Patient Assessment: 3

### **UNIT TERMINAL OBJECTIVE**

3-3 At the completion of this unit, the EMT-Critical Care Technician student will be able to integrate the principles of history taking and techniques of physical exam to perform patient assessment on an emergency patient.

# **COGNITIVE OBJECTIVES**

At the completion of this unit, the EMT-Critical Care Technician student will be able to:

- 3-3.1 Recognize hazards/ potential hazards. (C-1)
- 3-3.2 Describe common hazards found at the scene of a trauma and a medical patient. (C-1)
- 3-3.3 Determine hazards found at the scene of a medical or trauma patient. (C-2)
- 3-3.4 Differentiate safe from unsafe scenes. (C-3)
- 3-3.5 Describe methods to making an unsafe scene safe. (C-1)
- 3-3.6 Discuss common mechanisms of injury/ nature of illness. (C-1)
- 3-3.7 Recognize the importance of determining the mechanism of injury. (C-2)
- 3-3.8 Discuss the reason for identifying the total number of patients at the scene. (C-1)
- 3-3.9 Organize the management of a scene following size-up. (C-3)
- 3-3.10 Explain the reasons for identifying the need for additional help or assistance. (C-1)
- 3-3.11 Summarize the reasons for forming a general impression of the patient. (C-1)
- 3-3.12 Discuss methods of assessing mental status. (C-1)
- 3-3.13 Categorize levels of consciousness. (C-3)
- 3-3.14 Discuss methods of assessing the airway. (C-1)
- 3-3.15 Describe why the cervical spine is immobilized during the assessment of the trauma patient. (C-1)
- 3-3.16 Analyze a scene to determine if spinal precautions are required. (C-3)
- 3-3.17 Describe methods used for assessing if a patient is breathing. (C-1)
- 3-3.18 Differentiate between a patient with adequate and inadequate minute ventilation. (C-3)
- 3-3.19 Discuss the need for assessing the patient for external bleeding. (C-1)
- 3-3.20 Describe normal and abnormal findings when assessing skin color. (C-1)
- 3-3.21 Describe normal and abnormal findings when assessing skin temperature. (C-1)
- 3-3.22 Describe normal and abnormal findings when assessing skin condition. (C-1)
- 3-3.23 Explain the reason for prioritizing a patient for care and transport. (C-1)
- 3-3.24 Identify patients who require expeditious transport. (C-3)
- 3-3.25 Describe orthostatic vital signs and evaluate their usefulness in assessing a patient in shock. (C-1)
- 3-3.26 Apply the techniques of physical examination to the medical patient. (C-1)
- 3-3.27 Differentiate between the assessment that is performed for a patient who is has an altered mental status and other medical patients. (C-3)
- 3-3.28 Discuss the reasons for reconsidering the mechanism of injury. (C-1)
- 3-3.29 State the reasons for performing a rapid trauma assessment. (C-1)
- 3-3.30 Recite examples and explain why patients should receive a rapid trauma assessment. (C-1)
- 3-3.31 Apply the techniques of physical examination to the trauma patient. (C-1)
- 3-3.32 Describe the areas included in the rapid trauma assessment and discuss what should be evaluated. (C-1)
- 3-3.33 Differentiate cases when the rapid assessment may be altered in order to provide patient care. (C-3)
- 3-3.34 Discuss the reason for performing a focused history and physical exam. (C-1)
- 3-3.35 Describe when and why a detailed physical examination is necessary. (C-1)
- 3-3.36 Discuss the components of the detailed physical exam in relation to the techniques of examination. (C-1)
- 3-3.37 State the areas of the body that are evaluated during the detailed physical exam. (C-1)
- 3-3.38 Explain what additional care should be provided while performing the detailed physical exam. (C-1)
- 3-3.39 Distinguish between the detailed physical exam that is performed on a trauma patient and that of the medical patient. (C-3)
- 3-3.40 Differentiate between patients requiring a detailed physical exam from those who do not. (C-3)
- 3-3.41 Discuss the reasons for repeating the initial assessment as part of the on-going assessment. (C-1)

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- 3-3.42 Describe the components of the on-going assessment. (C-1)
- 3-3.43 Describe the trending of assessment components. (C-1)
- 3-3.44 Discuss medical identification devices/ systems. (C-1)

### **AFFECTIVE OBJECTIVES**

At the completion of this unit, the EMT-Critical Care Technician student will be able to:

