

# Basic Life Support



Dr Reza Safaee

Emergency Medicine Specialist



# BLS healthcare provider adult cardiac arrest algorithm

Verify scene safety.

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).

## Check Response

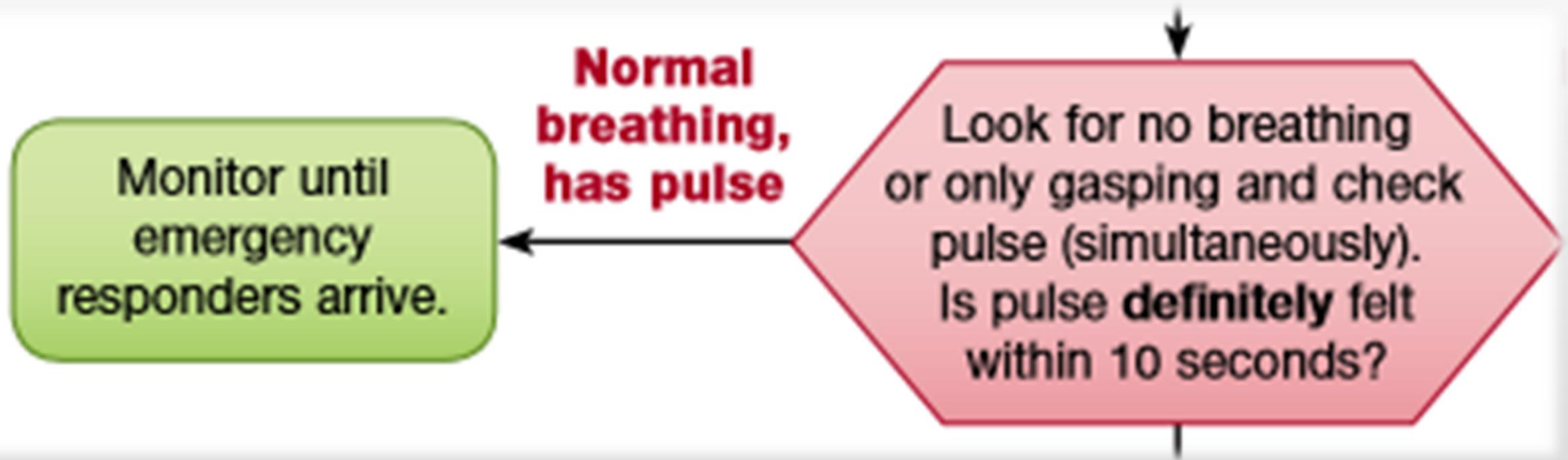


SHOUT





# BLS healthcare provider adult cardiac arrest algorithm



↓  
Look for no breathing  
or only gasping and check  
pulse (simultaneously).  
Is pulse **definitely** felt  
within 10 seconds?

**No normal  
breathing,  
has pulse**

Provide rescue breathing:  
1 breath every 5-6 seconds, or  
about 10-12 breaths/min.

