Learn the facts about chest compression rates:

The quality of CPR and rate of chest compressions during cardiac arrest have a major impact on neurologically-intact survival.

American Heart Association Guidelines (2010) recommend at least 100 chest compressions per minute, but studies show approximately 50% of healthcare providers do not compress at the correct rate.

Why is it important to compress the chest at the correct rate?

- Compression rates that are TOO SLOW (<100/min) are not effective, are insufficient to achieve optimal resuscitation hemodynamics, and negatively impact survival.
- Healthcare providers commonly ascribe to the “push hard, push fast” philosophy, but chest compressions that are TOO FAST compromise coronary blood flow and preload due to a shortened diastolic period and make it difficult to achieve the recommended compression depth of at least two inches.

NEW science!

Recent data from the Resuscitation Outcomes Consortium (ROC) study found that:

- Return of spontaneous circulation (ROSC) and survival were both optimized when chest compressions were performed between 100-125/min. Survival declined when chest compressions were performed too fast (>125/min).¹
- The most optimal compression rates for survival varied depending on whether an ITD was used. The best survival rates were observed at a lower compression rate with an ITD (≈100/min), compared to CPR without an ITD (≈118/min).²
- The highest overall survival rates with neurologically-intact function were observed when an ITD was used at the AHA-recommended rate of 100/min.²

How should I put this knowledge into action?

- ASK YOURSELF: What’s my compression rate? The next time you perform CPR, pay attention to the chest compression rate being performed.
- Use a metronome or timing aide to help achieve the recommended rates of at least 100/min.


The generally cleared indication for the ResQPOD available for sale in the United States (US) is for a temporary increase in blood circulation during emergency care, hospital, clinic and home use. The version of the ResQPOD used in the ROC PRIMED Study is not yet approved for sale in the United States. Research is ongoing in the US to evaluate the long-term benefit of the ResQPOD for indications related to patients suffering from cardiac arrest. The studies listed here are not intended to imply specific outcomes-based claims not yet cleared by the US FDA.