

# CPR | AED | & CHOKING

MODULE 7



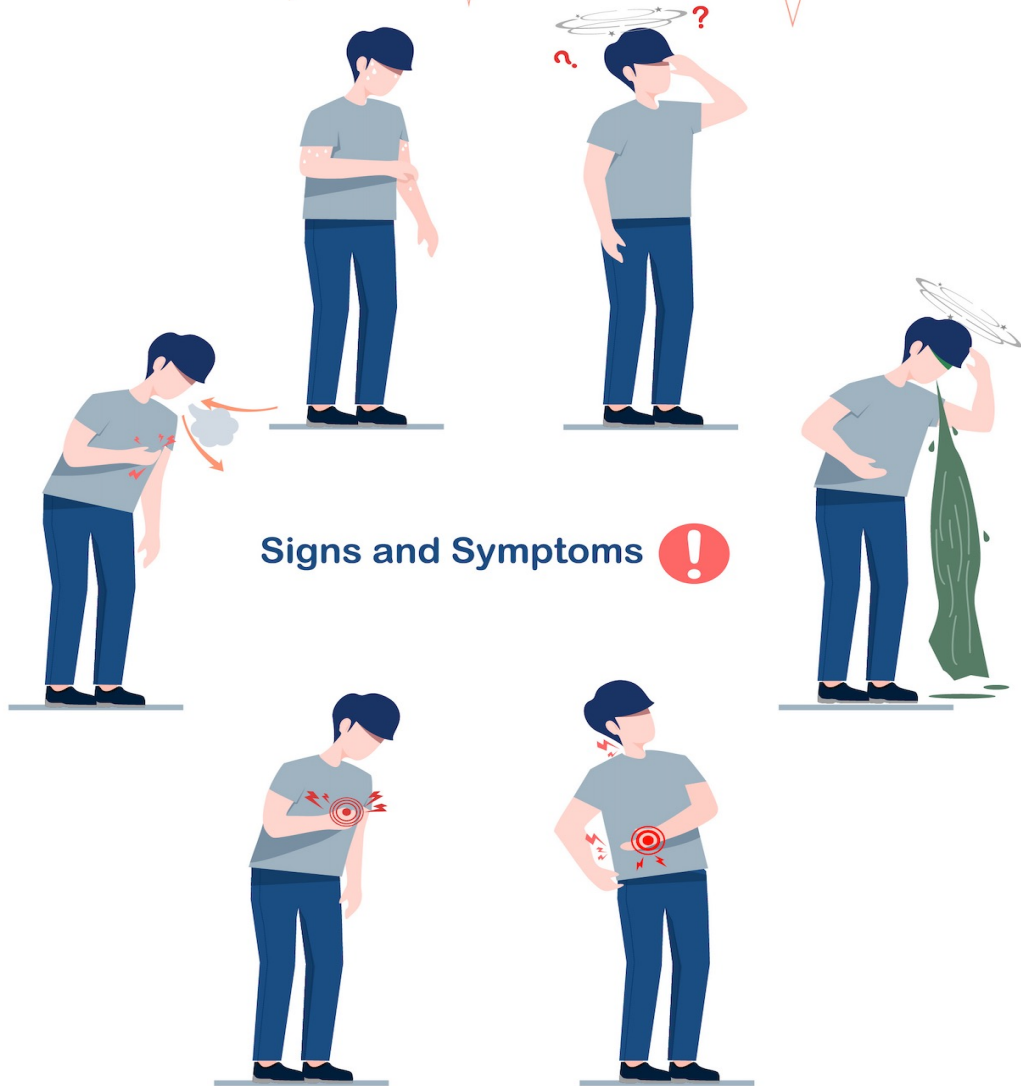


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## Chest Pain

- First aid for chest pain depends on the cause. Causes of chest pain can vary from minor problems, such as heartburn or emotional stress, to serious medical emergencies, such as a heart attack or blood clot in the lungs (pulmonary embolism).
- It can be difficult to tell if your chest pain is due to a heart attack or other health condition, especially if you've never had chest pain before. Don't try to diagnose the cause yourself. Seek emergency medical help if the patient has unexplained chest pain that lasts more than a few minutes
- Stay calm call 911 and Public Safety (650-738-7000)
- If patient is prescribed aspirin for cardiac care, you may help the patient self-administer aspirin
- If patient is prescribed nitroglycerin, you may help the patient self-administer
- Begin CPR on the person if they are unresponsive and not breathing
- Use an Automated External Defibrillator (AED)

# Heart Attack



Signs and Symptoms !

