

MODULE 2

Patient

Assessment

Lesson 2-1

Scene Size-up

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-1.1 Recognize potential scene hazards. (C-1)
- 2-1.2 Describe common hazards found at the scene of a trauma and a medical patient. (C-1)
- 2-1.3 Determine if the scene is safe to enter. (C-2)
- 2-1.4 Recognize the need for personal protective equipment. (C-2)
- 2-1.5 Discuss common mechanisms of injury/nature of illness. (C-1)
- 2-1.6 Discuss the reason for identifying the total number of patients at the scene. (C-1)
- 2-1.7 [Discuss the rationale for considering the possible need for early c-spine precautions in the patient assessment process. \(C-1\)](#)
- 2-1.8 Explain the reason for identifying the need for additional help or assistance. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-1.9 Explain the rationale for crew members to evaluate scene safety prior to entering. (A-2)
- 2-1.10 Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or nature of illness. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-1.11 Observe various scenarios and identify potential hazards. (P-1)

PREPARATION

Motivation: Size-up is the first aspect of a [systematic approach](#) to patient assessment. It begins as the EMT-Basic approaches the scene. During this phase, the EMT-Basic surveys the scene to determine if there are any threats that may cause an injury to the EMT-Basic. In addition, this assessment allows the EMT-Basic to determine the nature of the call and obtain additional help.

Prerequisites: BLS and Preparatory.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to scene size-up. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: None

PERSONNEL

Primary Instructor: One EMT-Basic instructor, knowledgeable in scene management.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable about scene size-up.

PRESENTATION

Declarative (What)

- I. Scene Size-up ([READ the scene](#)) – [gather, evaluate and synthesize information from dispatch, the scene and the patient](#)
 - 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 of the surroundings \(weather, environmental factors and clues from the scene\)](#) to assure the well-being of the EMT-Basic
 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 appropriate, help the bystander avoid becoming a patient
 5. If the scene is unsafe, make it safe. Otherwise, do not enter.
- C. [Think under pressure](#)
1. [Stop and think](#)
 2. [Scan the situation](#)
 3. [Decide and act](#)
 4. [Maintain control](#)
 5. [Continually reevaluate](#)
- D. Mechanism of injury/ nature of illness
1. Medical
 - a. Nature of illness (NOI) – [attempt to determined by interviewing the patient, family or bystanders](#)
 - b. Determine the total number of patients. If there are more patients than the responding unit can efficiently handle, initiate a mass casualty plan.
 - (1) Obtain additional help prior to contact with patients: law enforcement, fire, rescue, ALS, utilities. EMT-Basic is less likely to call for help when involved in patient care.
 - (2) Begin triage
 2. Trauma
 - a. Mechanism of injury (MOI) – [attempt to determine the specific cause of injury by interviewing the patient, family or bystanders, as well as inspect the scene for clues](#)
 - b. [Consider the need for c-spine protection early in the assessment process](#)
 - c. Determine the total number of patients
 - (1) If there are more patients than the responding unit can effectively handle, initiate a mass casualty plan.
 - (a) Obtain additional help prior to contact with patients. EMT-Basic is less likely to call for help when involved in patient care.
 - (b) Begin triage
 - (2) If the responding crew can manage the situation, consider spinal precautions and continue care.

APPLICATION

Procedural (How)

None identified for this lesson.

Contextual (When, Where, Why)

1. Size-up represents the very beginning of patient assessment. It requires the EMT-Basic to evaluate several aspects concerning the situation in a very short period of time. It is essential for assuring the safety of the crew and the patient.
2. This information may be obtained as part of dispatch, but should always be reassessed upon arrival at the scene. For some situations, size-up is an on-going process.
3. As additional information is obtained, modification is made to the size-up of the patient and the situation overall.

STUDENT ACTIVITIES

Auditory (Hear)

1. The student will hear simulations of various safe and unsafe scenes.

Visual (See)

1. The student will see simulations of various safe and unsafe scenes.
2. The student should see a [patient assessment flow chart](#).

Kinesthetic (Do)

1. The student will practice role playing the actions to take at various safe and unsafe scenes.
2. [The student should use a patient assessment flow chart](#).

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMIEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-2

Initial Assessment

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-2.1 Summarize the reasons for forming a general impression of the patient. (C-1)
- 2-2.2 Discuss methods of assessing altered mental status. (C-1)
- 2-2.3 Differentiate between assessing the altered mental status in the adult, child and infant patient. (C-3)
- 2-2.4 Discuss methods of assessing the airway in the adult, child and infant patient. (C-1)
- 2-2.5 State reasons for management of the cervical spine once the patient has been determined to be a trauma patient. (C-1)
- 2-2.6 Describe methods used for assessing if a patient is breathing. (C-1)
- 2-2.7 State what care should be provided to the adult, child and infant patient with adequate breathing. (C-1)
- 2-2.8 State what care should be provided to the adult, child and infant patient with inadequate breathing. (C-1)
- 2-2.9 Differentiate between a patient with adequate and inadequate breathing. (C-3)
- 2-2.10 Distinguish between methods of assessing breathing in the adult, child and infant patient. (C-3)
- 2-2.11 Compare the methods of providing airway care to the adult, child and infant patient. (C-3)
- 2-2.12 Describe the methods used to obtain a pulse. (C-1)
- 2-2.13 Differentiate between obtaining a pulse in an adult, child and infant patient. (C-3)
- 2-2.14 Discuss the need for assessing the patient for external bleeding. (C-1)
- 2-2.15 Describe normal and abnormal findings when assessing skin color. (C-1)
- 2-2.16 Describe normal and abnormal findings when assessing skin temperature. (C-1)
- 3-2.17 Describe normal and abnormal findings when assessing skin condition. (C-1)
- 2-2.18 Describe normal and abnormal findings when assessing skin capillary refill in the infant and child patient. (C-1)
- 2-2.19 Explain the reason for prioritizing a patient for care and transport. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-2.20 Explain the importance of forming a general impression of the patient. (A-1)
- 2-2.21 Explain the value of performing an initial assessment. A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-2.22 Demonstrate the techniques for assessing mental status. (P-1, 2)
- 2-2.23 Demonstrate the techniques for assessing the airway. (P-1, 2)
- 2-2.24 Demonstrate the techniques for assessing if the patient is breathing. (P-1, 2)
- 2-2.25 Demonstrate the techniques for assessing if the patient has a pulse. (P-1, 2)
- 2-2.26 Demonstrate the techniques for assessing the patient for external bleeding. (P-1, 2)
- 2-2.27 Demonstrate the techniques for assessing the patient's skin color, temperature, condition and capillary refill (infants and children only). (P-1, 2)
- 2-2.28 Demonstrate the ability to prioritize patients. (P-1, 2)

PREPARATION

Motivation: The EMT-Basic will encounter patients who require emergency medical care. It is important for the EMT-Basic to identify those patients who require rapid assessment critical interventions, and immediate transport.

[In keeping with a systematic approach to patient assessment, the EMT-B will gather important information about the status of the patient.](#)

Prerequisites: BLS and Preparatory.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to patient assessment. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Exam gloves, airway management equipment.

PERSONNEL

- Primary Instructor: One EMT-Basic instructor knowledgeable in patient assessment.
- Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable about patient assessment.

PRESENTATIONDeclarative (What)

- I. General Impression (**READ the patient**) – gather, evaluate and synthesize information about the patient
 - A. Definition
 1. The general impression is formed to determine priority of care and is based upon the EMT-B's assessment of the environment, and the patient's chief complaint.
 2. Determine MOI or NOI.
 3. Approximate age
 4. **Gender**
 5. Race
 6. **Note position and location of patient**
 - B. Assess patient and determine if the patient has a life threatening condition. **Observe, talk, touch and listen to the patient.**
 1. If a life threatening condition is found, treat immediately.
 2. Assess nature of illness or mechanism of injury.
- II. Assess Patient's Mental Status. Maintain Spinal Immobilization if Needed.
 - A. Begin by speaking to the patient. State name, tell the patient that you are an emergency medical technician, and explain that you are here to help.
 - B. Levels of consciousness (mental status) – AVPU Scale
 1. Alert
 2. Responds to Verbal stimuli.
 3. Responds to Painful stimuli.
 4. Unresponsive - no gag or cough reflex
 - C. **Patient affect – how patient is dealing with the situation and surroundings.**
- III. Assess the Patient's Airway **and REACT by managing life-threats.**
 - A. Responsive patient - Is the patient talking or crying?
 1. If yes, assess for adequacy of breathing.
 2. If no, open airway.
 - B. Unresponsive patient - Is the airway open?
 1. Open the airway. Positioning is patient, age, and size specific.
 - a. For medical patients, perform the head-tilt chin-lift.

- (1) Clear
 - (2) Not clear - Clear the airway.
 - b. For trauma patients or those with unknown nature of illness, the cervical spine should be stabilized/immobilized and the jaw thrust maneuver performed.
 - (1) Clear
 - (2) Not clear - Clear the airway.
- IV. Assess the Patient's Breathing **and REACT by managing life-threats.**
 - A. If breathing is adequate and the patient is responsive, oxygen may be indicated.
 - B. All responsive patients breathing >24 breaths per minute or <8 breaths per minute should receive high flow oxygen (defined as a 15 LPM nonrebreather mask).
 - C. If the patient is unresponsive and the breathing is adequate, open and maintain the airway and provide high concentration oxygen.
 - D. If the breathing is inadequate, open and maintain the airway, assist the patient's breathing and utilize airway adjuncts. In all cases oxygen should be used.
 - E. If the patient is not breathing, open and maintain the airway and ventilate using airway adjuncts. In all cases oxygen should be used.
- V. Assess the Patient's Circulation **and REACT by managing life-threats.**
 - A. Assess the patient's pulse.
 - 1. The circulation is assessed by feeling for a radial pulse.
 - a. In a patient one year old or less, palpate a brachial pulse.
 - b. If no radial pulse is felt, palpate carotid pulse.
 - (1) If pulseless, medical patient **>1 year old**, start CPR and apply automated external defibrillator (AED).
 - (2) Medical patient **< 1 year old**, start CPR.
 - (3) Trauma patient, start CPR **and apply AED.**
 - B. Assess if major bleeding is present. If bleeding is present, control bleeding.
 - C. Assess the patient's perfusion by evaluating skin color and temperature.
 - 1. The patient's skin color is assessed by looking at the nail beds, lips and eyes.
 - a. Normal - pink
 - b. Abnormal conditions
 - (1) Pale
 - (2) Cyanotic or blue-gray
 - (3) Flushed or red
 - (4) Jaundice or yellow
 - 2. Assess the patient's skin temperature by feeling the skin.
 - a. Normal - warm
 - b. Abnormal skin temperatures
 - (1) Hot

- (2) Cool
- (3) Cold
- (4) Clammy - cool & moist
- 3. Assess the patient's skin condition. This is an assessment of the amount of moisture on the skin.
 - a. Normal - dry
 - b. Abnormal - moist or wet
- 4. Assess capillary refill in infant and child patients.
 - a. Normal capillary refill is less than two seconds.
 - b. Abnormal capillary refill is greater than two seconds.
- VI. Establish a Differential Diagnosis/Field Impression – determine the most likely cause of the MOI/NOI that fits the patient's initial presentation of signs and symptoms.
- VII. Expose as needed to evaluated patient.
- VIII. Identify Priority Patients and make a Transport Decision – determine the most serious condition or cause that fits the patient's initial presentation of signs and symptoms.
 - A. Consider:
 - 1. Poor general impression
 - 2. Unresponsive patients - no gag or cough
 - 3. Responsive, not following commands
 - 4. Difficulty breathing
 - 5. Shock
 - 6. Complicated childbirth
 - 7. Chest pain with BP <100 systolic
 - 8. Uncontrolled bleeding
 - 9. Severe pain anywhere
 - B. Expedite transport of the patient. Consider ALS back up.
- IX. Proceed to the appropriate focused history and physical examination.

APPLICATION

Procedural (How)

1. Review airway patency, breathing and oxygen delivery.
2. Review methods of assessing mental status.
3. Demonstrate obtaining radial, carotid, and brachial pulses.
4. Show assessment and control of major external bleeding.
5. Demonstrate assessment of skin color, temperature and capillary refill.

Contextual (When, Where, Why)

1. Perform initial assessment on all patients after assuring scene and personal safety.
2. If the scene is safe and the environment permits, perform the assessment prior to moving the patient.

