GUIDELINES FOR CPR AND ECC

2022

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IHCA

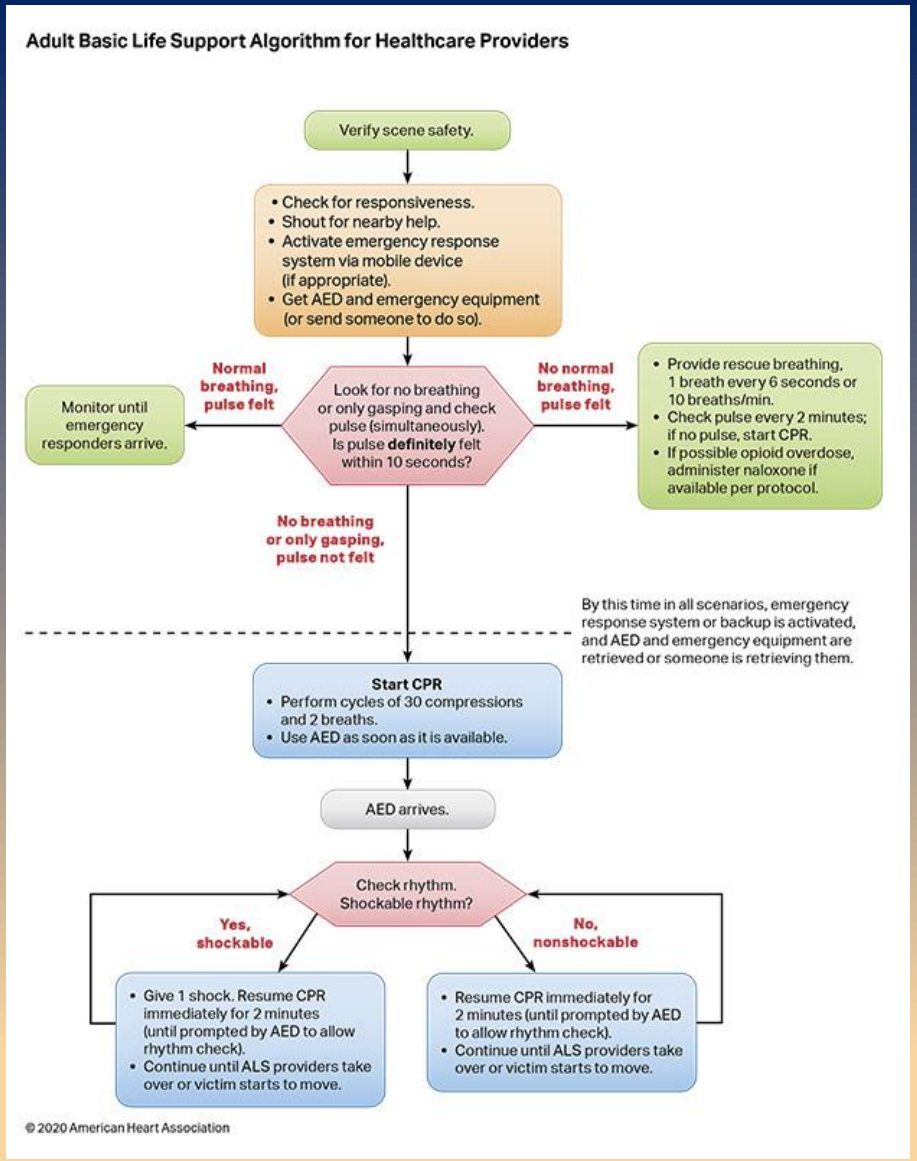
تشخیص زودهنگام و پیشگیری
فعال سازی فوریت‌های پزشکی
CPR با کیفیت بالا
دفیبریلاسیون
مراقبت پس از ایست قلبی
بهبود و ریکاوری

OHCA

فعال سازی فوریت‌های پزشکی
CPR با کیفیت بالا
دفیبریلاسیون
احیای پیشرفته
مراقبت پس از ایست قلبی
بهبود و ریکاوری

ADULT BLS
for
Health Care Providers (HCPs)
for
Suspected or Confirmed Case of
COVID-19

