


# Patient Assessment –Trauma

## 1 - Scene Size-Up

- Body Substance Isolation [INCLUDES, BUT NOT LIMITED TO: GLOVES, MASK, GOWN, HEPA MASK]
- Assess for scene safety [IF THE SCENE IS UNSAFE RETREAT TO A SAFE DISTANCE]
- Identify Mechanism of Injury (MOI)
- Identify number of patients
- Determine need for additional resources [OTHER BLS, ALS, FD, PD, ETC.]
- Application of cervical spine immobilization, as necessary [MANUAL OR MECHANICAL]

 Age, gender and race information may be used to identify a patient whose name cannot be determined.

## 2 - Initial Assessment

### • General Impression

- ◆ Age, gender, race, position found
- ◆ Determine MOI, if not already done
- ◆ Locate and treat life threats/quick *CPR Check* [EXSANGUINATING BLEEDING, NO PULSE OR RESPIRATIONS, ETC.]
- ◆ Verbalize a general impression of patient ["PALE LOOKING 35 Y/O MALE, BLEEDING FROM FOREHEAD"]

### • Mental Status

- ◆ Check for responsiveness, if not readily apparent
- ◆ Determine mental status/level of consciousness (LOC) on AVPU Scale
  - Alert** - correctly answers three questions related to Person, Place and Time
  - Verbal** - does not correctly answer all of above questions **OR** the patient only responds to verbal commands
  - Pain** - only responds to painful stimuli
  - Unresponsive** - does not respond to any stimuli
- ◆ Determine chief complaint, if possible

### • Airway

- ◆ Can patient speak or cry?
- ◆ Are there any unusual breathing sounds? [STRIDOR, WHEEZING, ETC]
- ◆ Can the patient maintain his/her own airway?
  - Suction, as necessary
  - Modified jaw-thrust, as necessary
  - If not, insert an Oropharyngeal Airway (OPA) or Nasopharyngeal Airway (NPA)


### • Breathing


- ◆ Is the patient breathing?
- ◆ Is the patient complaining of difficulty breathing?
- ◆ Inspect the chest for obvious deformities [IMPALED OBJECTS, PARADOXICAL MOTION, OPEN CHEST WOUND, ETC]
- ◆ Palpate the chest for unstable segments, crepitation and equal expansion of the chest
- ◆ Is the breathing adequate? Is the rate & quality adequate to sustain life? [OBTAIN A QUICK RESPIRATORY RATE & QUALITY]
  - Ventilate if: respiratory rate is <10 and/or signs of inadequate oxygenation are present. Connect to oxygen as soon as possible.
  - Provide oxygen via Non-Rebreather if pt. exhibits SOB or difficulty breathing, or via nasal-cannula PRN
- ◆ Assess and manage chest trauma [SEAL OPEN CHEST WOUNDS, STABILIZE FLAIL SEGMENTS, ETC.]


### • Circulation


- ◆ Is there life-threatening hemorrhage?
  - If there is life-threatening hemorrhage control it [DO NOT CONTROL MINOR BLEEDING AT THIS TIME]
- ◆ Assess pulses for presence and quality:
  - Carotid if unresponsive, radial if responsive (Brachial pulse if patient ≤ 1 year of age)
  - If radial pulse is weak, or absent, compare it to/check carotid pulse
- ◆ Assess patient's perfusion by evaluating the skin color, temperature and condition (CTC)
  - The patient's conjunctivae and lips may also be used to assess perfusion
  - Assess capillary refill in patient's < 6 years of age
- ◆ Treat for hypoperfusion (shock) as necessary
  - Position patient supine, elevate legs (or leg portion of longboard), maintain body temperature (cover with a blanket)

### • Identify Priority Patients

 A patient's dentures may block the airway if they are not securely in place.

 To better assess the chest during the Initial Assessment, listen for lung sounds at the mid-axillary line.

 Use the following mnemonic to remember the steps of a good breathing assessment  
**I**nspect  
**P**-palpate  
**A**-auscultate (listen)  
**S**-seal open wounds  
**S**-stabilize  
**O**-O<sub>2</sub> decision

 To check for bleeding from the back of a supine patient, slide your hands into the voids along the sides of the body. Roll patient if necessary to stop major bleeding.

 Systolic blood pressure estimates may be obtained as follows:  
 Radial=80mmHg  
 Femoral=70mmHg  
 Carotid=60mmHg

HIGH PRIORITY: TRANSPORT THE PATIENT IMMEDIATELY AND PERFORM A RAPID TRAUMA ASSESSMENT DURING TRANSPORT (OR ON SCENE IF DELAYED)		PERFORM FOCUSED TRAUMA ASSESSMENT
Critical	Unstable/Potentially Unstable	Stable
<ul style="list-style-type: none"> <li>• Cardiac or respiratory arrest</li> <li>• Ventilated patients</li> </ul>	<ul style="list-style-type: none"> <li>• Poor general impression</li> <li>• Unresponsive-no gag/cough reflex</li> <li>• Responsive, but can't follow commands</li> <li>• Difficulty breathing</li> <li>• Signs of hypoperfusion</li> <li>• Complicated childbirth</li> <li>• Uncontrolled bleeding</li> <li>• Severe pain anywhere in body</li> <li>• Severe chest pain, especially with systolic &lt; 100 mmHg</li> <li>• Inability to move any body part</li> </ul>	<ul style="list-style-type: none"> <li>• Minor illness</li> <li>• Uncomplicated extremity injury</li> <li>• Any patient that cannot be categorized as C, U or P</li> </ul>

### 3 - Rapid Trauma Assessment OR Focused Trauma Assessment



Palpate the cervical spine before applying a cervical collar. You can see JVD and tracheal deviation through the opening in the front of the collar.