3. The initial assessment is a rapid means of assessing patient condition and priorities of care.

STUDENT ACTIVITIES

Auditory (Hear)

1. Students should hear recordings of various patient situations to listen for clues concerning the general impression.
2. Students should hear normal and abnormal airway noises.
3. Students should hear breathing.

Visual (See)

1. Students should see audio-visual aids or materials of various patient situations.
2. Students should see breathing while an initial assessment is being performed.
3. Students should see appropriate landmarks for assessing pulses.
4. Students should see examples of major bleeding.
5. Students should see normal skin color and condition.
6. Students should see how to control major bleeding.
7. Students should see a [patient assessment flow chart](#).

Kinesthetic (Do)

1. Students should practice establishing mental status on programmed patients (fellow students) with various altered mental statuses.
2. Students should practice airway opening techniques on manikins and each other.
3. Students should practice assessing breathing.
4. Students should practice assessing pulses.
5. Students should practice assessing for major bleeding.
6. Students should practice assessing skin color, temperature and condition.
7. Students should practice assessing capillary refill.
8. Students should practice recording assessment findings.
9. Students should use a [patient assessment flow chart](#).

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-3

Baseline Vital Signs SAMPLE History and The Use of Pulse Oximetry

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-3.1 Identify the components of vital signs. (C-1)
- 2-3.2 Describe the methods to obtain a breathing rate. (C-1)
- 2-3.3 Identify the attributes that should be obtained when assessing breathing. (C-1)
- 2-3.4 Differentiate between shallow, labored and noisy breathing. (C-3)
- 2-3.5 Describe the methods to obtain a pulse rate. (C-1)
- 2-3.6 Identify the information obtained when assessing a patient's pulse. (C-1)
- 2-3.7 Differentiate between a strong, weak, regular and irregular pulse. (C-3)
- 2-3.8 Describe the methods to assess the skin color, temperature, condition (capillary refill in infants and children). (C-1)
- 2-3.9 Identify the normal and abnormal skin colors. (C-1)
- 2-3.10 Differentiate between pale, blue, red and yellow skin color. (C-3)
- 2-3.11 Identify the normal and abnormal skin temperature. (C-1)
- 2-3.12 Differentiate between hot, cool and cold skin temperature. (C-3)
- 2-3.13 Identify normal and abnormal skin conditions. (C-1)
- 2-3.14 Identify normal and abnormal capillary refill in infants and children. (C-1)
- 2-3.15 Describe the methods to assess the pupils. (C-1)
- 2-3.16 Identify normal and abnormal pupil size. (C-1)
- 2-3.17 Differentiate between dilated (big) and constricted (small) pupil size. (C-3)
- 2-3.18 Differentiate between reactive and non-reactive pupils and equal and unequal pupils. (C-3)
- 2-3.19 Describe the methods to assess blood pressure ([manual and automated](#)). (C-1)
- 2-3.20 Define systolic pressure. (C-1)
- 2-3.21 Define diastolic pressure. (C-1)
- 2-3.22 Explain the difference between auscultation and palpation for obtaining a blood pressure. (C-1)
- 2-3.23 Identify the components of the SAMPLE history. (C-1)
- 2-3.24 Differentiate between a sign and a symptom. (C-3)
- 2-3.25 State the importance of accurately reporting and recording the baseline vital signs. (C-1)

- 2-3.26 Discuss the need to search for additional medical identification. (C-1)
- 2-3.27 Describe the basic concept of pulse oximetry monitoring. (C-1)
- 2-3.28 Troubleshoot errors that can occur when using a pulse oximeter. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-3.29 Explain the value of performing the baseline vital signs. (A-2)
- 2-3.30 Recognize and respond to the feelings patients experience during assessment. (A-1)
- 2-3.31 Defend the need for obtaining and recording an accurate set of vital signs. (A-3)
- 2-3.32 Explain the rationale of recording additional sets of vital signs. (A-1)
- 2-3.33 Explain the importance of obtaining a SAMPLE history. (A-1)
- 2-3.34 Explain the significance of monitoring the patient's signs and symptoms while using a pulse oximeter. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-3.35 Demonstrate the skills involved in assessment of breathing. (P-1, 2)
- 2-3.36 Demonstrate the skills associated with obtaining a pulse. (P-1, 2)
- 2-3.37 Demonstrate the skills associated with assessing the skin color, temperature, condition, and capillary refill in infants and children. (P-1, 2)
- 2-3.38 Demonstrate the skills associated with assessing the pupils. (P-1,2)
- 2-3.39 Demonstrate the skills associated with obtaining blood pressure. (P-1,2)
- 2-3.40 Demonstrate the skills that should be used to obtain information from the patient, family, or bystanders at the scene. (P-1, 2)
- 2-3.41 Demonstrate proper placement of the transducer utilized in pulse oximetry. (P-2)
- 2-3.42 Demonstrate how to obtain a reading of the percentage of oxygen saturation. (P-2)

PREPARATION

Motivation: An EMT-Basic must be able to accurately assess and record a patient's vital signs. This must be done to record trends in the patient's condition. In addition to vital signs, obtain a SAMPLE history, as well as obtain pulse oximetry readings.

Prerequisite Skills: BLS and Preparatory.

MATERIALS

- AV Equipment: Utilize various audio-visual materials relating to vital signs, SAMPLE history and [pulse oximetry units](#). The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.
- EMS Equipment: Exam gloves, stethoscope (dual and single head)(1:6), blood pressure cuffs (adult, infant and child)(1:6), penlights (1:6), [pulse oximetry units](#).

PERSONNEL

- Primary Instructor: One EMT-Basic instructor knowledgeable in patient assessment.
- Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable in assessing baseline vital signs, SAMPLE histories and [pulse oximetry units](#).

PRESENTATIONDeclarative (What)

- I. Baseline Vital Signs – [establishes a “baseline” from what to compare additional sets of vital signs. Vital signs assist in identifying the majority of life-threatening conditions, are influenced by the patient’s age, underlying medical and physical conditions. Use trends as a triage tool to estimate severity of the patient’s condition.](#)
 - A. Breathing - assessed by observing the patient's chest rise and fall
 1. Rate is determined by counting the number of breaths in a 30-second period and multiplying by 2. Care should be taken not to inform the patient, to avoid influencing the rate.
 2. Quality of breathing can be determined while assessing the rate. Quality can be placed in 1 of 4 categories:
 - a. Normal - average chest wall motion, not using accessory muscles
 - b. Shallow - slight chest or abdominal wall motion
 - c. Labored
 - (1) An increase in the effort of breathing
 - (2) Grunting and stridor
 - (3) Often characterized by the use of accessory muscles

- (4) Nasal flaring, supraclavicular and intercostal retractions in infants and children
 - (5) Sometimes gasping
 - d. Noisy - an increase in the audible sound of breathing. May include snoring, wheezing, gurgling, crowing.
- B. Pulse
 - 1. Initially a radial pulse should be assessed in all patients one year or older. In patients less than one year of age a brachial pulse should be assessed.
 - 2. If the pulse is present, assess rate and quality
 - a. Rate is the number of beats felt in 30 seconds multiplied by 2
 - b. Quality of the pulse can be characterized as:
 - (1) Strong
 - (2) Weak
 - (3) Regular
 - (4) Irregular
 - 3. If peripheral pulse is not palpable, assess carotid pulse
 - a. Use caution. Avoid excess pressure on geriatrics
 - b. Never attempt to assess carotid pulse on both sides at one time
- C. Assess skin to determine perfusion
 - 1. The patient's color should be assessed in the nail beds, oral mucosa, and conjunctiva
 - a. In infants and children, palms of hands and soles of feet should be assessed
 - b. Normal skin - pink
 - c. Abnormal skin colors
 - (1) Pale - indicating poor perfusion (impaired blood flow)
 - (2) Cyanotic (blue-gray) - indicating inadequate oxygenation or poor perfusion
 - (3) Flushed (red) - indicating exposure to heat or carbon monoxide poisoning
 - (4) Jaundice (yellow) - indicating liver abnormalities
 - 2. The patient's temperature should be assessed by placing the back of your hand on the patient's skin
 - a. Normal - warm
 - b. Abnormal skin temperatures
 - (1) Hot - indicating fever or an exposure to heat
 - (2) Cool - indicating poor perfusion or exposure to cold
 - (3) Cold - indicates extreme exposure to cold
 - 3. Assess the condition of the patient's skin
 - a. Normal - dry
 - b. Abnormal - skin is wet, moist, or dry

4. Assess capillary refill in infants and children less than six years of age
 - a. Capillary refill in infants and children is assessed by pressing on the patient's skin or nail beds and determining time for return to initial color
 - b. Normal capillary refill in infants and children is < 2 seconds
 - c. Abnormal capillary refill in infants and children is > 2 seconds
- D. Pupils are assessed by briefly shining a light into the patient's eyes, and determining size and reactivity
 1. Dilated (very big), normal, or constricted (small)
 2. Equal or unequal
 3. Reactivity is whether or not the pupils change in response to the light
 - a. Reactive - change when exposed to light
 - b. Non-reactive - do not change when exposed to light
 - c. Equally or unequally reactive
- E. Blood pressure
 1. Assess systolic and diastolic pressures
 - a. Systolic blood pressure is the first distinct sound of blood flowing through the artery as the pressure in the blood pressure cuff is released. This is a measurement of the pressure exerted against the walls of the arteries during contraction of the heart.
 - b. Diastolic blood pressure is the point during deflation of the blood pressure cuff at which sounds of the pulse beat disappear. It represents the pressure exerted against the walls of the arteries while the left ventricle is at rest.
 - c. There are **three** methods of obtaining blood pressure
 - (1) Auscultation: In this case the EMT-Basic will listen for the systolic and diastolic sounds
 - (2) Palpation: In certain situations, the systolic blood pressure may be measured by feeling for return of pulse with deflation of the cuff
 - (3) **Automated: Some departments will utilize a mechanical unit to obtain systolic and diastolic readings**
 2. Blood pressure should be measured in all patients older than 3 years of age
 3. The general assessment of the infant or child patient, such as sick appearing, in respiratory distress, or unresponsive, is more valuable than vital sign numbers
- F. **REEVALUATE** and document vital signs -
 1. Every 15 minutes in a stable patient
 2. Every 5 minutes in the unstable patient

3. Following all medical interventions
 4. **Anytime patient status changes**
- II. Obtain a SAMPLE History
- A. Signs/Symptoms
 1. Sign - any medical or trauma condition displayed by the patient and identifiable by the EMT-Basic, e.g., Hearing = respiratory distress, Seeing = bleeding, Feeling = skin temperature
 2. Symptom - any condition described by the patient, e.g., shortness of breath
 - B. Allergies
 1. Medications
 2. Food
 3. Environmental allergies
 4. Consider medical identification tag
 - C. Medications
 1. Prescription
 - a. Current
 - b. Recent
 - c. Birth control pills
 2. Non-prescription
 - a. Current
 - b. Recent
 3. Alternative
 - a. herbal supplements
 - b. dietary supplement
 - D. Pertinent Past History
 1. Medical
 2. Surgical
 3. Trauma
 4. Consider medical identification tag
 - E. Last oral intake: Solid or liquid
 1. Time
 2. Quantity
 - F. Events leading to the injury or illness
 1. Chest pain with exertion
 2. Chest pain while at rest
- III. **Pulse Oximetry Monitoring**
- A. **Objectively determines the oxygenation status of a patient when applied correctly**
 - B. **Measures the percentage of circulating hemoglobin saturated with oxygen**
 - C. **Provide aggressive oxygenation to patients whose saturation level is <90%**
 1. **Normal pulse oximetry reading is >95%**
 2. **For some chronically ill patients (i.e. COPD) the normal may be 90-95%**