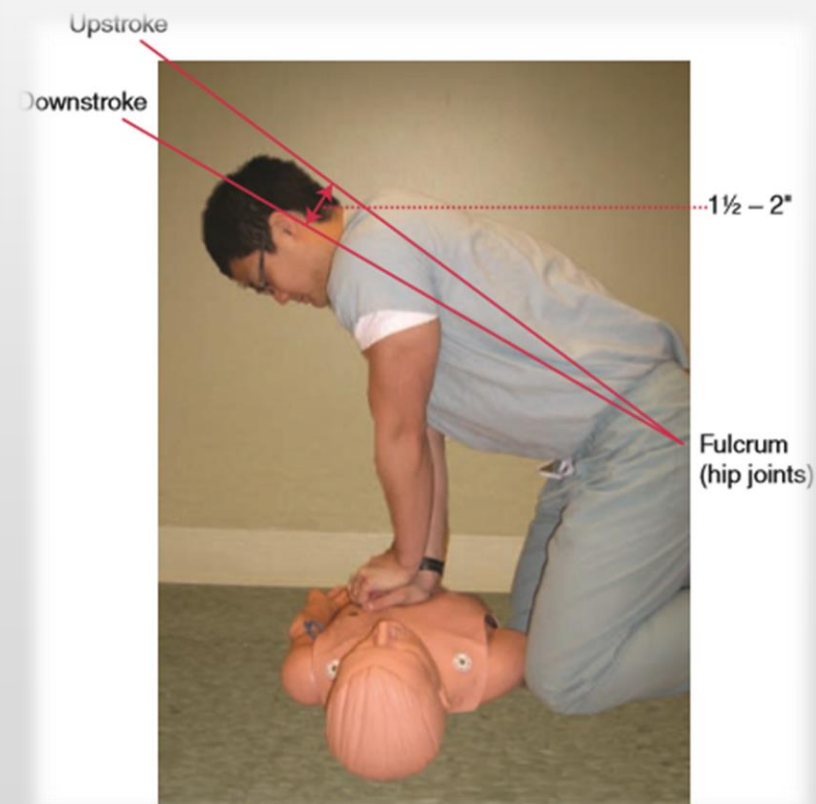
- Activate emergency response system (if not already done) after 2 minutes.
- Continue rescue breathing; check pulse about every 2 minutes. If no pulse, begin CPR (go to "**CPR**" box).
- If possible opioid overdose, administer naloxone if available per protocol.



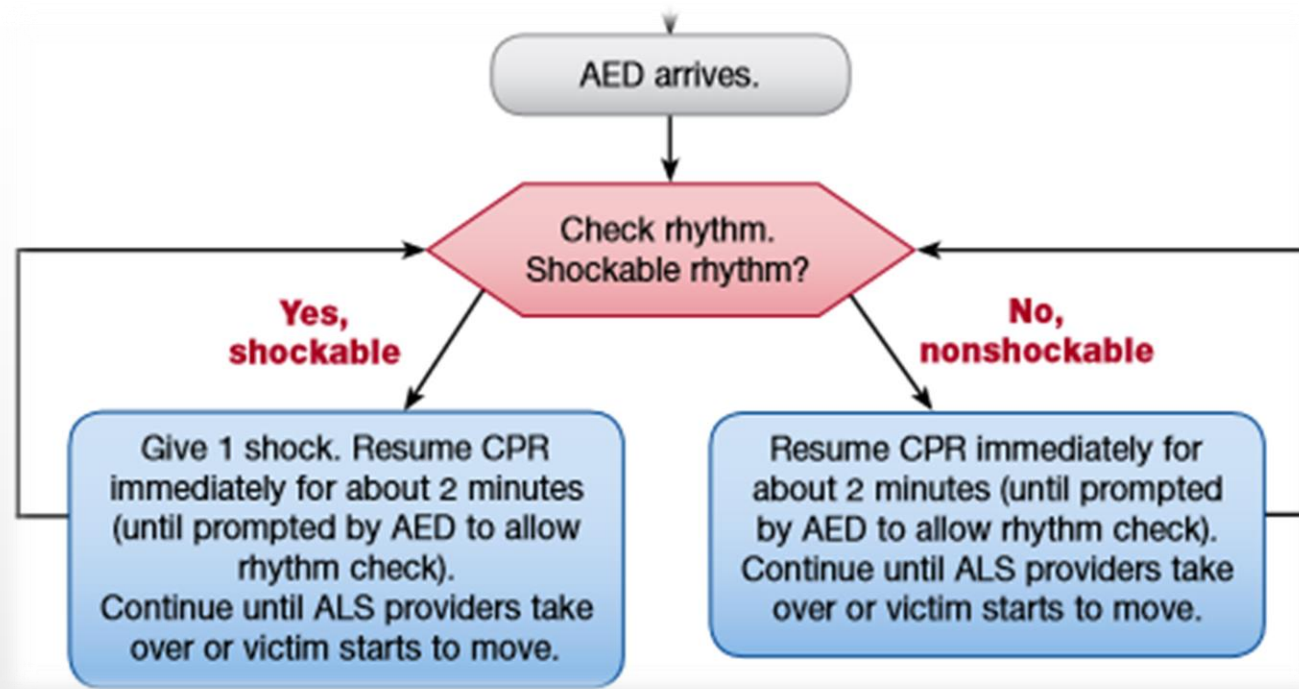
Look for no breathing  
or only gasping and check  
pulse (simultaneously).  
Is pulse **definitely** felt  
within 10 seconds?

