

CARDIOPULMONARY RESUSCITATION



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Objectives

- *By the end of this lecture, the student will be able to:*
- Define CPR technique
- Identify components of CPR technique



CPR

- A person whose breathing & heartbeat have stopped may need CPR.
- **Cardiopulmonary Resuscitation**- *is a life-saving first-aid procedure that combines rescue breaths with chest compressions, supplying oxygen to the body until normal body functions can resume.*
- You must be properly trained by a professional and certified before administering CPR.



CARDIOPULMONARY RESUSCITATION

Cardiopulmonary Resuscitation (CPR) is a first aid technique to help people who suffer a “cardiac arrest” (their heart stops beating).

- It involves doing chest compressions and rescue breaths to keep the patient alive until a **defibrillator** arrives.
- A defibrillator is an electrical device which can be used to help restart someone's heart.

CPR is as easy as

C - A - B



Compressions
Push hard and fast
on the center of
the victim's chest.



Airway
Tilt the victim's head
back and lift the chin
to open the airway



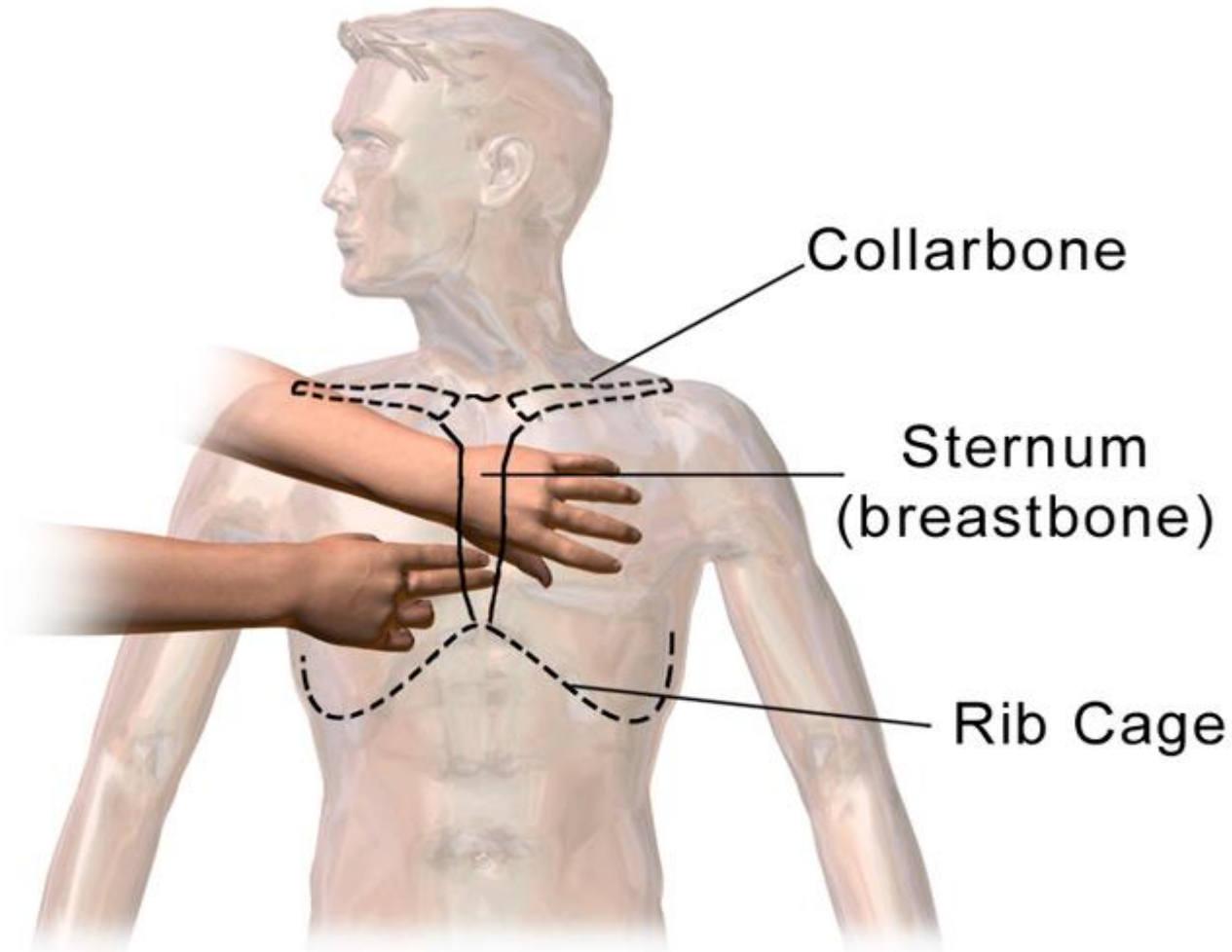
Breathing
Give mouth-to-mouth
rescue breaths

Early chest compression can immediately circulate oxygen that is still in the bloodstream. By changing the sequence, chest compressions are initiated sooner and the delay in ventilation should be minimal.