- D. Monitor patient status at all times. DO NOT rely solely upon mechanical readings.
- E. Possible invalid readings
 1. Patient with low blood flow states (i.e., shock states, hypothermic, hypovolemia) may show an inaccurate low oxygenation saturation
 2. Patient who has experienced carbon monoxide poisoning may show a false high percent reading. In this case, the oximeter is picking up the carbon monoxide that is attached to the hemoglobin and inaccurately assuming it to be oxygen.
 3. Patients with certain anemias and oxygen capacity carrying diseases (i.e., sickle cell) may also show a false high reading. The monitor is measuring that each hemoglobin molecule is saturated but is not able to accurately note that the hemoglobin count itself is diminished.
 4. Patients with fingernail polish, excessive grease and dirt, nail-tips, or gel nails may also present with a false low reading. The infrared and red light is not able to penetrate the polish, dirt or nail endings.
 5. Jaundice, patient movement and bright light may interfere with accurate pulse oximeter readings
 6. If the pulse rate on the monitor is incorrect, the validity of the pulse oximeter reading must be questioned
- F. Placement of the transducer
 1. Most commonly accepted placement is the distal end of a finger or toe. Remove excessive dirt, grease or nail polish prior to placement.
 2. Pediatric pulse oximetry transducers tape around the great toe or around the foot
 3. The ear lobe is also an acceptable area
 4. The pediatric transducer may also be taped across the bridge of the nose of an adult patient. This is especially useful in patients with bad circulation to distal extremities.
- G. Obtaining a reading
 1. Once the transducer is placed and the monitor turned on, the monitor senses a pulse reading. Once the monitor senses the pulse, the oxygen saturation will be expressed in a percent fashion.
 2. The patient must have a palpable pulse before using the monitor
- H. Troubleshooting for simple errors
 1. Not detecting a pulse
 2. Patient does not have a pulse
 3. Transducer not applied to the patient or does not fit properly
 4. Transducer not able to read through nail polish, etc.
 5. Patient cable not connected to monitor

6. Monitor not turned on
7. Low battery
- I. Continuous alarm sounds
 1. Alarm limits set too low
 2. Alarm limits set too high

APPLICATION

Procedural (How)

1. Demonstrate the skill of assessing breathing.
2. Demonstrate the skill of determining a pulse.
3. Demonstrate the skill of determining skin color, temperature, condition.
4. Demonstrate the skill of determining capillary refill in infants and children.
5. Demonstrate the skill of assessing pupils for size, reactivity and equality.
6. Demonstrate the skill of assessing blood pressure
 - A. Auscultation
 - B. Palpation
7. Discussion on questioning techniques to obtain history.
8. Demonstrate the skill of obtaining a pulse oximetry reading.

Contextual (When, Where, Why)

1. Accurate measurement and recording of vital signs over a period of time may indicate a trend in the patient's condition and be valuable in the continuum of care.
2. There are a number of interventions that the EMT-Basic can perform; however, these skills cannot be performed without an accurate set of baseline vital signs.
3. The SAMPLE history is important to guide the pace of the EMT-Basic and assist in the continuum of care at the receiving facility.
4. Pulse oximetry can provide the EMT-Basic with important information about the patient's oxygen saturation.

STUDENT ACTIVITIES

Auditory (Hear)

1. Students should hear normal and abnormal breathing.
2. Student should hear with a stethoscope and assess systolic and diastolic pressures.
3. Student should hear five components of the SAMPLE history.

Visual (See)

1. Students should see a simulated or actual patient's chest rise and fall and assess rate and quality of breathing.
2. Students should see appropriate areas of the body to assess the color and condition (and in infants and children < 6 years of age, the capillary refill).
3. Students should see pupils to assess size, reactivity and equality.

4. Students should see a simulation of obtaining a pulse oximetry reading.

Kinesthetic (Do)

1. Students should practice methods for assessing breathing.
2. Students should practice methods for obtaining a pulse.
3. Students should practice methods for determining skin color, temperature, condition, (and capillary refill in infants and children < 6 years of age).
4. Students should practice methods for determining pupil size, reactivity and equality.
5. Students should practice methods for determining blood pressure by auscultation and palpation.
6. Students should practice methods for obtaining an SAMPLE history.
7. Students should practice completing a prehospital care report including vital signs and SAMPLE history.
8. Students should practice obtaining a pulse oximetry reading.
9. Students should problem solve an erroneous reading obtained by a pulse oximeter.

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from instructor's course guide and attach with lesson plan

MODULE 2

Patient

Assessment

Lesson 2-4

Focused History and Physical Exam: Trauma

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-4.1 Discuss the reasons for reconsideration concerning the mechanism of injury. (C-1)
- 2-4.2 State the reasons for performing a rapid trauma assessment. (C-1)
- 2-4.3 Recite examples and explain why patients should receive a rapid trauma assessment. (C-1)
- 2-4.4 Describe the areas included in the rapid trauma assessment and discuss what should be evaluated. (C-1)
- 2-4.5 Differentiate when the rapid assessment may be altered in order to provide patient care. (C-3)
- 2-4.6 Discuss the reason for performing a focused history and physical exam. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-4.7 Recognize and respect the feelings that patients might experience during assessment. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-4.8 Demonstrate the rapid trauma assessment that should be used to assess a patient based on mechanism of injury. (P-1,2)

PREPARATION

Motivation: With trauma patients, it is important for the EMT-Basic student to separate those patients who require rapid assessment and critical interventions, from those patients who can be managed using components of the focused assessment.

Prerequisite Skills: BLS and Preparatory.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to the history and physical exam of trauma patients. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Exam gloves, stethoscope (dual and single head)(1:6), blood pressure cuffs (adult, child and infant)(1:6), penlight (1:6), [pulse oximeter](#).

PERSONNEL

Primary Instructor: One EMT-Basic instructor, knowledgeable in patient assessment.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable in assessing the history and physical exam of the trauma patient.

PRESENTATIONDeclarative (What)

- I. [REEVALUATE](#) Mechanism of Injury – [continual gathering, evaluating and synthesizing information to determine significant MOI](#)
 - A. Significant mechanism of injury
 1. Ejection from vehicle
 2. Death in same passenger compartment
 3. Falls >15 feet
 4. Roll-over of vehicle
 5. High-speed vehicle collision
 6. Vehicle-pedestrian collision
 7. Motorcycle crash
 8. Unresponsive or altered mental status
 9. Penetrations of the head, chest, or abdomen
 10. Hidden injuries
 - a) Seat belts
 - (1) If buckled, may have produced injuries
 - (2) If patient had seat belt on, it does not mean they do not have injuries
 - b) Airbags
 - (1) May not be effective without seat belt
 - (2) Patient can hit wheel after deflation

- (3) Lift the deployed airbag and look at the steering wheel for deformation
 - (a) "Lift and look" under the bag after the patient has been removed
 - (b) Any visible deformation of the steering wheel should be regarded as an indicator of potentially serious internal injury, and appropriate action should be taken
 - B. Infant and child considerations
 1. Falls >10 feet
 2. Bicycle collision
 3. Vehicle in medium speed collision
- II. Perform rapid trauma assessment on patients with significant mechanism of injury to determine life threatening injuries. In the responsive patient, symptoms should be sought before and during the trauma assessment.
- A. Continue spinal stabilization
 - B. Consider ALS request
 - C. Reconsider transport decision, [revise if needed](#)
 - D. Assess mental status
 - E. As you inspect and palpate, look and feel for the following obvious signs of trauma:
 1. Deformities
 2. Contusions
 3. Abrasions
 4. Punctures/penetrations
 5. Burns
 6. Tenderness
 7. Lacerations
 8. Swelling
 - F. Assess the head, inspect and palpate for injuries or signs of injury.
 1. Obvious signs of trauma, plus
 2. Crepitus
 - G. Assess the neck, inspect and palpate for injuries or signs of injury
 1. Obvious signs of trauma, plus
 2. Jugular vein distension (JVD)
 3. Crepitus
 - H. Apply cervical spinal immobilization collar (CSIC). May use information from the head injury lesson at this time.
 - I. Assess the chest, inspect and palpate for:
 1. Obvious signs of trauma, plus
 2. Paradoxical motion
 3. Crepitation
 4. Breath sounds in the apices, mid-clavicular line, bilaterally and at the bases, mid-axillary line, bilaterally
 - a) Present
 - b) Absent

- c) Equal
 - J. Assess the abdomen, inspect and palpate for injuries or signs of injury.
 - 1. Obvious signs of trauma, plus
 - 2. Firm
 - 3. Soft
 - 4. Distended
 - K. Assess the pelvis, inspect and palpate for injuries or signs of injury.
 - 1. Obvious signs of trauma, plus
 - 2. If no pain is noted, gently compress the pelvis to determine tenderness or motion.
 - L. Assess all four extremities, inspect and palpate for injuries or signs of injury
 - 1. Obvious signs of trauma, plus
 - 2. Distal pulse
 - 3. Sensation
 - 4. Motor function
 - M. Roll patient, while maintaining spinal precautions and assess posterior body, inspect and palpate, examining for injuries or signs of injury
 - N. Assess baseline vital signs
 - O. Assess SAMPLE history
 - P. [Assess O-P-Q-R-S-T \(patient complaint\)](#)
 - 1. [Onset](#)
 - 2. [Provocation](#)
 - 3. [Quality](#)
 - 4. [Radiation](#)
 - 5. [Severity](#)
 - 6. [Time](#)
 - Q. [Reevaluate Field Impression](#)
 - R. [Reconsider Transport Decision and revise if needed](#)
 - S. [Initiate management plan, consulting medical direction, if needed](#)
 - T. [Consider ALS](#)
- III. For patients with no significant mechanism of injury, e.g., cut finger
- A. Perform focused history and physical exam of injuries based on the components of the rapid assessment. The focused assessment is performed on the specific injury site.
 - B. Assess baseline vital signs
 - C. Assess SAMPLE history

APPLICATION

Procedural (How)

1. The assessment is completed by visually inspecting, physically palpating and auscultating, and verbally communicating with the patient and family. The assessment is an input/output process, where the assessment findings are the input and the treatment is the output.

- a. Review of scene size-up.
- b. Review of the initial assessment.
- c. Students should be shown audio-visual aids or materials of various trauma scenes to evaluate the mechanism of injury.
- d. Demonstrate a rapid patient assessment.

Contextual (When, Where, Why)

1. The history and physical exam are performed following the initial assessment and correction of immediate threats to life. During this process, obtain additional information regarding the patient's condition.
2. This assessment may be performed at the same location as the initial assessment, unless the scene or patient's condition requires movement.
3. This assessment is the second hands-on approach to gain information to continue providing patient care, managing life threats, and making a transport decision.

STUDENT ACTIVITIES

Auditory (Hear)

1. Students should hear information input from a simulated patient or others regarding signs and symptoms for patients that are unresponsive.
2. Students should hear the presence of breath sounds on fellow students.

Visual (See)

1. Students should see audio-visual aids or materials of various injuries.
2. Students should see the inspection and palpation of programmed patients for various injuries and patterns of injury.
3. Students should see landmarks for auscultation of breath sounds.
4. Students should see landmarks for palpation and inspection.
5. Students should see the sizing and application of cervical spine immobilization devices.
6. Students should see how the pupils of the eye normally react to light.
7. Students should see a patient assessment flow chart.

Kinesthetic (Do)

1. Students should practice performing the skills of inspection, palpation, and auscultation.
2. Students should practice measuring and applying cervical spine immobilization devices.
3. Students should practice recording assessment findings for a trauma patient.
4. Students should use a patient assessment flow chart.
5. The student should practice doing the focused history and physical exam learned in this lesson.

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.

3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

- Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.
- Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-5

Focused History and Physical Exam: Medical

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-5.1 Describe the unique needs for assessing an individual with a specific chief complaint with no known prior history. (C-1)
- 2-5.2 Differentiate between the history and physical exam that are performed for responsive patients with no known prior history and responsive patients with a known prior history. (C-3)
- 2-5.3 Describe the needs for assessing an individual who is unresponsive. (C-1)
- 2-5.4 Differentiate between the assessment that is performed for a patient who is unresponsive or has an altered mental status and other medical patients requiring assessment. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-5.5 Attend to the feelings that these patients might be experiencing. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-5.6 Demonstrate the patient assessment skills that should be used to assist a patient who is responsive with no known history. (P-1,2)
- 2-5.7 Demonstrate the patient assessment skills that should be used to assist a patient who is unresponsive or has an altered mental status. (P-1,2)

PREPARATION

Motivation: The emergency medical care for the patient by the EMT-Basic is based upon assessment findings. In the history and physical exam, the EMT-Basic will concentrate on the patient's complaint and history, allowing for rapid emergency medical care.

Prerequisite Skills: BLS and Preparatory.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to the history and physical exam of medical patients. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Exam gloves, stethoscope (dual and single head)(1:6), blood pressure cuffs (adult, child and infant)(1:6), penlight (1:6), [pulse oximeter](#).

PERSONNEL

Primary Instructor: One EMT-Basic instructor, knowledgeable in patient assessment.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable in assessing the history and physical exam for medical patients.