AHA 2022


Adult Basic Life Support 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).
Look for no breathing or only gasping and check pulse (simultaneously). Is pulse definitely felt within 10 seconds?
Normal breathing, pulse felt
Monitor until emergency responders arrive.
No normal breathing, pulse felt
• 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
• 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.
No, nonshockable
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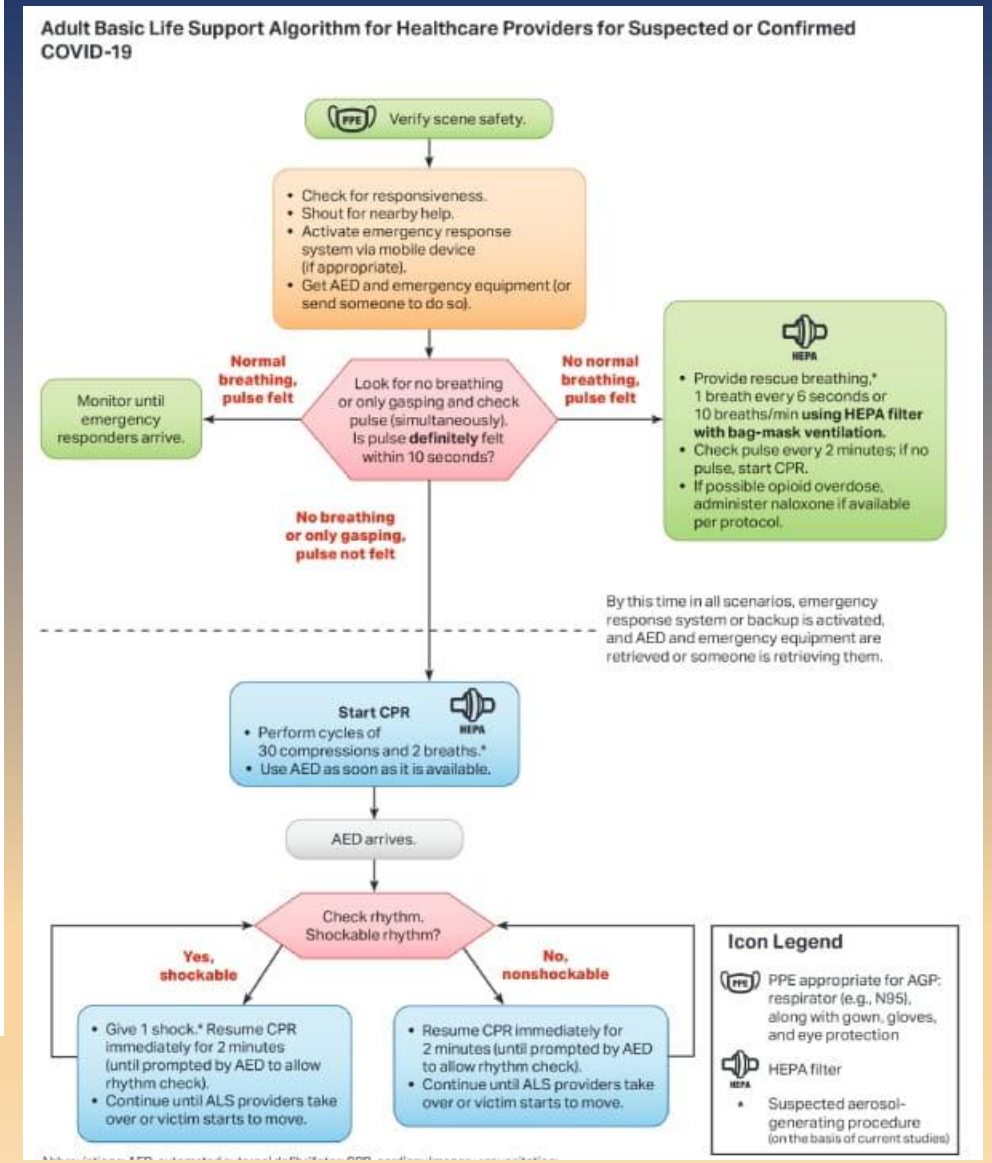
Adult Basic Life Support Algorithm for Healthcare Providers for Suspected or Confirmed COVID-19
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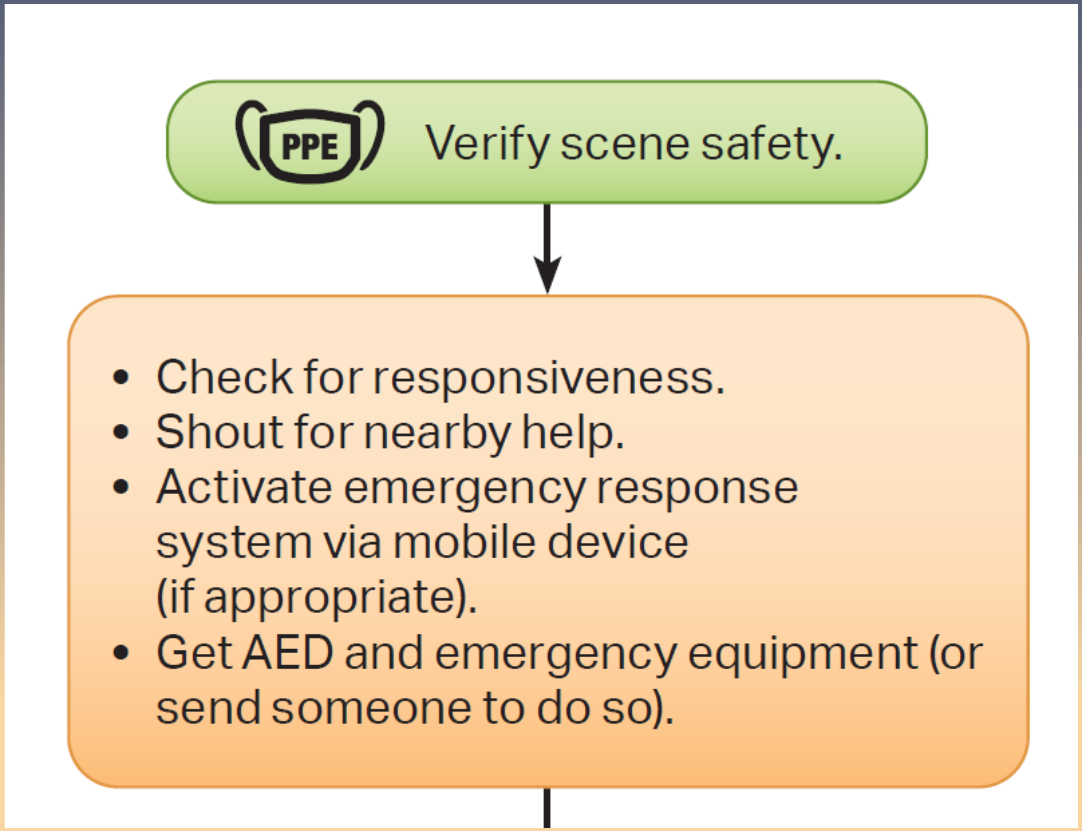
Icon Legend
PPE appropriate for AGP: respirator (e.g., N95), along with gown, gloves, and eye protection
HEPA filter
* Suspected aerosol-generating procedure (on the basis of current studies)

Adult BLS for HCPs _ COVID19



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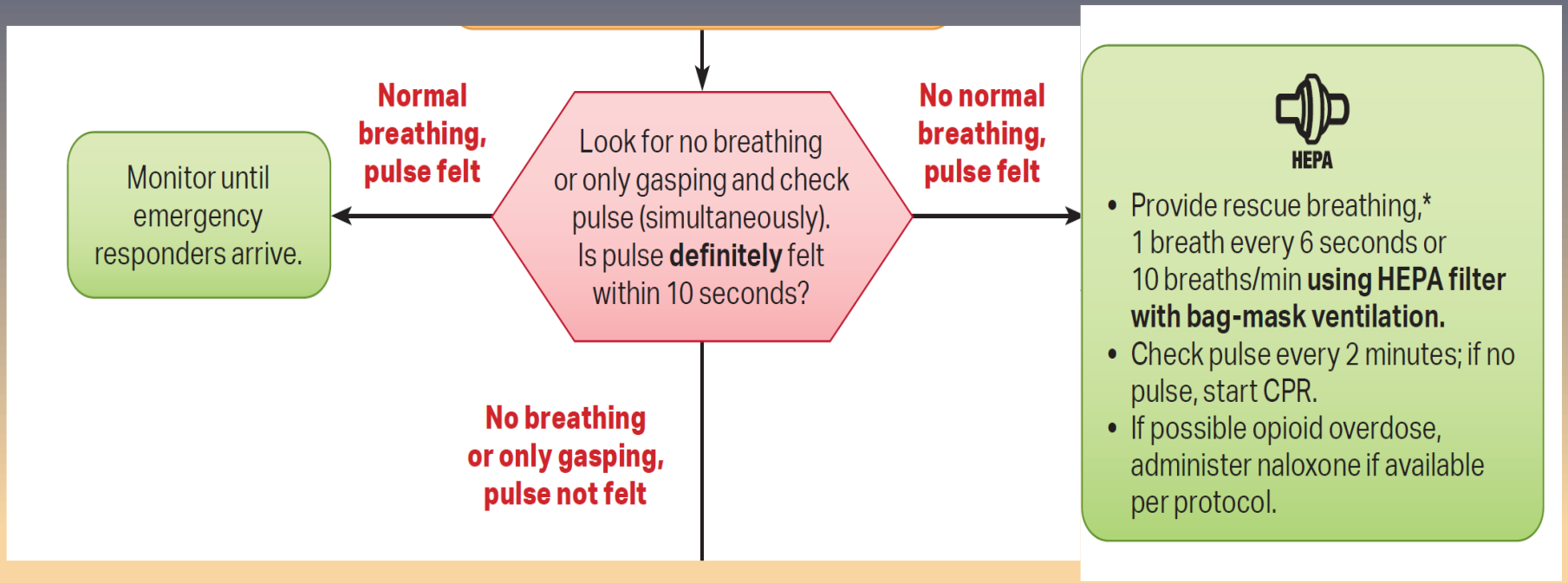