## ! Risk factors



High blood pressure

## + Preventions



# Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED)

## *Adult and Child CPR and AED*

- **CHECK** the scene for safety, form an initial impression and use personal protective equipment (PPE)
- If the person appears unresponsive, **CHECK** for responsiveness, breathing, life-threatening bleeding or other life-threatening conditions using shout-tap-shout
- If the person does not respond and is not breathing or only gasping, **CALL 9-1-1 and get an AED**
- Place person on their back on a firm flat surface
- **Give 30 chest compressions**
  - Hand Position: Two hands centered on the chest
  - Body Position: Shoulders directly over hands; elbows locked
  - Depth: At least 2 inches or  $2/3$
  - Rate: 100 to 120 compressions per minute
  - Allow chest to return to normal position after each compression
- **Give 2 rescue breaths**
  - Open the airway to a neutral position using the head-tilt/chin-lift technique
  - Ensure each breath lasts about 1 second and makes the chest rise; allow air to exit before giving the next breath
- Continue giving sets of **30 chest compressions and 2 rescue breaths. Use an AED as soon as one is available**





# Infant CPR & AED

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- Tap and Shout
- Yell for help. Send someone to phone 911
- Look for no breathing or only gasping
- Push hard and fast. **Give 30 compressions and 2 breaths**
- Open the airway and give 2 breaths
- Repeat sets of 30 compressions and 2 breaths

# LIFEPAK CR<sub>2</sub> AED

- The Office of Emergency Management have chosen the Physio Control LIFEPAK CR<sub>2</sub> AED as the standardized model which has been implemented at Cañada College, the College of San Mateo, Skyline College, and the District Office.
- The CR<sub>2</sub> offers industry leading technology which allows continual chest compressions during electrocardiogram (EKG) rhythm analysis thereby reducing pauses between CPR and defibrillation.
- In an AED comparison study, the CR<sub>2</sub> helped lay responders deliver the highest overall CPR quality.





**No buttons!**  
Just lift the lid and follow the commands



**Easy switch to paediatric mode,**  
no separate pads needed



**More effective CPR**  
chest compressions do not have to be stopped for heart analysis



**Fast time to shock**  
if required will administer first shock within 10 seconds



**Easy to manage**  
battery & pads only need to be replaced after four years



**WiFi Connectivity**  
online portal & email notifications keep you up to date on the status of your device

# Physio-Control LIFEPAK CR2 AED

- The Physio-Control LIFEPAK CR2 AED as the standardized model, which will be implemented at Cañada College, the College of San Mateo, Skyline College, and the District Office.
- The CR2 offers industry-leading technology which allows continual chest compressions during electrocardiogram (EKG) rhythm analysis thereby reducing pauses between CPR and defibrillation.
- In an AED comparison study, the CR2 helped lay responders, deliver the highest overall CPR quality



# CR2 Configurations

## *Fully Automatic Configuration*

**Does NOT require a manual press** of the “**shock**” button to deliver the defibrillation.

The AED will alert the rescuer that the AED will deliver a shock.

It is the rescuer’s responsibility to ensure no one is touching the victim prior or during the delivery of the shock.

Use, “**I’m clear, you’re clear, we’re all clear**”, prior to the AED delivering the shock to the patient.

## *Semi Automatic Configuration*

**Requires manual press** of the “**shock**” button to deliver the defibrillation.

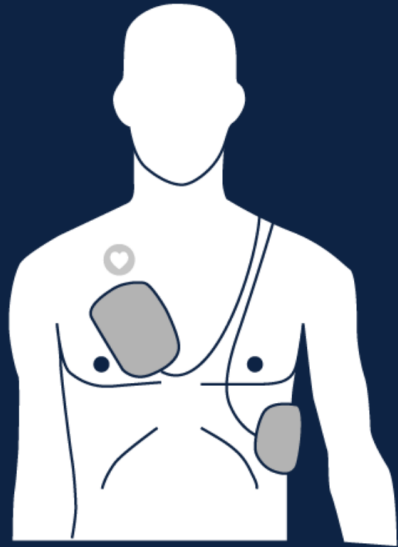
Ensure no one is in contact with the patient prior to delivering the shock.

Use, “**I’m clear, you’re clear, we’re all clear**”, prior to delivering the shock to the patient.



