TRAUMATIC CARDIAC ARREST

Adult | **Pediatric**

Primary Direction

To provide guidelines for rapid, systematic patient assessment and intervention in the setting of traumatic cardiac arrest.

- Cardiac medications (i.e., Epinephrine, Amiodarone) have limited or no benefit in the setting of traumatic cardiac arrest.
- Interventions take priority over chest compressions in agonal or pulseless conditions.
  - Airway management
  - Needle decompression
  - Hemorrhage control
  - Fluid resuscitation

BLS

Blunt OR Penetrating traumatic arrest **PRIOR** to EMS arrival
with no Signs of Life (SOL) (e.g., pulse, respirations, heart tones, reactive pupils, reaction to pain)

- **Do Not Attempt Resuscitation**

Suspected medical cause – minor trauma not likely to be the cause of the arrest.

- **Follow Medical Cardiac Arrest Protocol**

Blunt OR Penetrating traumatic arrest **AFTER** EMS arrival
(e.g., absent or agonal pulse or respirations)

- **Start CPR – Continuous Chest Compressions** rate of 100 – 120 per minute, allow full chest recoil
- **Simultaneously treat reversible causes**
  - Treatment of reversible causes may supersede CPR as needed
  - AED placement and analysis is not indicated
  - SMR precautions are secondary to resuscitation and controlling airway

External Bleeding	Airway Obstruction / Hypoxia	Penetrating Chest Trauma

• Control external bleeding
  ○ Hemostatic dressing, wound packing
  ○ Tourniquet
	• Clear airway – Suction
	• Ventilate BVM with 100% Oxygen
	• Basic or advanced airways as indicated
		• Apply chest seal with one-way valve

ALS

Blunt OR Penetrating traumatic arrest with Asystole or Wide Complex PEA < 40 BPM and no SOL

- **Do Not Attempt Resuscitation**
- **Terminate Resuscitation if already initiated**

Traumatic Arrest Not Meeting Above Criteria

- **Rapid Transport to Trauma Receiving Center**
- **Start CPR, Defibrillate if necessary**
- **Simultaneously treat reversible causes**
- **Do not administer epinephrine or amiodarone**

Hypovolemia	Hypoxia	Tension Pneumothorax
• **Fluid Bolus NS 250 mL** IV/IO ○ Repeat if no ROSC	• Basic or advanced airways as indicated • Needle Cricothyroidotomy as indicated	• Needle Thoracostomy (Chest Decompression) • Consider bilateral decompression in traumatic arrest due to chest trauma

Direction

- Contact the Trauma Center and advise them of a "**TRAUMA ALERT"** (preferably from the scene)
- If ROSC is achieved continue transport to the closest Trauma Receiving Center
- Contact Base Hospital for additional treatment or transport decisions
- Transmit Code Report via Physio Control Monitor – Required for all cardiac arrests