

# Trauma Assessment/Treatment Guidelines 705.01

- I. Purpose: To establish a consistent approach to the care of the trauma patient
  - A. Rapid trauma survey
    1. Airway
      - a. Maintain inline cervical stabilization
        - 1) Follow spinal precautions per VCEMS Policy 614
      - b. Open airway as needed
        - 2) Utilize a trauma jaw thrust to maintain inline cervical stabilization if indicated
      - c. Suction airway if indicated
    2. Breathing
      - a. Assess rate, depth and quality of respirations
      - b. If respiratory effort inadequate, assist ventilations with BVM
      - c. Insert appropriate airway adjunct if indicated
      - d. Assess lung sounds
      - e. Initiate airway management and oxygen therapy as indicated
        - 1) Maintain SpO<sub>2</sub> ≥ 94%
    3. Circulation
      - a. Assess skin color, temperature, and condition
      - b. Check distal/central pulses and capillary refill time
      - c. Control major bleeding
      - d. Initiate shock management as indicated
    4. Disability
      - a. Determine level of consciousness (Glasgow Coma Scale)
      - b. Assess pupils
    5. Exposure
      - a. If indicated, remove clothing for proper assessment/treatment of injury location. Maintain patient dignity
      - b. Maintain patient body temperature
  - B. Detailed physical examination
    1. Head
      - a. Inspect/palpate skull
      - b. Inspect eyes, ears, nose and throat
    2. Neck
      - a. Palpate cervical spine
      - b. Check position of trachea
      - c. Assess for jugular vein distention (JVD)
    3. Chest
      - a. Visualize, palpate, and auscultate chest wall

4. Abdomen/Pelvis
  - a. Inspect/palpate abdomen
  - b. Assess pelvis, including genitalia/perineum if pertinent
5. Extremities
  - a. Visualize, inspect, and palpate
  - b. Assess Circulation, Sensory, Motor (CSM)
6. Back
  - a. Visualize, inspect, and palpate thoracic and lumbar spines

C. Trauma care guidelines

1. Fluid Administration
  - a. Maintain SBP of  $\geq 80$  mmHg
    - 1) Patients 65 years and older, maintain SBP of  $\geq 100$  mmHg
    - 2) Pediatric patients, maintain minimum systolic for respective age in Handtevy.
    - 3) Isolated head injuries, maintain SBP of  $\geq 100$  mmHg
2. Tranexamic Acid (TXA) Administration
  - a. Patients 15 years of age and older as indicated in VCEMS Policy 734
3. Head injuries
  - a. General treatments
    - 1) Evaluate head and face – maintain high index of suspicion for injury if significant mechanism of injury is present or physical examination is remarkable for findings
    - 2) Elevate head  $30^\circ$  unless contraindicated
    - 3) Do not attempt to intubate head injured patients unless unable to manage with BLS airway measures
    - 4) Do not delay transport if significant airway compromise
  - b. Penetrating injuries
    - 1) DO NOT REMOVE IMPALED OBJECT (unless airway obstruction is present)
    - 2) Stabilize object manually or with bulky dressings
  - c. Facial injuries
    - 1) Assess airway and suction as needed
    - 2) Remove loose teeth or dentures if present
  - d. Eye injuries
    - 1) Remove contact lenses
    - 2) Irrigate eye thoroughly with suspected acid/alkali burns
    - 3) Avoid direct pressure
    - 4) Cover both eyes
    - 5) Stabilize any impaled object manually or with bulky dressing