PREPARATIONDeclarative (What)

- I. [Responsive Medical Patient - REEVALUATE](#) Nature of Illness – [continue to gather, evaluate and synthesize information to determine significant NOI](#)
- II. Assess History of Present Illness
 - A. Assess complaints and signs or symptoms
 1. O-P-Q-R-S-T
 - a) Onset
 - b) Provocation
 - c) Quality
 - d) Radiation
 - e) Severity
 - f) Time
 2. Assess SAMPLE History
 3. Assess baseline vital signs
 4. [Perform appropriate physical exam](#)
 - a) Assess the head if necessary
 - b) Assess the neck if necessary
 - c) Assess the chest if necessary
 - d) Assess the abdomen if necessary
 - e) Assess the pelvis if necessary
 - f) Assess the extremities if necessary

- g) Assess the posterior body if necessary
 - 5. Reevaluate Field Impression
 - 6. Reconsider Transport Decision and revise if needed
 - 7. Initiate management plan, consulting medical direction, if needed
 - 8. Consider ALS
- III. Unresponsive Medical Patients - REEVALUATE Nature of Illness – continue to gather, evaluate and synthesize information to determine significant NOI
- A. Perform rapid assessment
 - B. Assess baseline vital signs
 - C. SAMPLE History – obtain information from family/bystanders without delaying transport
 - D. O-P-Q-R-S-T – obtain information from family/bystanders without delaying transport
 - E. Reevaluate Field Impression
 - F. Reevaluate Transport Decision
 - G. Initiate management plan, consulting medical direction, if needed
 - H. Consider ALS

APPLICATION

Procedural (How)

1. Review methods of questioning to determine SAMPLE history.
2. Practice methods of questioning to determine history of present illness.
3. Review airway management.
4. Review size-up.
5. Review the initial assessment.
6. Review rapid patient assessment.
7. Review of general impression.

Contextual (When, Where, Why)

1. The history and physical exam will be performed on all patients, following the initial assessment.
2. This assessment will focus on the patient's history, as well as the signs and symptoms of the present illness.
3. This assessment will help the EMT-Basic student provide rapid intervention.

STUDENT ACTIVITIES

Auditory (Hear)

1. Students should hear input from the patient or others regarding signs and symptoms for patients that are unresponsive.
2. Students should hear the presence of breath sounds in fellow students.
3. Students should hear questions to assist in determining the SAMPLE History.
4. Students should hear questions to assist in determining the history of the present illness.

Visual (See)

1. Students should see the entire assessment completed for each patient category.
2. Students should see audio-visual aids or materials of various illnesses.
3. Students should see the inspection and palpation of programmed patients for various illnesses.
4. Students should see landmarks for auscultation of breath sounds.
5. Students should see landmarks for palpation and inspection.
6. Students should see a patient assessment flow chart.

Kinesthetic (Do)

1. Students should practice performing the skills of inspection, palpation, and auscultation.
2. Students should practice questioning programmed patients on SAMPLE histories.
3. Students should practice questioning programmed patients on the history of present illness.
4. Students should practice all components of the assessment including: Size-up, initial assessment and the focused history and physical exam.
5. Students should practice recording assessment findings on a medical patient.
6. Students should use a patient assessment flow chart.

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-6

Detailed Physical Exam

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-6.1 Discuss the components of the detailed physical exam. (C-1)
- 2-6.2 State the areas of the body that are evaluated during the detailed physical exam. (C-1)
- 2-6.3 Explain what additional care should be provided while performing the detailed physical exam. (C-1)
- 2-6.4 Distinguish between the detailed physical exam that is performed on a trauma patient and that of the medical patient. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-6.5 Explain the rationale for the feelings that these patients might be experiencing. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-6.6 Demonstrate the skills involved in performing the detailed physical exam. (P-1,2)

PREPARATION

Motivation: The entire basis for the EMT-Basic's emergency medical care is the assessment findings. In the detailed physical exam, the EMT-Basic will continue to **systematically** assess the patient, allowing for continued care.

Prerequisites: BLS and Preparatory.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to the detailed physical exam. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best

meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Exam gloves, stethoscope (dual and single head)(1:6), blood pressure cuffs (adult, child and infant)(1:6), penlight (1:6), pulse oximeter.

PERSONNEL

Primary Instructor: One EMT-Basic instructor with knowledge in patient assessment.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable in assessing a detailed physical exam.

PRESENTATION

Declarative (What)

- I. Detailed Physical Exam – **REEVALUATE and REVISE**
 - A. **Conducted on patients who are unresponsive or have a significant MOI**
 - B. Perform a detailed physical examination on the patient to gather additional information, **reevaluate patient status and revise management, if needed**
 - C. As you inspect and palpate each area of the body, look and/or feel for obvious signs of trauma:
 1. Assess the head
 2. Assess the face
 3. Assess the ears, also look for
 - a) drainage
 - b) bleeding
 4. Assess the eyes, also look for
 - a) Discoloration
 - b) Unequal pupils
 - c) Foreign bodies
 - d) Blood in anterior chamber
 5. Assess the nose, also look for
 - a) Drainage
 - b) Bleeding
 6. Assess the mouth, also look for
 - a) Loose teeth
 - b) Obstructions
 - c) Swollen or lacerated tongue
 - d) Unusual odors
 - e) Discoloration

7. Assess the neck, also look for
 - a) Jugular vein distension
 - b) Crepitus
8. Assess the chest, also look for
 - a) Crepitus
 - b) Paradoxical motion
 - c) Breath sounds in the apices, mid-clavicular line, bilaterally and at the bases, mid-axillary line, bilaterally
 - (1) Present
 - (2) Absent
 - (3) Equal
9. Assess the abdomen, also look for
 - a) Firm
 - b) Soft
 - c) Distended
10. Assess the pelvis, also
 - a) If the patient does not complain of pain or is unresponsive, gently flex and compress the pelvis to determine stability
11. Assess all four extremities, also look for
 - a) Distal pulses
 - b) Sensation
 - c) Motor function
12. Assess back - roll the patient, while maintaining spinal precautions, to inspect and palpate for injuries

II. Reassess Vital Signs

APPLICATION

Procedural (How)

1. The physical assessment is completed by visual inspection and palpation.
2. The assessment is an input/output process, where the assessment findings are the input and the treatment is the output.

Contextual (When, Where, Why)

1. The detailed physical exam is performed following the focused history and physical exam.
2. It will be performed after all critical interventions have been completed.
3. It is situation and time dependent. Depending upon the severity of the patient's injury or illness, this assessment may not be completed.
4. During this process, additional information regarding the patient's condition is obtained.
5. Typically this assessment will be performed while en route to the receiving facility.

STUDENT ACTIVITIES

Auditory (Hear)

1. Students should hear information (clues) from the responsive or altered mental status patient regarding symptoms.

Visual (See)

1. Students should see audio-visual aids or materials of various injuries.
2. Students should see the inspection and palpation of programmed patients for various injuries and illnesses.
3. Students should see landmarks for auscultation of breath sounds.
4. Students should see landmarks for palpation and inspection.
5. Students should see a patient assessment flow chart.

Kinesthetic (Do)

1. Students should practice performing the skills of inspection, palpation, and auscultation of the detailed physical exam.
2. Students should use a patient assessment flow chart.

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

- Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.
- Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-7

On-Going Assessment

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-7.1 Discuss the reasons for repeating the initial assessment as part of the on-going assessment. (C-1)
- 2-7.2 Describe the components of the on-going assessment. (C-1)
- 2-7.3 Describe trending of assessment components. C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-7.4 Explain the value of performing an on-going assessment. (A-2)
- 2-7.5 Recognize and respect the feelings that patients might experience during assessment. (A-1)
- 2-7.6 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 lesson, the EMT-Basic student will be able to:

- 2-7.7 Demonstrate the skills involved in performing the on-going assessment. (P-1,2)

PREPARATION

Motivation:

In order to assure appropriate care, the EMT-Basic must re-evaluate the patient frequently **and revise the management plan as needed**. The length of time spent with the patient or the condition of the patient will assist in establishing how often and how on-going assessments will be conducted.

It is of utmost importance to be accurate with the documentation of all findings and interventions. Be sure to accurately record all times associated with the care provided.

Prerequisites: BLS and Preparatory.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to patient assessment. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Exam gloves, stethoscope (dual and single head)(1:6), blood pressure cuffs (adult, child and infant)(1:6), penlight, pulse oximetry unit.

PERSONNEL

Primary Instructor: One EMT-Basic instructor with knowledge in patient assessment.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable in the aspects of the on-going assessment.

PRESENTATION

Declarative (What)

- I. Repeat initial assessment. For a stable patient, repeat and record every 15 minutes. For an unstable patient, repeat and record at a minimum every 5 minutes.
 - A. Reassess mental status
 - B. Maintain open airway
 - C. Monitor breathing for rate and quality
 - D. Reassess pulse for rate and quality
 - E. Monitor skin color and temperature
 - F. Re-establish patient priorities
- II. Reassess and record vital signs
- III. Repeat focused assessment regarding patient complaint or injuries
- IV. Recheck interventions
 - A. Assure adequacy of oxygen delivery/artificial ventilation
 - B. Assure management of bleeding
 - C. Assure adequacy of other interventions
 - D. **Revise management plan if needed**
- V. **REVIEW performance at run critique**

APPLICATION

Procedural (How)

1. Review methods for determining mental status.
2. Review of the airway module for airway patency.
3. Review of the airway module for breathing.
4. Review of the airway module for oxygen delivery/artificial ventilation.
5. Review of obtaining radial, carotid, and brachial pulses.
6. Review assessment of skin color, temperature and capillary refill for infant and child patients.
7. Review patient priorities.
8. Review baseline vital signs.
9. Review SAMPLE history.
10. Review the focused history and physical examination.
11. Discuss intervention checks.

Contextual (When, Where, Why)

1. The on-going assessment should be performed on all patients after assuring completion of critical interventions. Ideally, it is completed following the detailed physical exam. However, the patient condition may preclude performance of the detailed physical exam. In these cases, the on-going assessment is extremely valuable.
2. The on-going assessment is a means of determining changes in the patient's condition.

STUDENT ACTIVITIES

Auditory (Hear)

None identified for this lesson.

Visual (See)

1. The students should see the flow chart from Appendix I.

Kinesthetic (Do)

1. The students should practice establishing mental status on programmed patients with various mental statuses.
2. The students should practice airway opening techniques on manikins and each other.
3. The students should practice on each other to determine breathing.
4. The students should practice determining pulses.
5. The students should practice determining skin color, temperature and condition.
6. The students should practice examining interventions to assure that they continue to be effective.
7. The students should practice completing an on-going assessment.
8. The students should practice recording assessment findings.
9. The students should use a patient assessment flow chart.

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-8

Communications

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-8.1 List the proper methods of initiating and terminating a radio call. (C-1)
- 2-8.2 State the proper sequence for delivery of patient information. (C-1)
- 2-8.3 Explain the importance of effective communication of patient information in the verbal report. (C-1)
- 2-8.4 Identify the essential components of the verbal report. (C-1)
- 2-8.5 Describe the attributes for increasing effectiveness and efficiency of verbal communications. (C-1)
- 2-8.6 State legal aspects to consider in verbal communication. (C-1)
- 2-8.7 Discuss the communication skills that should be used to interact with the patient. (C-1)
- 2-8.8 Discuss the communication skills that should be used to interact with the family, bystanders, individuals from other agencies while providing patient care and the difference between skills used to interact with the patient and those used to interact with others. (C-1)
- 2-8.9 List the correct radio procedures for all phases of a typical call: (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-8.10 Explain the rationale for providing efficient and effective radio communications and patient reports. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-8.11 Perform a simulated, organized, concise radio transmission. (P-2)
- 2-8.12 Perform an organized, concise patient report that would be given to the staff at a receiving facility. (P-2)
- 2-8.13 Perform a brief, organized report that would be given to an ALS provider arriving at an incident scene at which the EMT-Basic was already providing care. (P-2)

PREPARATION

Motivation: The best prehospital patient care may come to an end at the door of the Emergency Department (ED) if a patient's condition is not described well enough for the ED staff to prepare.

Communication is an essential component of prehospital care. Both verbal and written communications will be used during every response. Patient care not only includes assessment and treatment, but the ability to effectively and efficiently communicate findings to other health care providers.

Prerequisites: BLS and Preparatory.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to communications. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Two-way mobile radios, if available.