# AED Pad Placement

## *Adult & Child*

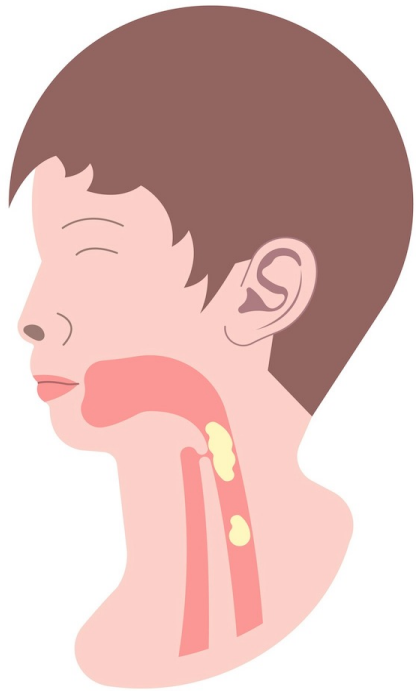


- 1: Right below right collarbone**  
At least one inch from implanted medical device.
- 2: Lower left chest**

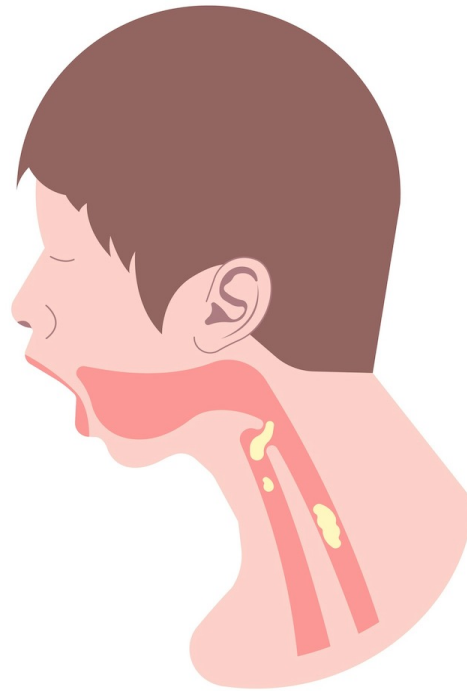


- 1: Right below right collarbone**
- 2: Lower left chest**

# Adult & Child Choking



**SWALLOWING**



**CHOKING**

- Recognize a severe airway block
  - Make the choking sign
  - Cannot breathe, cough, speak, or make sounds
- Ask, “Are you choking?”, If the person nods yes, say “Can I help you?”
- Give thrust slightly above the belly button until

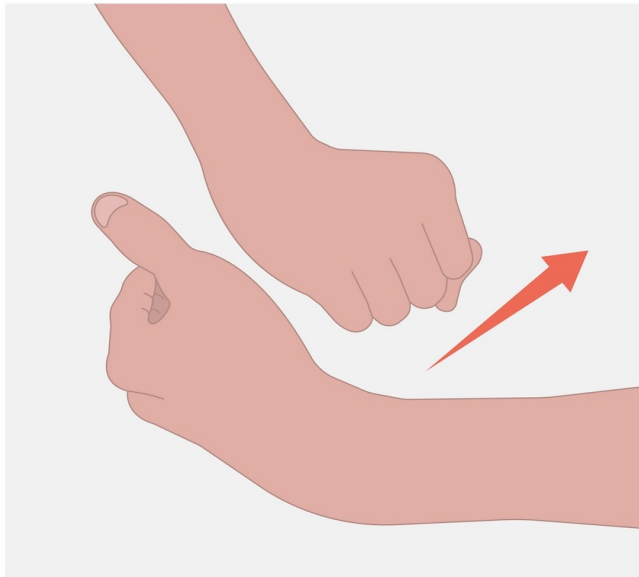
A	B	C
Object is forced out	Person can breathe and make sounds	Person becomes unresponsive

- If the person stops responding
  - Shout for help
  - Phone or have someone else phone 9-1-1 and get an AED. Put the phone on speaker mode so that you can talk to the dispatcher
  - Provide CPR if needed, starting with compressions
  - Look in the mouth. If you see an object in the mouth, take it out.
    - Give 2 breaths and then repeat 30 compressions
  - Continue CPR until
    - The person moves, speaks, blinks, or otherwise reacts
    - Someone with more advanced training arrives and takes over