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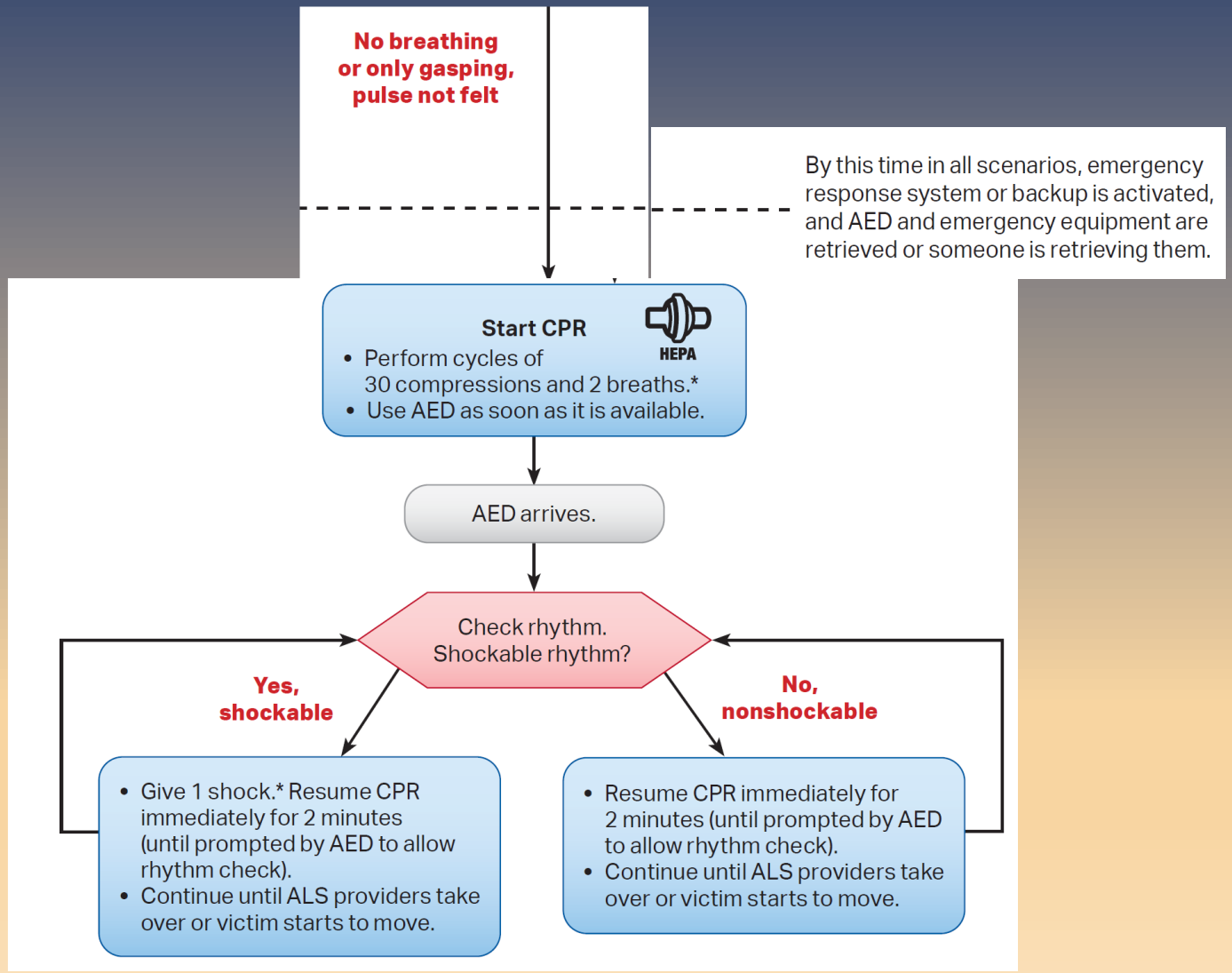
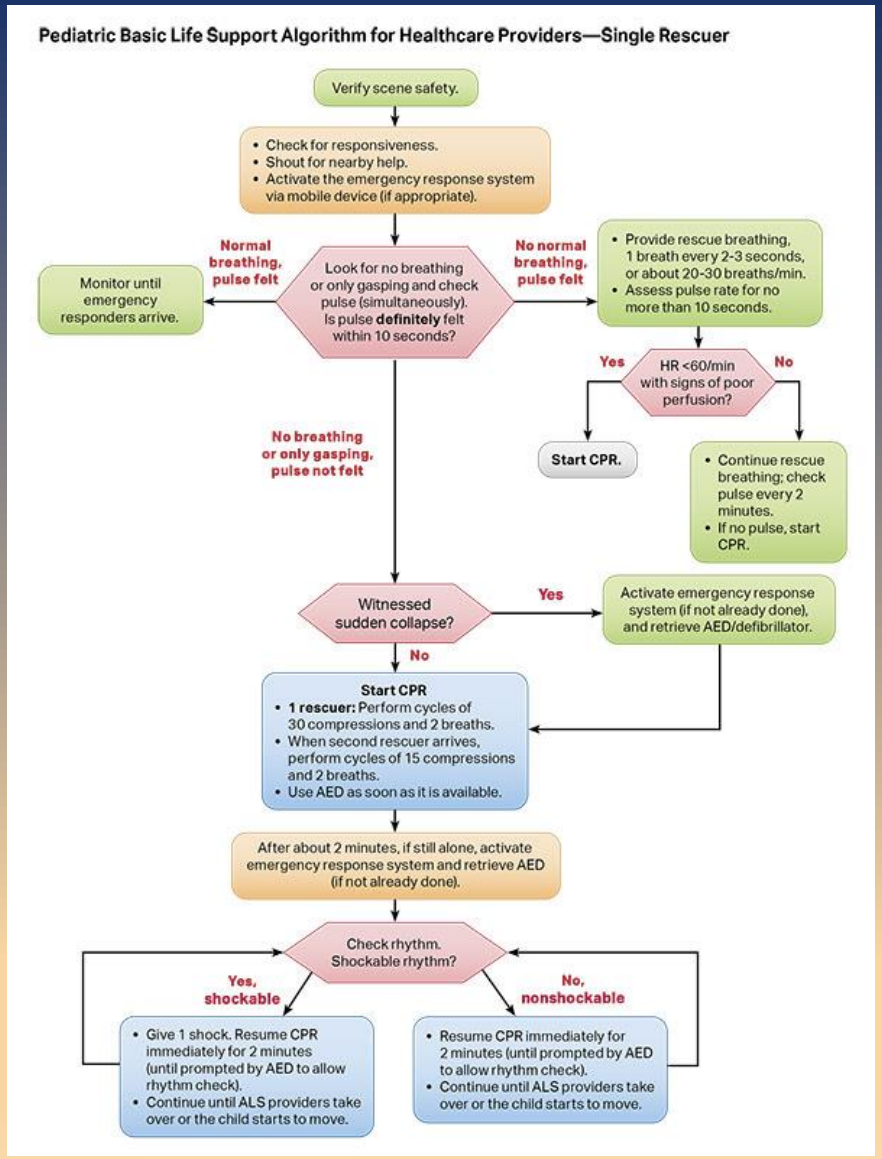


Pediatric BLS
for
Health Care Providers (HCPs)
for
Suspected or Confirmed Case of COVID-19