**3a - If *THERE IS* a significant mechanism of injury (High Priority) perform a Rapid Trauma Assessment during transport, or on-scene while preparing for transport.**

- Maintain spinal stabilization (If a CSIC has not been applied, apply one now)
- Is ALS needed?
- Inspect/palpate each area of the body for the following (in addition to DCAP-BTLS):

<b>Head</b>	Blood/fluid from head <i>Keep airway clear</i>
<b>Neck</b>	Jugular venous distention (JVD) Crepitation Apply cervical spine immobilization collar(CSIC), if not already done
<b>Chest</b>	Paradoxical motion Crepitation Breath sounds (bilateral assessment at apices of mid-clavicular line, mid-axillary at nipple line, and at bases)
<b>Abdomen</b>	Pain Firm/soft Distention
<b>Pelvis</b>	If no pain, gently compress iliac crests to determine instability
<b>Extremities</b>	Crepitation Distal pulses, sensory and motor function
<b>Posterior</b>	Log-roll the patient while maintaining c-spine immobilization

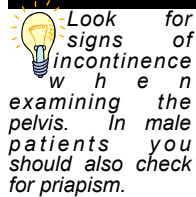
INSPECT THE ABDOMEN  
ONE QUADRANT AT A TIME

**3b - If *THERE IS NO* significant mechanism of injury perform a Focused Trauma Assessment, on-scene, based upon the patient's chief complaint and/or the mechanism of injury.**

- Assess and treat injuries not found during the Initial Assessment (should not be life-threatening)
- Reconsider transport decision
- Is ALS needed?

Assess the specific area of injury as you would in a Rapid Trauma Assessment

[SEE RAPID TRAUMA ASSESSMENT AT LEFT]



Look for signs of incontinence when examining the pelvis. In male patients you should also check for priapism.

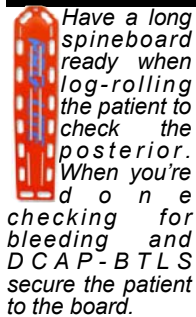


Leave the B/P cuff in place when treating patients requiring constant monitoring.

### 4 - Baseline Vital Signs

Obtain a full set of vital signs, including:

- **Respirations** - rate, quality and rhythm [COUNT FOR 30 SECS AND MULTIPLY BY 2. IF IRREGULAR, COUNT FOR A FULL MINUTE]
- **Pulse** - rate, quality and rhythm [COUNT FOR 30 SECS AND MULTIPLY BY 2. IF IRREGULAR, COUNT FOR A FULL MINUTE. IF HYPOTHERMIC, COUNT FOR 30 - 45 SECS]
- **Blood Pressure** [NOT REQUIRED IN PATIENTS UNDER THREE YEARS OF AGE]
- **Level of Consciousness (LOC)** [USE AVPU]
- **Skin** - color, temperature and condition
- **Pupils**



Have a long spineboard ready when log-rolling the patient to check the posterior. When you're done checking for bleeding and DCAP-BTLS secure the patient to the board.

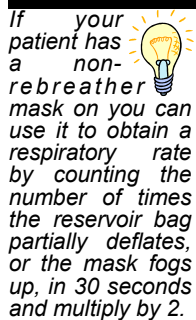
### 5 - SAMPLE History

- Signs and Symptoms
- Allergies – medication and other
- Medications - prescription, over-the-counter (OTC), herbal and other. Are they compliant?
- Pertinent Past Medical History – includes medical conditions, hospitalizations and surgeries
- Last oral intake – what and when?
- Events leading up to this incident

### 6 - Detailed Physical Examination

Performed to gather additional information regarding the patient's condition after attending to life-threatening conditions. **DO NOT DELAY** transport to perform this assessment. Perform during transport, or on scene if transport is delayed. Not necessarily performed on all patients. Performed in a head-to-toe manner as is the Rapid Trauma Assessment, but with the following additions:

Face	Nose - drainage, bleeding
Ears - Drainage, Battle's signs	Mouth - broken teeth, unusual odors, discoloration
Eyes - discoloration, equality of pupils, blood in anterior chamber, foreign bodies	Neck - tracheal deviation
	Genitalia/perineum - priapism, bleeding or discharge



If your patient has a non-rebreather mask on you can use it to obtain a respiratory rate by counting the number of times the reservoir bag partially deflates, or the mask fogs up, in 30 seconds and multiply by 2.

### 7 - On-Going Assessment

Performed during transport to hospital. Consists of repeating the Initial Assessment, vital signs, Focused Assessment and interventions. Record any findings.

**Repeat On-Going Assessment every 5 minutes for High Priority (Rapid Transport) Patients and every 15 minutes for Stable Patients.**