4. Spinal cord injuries
  - a. General treatments
    - 1) Evaluate spinal column – maintain high index of suspicion for injury if significant mechanism of injury is present or physical examination is remarkable for findings
    - 2) Place patient in supine position if hypotension is present
  - b. Penetrating injuries – DO NOT REMOVE IMPALED OBJECT
    - 1) Stabilize object manually or with bulky dressings
    - 2) Control bleeding if present
    - 3) In the presence of isolated penetrating injuries, spinal motion restriction is contraindicated
  - c. Neck injuries
    - 1) Monitor airway
    - 2) Control bleeding if present
5. Thoracic Trauma
  - a. General treatments
    - 1) Evaluate chest – maintain high index of suspicion for internal injury if significant mechanism of injury is present or physical examination is remarkable for findings
    - 2) Keep patients sitting high-fowlers
      - a. In the presence of isolated penetrating injuries, spinal motion restriction is contraindicated
  - b. Penetrating injuries – DO NOT REMOVE IMPALED OBJECT
    - a) Remove object if CPR is interfered
    - b) Stabilize object manually or with bulky dressings
    - c) Control bleeding if present
  - c. Flail Chest/Rib injuries
    - a) Assist ventilations if respiratory status deteriorates
  - d. Pneumothorax/Hemothorax
    - a) Keep patient sitting high-fowlers
    - b) Assist ventilations if respiratory status deteriorates1.
      - 1) Suspected tension pneumothorax should be managed per VCEMS Policy 715
  - e. Open (Sucking) Chest Wound
    - a) Place an occlusive dressing to wound site, secure on 3 sides only or place a vented chest seal.
    - b) Assist ventilations if respiratory status deteriorates

- f. Cardiac Tamponade – If suspected, expedite transport
  - a) Beck's Triad
    - 1) Muffled heart tones
    - 2) JVD
    - 3) Hypotension
  - g. Traumatic Aortic Disruption
    - a) Assess for quality of radial and femoral pulses
    - b) If suspected, expedite transport
- 6. Abdominal/Pelvic Trauma
  - a. General Treatments
    - 1) Evaluate abdomen and pelvis – maintain high index of suspicion for internal injury if significant mechanism of injury is present or physical examination is remarkable for findings
  - b. Blunt injuries
    - 1) Place patient in supine position if hypotension is present
  - c. Penetrating injuries – DO NOT REMOVE IMPALED OBJECT
    - 1) Stabilize object manually or with bulky dressings
    - 2) Control bleeding if present
  - d. Eviscerations
    - 1) DO NOT REPLACE ABDOMINAL CONTENTS
      - a) Cover wound with saline-soaked dressings
    - 2) Control bleeding if present
  - e. Pregnancy
    - 1) Place patient in left-lateral position to prevent supine hypotensive syndrome
  - f. Pelvic injuries
    - 1) Consider wrapping a bed sheet tightly around the pelvis and tying it together for use as a binder to help control internal bleeding
      - a) Assessment of pelvis should be only performed **ONCE** to limit additional injury
    - 2) Control bleeding if present
    - 3) If possible, avoid log rolling patient.
- 7. Extremity Trauma
  - a. General Treatments
    - 1) Evaluate CSM distal to injury
      - a) If decrease or absence in CSM is present:

- (1) Manually reposition extremity into anatomical position
  - (2) Re-evaluate CSM
  - b) If no change in CSM after repositioning, splint in anatomical position and expedite transport
  - c) Cover open wounds with sterile dressings
  - d) Place ice pack on injury area (if closed wound)
  - e) Splint/elevate extremity with appropriate equipment
  - f) Uncontrolled hemorrhage: Tranexamic Acid – For patients 15 years of age and older as indicated in VCEMS Policy 734
- b. Dislocations
- 1) Splint in position found with appropriate equipment
- c. Penetrating injuries – DO NOT REMOVE IMPALED OBJECTS
- 1) Stabilize object manually or with bulky dressings
  - 2) Control bleeding if present
- d. Femur fractures
- 1) Utilize traction splint only if isolated mid-shaft femur fracture is suspected
  - 2) Assess CSM before and after traction splint application
- e. Amputations
- 1) Clean the amputated extremity with NS
  - 2) Wrap in moist sterile gauze
  - 3) Place in plastic bag
  - 4) Place bag with amputated extremity into a separate bag containing ice packs
  - 5) Prevent direct tissue contact with the ice pack