AHA 2022

1 Rescuer


Pediatric Basic Life Support Algorithm for Healthcare Providers—Single Rescuer
Verify scene safety.
• Check for responsiveness.
• Shout for nearby help.
• Activate the emergency response system via mobile device (if appropriate).
Look for no breathing or only gasping and check pulse (simultaneously). Is pulse definitely felt within 10 seconds?
Normal breathing, pulse felt
Monitor until emergency responders arrive.
No normal breathing, pulse felt
• Provide rescue breathing, 1 breath every 2-3 seconds, or about 20-30 breaths/min.
• Assess pulse rate for no more than 10 seconds.
HR <60/min with signs of poor perfusion?
Yes
No
Start CPR.
• Continue rescue breathing; check pulse every 2 minutes.
• If no pulse, start CPR.
No breathing or only gasping, pulse not felt
Witnessed sudden collapse?
Yes
Activate emergency response system (if not already done), and retrieve AED/defibrillator.
No
Start CPR
• 1 rescuer: Perform cycles of 30 compressions and 2 breaths.
• When second rescuer arrives, perform cycles of 15 compressions and 2 breaths.
• Use AED as soon as it is available.
After about 2 minutes, if still alone, activate emergency response system and retrieve AED (if not already done).
Check rhythm. Shockable rhythm?
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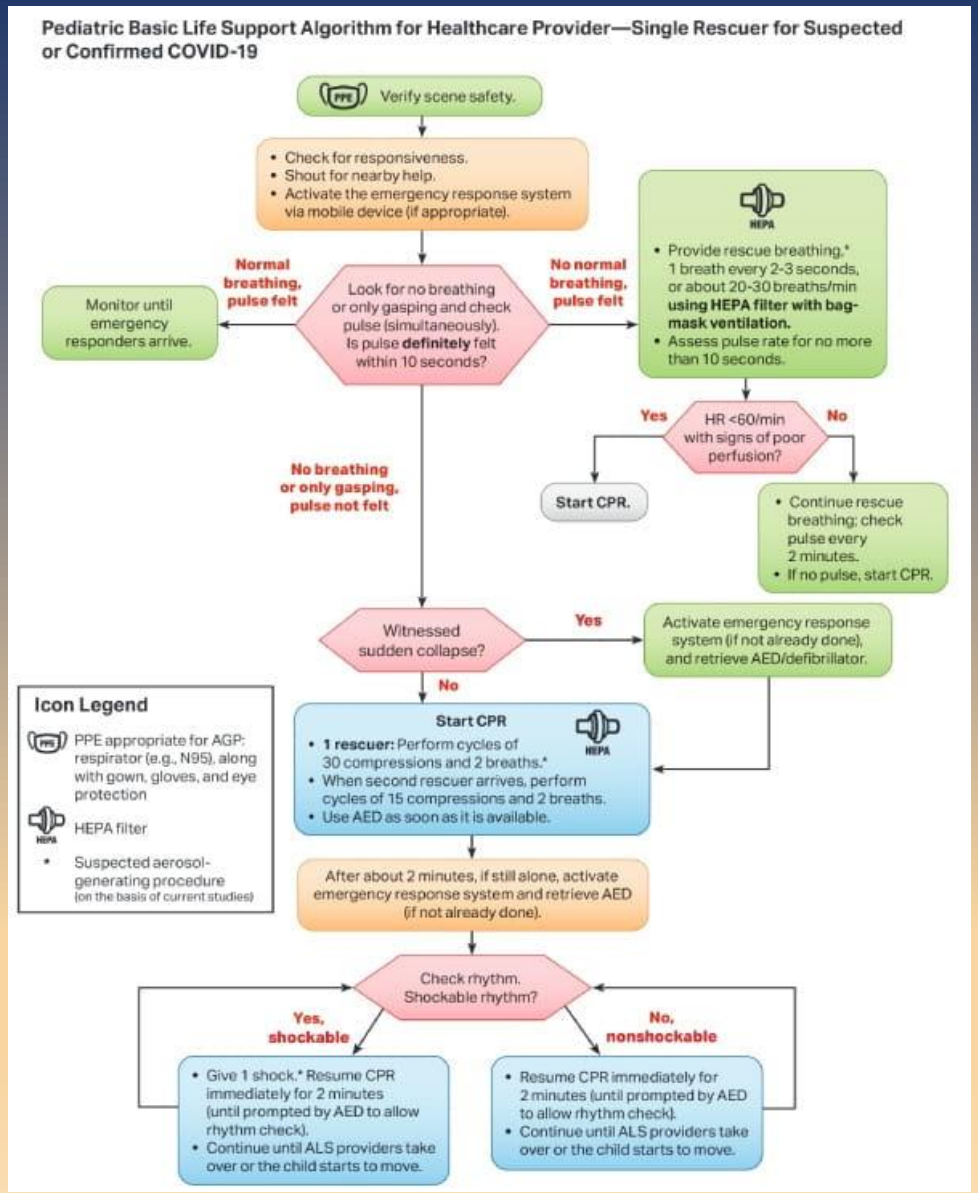
Pediatric Basic Life Support Algorithm for Healthcare Provider—Single Rescuer for Suspected or Confirmed COVID-19
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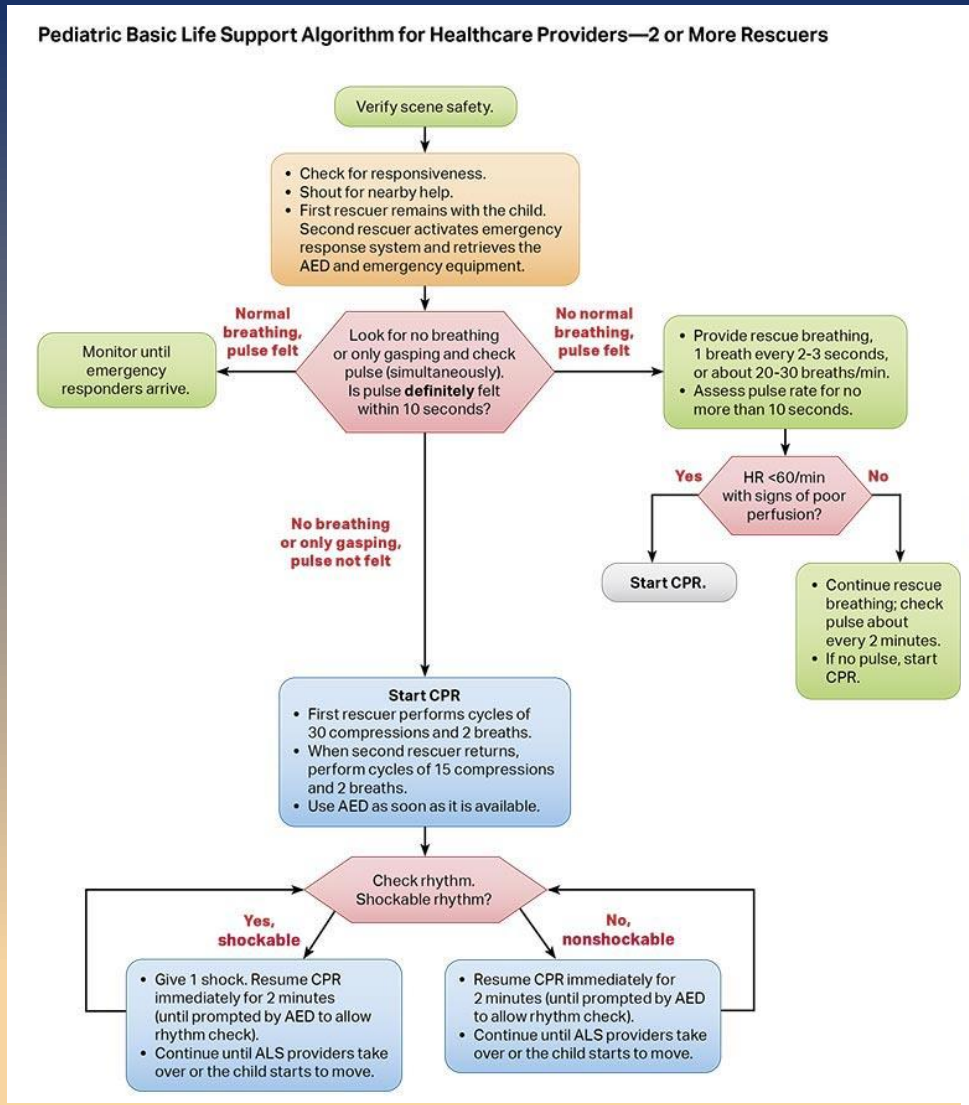
2 Rescuer