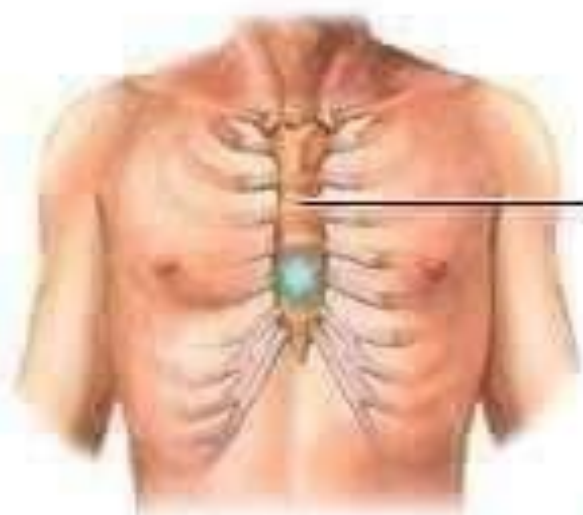
2010 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science With Treatment Recommendations

N.B: In victim's assessment start with ABC, But in performing CPR, start with CAB

Commence CPR



Locate the Sternum



Breast
bone
(sternum)

Chest compressions
are performed
between the nipples



ADAM.

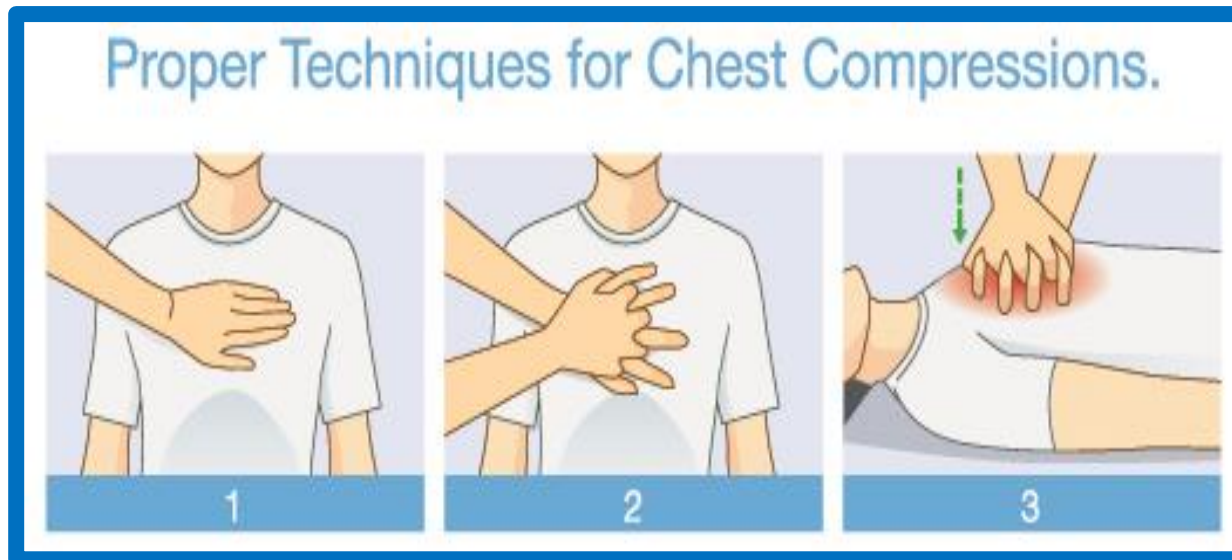
CPR: chest compression

1. After an ambulance has been called, you should immediately start CPR.
2. First, you should give 30 chest compressions
3. Place your hands in the centre of the person's chest, over the breastbone (sternum)
4. Interlock your fingers
5. Push down 30 times at a rate of 100 - 120 compressions / minute



CPR: chest compression

- ❑ Ensure your elbows are locked and your shoulders positioned above the chest.
- ❑ Push down to a depth of **5 – 6cm**
- ❑ Ensure you release fully after each compression. Do not 'lean' on the victim's chest.





CPR



CPR: Rescue Breaths “Ratio”

– rescue breathing...

1. Keeping the victim's head in the proper position, pinch nostrils shut.
2. Place your mouth over the victim's mouth forming a seal. Give 2 slow breaths, each for about 2 seconds long. The victim's chest should rise with each breath.



Place your mouth
over the person's
mouth and exhale

CPR: Rescue Breaths “Ratio”

- ☐ If you have been trained in CPR and are willing to, give two rescue breaths after every thirty chest compressions.
- ☐ Tilt the victim's head backwards, lift their chin and then pinch their nose
- ☐ Make a seal over their mouth and breath in for approximately **one** second. **Do not** overinflate the patient's chest – you are not blowing up a balloon!

- ❑ Continue the cycle of **30 chest compressions** to **2 rescue breaths** until help arrives.
- ❑ If there is more than one first aider, swap over doing chest compressions every two minutes.
- ❑ If **a defibrillator** جهاز الصدمات الكهربائية arrives it should be used immediately.

N.B

☐ The Canadian Red Cross recognizes that **compression-only CPR** is an acceptable alternative for those who are unwilling, unable, untrained, or are no longer able to perform full CPR

☐ **Compression-only CPR** is giving continuous chest compressions of approximately 100 compressions per minute, without giving rescue breaths

Once you begin CPR, do not stop except in one of these situations:

1. Return vital signs (breathing)
2. A defibrillator is available and ready to use.
3. You are too exhausted to continue.
4. The scene becomes unsafe.



Questions