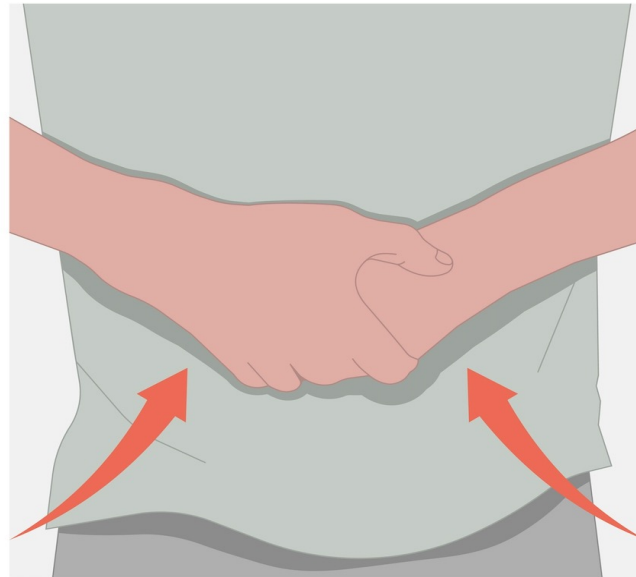
# HEIMLICH MANEUVER

**1** STAND BEHIND THE PERSON

**2** GRASP YOUR FIST WITH YOUR OTHER HAND



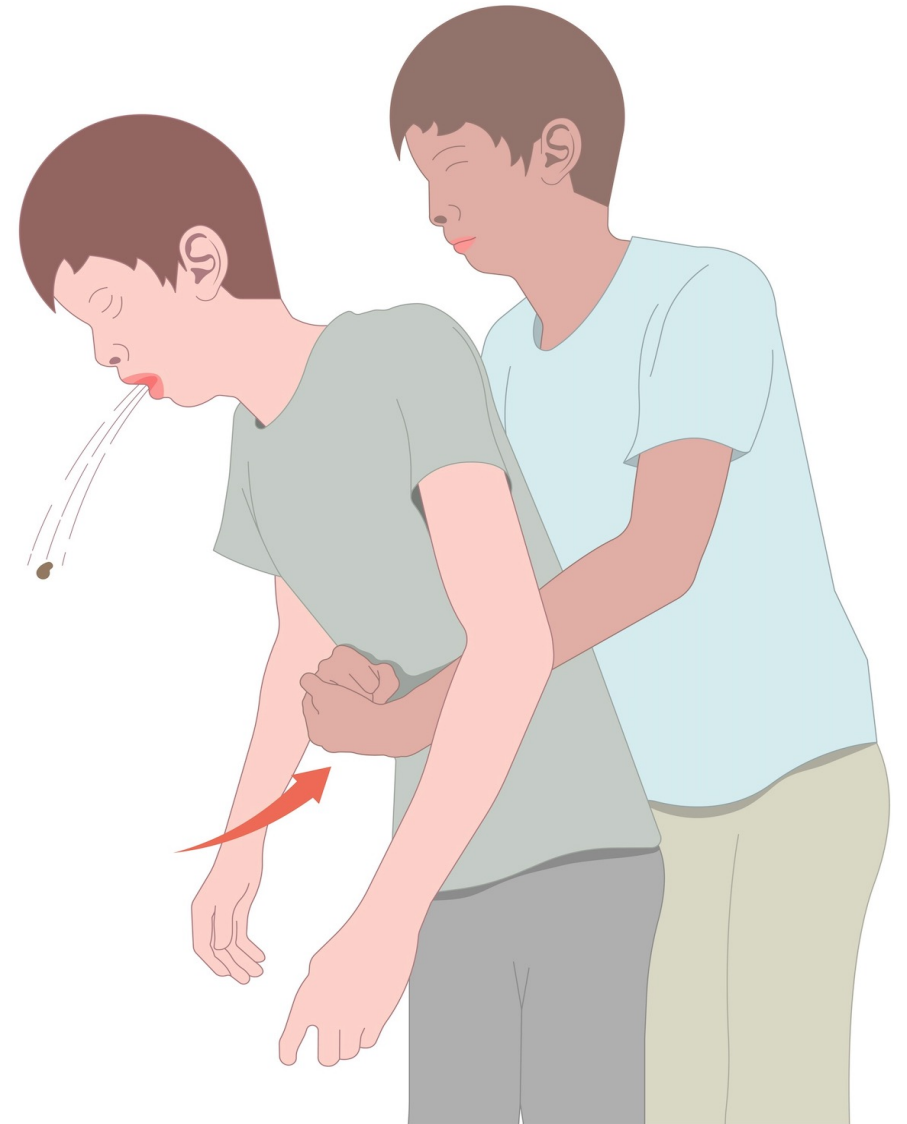
**3** PLACE A FIST SLIGHTLY ABOVE THE UPPER ABDOMINAL AREA



**5** REPEAT UNTIL THE OBJECT IS EJECTED OR THE PERSON FORCEFULLY COUGHS

**DIAL FOR AN AMBULANCE IMMEDIATELY IF THE OBJECT HAS NOT DISLODGED AFTER 3 REPETITIONS**

**4** PRESS YOUR FIST HARD INTO THE UPPER ABDOMINAL AREA WITH A QUICK INWARD AND UPWARD



# Infant Choking

Recognize a severe airway block

Cannot breathe or make a sound

Has a cough that has no sound

Remove object (support infant's head)