- 3-3.45 Explain the rationale for crew members to evaluate scene safety prior to entering. (A-2)
- 3-3.46 Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness. (A-3)
- 3-3.47 Explain the importance of forming a general impression of the patient. (A-1)
- 3-3.48 Explain the value of performing an initial assessment. (A-2)
- 3-3.49 Demonstrate a caring attitude when performing an initial assessment. (A-3)
- 3-3.50 Attend to the feelings that patients with medical conditions might be experiencing. (A-1)
- 3-3.51 Value the need for maintaining a professional caring attitude when performing a focused history and physical examination. (A-3)
- 3-3.52 Explain the rationale for the feelings that these patients might be experiencing. (A-3)
- 3-3.53 Demonstrate a caring attitude when performing a detailed physical examination. (A-3)
- 3-3.54 Explain the value of performing an on-going assessment. (A-2)
- 3-3.55 Recognize and respect the feelings that patients might experience during assessment. (A-1)
- 3-3.56 Explain the value of trending assessment components to other health professionals who assume care of the patient. (A-2)

#### **PSYCHOMOTOR OBJECTIVES**

At the completion of this unit, the EMT-Critical Care Technician student will be able to:

- 3-3.57 Demonstrate the techniques for assessing mental status. (P-2)
- 3-3.58 Demonstrate the techniques for assessing the airway. (P-2)
- 3-3.59 Demonstrate the techniques for determining if the patient is breathing. (P-2)
- 3-3.60 Demonstrate the techniques for determining if the patient has a pulse. (P-2)
- 3-3.61 Demonstrate the techniques for determining the patient for external bleeding. (P-2)
- 3-3.62 Demonstrate the techniques for determining the patient's skin color, temperature, and condition. (P-2)
- 3-3.63 Using the techniques of examination, demonstrate the assessment of a medical patient. (P-2)
- 3-3.64 Demonstrate the techniques for assessing a patient who is responsive with no known history. (P-2)
- 3-3.65 Demonstrate the techniques for assessing a patient who has a altered metal status. (P-2)
- 3-3.66 Perform a rapid medical assessment. (P-2)
- 3-3.67 Perform a focused history and physical exam of the medical patient. (P-2)
- 3-3.68 Using the techniques of physical examination, demonstrate the assessment of a trauma patient. (P-2)
- 3-3.69 Demonstrate the rapid trauma assessment used to assess a patient based on mechanism of injury. (P-2)
- 3-3.70 Perform a focused history and physical exam on a non-critically injured patient. (P-2)
- 3-3.71 Perform a focused history and physical exam on a patient with life-threatening injuries. (P-2)
- 3-3.72 Perform a detailed physical examination. (P-2)
- 3-3.73 Demonstrate the skills involved in performing the on-going assessment. (P-2)

Patient Assessment: 3

#### **DECLARATIVE**

- Scene size-up/ assessment
  - A. Body substance isolation review
    - 1. Eye protection if necessary
    - 2. Gloves if necessary
    - 3. Gown if necessary
    - 4. Mask if necessary
  - B. Scene safety
    - 1. Definition an assessment to assure the well-being of the EMT-Critical Care Technician
    - 2. Personal protection is it safe to approach the patient?
      - a. Crash/ rescue scenes
      - b. Toxic substances low oxygen areas
      - c. Crime scenes potential for violence
      - d. Unstable surfaces slope, ice, water
    - 3. Protection of the patient environmental considerations
    - 4. Protection of bystanders if necessary, help the bystander avoid becoming a patient
    - 5. Do not enter unsafe scenes
    - 6. Scenes may be dangerous even if they appear to be safe
  - C. Definition an assessment of the scene and surroundings that will provide valuable information to the EMT-Critical Care Technician
  - D. Mechanism of injury/ nature of illness
    - 1. Medical
      - Nature of illness determine from the patient, family, or bystanders why EMS was activated
      - b. Determine the total number of patients
      - c. If there are more patients than the responding unit can effectively handle, initiate a mass casualty plan
        - (1) EMT-Critical Care Technician is less likely to call for help if involved in patient care
        - (2) Prior to contact with patients, obtain additional help: law enforcement, fire, rescue, ALS, utilities
        - (3) Begin triage
    - 2. Trauma
      - a. Mechanism of injury
        - (1) determine from the patient, family, or bystanders and inspection of the scene
        - (2) Immobilize the cervical spine
      - b. Determine the total number of patients
      - c. If there are more patients than the responding unit can effectively handle, initiate a mass casualty plan
        - (1) EMT-Critical Care Technician is less likely to call for help if involved in patient care
        - (2) Prior to contact with patients, obtain additional help: law enforcement, fire, rescue, ALS, utilities
        - (3) Begin triage
        - (4) If the responding crew can manage the situation, consider spinal precautions and continue care
- II. Initial assessment
  - A. General impression of the patient
    - 1. Formed to determine priority of care and is based on the EMT-Critical Care Technician's