**No breathing  
or only gasping,  
no pulse**

**CPR**  
Begin cycles of  
30 compressions and 2 breaths.  
Use AED as soon as it is available.







## Rescuers Should

Perform chest compressions at a rate of 100-120/min

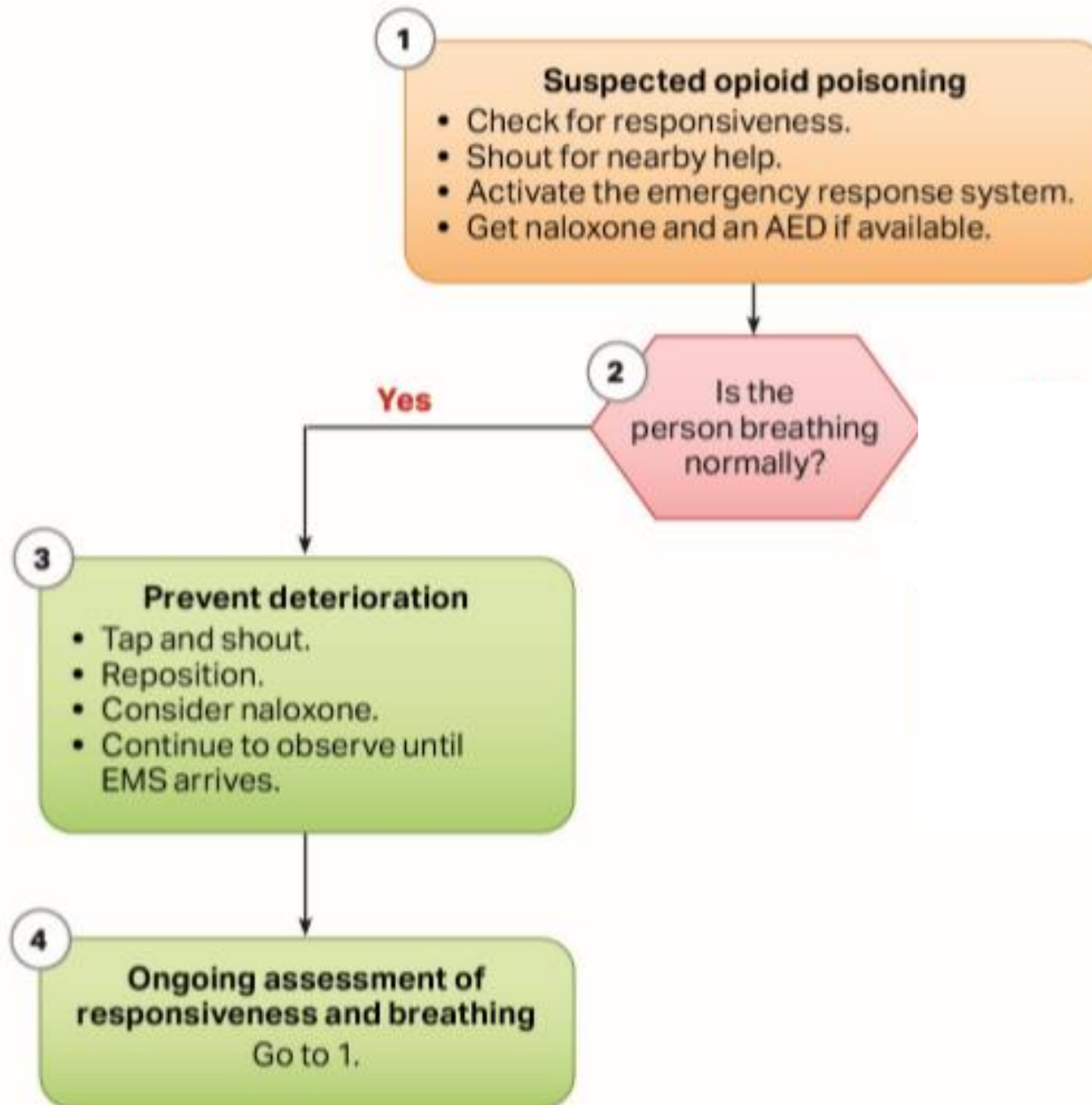
Compress to a depth of at least 2 inches (5 cm)