PERSONNEL

Primary Instructor: One EMT-Basic instructor knowledgeable in this area.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable in communications.

PRESENTATIONDeclarative (What)

- I. Communication
 - A. Communication system
 1. System components
 - a) Base station - a radio which is located at a stationary site such as a hospital, mountain top, or public safety agency
 - b) Mobile two-way radios (transmitter/receivers)
 - (1) Implies a vehicular mounted device
 - (2) Mobile transmitters usually transmit at lower power than base stations (typically 20 - 50 watts)

- (3) Typical transmission range is 10 - 15 miles over average terrain
 - c) Portable radios (transmitter/receivers)
 - (1) Implies a handheld device
 - (2) Typically have power output of 1 - 5 watts, limiting their range
 - d) Repeater/base station - receives a transmission from a low-power portable or mobile radio on one frequency and retransmits at a higher power on another frequency
 - e) Digital radio equipment
 - f) Cellular telephones
2. Radio communications
- a) Radio frequencies - assigned and licensed by the Federal Communication Commission (FCC)
 - b) Response to the scene
 - (1) The dispatcher needs to be notified that the call was received
 - (2) Dispatch needs to know that the unit is en route
 - (3) Other agencies should be notified as appropriate, e.g., local hospital
 - c) Arrival at the scene - the dispatcher must be notified
3. Communication with medical direction
- a) In some systems, medical direction is at the receiving facility. In others, medical direction is at a separate site.
 - b) In either case, EMT-Basics may need to contact medical direction for consultation and to get orders for administration of medications. Radio transmissions need to be organized, concise and pertinent.
 - c) Since the physician will determine whether to order medications and procedures based on the information given by the EMT-Basic, this information must be accurate
 - d) After receiving an order for a medication or procedure (or denial of such a request), repeat the order back word for word
 - e) Orders that are unclear or appear to be inappropriate should be questioned
 - f) Communication with receiving facilities
 - g) EMT-Basics provide information that allows hospitals to prepare for a patient's arrival by having the right room, equipment and personnel prepared
 - h) Patient reporting concepts
 - (1) When speaking on the radio, keep these principles in mind:
 - (a) Radio is on and volume is properly adjusted

- (b) Listen to the frequency and ensure it is clear before beginning a transmission
- (c) Press the "press to talk" (PTT) button on the radio and wait for one second before speaking
- (d) Speak with lips about 2 to 3 inches from the microphone
- (e) Address the unit being called, then give the name of the unit (and number if appropriate) where the transmission is originating from
- (f) The unit being called will signal that the transmission should start by saying "go ahead" or some other term standard for that area. A response of "stand by" means wait until further notice.
- (g) Speak clearly and slowly, in a monotone voice
- (h) Keep transmissions brief. If, on occasion, a transmission takes longer than 30 seconds, stop at that point and pause for a few seconds so that emergency traffic can use the frequency if necessary.
- (i) Use clear text
- (j) Avoid codes
- (k) Avoid meaningless phrases like "Be advised."
- (l) Courtesy is assumed, so there is no need to say "please," "thank you" and "you're welcome."
- (m) When transmitting a number that might be confused (e.g., a number in the teens), give the number, then give the individual digits
- (n) The airwaves are public and scanners are popular. EMS transmissions may be overheard by more than just the EMS community. Do not give a patient's name over the air. [HIPAA Privacy Rule must be adhered to when sharing patient information.](#)
- (o) For the same reason, be careful to remain objective and impartial in describing patients. An EMT-Basic may be sued for slander if he injures someone's reputation in this way.

- (p) An EMT-Basic rarely acts alone: Use "we" instead of "I"
 - (q) Do not use profanity on the air. The FCC takes a dim view of such language and may impose substantial fines.
 - (r) Avoid words that are difficult to hear like "yes" and "no." Use "affirmative" and "negative."
 - (s) Use the standard format for transmission of information
 - (t) When the transmission is finished, indicate this by saying "over." Get confirmation that the message was received.
 - (u) Avoid codes, especially those that are not standardized
 - (v) Avoid offering a diagnosis of the patient's problem
 - (w) Use EMS frequencies only for EMS communication
 - (x) Reduce background noise as much as possible by closing the window
- (2) Notify the dispatcher when the unit leaves the scene
- (3) When communicating with medical direction or the receiving facility, a verbal report should be given. The essential elements of such a report, in the order they should be given, are:
- (a) Identify unit and level of provider (who and what)
 - (b) Estimated time of arrival
 - (c) Patient's age and gender
 - (d) Chief complaint
 - (e) Brief, pertinent history of the present illness
 - (f) Major past illnesses
 - (g) Mental status
 - (h) Baseline vital signs
 - (i) Pertinent findings of the physical exam
 - (j) Emergency medical care given
 - (k) Response to emergency medical care
- (4) After giving this information, the EMT-Basic will continue to assess the patient. Additional vital signs may be taken and new information may become available, particularly on long transports. In some systems, this information should be relayed to the hospital (see local protocol).

Information that must be transmitted includes deterioration in the patient's condition.

- (5) Arrival at the hospital
 - (a) The dispatcher must be notified
 - (b) In some systems, the hospital should also be notified
 - (6) Leaving the hospital for the station - the dispatcher should be notified
 - (7) Arrival at the station - the dispatcher should be notified
4. System maintenance
- a) Communication equipment needs to be checked periodically by a qualified technician, e.g., to ensure that a radio is not drifting from its assigned frequency
 - b) As technology changes, new equipment becomes available that may have a role in EMS systems, e.g., cellular phones
 - c) Since EMT-Basics may need to be able to consult on-line medical direction, an EMS system must provide a back-up in case the usual procedures do not work
- B. Verbal communication
1. After arrival at the hospital, give a verbal report to the staff
 - a) Introduce the patient by name (if known)
 - b) Summarize the information given over the radio:
 - (1) Chief complaint
 - (2) History that was not given previously
 - (3) Additional treatment given en route
 - (4) Additional vital signs taken en route
 - c) Give additional information that was collected but not transmitted
- C. Written communication - this is covered in the lesson on documentation
- D. Interpersonal communication
1. Make and keep eye contact with the patient
 2. When practical, position yourself at a level lower than the patient
 3. Be honest with the patient
 4. Use language the patient can understand
 5. Be aware of your own body language
 6. Speak clearly, slowly and distinctly
 7. Use the patient's proper name, either first or last, depending on the circumstances. Ask the patient what he wishes to be called.
 8. If a patient has difficulty hearing, speak clearly with lips visible
 9. Allow the patient enough time to answer a question before asking the next one
 10. Act and speak in a calm, confident manner

- E. Communication with hearing impaired, vision impaired, and non-English speaking populations, use of interpreters, etc.
- F. Communication with elderly
 - 1. Potential for visual deficit
 - 2. Potential for auditory deficit

APPLICATION

Procedural (How)

1. Show how to initiate and terminate a radio call.
2. Demonstrate use of the radio in the different phases of a typical call.
3. Demonstrate the proper sequence of patient information.
4. Demonstrate how to communicate with a patient.
5. Demonstrate how to communicate with a patient's family.
6. Demonstrate how to communicate with bystanders.
7. Demonstrate how to communicate with individuals from other agencies while providing patient care.
8. Demonstrate a brief, organized report that would be given to an ALS provider arriving at an incident scene at which the EMT-Basic was already providing care.
9. Demonstrate a simulated, organized, concise radio transmission.

Contextual (When, Where, Why)

1. Communications occur from the pre-dispatch phase, throughout the call, and well after the completion of the transport. Various individuals will be involved in the verbal communication process and vital information will be discussed.
2. The EMT-Basic must have excellent verbal and written communication skills to assure accurate information is delivered to the appropriate individuals.
3. The continuum of patient care is based upon effective and efficient communication skills.

STUDENT ACTIVITIES

Auditory (Hear)

1. The student should hear both sides of a radio transmission during the phases of a typical call:
2. The student should hear initiation and termination of a radio call.
3. The student should hear patient information delivered in the proper sequence.
4. The student should hear communication with a simulated patient.
5. The student should hear communication with the family of a simulated patient.
6. The student should hear communication with simulated bystanders.
7. The student should hear communication with individuals from other agencies at a call.
8. The student should hear a brief, organized report that would be given to an ALS provider arriving at an incident scene at which the EMT-Basic was already providing care.

Visual (See)

1. The student should see examples of portable, mobile and base station radio equipment.
2. The student should see the communication skills used to interact with the family.
3. The student should see the communication skills used to interact with bystanders.
4. The student should see the communication skills used to interact with individuals from other agencies while providing patient care.
5. The student should see the components of the minimum data set.

Kinesthetic (Do)

1. The student should practice radio use procedures in the following phases of a typical call:
2. The student should practice the proper methods of initiating and terminating a radio call.
3. The student should practice the proper sequence of delivery of patient information.
4. The student should practice the communication skills used to interact with the patient.
5. The student should practice the communication skills used to interact with the family.
6. The student should practice the communication skills used to interact with bystanders.
7. The student should practice the communication skills used to interact with individuals from other agencies while providing patient care.
8. The student should practice performing an organized, concise patient report that would be given to the medical staff at a receiving facility.
9. The student should practice performing a brief, organized report that would be given to an ALS provider arriving at an incident scene at which the EMT-Basic was already providing care.
10. The student should practice performing a simulated, organized, concise radio transmission.

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-9

Documentation

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-9.1 Explain the components of the written report and list the information that should be included in the written report. C-1)
- 2-9.2 Identify the various sections of the written report. C-1)
- 2-9.3 Describe what information is required in each section of the prehospital care report and how it should be entered. C-1)
- 2-9.4 Define the special considerations concerning patient refusal. (C-1)
- 2-9.5 Describe the legal implications associated with the written report. C-1)
- 2-9.6 Discuss all state and/or local record and reporting requirements. C-1)
- 2-9.7 [Discuss elements of the HIPAA Privacy Rule as it pertains to prehospital patient care reporting. \(C-1\)](#)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-9.8 Explain the rationale for patient care documentation.(A-3)
- 2-9.9 Explain the rationale for the EMS system gathering data.(A-3)
- 2-9.10 Explain the rationale for using medical terminology correctly.(A-3)
- 2-9.11 Explain the rationale for using an accurate and synchronous clock so that information can be used in trending.(A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-9.12 Complete a prehospital care report. (P-2)

PREPARATION

Motivation:

A competent prehospital report documents the nature and extent of emergency medical care. Well prepared reports are an important medical/legal document. "If it isn't written down, it wasn't done," and "If it wasn't done, don't write it down."

Health care providers use the information from the report to trend changes in patient condition. In particular, the trending of mental status and vital signs is extremely important to physicians and nurses who assume care. The information on the report can also be used in quality assessment of emergency medical care.

Prerequisites: BLS and Preparatory.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to documentation. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Copies of a prehospital care report and a vital sign trended report.

PERSONNEL

Primary Instructor: One EMT-Basic instructor knowledgeable in this area.

Assistant Instructor: None required.