Give 5 back blows; hold the infant facedown and give slaps with the heel of your hand between the

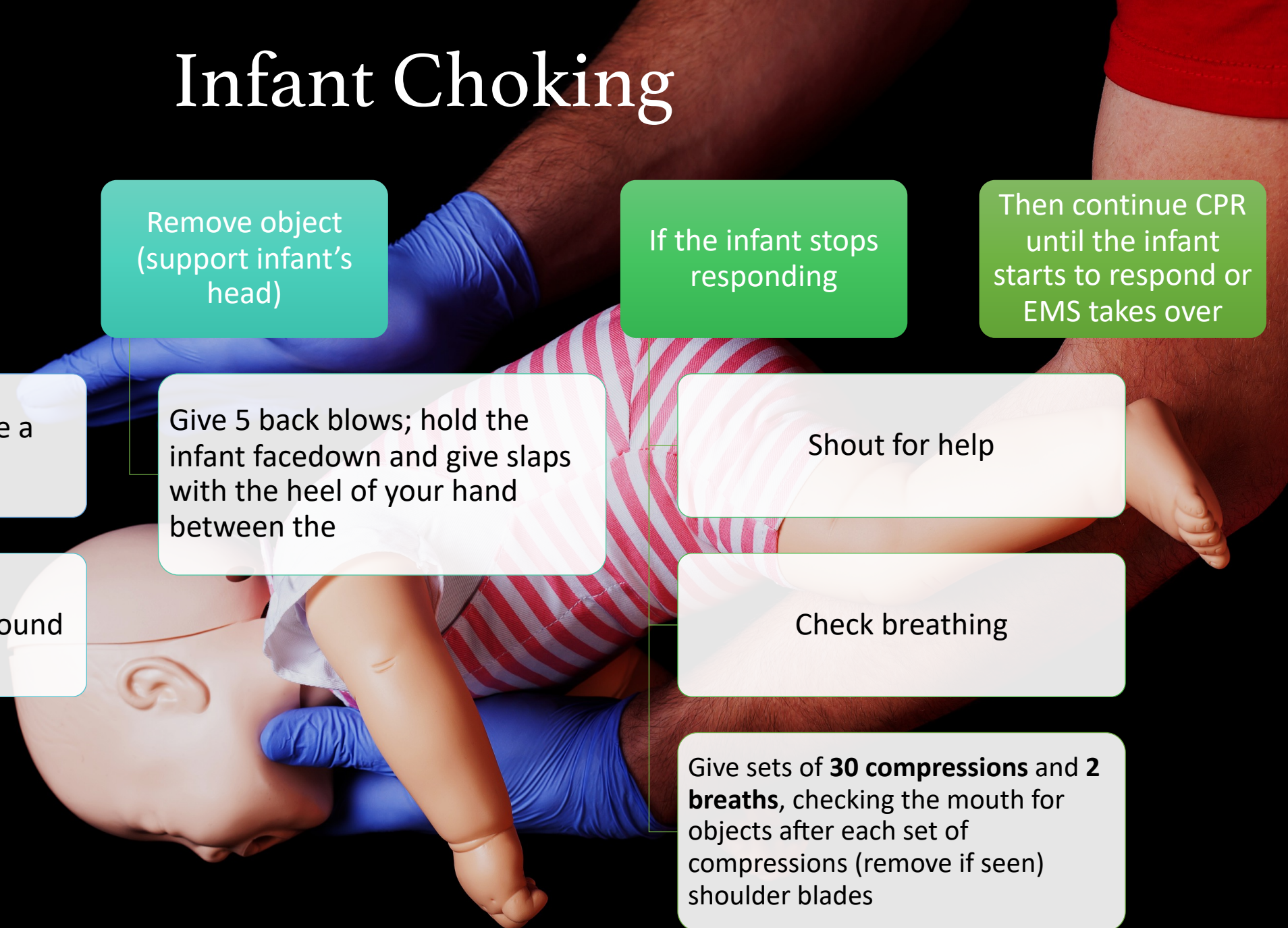
If the infant stops responding

Shout for help

Check breathing

Give sets of **30 compressions** and **2 breaths**, checking the mouth for objects after each set of compressions (remove if seen) shoulder blades

Then continue CPR until the infant starts to respond or EMS takes over



# CHOCKING FIRST AID FOR INFANT



REPEAT STEPS 1 AND 2  
UNTIL THE OBJECT IS  
EJECTED OR THE PERSON  
COUGHS

