

High Performance CPR

The importance of good CPR

- CPR is the foundation of the resuscitation arsenal.
- High performance CPR improves the effectiveness of defibrillatory shock.
- High performance CPR improves the effectiveness of medication treatments.
- The longer the pause preceding shock or following a shock, the lower the chances of survival.

The components of CPR

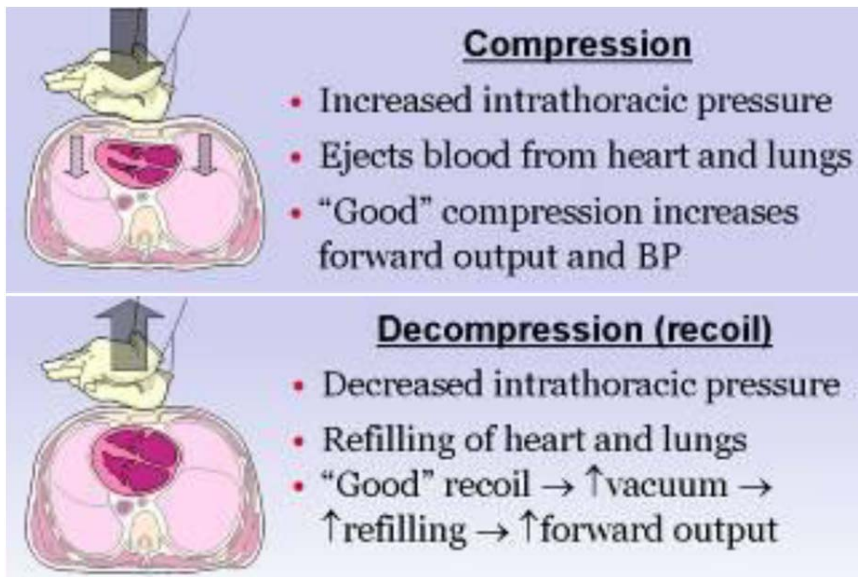
- Better compressions lead to better organ perfusion which leads to better resuscitation.
- Greater depth of compressions=increased likelihood of a successful shock.
- **Compression**=Organ perfusion.
- **Decompression**=Heart perfusion.





Ventilations

- Ventilation is believed to be a vital component of resuscitation, **but too much of a good thing (hyperventilation) can decrease survival.**

Recoil/Decompression

- If decompression is incomplete, compression is not as effective due to inadequate blood volume in the heart and lungs.
- Inadequate decompression compromises both coronary *and* cerebral blood flow
- Even limited periods of incomplete decompression can have a lingering effect on coronary and cerebral perfusion pressures, which may remain low even after this deficiency in CPR has been corrected.



Legend	
	EMR
	EMT
	Intermediate
	Paramedic

No matter which model is used or how many responders are present, the following are **always** true:

- C-A-B.
- Minimize interruptions in compressions.
- Compress at least 100/min, 110/min preferred (use of a metronome is recommended).
- Allow complete chest wall recoil/decompression between compressions (2.5 inches is the recommended depth).
- Very brief rhythm assessment every 2 minutes or, if using waveform capnography, when the ETCO₂ begins to rise.
- Rotate compressors every 2 minutes.
- **Hover over patient with hands ready during defibrillation** so compressions can start immediately after the shock (or analysis) has occurred.