PRESENTATION

Declarative (What)

- I. Documentation
 - A. Minimum data set
 1. Patient information gathered at time of EMT-B's initial contact with patient on arrival at scene, following all interventions and on arrival at facility
 - a) Chief complaint
 - b) Level of consciousness (AVPU) - mental status
 - c) Blood pressure for patients greater than 3 years old
 - d) Skin perfusion (capillary refill) for patients less than 6 years old
 - e) Skin color and temperature
 - f) Pulse rate
 - g) Respiratory rate and effort
 2. Administrative information
 - a) Time incident reported
 - b) Time unit notified
 - c) Time of arrival at patient

- d) Time unit left scene
- e) Time of arrival at destination
- f) Time of transfer of care
- 3. Accurate and synchronous clocks
- B. Prehospital care report
 - 1. Functions
 - a) Continuity of care - a form that is not read immediately in the emergency department may very well be referred to later for important information
 - b) Legal document
 - (1) A good report has documented what emergency medical care was provided and the status of the patient on arrival at the scene and any changes upon arrival at the receiving facility
 - (2) The person who completed the form ordinarily must go to court with the form
 - (3) Information should include objective and subjective information and be clear
 - c) Educational - used to demonstrate proper documentation and how to handle unusual or uncommon cases
 - d) Administrative
 - (1) Billing
 - (2) Service statistics
 - e) Research
 - f) Evaluation and continuous quality improvement
 - 2. Use
 - a) Types
 - (1) Traditional written form with check boxes and a section for narrative
 - (2) Computerized version where information is filled in by means of an electronic clipboard or a similar device
 - b) Sections
 - (1) Run data - date, times, service, unit, names of crew
 - (2) Patient data - patient name, address, date of birth, insurance information, sex, age, nature of call, mechanism of injury, location of patient, treatment administered prior to arrival of EMT-Basic, signs and symptoms, care administered, baseline vital signs, SAMPLE history and changes in condition
 - (3) Check boxes
 - (a) Be sure to fill in the box completely
 - (b) Avoid stray marks
 - (4) Narrative section (if applicable)
 - (a) Describe, don't conclude

- (b) Include pertinent negatives
 - (c) Record important observations about the scene, e.g., suicide note, weapon, etc.
 - (d) Avoid radio codes
 - (e) Use abbreviations only if they are standard
 - (f) When information of a sensitive nature is documented, note the source of that information, e.g., communicable diseases
 - (g) State reporting requirements
 - (h) Be sure to spell words correctly, especially medical words. If you do not know how to spell it, find out or use another word
 - (i) For every reassessment, record time and findings
- (5) Other state or local requirements
- c) Confidentiality - the form itself and the information on the form are considered confidential. Be familiar with state laws. [HIPAA Privacy Rule must be adhered to when reporting information \(see Lesson 1-3 Legal Issues\)](#)
 - d) Distribution - local and state protocol and procedures will determine where the different copies of the form should be distributed
3. Falsification issues
- a) When an error of omission or commission occurs, the EMT-Basic should not try to cover it up. Instead, document what did or did not happen and what steps were taken (if any) to correct the situation.
 - b) Falsification of information on the prehospital care report may lead not only to suspension or revocation of the EMT-Basic's certification/license, but also to poor patient care because other health care providers have a false impression of which assessment findings were discovered or what treatment was given
 - c) Specific areas of difficulty
 - (1) Vital signs - document only the vital signs that were actually taken
 - (2) Treatment - if a treatment like oxygen was overlooked, do not chart that the patient was given oxygen
- C. Documentation of patient refusal
- 1. Competent adult patients have the right to refuse treatment
 - 2. Before the EMT-Basic leaves the scene, however, he should:
 - a) Try again to persuade the patient to go to a hospital
 - b) Ensure the patient is able to make a rational, informed decision, e.g., not under the influence of alcohol or other drugs, or illness/injury effects

- c) Inform the patient why he should go and what may happen to him if he does not
 - d) Consult medical direction as directed by local protocol
 - e) If the patient still refuses, document any assessment findings and emergency medical care given, then have the patient sign a refusal form
 - f) Have a family member, police officer or bystander sign the form as a witness. If the patient refuses to sign the refusal form, have a family member, police officer or bystander sign the form verifying that the patient refused to sign.
 - g) Complete the prehospital care report
 - (1) Complete patient assessment
 - (2) Care EMT-Basic wished to provide for the patient
 - (3) Statement that the EMT-Basic explained to the patient the possible consequences of failure to accept care, including potential death
 - (4) Offer alternative methods of gaining care
 - (5) State willingness to return
- D. Special situations/reports/incident reporting
- 1. Correction of errors
 - a) Errors discovered while the report form is being written
 - (1) Draw a single horizontal line through the error, initial it and write the correct information beside it
 - (2) Do not try to obliterate the error - this may be interpreted as an attempt to cover up a mistake
 - b) Errors discovered after the report form is submitted
 - (1) Preferably in a different color ink, draw a single line through the error, initial and date it and add a note with the correct information
 - (2) If information was omitted, add a note with the correct information, the date and the EMT-Basic's initials
 - 2. Multiple casualty incidents (MCI)
 - a) When there is not enough time to complete the form before the next call, the EMT-Basic will need to fill out the report later
 - b) The local MCI plan should have some means of recording important medical information temporarily, e.g., triage tag, that can be used later to complete the form
 - c) The standard for completing the form in an MCI is not the same as for a typical call. The local plan should have guidelines.
 - 3. Special situation reports
 - a) Used to document events that should be reported to local authorities, or to amplify and supplement primary report

- b) Should be submitted in timely manner
 - c) Should be accurate and objective
 - d) The EMT-Basic should keep a copy for his own records
 - e) The report, and copies, if appropriate, should be submitted to the authority described by local protocol
 - f) Exposure
 - g) Injury
4. Continuous quality improvement
 5. Information gathered from the prehospital care report can be used to analyze various aspects of the EMS system
 6. This information can then be used to improve different components of the system and prevent problems from occurring

APPLICATION

Procedural (How)

1. Show the students the prehospital care report used locally.
2. Show the students the refusal form used locally, if there is one.
3. Show the students good examples of completed prehospital care reports.
4. If there is a quality improvement system in place locally, show the students a report generated by the system.
5. Show the students how trending information is used to aid in the future care of the patient.

Contextual (When, Where, Why)

1. To establish the continuum of care, the EMT-Basic must document not only what the patient complained of, but also what he denied.
2. A prehospital care report must be filled out for every patient encounter.
3. On non-emergency runs, this process may be started at the scene.
4. Documentation is an on-going process and the report provides information that can be used in many constructive ways.

STUDENT ACTIVITIES

Auditory (Hear)

None identified for this lesson.

Visual (See)

1. The student should see the prehospital care report used locally.
2. The student should see the components of the prehospital care report.
3. The student should see good examples of completed prehospital care reports.

Kinesthetic (Do)

1. The student should practice completing the prehospital care report, given different scenarios.

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-10

Critical Thinking

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-10.1 Define the critical thinking process. (C-1)
- 2-10.2 Utilize the elements of critical thinking to formulate a field impression for the purpose of generating patient management plans. (C-2)
- 2-10.3 Describe the effects of the “fight or flight” response and the positive and negative effects on an EMT’s decision making. (C-1)
- 2-10.4 Summarize the “six Rs” of putting it all together: Read the patient, Read the scene, React, Reevaluate, Revise the management plan, Review performance. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-10.5 Estimate the effects of the “fight or flight” response on the EMT-Basic in the field. (A-1)
- 2-10.6 Defend the position that clinical decision making is the cornerstone of effective EMT practice. (A-3)
- 2-10.7 Practice facilitating behaviors when thinking under pressure. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-10.8 Demonstrate the use of the six “Rs” of patient management in the prehospital setting. (P-2)
- 2-10.9 Demonstrate the use of the critical thinking process utilized in formulating a field impression for the purpose of generating a patient management plan. (P-2)

PREPARATION

Motivation:

Critical thinking is an important tool needed when conducting any patient assessment, whether the patient has been injured or is ill. On every call, an EMT collects, integrates and synthesizes information to provide patient care. Usually, without thinking about the details, we incorporate our knowledge about the patient’s disease or injury and develop a treatment plan appropriate for that

patient. A good EMT moves on from a simple thought process to critical thinking.

Prerequisites: BLS and Preparatory.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to critical thinking. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment: None

PERSONNEL

Primary Instructor: One EMT-Basic instructor, knowledgeable in critical thinking.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable about critical thinking.

PRESENTATION

Declarative (What)

- I. Introduction
 - A. Being aware of critical thinking skills can enhance patient assessment and care
 - B. The out-of-hospital environment is unique
 - C. Prehospital work is heavily influenced by factors not present in other medical settings.
- II. The cornerstones of effective EMT practice
 - A. Gathering, evaluating, and synthesizing information
 1. Starts with dispatch information
 2. Scene size up- including weather, environment and clues from the scene
 3. Initial assessment
 4. Focused, detailed and ongoing assessments
 - B. Developing and implementing appropriate patient management plans
 1. Solid foundation of knowledge
 - a) Disease processes
 - b) Injury patterns
 2. Past experience

3. Attitude
 - a) Inquisitive
 - b) Jumps to conclusions
 - c) "Know it all"
- C. Applying judgment and exercising independent decision making
 1. Develop a working assessment/field impression
 2. Apply protocols
 3. Contact medical control as needed
- D. Thinking and working effectively under pressure
- III. Protocols, standing orders, and patient care algorithms
 - A. Define and outline performance parameters
 - B. Promote a standardized approach
 - C. Limitations of protocols, standing orders, and patient care algorithms
 1. Addresses only "classic" patient presentations
 - a) Non-specific patient complaints do not follow model
 - b) Limited clarity of presenting patient problems
 2. Does not address multiple disease etiologies
 3. Does not address multiple treatment modalities
 4. Promotes linear thinking (i.e. "cookbook medicine")
- IV. Components, stages, and sequence of critical thinking process for EMTs
 - A. Concept formation
 1. MOI/ scene assessment
 2. Initial assessment and physical examination
 3. Chief complaint
 4. Patient history
 5. Patient affect
 6. Technical tools
 - a) Pulse oximetry
 - b) Glucose monitoring
 - c) Other
 - B. Data interpretation
 1. Data gathered
 2. EMT knowledge of anatomy, physiology and pathophysiology
 3. EMT attitude
 4. Previous experience of the EMT
 - C. Application of principle
 1. Working assessment / field impression
 2. Protocols / standing orders
 3. Treatment / intervention
 - D. Evaluation is a continual process which includes:
 1. Reassessment of patient
 2. Revision of impression and treatment / intervention
 - E. Reflection on action
 1. Run critique
 2. Addition to or modification of EMT's experience
- V. Fundamental elements of critical thinking for EMTs

- A. Adequate fund of knowledge
 - 1. Anatomy, physiology and pathophysiology
 - 2. Signs and symptoms
 - 3. Protocols
 - 4. Medications
 - B. Ability to focus on specific and multiple elements of data
 - 1. Scene size up and all that it entails
 - 2. Patient assessment
 - C. Ability to gather and organize data and form working assessment / field impression
 - D. Ability to identify and deal with medical ambiguity
 - 1. Patients whose signs and symptoms may not fall into the normal presentation
 - 2. Patients who have multiple working assessments / field impressions
 - E. Ability to differentiate between relevant and irrelevant data
 - F. Ability to analyze and compare similar situations
 - G. Ability to recall contrary situations
 - H. Ability to articulate assessment based decisions and construct arguments
- VI. Considerations with field application of assessment-based patient management
- A. The patient acuity spectrum
 - 1. EMS is activated for countless reasons
 - 2. Few out-of-hospital calls are true life-threatening emergencies
 - a) Minor medical and traumatic events require little critical thinking and in turn the decisions are relatively easy
 - b) Patients with obvious life-threats pose limited critical thinking challenges
 - c) Patients who fall on the acuity spectrum between minor and life-threatening pose the greatest critical thinking challenge
 - B. Thinking under pressure
 - 1. Hormonal influence (i.e. "fight or flight" response) impacts the EMT's decision making both positively and negatively
 - a) Enhanced visual and auditory acuity
 - b) Improved reflexes and muscle strength
 - c) Impaired critical thinking skills
 - d) Diminished concentration and assessment ability
 - 2. Mental conditioning is the key to effective performance under pressure
 - a) Skills learned at a pseudo-instinctive performance level (e.g. performing CPR)
 - b) Automatic response for technical treatment requirements (e.g. blood glucose monitor)
 - C. Mental checklist for thinking under pressure

1. Stop and think
 2. Scan the situation
 3. Decide and act
 4. Maintain clear, concise control
 5. Regularly and continually reevaluate the patient
- D. Facilitating behaviors for thinking under pressure
1. Stay calm, don't panic
 2. Assume and plan for the worst; err on the side of the patient
 3. Maintain a systematic assessment pattern
 4. Balance styles
 - a) Situation analysis
 - (1) Reflective - gather and organize data to form working assessment/field impression
 - (2) Impulsive - "knee-jerk response" without gathering and organizing all the facts
 - b) Data processing
 - c) Divergent (various ways to do something) vs Convergent (one way to do something)
 - d) Decision making
 - (1) Anticipatory - staying "ahead of the 8-ball"
 - (2) Reactive - being "behind the 8-ball"
- E. Putting it all together – "The Six R's"
1. **Read** the scene
 - a) Safety issues and hazards
 - b) General environmental conditions
 - c) Evaluate immediate surroundings
 - d) Mechanism of injury/nature of illness
 2. **Read** the patient
 - a) Observe the patient
 - (1) Level of responsiveness/consciousness/distress
 - (2) Skin color
 - (3) Position and location of patient - obvious deformity or asymmetry
 - b) Talk to the patient
 - (1) Determine the chief complaint
 - (2) New problem or worsening of preexisting condition
 - c) Touch the patient
 - (1) Skin temperature and moisture
 - (2) Pulse rate, strength and regularity
 - d) Auscultate the patient
 - (1) Identify problems with the lower airway
 - (2) Identify problems with the upper airway
 - e) Status of ABC's - identify life-threats
 - f) Complete an accurate set of vital signs
 - (1) Use trending as triage tool to estimate severity

- (2) Can assist in identifying the majority of life-threatening conditions
 - (3) Influenced by patient age, underlying physical and medical conditions, and current medications
3. **React**
 - a) Address life-threats in the order they are found - ABC's
 - b) Determine the most common and statistically probable cause of MOI/NOI that fits the patient's initial presentation (signs and symptoms)
 - c) Consider the most serious condition or cause that fits the patient's initial presentation (signs and symptoms)
 - d) If a clear medical problem is elusive, treat based on presenting signs and symptoms
 4. **Reevaluate**
 - a) Focused, detailed and ongoing assessments
 - b) Response to initial management/ interventions
 - c) Discovery of less obvious problems
 5. **Revise** management plan - If what you are doing isn't working, try something else! Come up with revised working assessment/field impression and/or management plan
 6. **Review** performance at run critique
 - a) Formal
 - b) Informal
 - c) Patients with obvious life-threats pose limited critical thinking challenges
 - d) Patients who fall on the acuity spectrum between minor and life-threatening pose the greatest critical thinking challenge

APPLICATION

Procedural (How)

None identified for this lesson.

