# GENERAL TRAUMA MANAGEMENT

## ALL PROVIDERS / EMT

- ❑ Focused history and physical exam
- ❑ Continuous cardiac monitoring, ETCO2, and pulse oximetry, when available
- ❑ **Treatment Plan**
- ❑ **Primary Survey:**
  - Hemorrhage Control: Assess for and stop severe hemorrhage
  - Airway:
    - Assess airway patency, ask patient to talk to assess stridor and ease of air movement
    - Evaluate for injuries that may lead to airway obstruction including unstable facial fractures, expanding neck hematoma, blood or vomitus in the airway, facial burns/inhalation injury
    - Evaluate mental status for ability to protect airway (AVPU="P" or "U" or GCS <8). These patients will require airway protection.
    - Establish a patent airway (with cervical spine precautions)
  - Breathing:
    - Assess respiratory rate and pattern, symmetry of chest wall movement, and presence of breath sounds bilaterally
    - If chest injury present in a hypotensive patient, consider tension pneumothorax
      - Needle Thoracostomy: The 5th intercostal space at the anterior axillary line is the preferred location for needle thoracostomy placement
      - If placing at the 5th ICS at the anterior axillary line, a 5 cm catheter should be the maximum length used to minimize risk of injury to vital structures
      - Minimum catheter length should be 5 cm (and 8 cm may be necessary) for 2nd ICS/mid-clavicular line needle thoracostomy placement
    - For open chest wound, place an occlusive dressing sealed on 3 sides
  - Circulation:
    - Assess vital signs / check for radial pulse
    - If pelvis is unstable (based on lateral compression), place pelvic binder to stabilize pelvis
  - Disability (quick neurologic evaluation)
    - Assess pupils, motor movement of extremities, and mental status (AVPU)
  - Exposure/Environment:
    - Rapid evaluation of entire body (including back) to assess for injuries
    - Prevent hypothermia by removing wet clothing, providing passive rewarming, and use of warmed IV fluids (if fluids indicated)
  - Treat for pain and anxiety per the ***Pain and Anxiety Management Guideline***.
- ❑ **Key Considerations**
  - Scene times should be as short as possible for severely injured patients (Goal: 10 minutes). Perform required procedures enroute to the trauma center.
  - Severely injured trauma patients should be preferentially transported to a state-certified trauma center, as per the ***Field Trauma Triage Guideline.***
  - **Withholding and termination of resuscitative efforts**
    - Resuscitative efforts should be withheld for trauma patients with the following:
      - Decapitation
      - Hemicorporectomy
      - Signs of rigor mortis or dependent lividity
      - Blunt trauma patients who are apneic, pulseless, and have no organized activity on the cardiac monitor

- Resuscitative efforts may be terminated in patients with traumatic arrest who have no return to spontaneous circulation after 15-30 minutes of resuscitative efforts, including CPR
- Pediatric lowest acceptable systolic blood pressures are birth to 1 month = 60mmHg, 1 month to 1 year = 70mmHg, 1 year to 10 years is = 70mmHg + (age x 2) and over 10 years = 90mmHg.

| ADULT | PEDIATRIC (<15 years of Age)<br>NOTE: Pediatric weight based dosing should not exceed Adult dosing. |
|---|---|
| **AEMT** | **AEMT** |
| ❑ Establish vascular access and begin fluid therapy. | ❑ Vascular access and fluid therapy per ***IV/IO Access***. |
| ❑ **Suspected Tension Pneumothorax:** Evidence of chest trauma + hypotension:<br>● Immediate needle decompression of affected side | ❑ **Suspected Tension Pneumothorax:** Evidence of chest trauma + hypotension:<br>● Immediate needle decompression of affected side |
| ❑ **Traumatic Arrest**<br>● Consider bilateral needle decompression based on mechanism of injury and significant chest trauma that could lead to a pneumothorax. | ❑ **Traumatic Arrest**<br>● Consider bilateral needle decompression based on mechanism of injury and significant chest trauma that could lead to a pneumothorax. |
| **PARAMEDIC** | **PARAMEDIC** |