Patient Assessment

MFR/EMT/SPECIALIST/PARAMEDIC

Scene Size Up

1. Recognize environmental hazards to rescuers, and secure area for treatment.
2. Recognize hazard for patient, and protect from further injury.
3. Identify number of patients. Follow the **Mass Casualty Incident Protocol** if appropriate.
4. Observe position of patient, mechanism of injury, surroundings.
5. Identify self.
6. Utilize universal precautions in all protocols.
7. Determine if patient has a valid Do-not-resuscitate bracelet/order.

Primary Survey

1. Airway:
   - A. Protect spine from movement in trauma victims. Provide continuous spinal precautions. Follow the **Spinal Injury Assessment Protocol**.
   - B. Observe the mouth and upper airway for air movement.
   - C. Establish and maintain the airway. Follow the **Emergency Airway Procedure.**
   - D. Look for evidence of upper airway problems such as vomitus, bleeding, facial trauma, absent gag reflex.
   - E. Clear upper airway of mechanical obstruction as needed.
2. Breathing: Look, Listen and Feel
   - A. Note respiratory rate, noise, and effort.
   - B. Treat respiratory distress or arrest with oxygenation and ventilation.
   - C. Observe skin color and level of consciousness for signs of hypoxia.
   - D. Expose chest and observe chest wall movement, as appropriate.
   - **E.** Look for life-threatening respiratory problems and stabilize:

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   - F. Tension pneumothorax: Follow **Pleural Decompression Procedure.**

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3. Circulation
   - A. Check pulse and begin CPR if no central pulse. Follow **Adult or Pediatric Cardiac Arrest – General Protocols**.
   - B. Note pulse quality and rate; compare distal to central pulses as appropriate.
   - C. Control hemorrhage by direct pressure. (If needed, use elevation, pressure points or follow the **Tourniquet Application Procedure.**)
   - D. Check capillary refill time in fingertips.
   - E. If evidence of shock or hypovolemia begin treatment according to **Shock Protocol.**
4. Level of consciousness:
   - A. Note mental status (AVPU)
     - a. Alert
     - b. Verbal stimuli response
     - c. Painful stimuli response
     - d. Unresponsive

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B. Measure Glasgow Coma Scale

Patient age > 2 years old		Patient age < 2 years old
Eye opening		
• Spontaneous	4	Spontaneous
• To speech	3	To speech
• To pain	2	To Pain
• No response	1	No Response
Verbal response		
• Oriented and talking	5	Smiles, recognizes sounds, follows objects, interacts
• Disoriented and talking	4	Cries, consolable, inappropriate interactions
• Inappropriate words	3	Inconsistently inconsolable, moaning
• Incomprehensible sounds	2	Agitated, restless, inconsolable
• No response	1	No response
Motor response		
• Obeys command	6	Spontaneous movement
• Localizes pain	5	Withdraws from touch
• Withdraws to pain	4	Withdraws from pain
• Flexion to pain	3	Abnormal flexion to pain (decorticate posturing)
• Extension to pain	2	Abnormal extension to pain (decerebrate posturing)
• No response	1	No response

Any combined score of less than eight represents a significant risk of mortality.

If the patient is not alert and the cause is not immediately known, consider:

A – Alcohol	**T** – Trauma	**C** – Cardiac
E – Epilepsy	**I** – Ingestion	**H** – Hypoxia
I – Insulin	**P** – Psych	**E** – Environmental
O – Overdose	**P** – Phenothiazine	**S** – Stroke
U – Uremia	**S** – Saliscylates	**S** - Sepsis

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The secondary survey is performed in a systematic manner.
(Steps listed are not necessarily sequential.)

1. Vital Signs:
   A. Frequent monitoring of blood pressure, pulse, and respirations
   B. Temperature as indicated in protocol.

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   C. Blood glucose measurement as available and appropriate.

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   D. Pulse oximetry as available and appropriate.

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   E. ECG monitoring as indicated in protocol.
   F. 12 Lead if available and appropriate, follow **12 Lead ECG Procedure**.

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2. Head and Face
   A. Observe and palpate for deformities, asymmetry, bleeding, tenderness, or crepitus.
   B. Recheck airway for potential obstruction: upper airway noises, dentures, bleeding, loose or avulsed teeth, vomitus, or absent gag reflex.
   C. Eyes: pupils (equal or unequal, responsiveness to light), foreign bodies, contact lenses, or raccoon eyes
   D. Ears: bleeding, discharge, or bruising behind ears.
3. Neck
   A. Maintain stabilization; follow the **Spinal Injury Assessment Protocol**, if appropriate.
   B. Check for deformity, tenderness, wounds, jugular vein distention, and use of neck muscles for respiration, altered voice, and medical alert tags.
4. Chest
   A. Observe for wounds, air leak from wounds, symmetry of chest wall movement, and use of accessory muscles.
   B. Palpate for tenderness, wounds, crepitus, or unequal rise of chest.
   C. Auscultate for bilateral breath sounds.
   D. Capnography/capnometry if available and appropriate
5. Abdomen
   A. Observe for wounds, bruising, distention, or pregnancy.
   B. Palpation.
6. Pelvis
   A. Palpate pelvis for tenderness and stability
7. Extremities
   A. Observe for deformity, wounds, open fractures, and symmetry.
   B. Palpate for tenderness and crepitus.
   C. Note distal pulses, skin color, and medical alert/DNR tags.
   D. Check sensation.
   E. Test for motor strength if no obvious fracture present.

8. Back
    A. Observe and palpate for tenderness and wounds.

Special Considerations:

1. If there is a specific mechanism of injury with only localized injury, a focused exam may be performed in lieu of the full patient survey provided the patient is alert.
2. Follow the appropriate assessment protocol:
    A. General Pre-hospital Care
    B. Pediatric Assessment and Treatment
    C. Newborn Assessment, Treatment and Resuscitation
    D. Cardiac Arrest – General Protocol
    E. Pediatric Cardiac Arrest – General Protocol
    F. Adult Trauma
    G. Spinal Injury Assessment