Pediatric Basic Life Support Algorithm for Healthcare Providers—2 or More Rescuers
Verify scene safety.
• Check for responsiveness.
• Shout for nearby help.
• First rescuer remains with the child. Second rescuer activates emergency response system and retrieves the AED and emergency equipment.
Look for no breathing or only gasping and check pulse (simultaneously). Is pulse definitely felt within 10 seconds?
Normal breathing, pulse felt
Monitor until emergency responders arrive.
No normal breathing, pulse felt
• Provide rescue breathing, 1 breath every 2-3 seconds, or about 20-30 breaths/min.
• Assess pulse rate for no more than 10 seconds.
HR <60/min with signs of poor perfusion?
Yes
No
Start CPR.
• Continue rescue breathing; check pulse about every 2 minutes.
• If no pulse, start CPR.
No breathing or only gasping, pulse not felt
Start CPR
• First rescuer performs cycles of 30 compressions and 2 breaths.
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• Use AED as soon as it is available.
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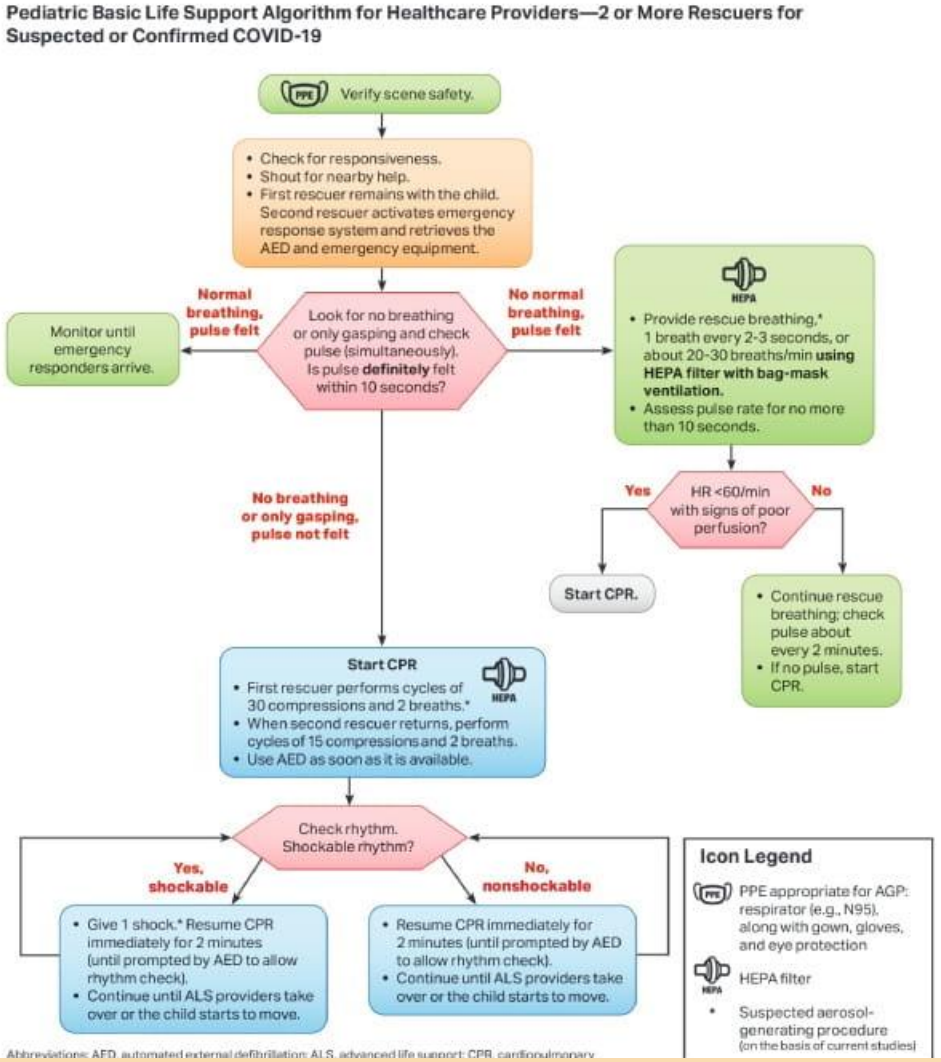
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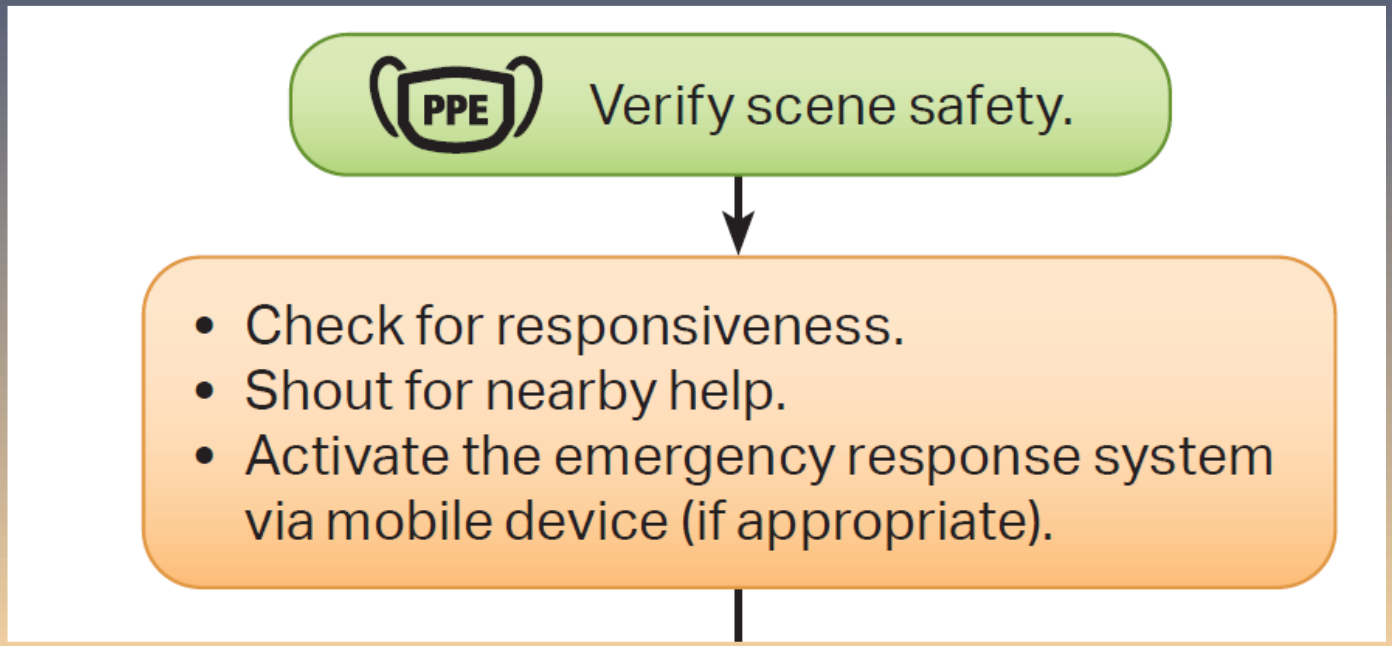
Abbreviations: AED, automated external defibrillation; ALS, advanced life support; CPR, cardiopulmonary

