

Traumatic Cardiac Arrest (Adult and Pediatric)

CFR and All Provider Levels

1. Begin CPR as per AHA guidelines
2. Control any bleeding as needed without interrupting CPR
3. Turn on the Automated External Defibrillator (AED)
4. Apply appropriately-sized AED pads to the patient's bare chest with minimal interruption of chest compressions
5. Connect AED pads and follow the AED voice prompts
6. Continue CPR, re-analyze every two (2) minutes and shock as indicated

CFR STOP

EMT

7. Request ALS assistance
8. Continue CPR and AED analysis with minimal interruption of chest compressions
9. Transport

EMT STOP

Paramedic

10. Continue CPR and defibrillation cycles with minimal interruption of chest compressions
11. If an AED is in place, transition from the AED to an ALS monitor after AED analysis and begin cardiac monitoring. Defibrillate with the following energy settings using appropriately-sized AED/monitor pads:
 - **ADULT:** Maximum joule setting possible
 - **PEDIATRIC:**
 - Initial defibrillation: 2 joules/kg
 - Second defibrillation as needed: 4 joules/kg
 - Subsequent defibrillations as needed: 10 joules/kg
12. If the cause of the cardiac arrest is suspected to be secondary to a medical condition that is non-traumatic, treat accordingly as a non-traumatic cardiac arrest
13. Perform needle decompression for a suspected tension pneumothorax (Appendix M: Needle Decompression of Tension Pneumothorax) as needed
14. Perform advanced airway management after second rhythm analysis
15. Obtain intravascular access via either large bore IV or intraosseous site. Consider intraosseous access for pediatric patients if needed
16. Administer crystalloid fluid 20 ml/kg IV (maximum 2 L)

Paramedic STOP

Medical Control Options

18. Administer additional crystalloid fluid 20 ml/kg IV (maximum 1 L)

Key Points / Considerations

- Do not interrupt compressions for placement of an advanced airway
- Traumatic arrests should be transported as soon as possible
- AED should be placed as soon as possible without interrupting compressions
- Artifact from vibrations in a moving ambulance may compromise the effectiveness of an AED
- Maximum joule setting may vary depending on the defibrillator used
- As per AHA, the benefit of double sequential defibrillation for refractory shockable rhythms has not been established
- If the cardiac monitor is unable to deliver the desired weight-based joule setting, use the closest setting without exceeding the desired setting