response system or backup is activated, and AED and emergency equipment are retrieved or someone is retrieving them.
CPR
Begin cycles of 30 compressions and 2 breaths
using bag-mask device with filter and tight seal
OR
continuous compressions with passive oxygenation using face mask.
Use AED as soon as it is available.
AED arrives.
Check rhythm. Shockable rhythm?
Yes, shockable
No, nonshockable
Give 1 shock. Resume CPR immediately for about 2 minutes (until prompted by AED to allow rhythm check). Continue until ALS providers take over or victim starts to move.
Resume CPR immediately for about 2 minutes (until prompted by AED to allow rhythm check). Continue until ALS providers take over or victim starts to move.
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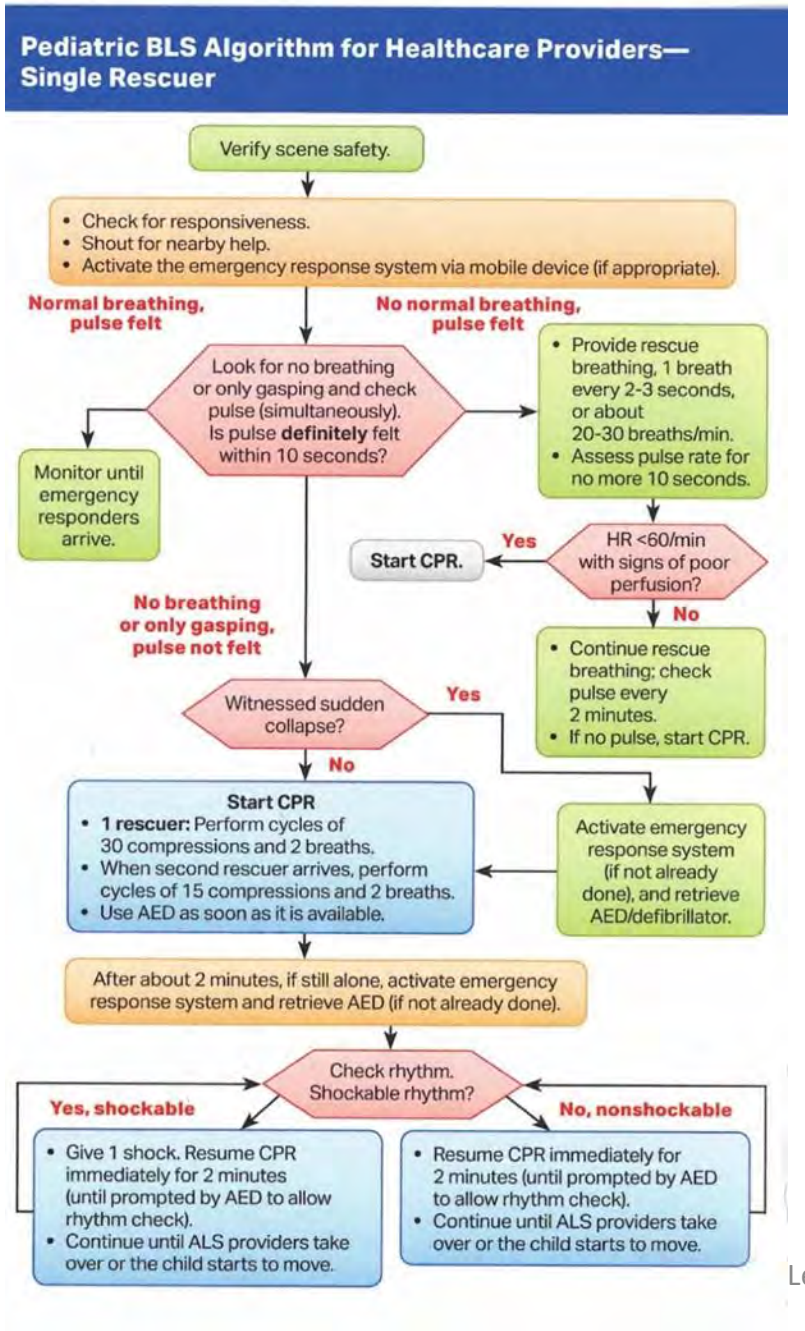
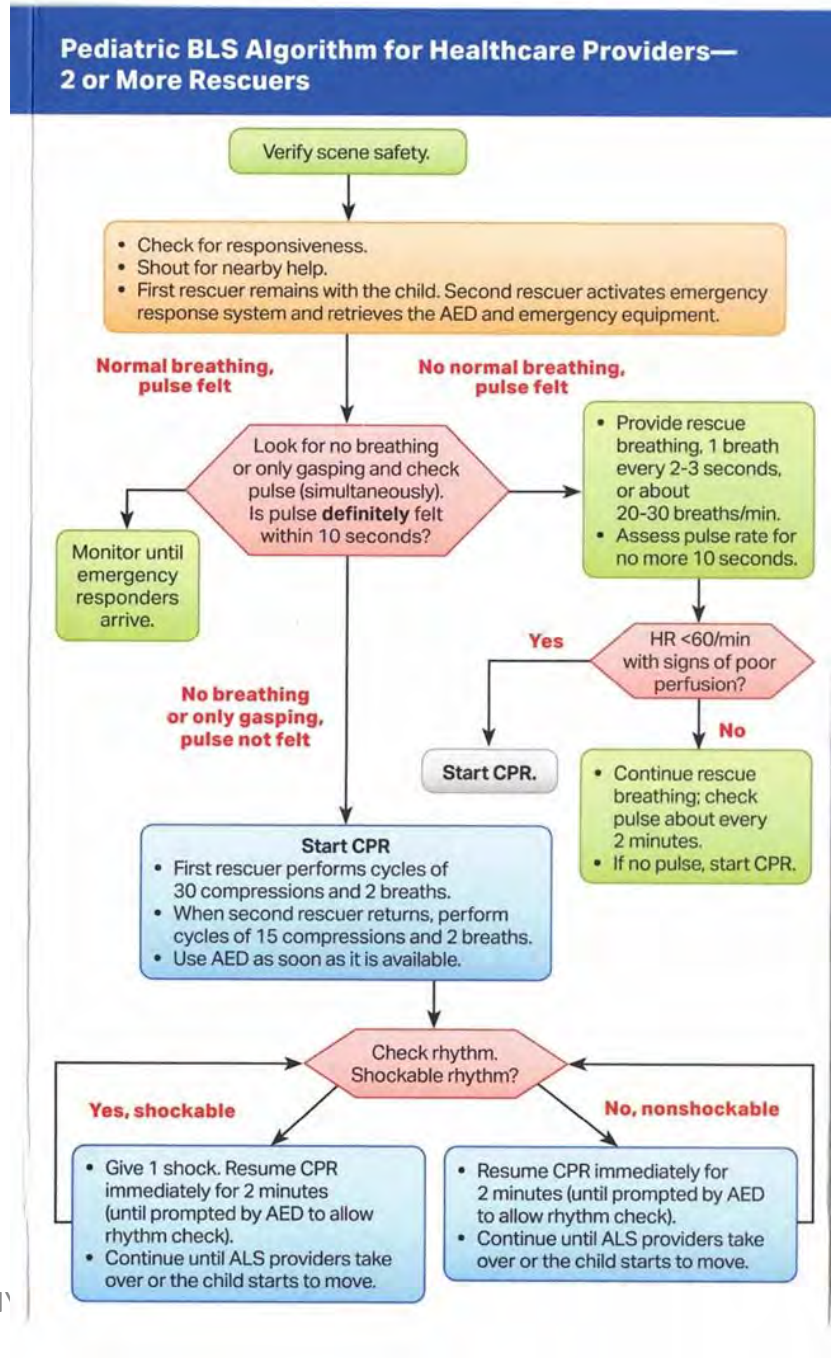
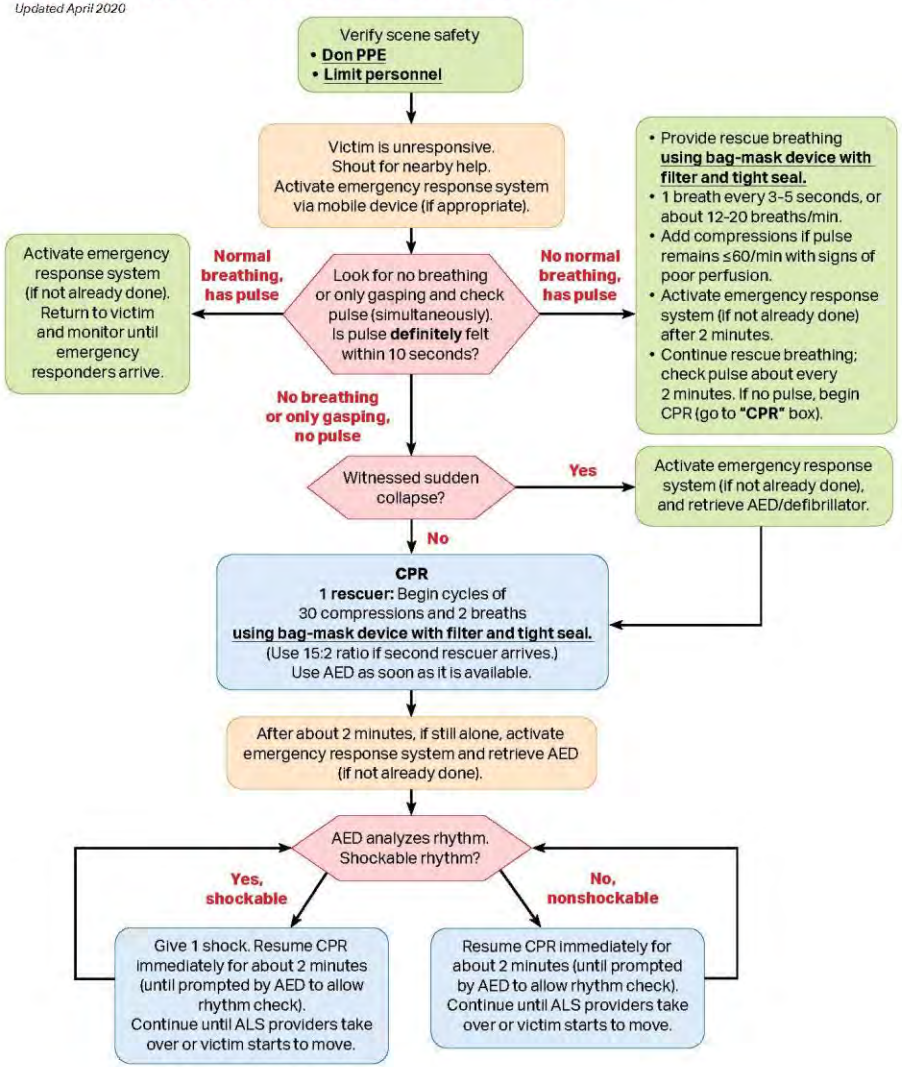




BLS Healthcare Provider
Pediatric Cardiac Arrest Algorithm for the Single Rescuer for Suspected or Confirmed COVID-19 Patients

Updated April 2020



BLS Healthcare Provider
Pediatric Cardiac Arrest Algorithm for 2 or More Rescuers for Suspected or Confirmed COVID-19 Patients

Updated April 2020