Pediatric BLS for HCPs _ COVID19
Single Rescuer



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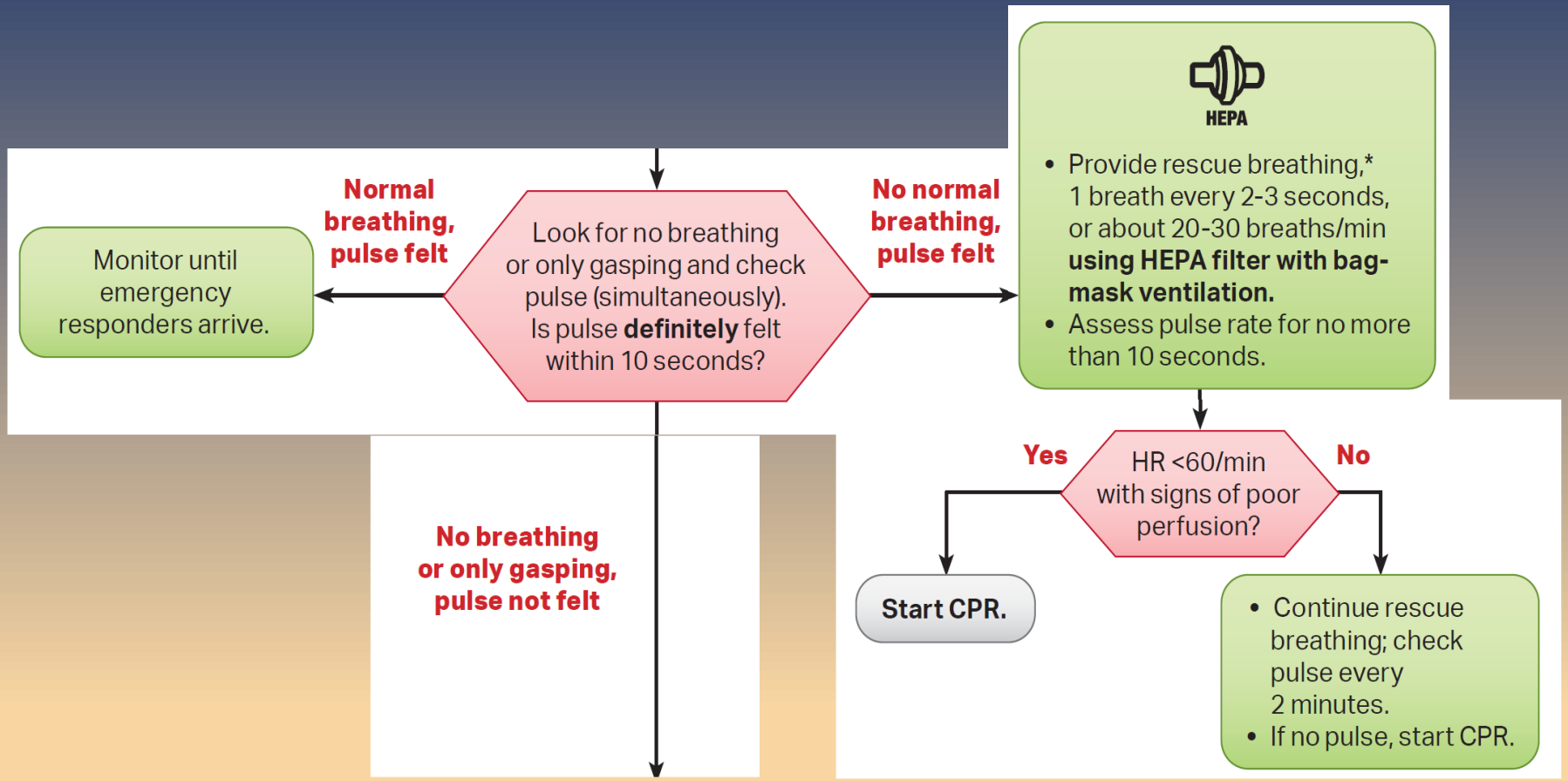
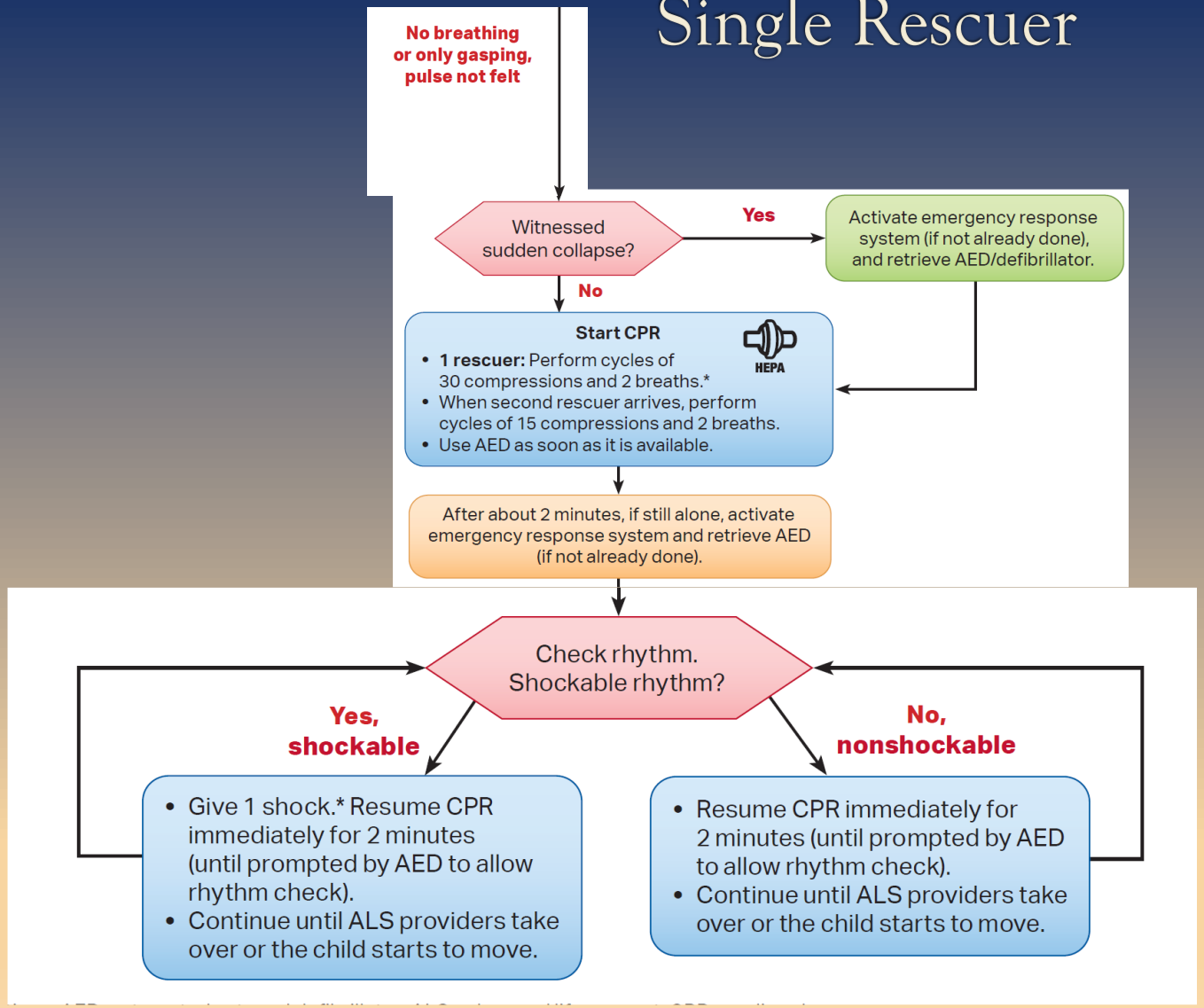
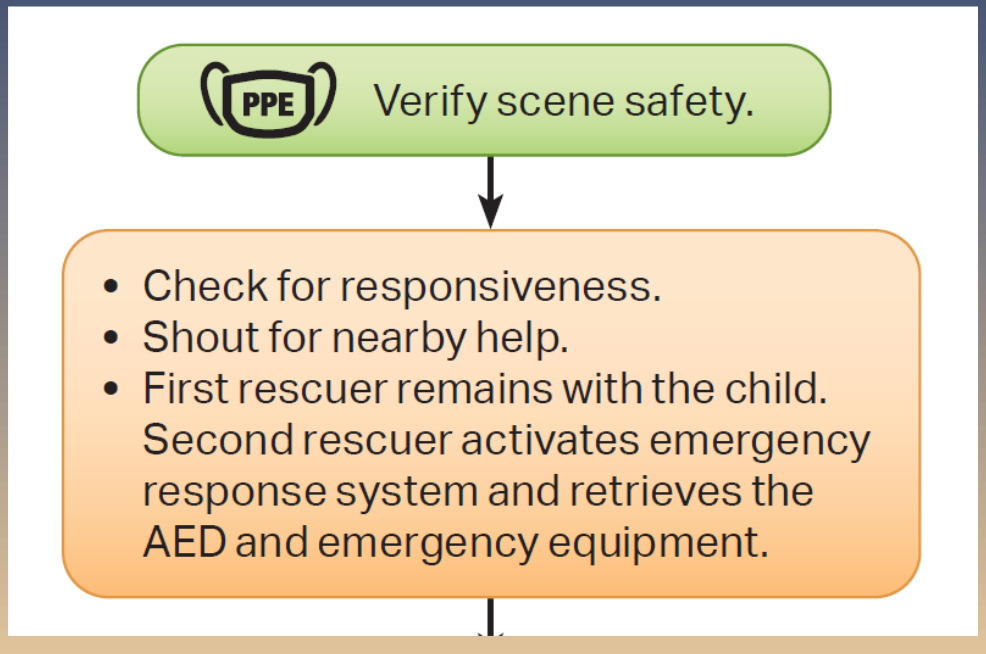