immediate assessment of the environment and the patient's chief complaint

- 2. Determine if ill, i.e., medical or injured (trauma)
  - a. If injured, identify mechanism of injury
  - b. If ill, identify nature of illness
- B. Assess the patient and determine if the patient has a life-threatening condition
  - 1. If a life threatening condition is found, treat immediately
  - 2. Assess nature of illness or mechanism of injury
- C. Assess patient's mental status (maintain spinal immobilization if needed)
  - 1. Levels of mental status (AVPU)
    - a. Alert
    - b. Responds to verbal stimuli
    - c. Responds to painful stimuli
    - d. <u>Unresponsive</u> no gag or cough
- D. Assess the patient's airway status
  - Patent
  - 2. Obstructed
    - a. Suction
    - b. Position
    - c. Airway adjuncts
    - d. Invasive techniques
      - (1) ET intubation
      - (2) Multi-lumen airways
- E. Assess the patient's breathing
  - Adequate
  - 2. Inadequate
- F. Assess the patient's circulation
  - Pulse
  - 2. If major bleeding is present if bleeding is present, control bleeding
  - 3. Perfusion by evaluating skin color, temperature, capillary refill, and condition
- G. Identify priority patient
  - 1. C.U.P.S.
    - a. C Critical
    - b. U Unstable
    - c. P Potentially Unstable
    - d. S Stable
  - 1. Consider
    - a. Poor general impression
    - b. Altered mental status
    - c. Responsive, not following commands
    - d. Difficulty breathing
    - e. Inadequate minute volume
    - f. Shock (hypoperfusion)
    - g. Complicated childbirth
    - h. Chest pain with suspected cardiac origin
    - i. Uncontrolled bleeding
    - j. Severe pain anywhere
    - k. Multiple injuries
  - Expedite transport of the patient
- H. Proceed to the appropriate focused history and physical examination
- III. Focused history and physical exam medical patient

Α.	Responsive	medical	patient
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- 1. Assess patient history
  - a. Chief complaint
  - b. History of present illness
    - (1) Attributes of a symptom
      - (a) Location
        - i) Where is it
        - ii) Does it radiate
      - (b) Quality
        - i) What is it like
      - (c) Quantity or severity
        - i) How bad is it
      - (d) Timing
        - i) When did it start
        - ii) How long does it last
      - (e) Setting in which it occurs
        - i) Emotional response
        - ii) Environmental factors
      - (f) Factors that make it better or worse
      - (g) Associated manifestations
  - c. Past medical history
  - d. Current health status
- 2. Perform physical examination
  - a. Utilize the techniques of physical examination to
    - (1) Assess the head as necessary
    - (2) Assess the neck as necessary
    - (3) Assess the chest as necessary
    - (4) Assess the abdomen as necessary
    - (5) Assess the pelvis as necessary
    - (6) Assess the extremities as necessary
    - (7) Assess the posterior body as necessary
- 3. Assess baseline vital signs
  - a. Consider orthostatic vital signs
- 4. Provide emergency medical care based on signs and symptoms in consultation with medical direction
- B. Unresponsive medical patient
  - 1. Perform rapid assessment
  - 2. Utilize the techniques of patient assessment
    - a. Position patient to protect airway
    - b. Assess the head
    - c. Assess the neck
    - d. Assess the chest
    - e. Assess the abdomen
    - f. Assess the pelvis
    - g. Assess the extremities
    - h. Assess the posterior aspect of the body
  - 3. Assess baseline vital signs
  - 4. Obtain patient history from bystander, family, friends, and/ or medical identification devices/ services
    - a. Chief complaint
    - b. History of present illness
    - c. Past medical history