Contextual (When, Where, Why)

1. Critical thinking represents an important concept utilized to appropriately evaluate and care for patients in the prehospital setting.
2. It requires the EMT-Basic to evaluate several aspects concerning the patient.
3. On every call, an EMT collects, integrates and synthesizes information to provide appropriate patient care.

STUDENT ACTIVITIES

Auditory (Hear)

1. The student will hear a lecture on critical thinking and problem solving.
2. The student will discuss critical thinking in a small group.

Visual (See)

1. The student will see simulations utilizing problem solving skills when conducting a patient assessment.

Kinesthetic (Do)

1. The student will decide on a method to solve a problem related to generating a field impression.
2. The student will participate in a “thinking under pressure” activity.
3. The student will write a case study, where critical thinking is needed.
4. The student will practice selecting appropriate principles of critical thinking for application to varied EMS field cases or problems.
5. The student will demonstrate the use of the critical thinking process utilizing the six “Rs”, in formulating a field impression.

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-11

**Age Extremes:
Geriatrics and Pediatrics**

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-11.1 Explain why geriatric and pediatric patients need varying approaches to assessment and care. (C-1)
- 2-11.2 Describe the aging process. (C-1)
- 2-11.3 Discuss effects of the natural aging process on the human body. (C-1)
- 2-11.4 Identify potential communication challenges when assessing a geriatric patient. (C-1)
- 2-11.5 Describe normal and abnormal assessment findings of the geriatric patient. (C-1)
- 2-11.6 Recognize common emotional and psychological reactions of the geriatric patient. (C-2)
- 2-11.7 Discuss emotional and physical aspects of terminal illnesses and end of life care. (C-1)
- 2-11.8 Discuss key additions to the initial assessment to consider when assessing a geriatric patient. (C-1)
- 2-11.9 Identify the developmental considerations for the following age groups: (C-1)
 - infants
 - toddlers
 - pre-school
 - school age
 - adolescent
- 2-11.10 Identify potential communication challenges when assessing a pediatric patient. (C-1)
- 2-11.11 Describe differences in anatomy and physiology of the pediatric and adult patient. (C-1)
- 2-11.12 Differentiate the response of the ill or injured infant or child (age specific) from that of an adult. (C-3)
- 2-11.13 Identify expected injury patterns seen in geriatric and pediatric patients. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-11.14 Explain the importance of including family members in the assessment and management of a geriatric and pediatric patient. (A-1)

- 2-11.15 Explain the rationale for having knowledge and skills appropriate for dealing with a geriatric and pediatric patient. (A-3)
- 2-11.16 Attend to the feelings of the family when dealing with an ill or injured geriatric or pediatric patient. (A-1)
- 2-11.17 Understand the provider's own response (emotional) to caring for geriatric and pediatric patients. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 2-11.18 Conduct a patient interview for a geriatric patient. (P-1)
- 2-11.19 Demonstrate the assessment of a geriatric patient who is hearing impaired, vision impaired, confused, or unable to speak. (P-1)
- 2-11.20 Demonstrate the assessment of a pediatric patient. (P-1,2)

PREPARATION

Motivation: Understanding the special factors involved with the geriatric and pediatric patient can provide a quality continuum of care for these special populations.

Prerequisites: BLS and Preparatory.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to infants and children. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to assure meeting the objectives of the curriculum.

EMS Equipment: Exam gloves, stethoscope, blood pressure cuff, penlight, pulse oximeter.

PERSONNEL

Primary Instructor: One EMT-Basic instructor, knowledgeable with geriatric and pediatric patients.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable with geriatric and pediatric care.

PRESENTATIONDeclarative (What)

- I. Importance of understanding differences by age
 - A. Geriatrics
 - B. Pediatrics patients
 - C. Medical needs vary with age
 - D. Injury patterns vary with age
 - E. Approaches to assessment vary
 - F. Provision of emergency medical care will require special knowledge of both populations
- II. The aging process
 - A. Increasing numbers of people over the age of 65 is rising
 - B. Older individuals have many social and environmental concerns
- III. Describe normal changes with advancing age
 - A. Functional decline of physical structures
 - B. Body composition changes
 - C. Organ function declines
 - D. Sensory deficits
 1. Vision
 2. Hearing
 3. Tactile
- IV. Normal and abnormal assessment findings of the geriatric patient
 - A. Follow usual patient assessment algorithm
 - B. Consider unusual environmental conditions
 - C. Consider complications with declining respiratory and cardiovascular systems
- V. Common emotional and psychological reactions of the geriatric patient
 - A. Most often are presentations of physical changes from illness or injury
 - B. Need evaluation at a medical facility
 - C. Terminal illnesses can have emotional and physical effects upon patients and their families. Special care should be sought from appropriate mental health care professionals
 - D. Hospice care can have a positive impact upon patients and their families when faced with end of life care
- VI. Key additions to the initial assessment to consider when assessing a geriatric patient
 - A. Airway
 1. Dentures
 2. Diminished cough reflex
 - B. Breathing
 1. Evaluate chest wall
 2. Evaluate respiratory drive
 - C. Circulation
 1. Quality of pulses
 2. Temperature imbalances

- D. Decreased mental status
- E. Important to establish patient norm
- VII. Developmental concerns of the pediatric patient
 - A. Newborns and infants - birth to 1 year of age
 - 1. Minimal stranger anxiety
 - 2. Do not like to be separated from parents
 - 3. Do not want to be suffocated by an oxygen mask
 - 4. Need to be kept warm - make sure hands and stethoscope are warmed before touching child
 - 5. Breathing rate best obtained at a distance - watch chest rise, note color and level of activity
 - 6. Examine heart and lungs first, head last. This is done to build confidence. It is best to obtain heart and lung sounds before the child becomes agitated.
 - B. Toddlers - 1 year to 3 years
 - 1. Do not like to be touched
 - 2. Do not like being separated from parents
 - 3. Do not like having clothing removed. Remove, exam, replace.
 - 4. Do not want to be suffocated by an oxygen mask
 - 5. Assure child that he was not bad. Children think their illness/injury is punishment.
 - 6. Afraid of needles
 - 7. Fear of pain
 - 8. Should be examined trunk to head approach. This is done to build confidence. It should be done before child becomes agitated.
 - C. Preschool - 3 years to 6 years
 - 1. Do not like to be touched
 - 2. Do not like being separated from parents
 - 3. Do not like having clothing removed. Remove, exam, replace.
 - 4. Do not want to be suffocated by an oxygen mask
 - 5. Assure child that he was not bad. Children think that the illness/injury is a punishment.
 - 6. Afraid of blood
 - 7. Fear of pain
 - 8. Fear of permanent injury
 - 9. Modest
 - D. School Age - 6 years to 12 years
 - 1. Afraid of blood
 - 2. Fear of pain
 - 3. Fear of permanent injury
 - 4. Modest
 - 5. Fear of disfigurement
 - E. Adolescent - 12 years to 18 years
 - 1. Fear of permanent injury
 - 2. Modest

3. Fear of disfigurement
4. Treat them as adults
5. These patients may desire to be assessed privately, away from parents or guardians

VIII. Assessment

- A. General impression of well versus sick child can be obtained from overall appearance
- B. Assess mental status
- C. Effort of breathing
- D. Color
- E. Quality of cry/speech
- F. Interaction with environment and parents
- G. Normal behavior for child of this age
 1. Playing
 2. Moving around
 3. Attentive versus non-attentive
 4. Eye contact
 5. Recognizes parents
 6. Responds to parents calling
- H. Emotional state
 1. Response to the EMT-Basic
- I. Tone/body position
- J. Approach to evaluation
 1. Begin from across the room
 2. Mechanism of injury
 3. Assessment of surroundings
 4. General impression of well versus sick
 5. Respiratory assessment
 - a) Note chest expansion/symmetry
 - b) Effort of breathing
 - c) Nasal flaring
 - d) Stridor, crowing, or noisy
 - e) Retractions
 - f) Grunting
 - g) Respiratory rate
 6. Perfusion assessment - skin color
 7. Hands on approach to infant or child patient assessment
 8. Assess breath sounds
 - a) Present
 - b) Absent
 - c) Stridor
 - d) Wheezing
 9. Assess circulation
 - a) Assess brachial or femoral pulse
 - b) Assess peripheral pulses
 - c) Assess capillary refill

- d) Assess blood pressure in children older than 3. Use appropriate size cuff.
- e) Assess skin color, temperature and moisture
- 10. Detailed physical exam - begin with a trunk to head approach
- 11. Situation and age dependant
- 12. Should help reduce the infant or child's anxiety
- K. Family Response
 - 1. A child cannot be cared for in isolation from the family; therefore, you have multiple patients Striving for calm, supportive interaction with family will result in improved ability to deal with the child
 - 2. Calm parents = calm child; agitated parents = agitated child
 - 3. Anxiety arises from concern over child's pain; fear for child's well-being
 - 4. Worsened by sense of helplessness
- L. Parent may respond to EMT-Basic with anger or hysteria
- M. Parents should remain part of the care unless child is not aware or medical conditions require separation
- N. Parents should be instructed to calm child; can maintain position of comfort and/or hold oxygen
- O. Parents may not have medical training, but they are experts on what is normal or abnormal for their children and what will have a calming effect
- IX. Provider Response
 - A. Anxiety from lack of experience with treating children as well as fear of failure
 - B. Skills can be learned and applied to children
 - C. Stress from identifying patient with their own children
 - D. Provider should realize that much of what they learned about adults applies to children; they need to remember the differences
 - E. Infrequent encounters with sick children; advance preparation is important (practice with equipment and examining children)

APPLICATION

Procedural (How)

1. Demonstrate the assessment of a geriatric patient.
2. Demonstrate the assessment of a pediatric patient.

Contextual (When, Where, Why)

1. Recognize how the aging process affects patients, both physically and mentally.
2. Recognize physical and developmental peculiarities of infants and children of different ages and modify approach accordingly.

3. The EMT-Basic must have an understanding of the unique aspects of dealing with patients of varying ages.
4. A calm, professional reassuring EMT-Basic may help to minimize psychological impact of transport to geriatric and pediatric patients.

STUDENT ACTIVITIES

Auditory (Hear)

None identified for this lesson.

Visual (See)

1. Students should see a demonstration of the assessment of a geriatric patient.
2. Students should see a demonstration of the assessment of a pediatric patient.

Kinesthetic (Do)

1. Students should practice the assessment of a geriatric patient.
2. Students should practice the assessment of a pediatric patient.

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-12

Practical Lab: Patient Assessment

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

Demonstrate the cognitive objectives of Lesson 2-1: Scene Size-up.

Demonstrate the cognitive objectives of Lesson 2-2: Initial Assessment.

[Demonstrate the cognitive objectives of Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.](#)

Demonstrate the cognitive objectives of Lesson 2-4: Focused History and Physical Exam: Trauma

Demonstrate the cognitive objectives of Lesson 2-5: Focused History and Physical Exam: Medical

Demonstrate the cognitive objectives of Lesson 2-6: Detailed Physical Exam.

