

## Resuscitation in Traumatic Cardiac Arrest

### Aliases

Traumatic Cardiac Arrest (TCA)

### Patient Care Goals

1. Return of spontaneous circulation
2. Treatment and resolution of the underlying pathophysiology leading to the traumatic cardiac arrest
3. When appropriate, transport to the closest and most capable hospital within the defined trauma system

### Patient Presentation

#### Inclusion Criteria

Patients suffering blunt or penetrating trauma with cardiac arrest after arrival of EMS clinicians or while under the care of EMS clinicians (witnessed arrest or recent arrest with continued signs of life)

#### Exclusion Criteria

1. When the mechanism of injury does not correlate with the clinical condition, suggesting a nontraumatic cause of cardiac arrest, standard resuscitative measures should be followed. In such cases, refer to the [Resuscitation Section](#)
2. In victims of blunt or penetrating trauma with pulses or other signs of life on EMS clinician assessment refer to the [General Trauma Management Guideline](#)
3. In victims of blunt or penetrating trauma with rigor mortis, lividity, or evidence of injuries incompatible with life (including decapitation, hemicorporectomy). In such cases, refer to [Determination of Death/Withholding Resuscitative Efforts Guideline](#)
4. Resuscitation efforts may be withheld in any **blunt** trauma patient who, based on thorough primary assessment, is found apneic, pulseless, and asystolic on an EKG or cardiac monitor upon arrival of emergency medical services at the scene. In such cases, refer to the [Determination of Death/Withholding Resuscitative Efforts Guideline](#)
5. Resuscitation efforts may be withheld in victims of **penetrating** trauma found apneic, pulseless, and without other signs of life including pupillary reflexes, respiratory effort, spontaneous movement, response to pain, and electrical activity on EKG. In such cases, refer to the [Determination of Death/Withholding Resuscitative Efforts Guideline](#)

### Patient Management

#### Assessment

1. Management of traumatic cardiac arrest requires a balance of rapid, focused evaluation followed by prompt treatment of reversible life threats, including management of massive hemorrhage, airway management, decompression of tension pneumothorax, and resuscitation
2. Assess for signs of life, including pulses, respiratory effort, and evaluation of other signs of life
3. Assess for evidence of massive hemorrhage
  - a. Including evidence of massive external hemorrhage