- d. Current health status
- IV. Focused history and physical exam trauma patient
  - A. Re-consider mechanism of injury
    - 1. Helps to identify priority patients
    - 2. Helps to guide the assessment
    - 3. Significant mechanism of injury
      - a. Ejection from vehicle
      - b. Death in same passenger compartment
      - c. Falls > 20 feet
      - d. Roll-over of vehicle
      - e. High speed vehicle crash
      - f. Vehicle-pedestrian crash
      - g. Motorcycle crash
      - h. Unresponsive or altered mental status
      - i. Penetrations of the head, chest, or abdomen
      - j. Hidden injuries
        - (1) Seat belts
          - (a) If buckled, may have produced injuries
          - (b) If patient had seat belt on, it does not mean they do not have injuries
        - (2) Airbags
          - (a) May not be effective without seat belt
          - (b) Patient can hit steering wheel after deflation
          - (c) Lift the deployed airbag and look at the steering wheel for deformation
            - Lift and look under the bag after the patient has been removed
            - ii) Any visible deformation of the steering wheel should be regarded as an indicator of potentially serious internal injury, and appropriate action should be taken
            - iii) Child safety seats
              - a) Injury patterns with airbags
              - b) Proper use in vehicles with airbags
    - 4. Infant and child considerations
      - a. Falls >10 feet
      - b. Bicycle collision
      - c. Vehicle in medium speed collision
  - B. Perform rapid trauma physical examination on patients with significant mechanism of injury to determine life-threatening injuries
    - 1. In the responsive patient, symptoms should be sought before and during the trauma assessment
    - 2. Continue spinal stabilization
    - 3. Reconsider transport decision (C.U.P.S.)
    - 4. Assess mental status
    - 5. As you inspect and palpate, look and feel for injuries or signs of injury
    - 6. Examination
      - a. Assess the head, inspect and palpate for injuries or signs of injury
      - b. Assess the neck, inspect and palpate for injuries or signs of injury
      - c. Apply cervical spinal immobilization collar (CSIC)
      - d. Assess the chest, inspect and palpate for injuries or signs of injury
      - e. Assess the abdomen, inspect and palpate for injuries or signs of injury

- f. Assess the pelvis, inspect and palpate for injuries or signs of injury
- g. Assess all four extremities, inspect and palpate for injuries or signs of injury
- h. Roll patient with spinal precautions and assess posterior body, inspect and palpate for injuries or signs of injury
- i. Look for medical identification devices
- j. Assess baseline vital signs
- k. Assess patient history
  - (1) Chief complaint
  - (2) History of present illness
  - (3) Past medical history
  - (4) Current health status
- C. For patients with no significant mechanism of injury, e.g., cut finger
  - Perform focused history and physical exam of injuries based on the techniques of examination
  - 2. The focused assessment is performed on the specific injury site
  - 3. Assess baseline vital signs
  - Assess patient history
    - a. Chief complaint
    - b. History of present illness
    - c. Past medical history
    - d. Current health status
- V. Detailed physical exam
  - A. Patient and injury specific, e.g., cut finger would not require the detailed physical exam
  - B. Perform a detailed physical examination on the patient to gather additional information
  - C. General approach
    - 1. Assess patient history
      - a. Chief complaint
      - b. History of present illness
      - c. Past medical history
      - d. Current health status
    - 2. Examine the patient systematically
    - 3. Place special emphasis on areas suggested by the present illness and chief complaint
    - 4. Keep in mind that most patients view a physical exam with apprehension and anxiety they feel vulnerable and exposed
  - D. Overview of the detailed physical exam
    - Mental status
      - a. Appearance and behavior
      - b. Posture and motor behavior
      - c. Speech and language
      - d. Mood
      - e. Thought and perceptions
      - f. Thought content
      - g. Perceptions
      - h. Insight and judgement
      - i. Memory and attention
      - j. Remote memory (i.e., birthdays)
      - k. Recent memory (i.e., events of the day)
      - I. New learning ability
    - 2. General survey
      - a. Level of consciousness
      - b. Signs of distress

- c. Apparent state of health
- d. Skin color and obvious lesions
- e. Height and build
- f. Sexual development
- g. Weight
- h. Posture, gait, and motor activity
- i. Dress, grooming and personal hygiene
- j. Odors of breath or body
- k. Facial expression
- 3. Skin
- 4. Head
- 5. Eyes
- 6. Ears
- 7. Nose and sinuses
- 8. Mouth and pharynx
- 9. Neck
- 10. Thorax and lungs
- 11. Cardiovascular system
- 12. Abdomen
- 13. External genitalia
- 14. Peripheral vascular system
- 15. Musculoskeletal system
- 16. Nervous system
- E. Recording examination findings
- F. Assess baseline vital signs

### VI. On-going assessment

- A. Repeat initial assessment
  - 1. For a stable patient, repeat and record every 15 minutes
  - 2. For an unstable patient, repeat and record at a minimum every 5 minutes
  - 3. Reassess mental status
  - 4. Reassess airway
  - 5. Monitor breathing for rate and quality
  - 6. Reassess circulation
  - 7. Re-establish patient priorities
- B. Reassess and record vital signs
- C. Repeat focused assessment regarding patient complaint or injuries
- D. Assess interventions
  - 1. Assess response to management
  - 2. Maintain or modify management plan