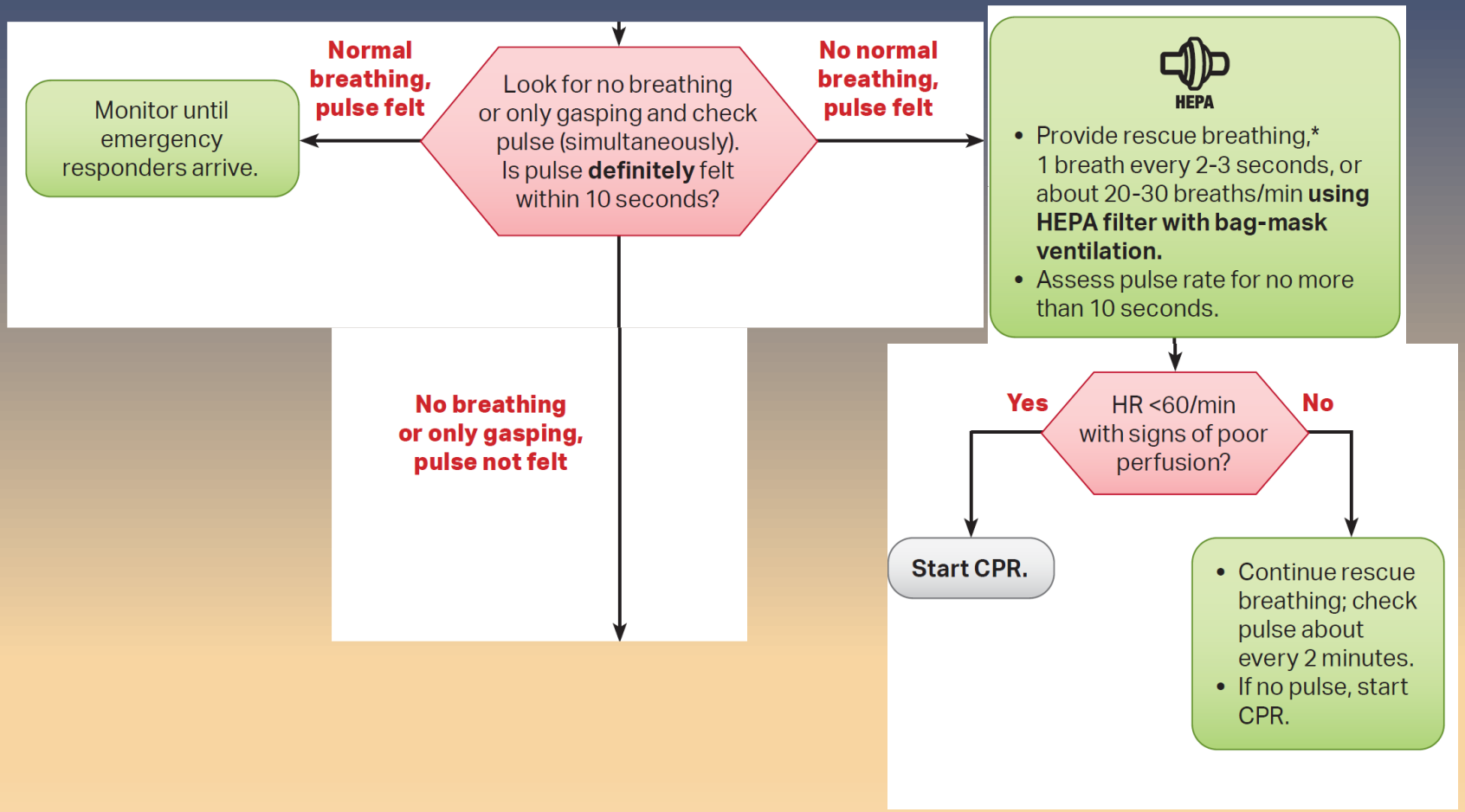
Pediatric BLS for HCPs _ COVID19 Single Rescuer