Allow full recoil after each compression

Minimize pauses in compressions

Ventilate adequately (2 breaths after 30 compressions, each breath delivered over 1 second, each causing chest rise)

**Figure 5. Opioid-Associated Emergency for Lay Responders Algorithm.**





1

### Suspected opioid poisoning

- Check for responsiveness.
- Shout for nearby help.
- Activate the emergency response system.
- Get naloxone and an AED if available.

2

Is the  
person breathing  
normally?

No

5

### Start CPR\*

- Give naloxone.
- Use an AED.
- Resume CPR until EMS arrives.

1

**Suspected opioid poisoning**

- Check for responsiveness.
- Shout for nearby help.
- Activate the emergency response system.
- Get naloxone and an AED if available.

2

Is the person breathing normally?

No

5

Yes

Does the person have a pulse?  
(Assess for  $\leq 10$  seconds.)

No

6

**Support ventilation**

- Open the airway and reposition.
- Provide rescue breathing or a bag-mask device.
- Give naloxone.

7

**Start CPR**

- Use an AED.
- Consider naloxone.
- Refer to the BLS/Cardiac Arrest algorithm.

1

### **Suspected opioid poisoning**

- Check for responsiveness.
- Shout for nearby help.
- Activate the emergency response system.
- Get naloxone and an AED if available.

2

Is the  
person breathing  
normally?

**Yes**

3

### **Prevent deterioration**

- Tap and shout.
- Open the airway and reposition.
- Consider naloxone.
- Transport to the hospital.

4

**Ongoing assessment of  
responsiveness and breathing**

Go to 1.



# CHOKING AND FOREIGN-BODY MANAGEMENT



**FIGURE 109-3.** Back blows to clear airway of choking infant. [Image used with permission of Rita K. Cydulka, MD, MS, MetroHealth Medical Center.]



**FIGURE 109-4.** Chest thrusts to clear airway of choking infant. [Image used with permission of Rita K. Cydulka, MD, MS, MetroHealth Medical Center.]

# CHOKING AND FOREIGN-BODY MANAGEMENT

- After 30 compressions, open the airway and look for a foreign body in the mouth
- Attempt to deliver two rescue breaths. If successful, then check for a pulse.



# OBSTRUCTED AIRWAY (HEIMLICH) MANEUVER



**FIGURE 22-6.** Standing Heimlich maneuver administered to conscious victim of foreign body airway obstruction. [Image used with permission of Rita K. Cydulka, MD, MS, MetroHealth Medical Center.]



**Heimlich maneuver in pregnancy**



# OBSTRUCTED AIRWAY



**FIGURE 22-7.** Prone Heimlich maneuver administered to unconscious victim of foreign body airway obstruction. [Image used with permission of Rita K. Cydulka, MD, MS, MetroHealth Medical Center.]

**Thanks For Attention**