Pediatric BLS for HCPs _ COVID19
2 Rescuers



Pediatric BLS for HCPs _ COVID19
2 Rescuers



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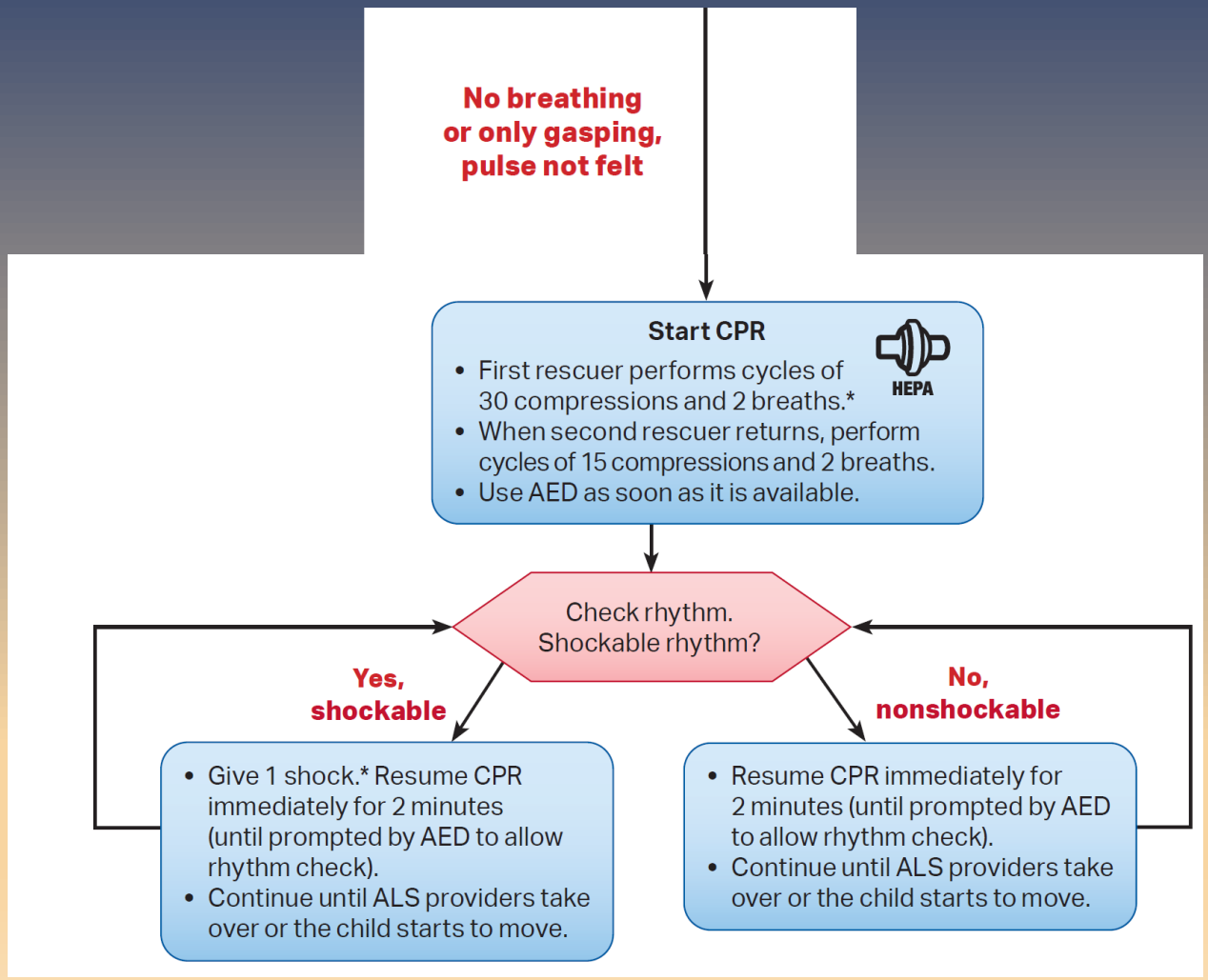


CPR at a Glance

BLS for Healthcare Professionals

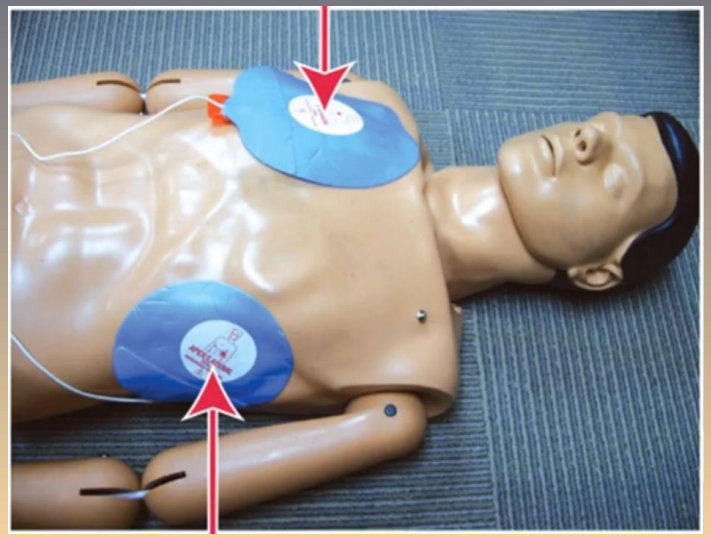
CABs of CPR

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 **WITNESS THE COLLAPSE** 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 **has** 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 **NO** detectable pulse: **Begin CPR** Minimize interruptions	**1 rescuer:** 30 compressions : 2 breaths **2+ rescuers:** 30 compressions : 2 breaths Use AED as soon as it arrives	**1 rescuer:** 30 compressions : 2 breaths **2+ rescuers**: 15 compressions : 2 breaths Use the AED as soon as it arrives	
Compression rate	100 - 120 compressions per minute		
Hand placement	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 depth	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.		

AED

دفیبریلاسیون سریع با کمک AED

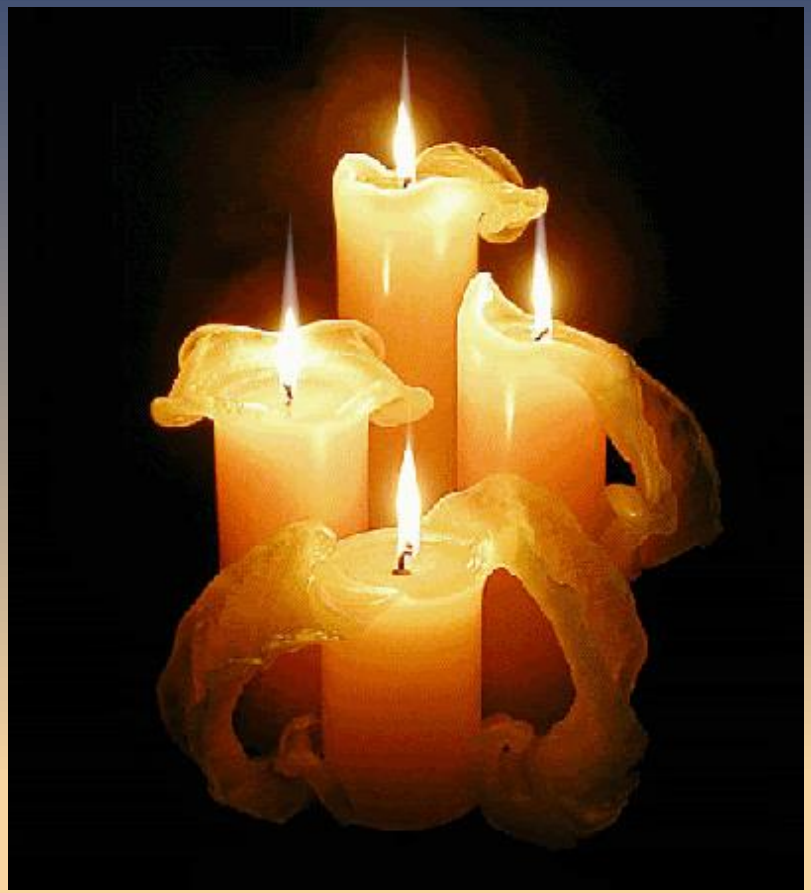
- روشن کردن دستگاه
- چسباندن پدها
- آنالیز ریتم
- دادن شوک در صورتی که دستگاه ریتم را قابل شوک اعلام می کند (پس از جدا شدن از بیمار)
- ماساژ سریع قفسه سینه به مدت 2 دقیقه پس از شوک
- آنالیز مجدد ریتم با AED
- ریتم غیر قابل شوک



Despite recent gains, less than 40% of adults receive layperson-initiated CPR, and fewer than 12% have an AED applied before EMS arrival.

با وجود دستاوردهای اخیر، کمتر از ۴۰٪ بزرگسالان CPR اولیه از حاضران در صحنه، و کمتر از ۱۲٪ آنها AED را قبل از رسیدن اورژانس دریافت کرده اند.

Thanks



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