Demonstrate the cognitive objectives of Lesson 2-7: On-going Assessment.

Demonstrate the cognitive objectives of Lesson 2-8: Communications.

Demonstrate the cognitive objectives of Lesson 2-9: Documentation.

[Demonstrate the cognitive objectives of Lesson 2-10: Critical Thinking.](#)

[Demonstrate the cognitive objectives of Lesson 2-11: Age Extremes: Geriatrics and Pediatrics](#)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

Demonstrate the affective objectives of Lesson 2-1: Scene Size-up.

Demonstrate the affective objectives of Lesson 2-2: Initial Assessment.

[Demonstrate the affective objectives of Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.](#)

Demonstrate the affective objectives of Lesson 2-4: Focused History and Physical Exam: Trauma

Demonstrate the affective objectives of Lesson 2-5: Focused History and Physical Exam: Medical

Demonstrate the affective objectives of Lesson 2-6: Detailed Physical Exam.

Demonstrate the affective objectives of Lesson 2-7: On-going Assessment.

Demonstrate the affective objectives of Lesson 2-8: Communications.

Demonstrate the affective objectives of Lesson 2-9: Documentation.

[Demonstrate the affective objectives of Lesson 2-10: Critical Thinking.](#)

[Demonstrate the affective objectives of Lesson 2-11: Age Extremes: Geriatrics and Pediatrics](#)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

Demonstrate the psychomotor objectives of Lesson 2-1: Scene Size-up.

Demonstrate the psychomotor objectives of Lesson 2-2: Initial Assessment.

[Demonstrate the psychomotor objectives of Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.](#)

Demonstrate the psychomotor objectives of Lesson 2-4: Focused History and Physical Exam: Trauma

Demonstrate the psychomotor objectives of Lesson 2-5: Focused History and Physical Exam: Medical

Demonstrate the psychomotor objectives of Lesson 2-6: Detailed Physical Exam.

Demonstrate the psychomotor objectives of Lesson 2-7: On-going Assessment.

Demonstrate the psychomotor objectives of Lesson 2-8: Communications.

Demonstrate the psychomotor objectives of Lesson 2-9: Documentation.

[Demonstrate the psychomotor objectives of Lesson 2-10: Critical Thinking.](#)

[Demonstrate the psychomotor objectives of Lesson 2-11: Age Extremes: Geriatrics and Pediatrics.](#)

PREPARATION

Motivation:

The practical lesson is designed to allow the students additional time to perfect skills. It is of utmost importance that the students demonstrate proficiency of the skill, cognitive knowledge of the steps to perform a skill, and a healthy attitude towards performing that skill on a patient.

This is an opportunity for the instructor and assistant instructors to praise progress and re-direct the students toward appropriate psychomotor skills. The material from all preceding lessons and basic life support should be incorporated into these practical skill sessions.

Prerequisites:

BLS and Preparatory.

MATERIALS

AV Equipment:

Typically not required.

EMS Equipment:

Equipment from the lists in Lessons 2-1 through 2-11.

PERSONNEL

Primary Instructor:

One EMT-Basic instructor knowledgeable in patient assessment.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable in patient assessment.

APPLICATION

Procedural (How)

1. Instructor should demonstrate the procedural activities from Lesson 2-1: Scene Size-up.
2. Instructor should demonstrate the procedural activities from Lesson 2-2: Initial Assessment.
3. [Instructor should demonstrate the procedural activities from Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.](#)
4. Instructor should demonstrate the procedural activities from Lesson 2-4: Focused History and Physical Exam: Trauma.
5. Instructor should demonstrate the procedural activities from Lesson 2-5: Focused History and Physical Exam: Medical.
6. Instructor should demonstrate the procedural activities from Lesson 2-6: Detailed Physical Exam.
7. Instructor should demonstrate the procedural activities from Lesson 2-7: On-going Assessment.
8. Instructor should demonstrate the procedural activities from Lesson 2-8: Communications.
9. Instructor should demonstrate the procedural activities from Lesson 2-9: Documentation.
10. [Instructor should demonstrate the procedural activities from Lesson 2-10: Critical Thinking.](#)
11. [Instructor should demonstrate the procedural activities from Lesson 2-11: Age Extremes: Geriatrics and Pediatrics.](#)

Contextual (When, Where, Why)

1. Instructor should review contextual information from Lesson 2-1: Scene Size-up.
2. Instructor should review contextual information from Lesson 2-2: Initial Assessment.
3. [Instructor should review contextual information from Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.](#)
4. Instructor should review contextual information from Lesson 2-4: Focused History and Physical Exam: Trauma
5. Instructor should review contextual information from Lesson 2-5: Focused History and Physical Exam: Medical
6. Instructor should review contextual information from Lesson 2-6: Detailed Physical Exam.

7. Instructor should review contextual information from Lesson 2-7: On-going Assessment.
8. Instructor should review contextual information from Lesson 2-8: Communications.
9. Instructor should review contextual information from Lesson 2-9: Documentation.
10. [Instructor should review contextual information from Lesson 2-10: Critical Thinking.](#)
11. [Instructor should review contextual information from Lesson 2-11: Age Extremes: Geriatrics and Pediatrics.](#)

STUDENT ACTIVITIES

Auditory (Hear)

1. The students should hear the auditory information from Lesson 2-1: Scene Size-up.
2. The students should hear the auditory information from Lesson 2-2: Initial Assessment.
3. [The students should hear the auditory information from Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.](#)
4. The students should hear the auditory information from Lesson 2-4: Focused History and Physical Exam: Trauma.
5. The students should hear the auditory information from Lesson 2-5: Focused History and Physical Exam: Medical.
6. The students should hear the auditory information from Lesson 2-6: Detailed Physical Exam.
7. The students should hear the auditory information from Lesson 2-7: Ongoing Assessment.
8. The students should hear the auditory information from Lesson 2-8: Communications.
9. The students should hear the auditory information from Lesson 2-9: Documentation.
10. [The students should hear the auditory information from Lesson 2-10: Critical Thinking.](#)
11. [The students should hear the auditory information from Lesson 2-11: Age Extremes: Geriatrics and Pediatrics.](#)

Visual (See)

1. The students should see the visual material from Lesson 2-1: Scene Size-up.
2. The students should see the visual material from Lesson 2-2: Initial Assessment.
3. [The students should see the visual material from Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.](#)
4. The students should see the visual material from Lesson 2-4: Focused History and Physical Exam: Trauma.

5. The students should see the visual material from Lesson 2-5: Focused History and Physical Exam: Medical.
6. The students should see the visual material from Lesson 2-6: Detailed Physical Exam.
7. The students should see the visual material from Lesson 2-7: Ongoing Assessment.
8. The students should see the visual material from Lesson 2-8: Communications.
9. The students should see the visual material from Lesson 2-9: Documentation.
10. The students should see the visual material from Lesson 2-10: Critical Thinking.
11. The students should see the visual material from Lesson 2-11: Age Extremes: Geriatrics and Pediatrics.

Kinesthetic (Do)

1. The students should practice the kinesthetic activities from Lesson 2-1: Scene Size-up.
2. The students should practice the kinesthetic activities from Lesson 2-2: Initial Assessment.
3. The students should practice the kinesthetic activities from Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.
4. The students should practice the kinesthetic activities from Lesson 2-4: Focused History and Physical Exam: Trauma.
5. The students should practice the kinesthetic activities from Lesson 2-5: Focused History and Physical Exam: Medical.
6. The students should practice the kinesthetic activities from Lesson 2-6: Detailed Physical Exam.
7. The students should practice the kinesthetic activities from Lesson 2-7: On-going Assessment.
8. The students should practice the kinesthetic activities from Lesson 2-8: Communications.
9. The students should practice the kinesthetic activities from Lesson 2-9: Documentation.
10. The students should practice the kinesthetic activities from Lesson 2-10: Critical Thinking.
11. The students should practice the kinesthetic activities from Lesson 2-11: Age Extremes: Geriatrics and Pediatrics.

INSTRUCTOR ACTIVITIES

1. Supervise student practice.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skills stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDICATION

Identify students or groups of students who are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

MODULE 2

Patient

Assessment

Lesson 2-13

Evaluation: Patient Assessment

OBJECTIVES

OBJECTIVES LEGEND

C=Cognitive P=Psychomotor A=Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

Demonstrate knowledge of the cognitive objectives of Lesson 2-1: Scene Size-up.

Demonstrate knowledge of the cognitive objectives of Lesson 2-2: Initial Assessment.

[Demonstrate knowledge of the cognitive objectives of Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.](#)

Demonstrate knowledge of the cognitive objectives of Lesson 2-4: Focused History and Physical Exam: Trauma.

Demonstrate knowledge of the cognitive objectives of Lesson 2-5: Focused History and Physical Exam: Medical.

Demonstrate knowledge of the cognitive objectives of Lesson 2-6: The Detailed Physical Exam.

Demonstrate knowledge of the cognitive objectives of Lesson 2-7: On-going Assessment.

Demonstrate knowledge of the cognitive objectives of Lesson 2-8: Communications.

Demonstrate knowledge of the cognitive objectives of Lesson 2-9: Documentation.

[Demonstrate knowledge of the cognitive objectives of Lesson 2-10: Critical Thinking.](#)

[Demonstrate knowledge of the cognitive objectives of Lesson 2-11: Age Extremes: Geriatrics and Pediatrics.](#)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

Demonstrate knowledge of the affective objectives of Lesson 2-1: Scene Size-up.

Demonstrate knowledge of the affective objectives of Lesson 2-2: Initial Assessment.

[Demonstrate knowledge of the affective objectives of Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.](#)

Demonstrate knowledge of the affective objectives of Lesson 2-4: Focused History and Physical Exam: Trauma.

Demonstrate knowledge of the affective objectives of Lesson 2-5: Focused History and Physical Exam: Medical.

Demonstrate knowledge of the affective objectives of Lesson 2-6: The Detailed Physical Exam.

Demonstrate knowledge of the affective objectives of Lesson 2-7: On-going Assessment.

Demonstrate knowledge of the affective objectives of Lesson 2-8: Communications.

Demonstrate knowledge of the affective objectives of Lesson 2-9: Documentation.

[Demonstrate knowledge of the affective objectives of Lesson 2-10: Critical Thinking.](#)

[Demonstrate knowledge of the affective objectives of Lesson 2-11: Age Extremes: Geriatrics and Pediatrics.](#)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

Demonstrate knowledge of the psychomotor objectives of Lesson 2-1: Scene Size-up.

Demonstrate knowledge of the psychomotor objectives of Lesson 2-2: Initial Assessment.

[Demonstrate knowledge of the psychomotor objectives of Lesson 2-3: Baseline Vital Signs, SAMPLE History and Pulse Oximetry.](#)

Demonstrate knowledge of the psychomotor objectives of Lesson 2-4: Focused History and Physical Exam: Trauma.

Demonstrate knowledge of the psychomotor objectives of Lesson 2-5: Focused History and Physical Exam: Medical.

Demonstrate knowledge of the psychomotor objectives of Lesson 2-6: The Detailed Physical Exam.

Demonstrate knowledge of the psychomotor objectives of Lesson 2-7: On-going Assessment.

Demonstrate knowledge of the psychomotor objectives of Lesson 2-8: Communications.

Demonstrate knowledge of the psychomotor objectives of Lesson 2-9: Documentation.

[Demonstrate knowledge of the psychomotor objectives of Lesson 2-10: Critical Thinking.](#)

[Demonstrate knowledge of the psychomotor objectives of Lesson 2-11: Age Extremes: Geriatrics and Pediatrics.](#)

PREPARATION

Motivation:

Evaluation of the student's attainment of the cognitive and affective knowledge and psychomotor skills is an essential component of the EMT-Basic educational

process. The modules are presented in a "building block" format. Once the students have demonstrated their knowledge and proficiency, the next lesson should be built upon that knowledge. This evaluation will help to identify students or groups of students having difficulty with a particular area. This is an opportunity for the instructor to evaluate his performance, and make appropriate modifications to the delivery of material.

Prerequisites: Completion of [Lessons 2-1 through 2-11](#).

MATERIALS

AV Equipment: Typically none required.

EMS Equipment: Equipment required to evaluate the students' proficiency in the psychomotor skills of this module.

PERSONNEL

Primary Instructor: One proctor for the written evaluation.

Assistant Instructor: One practical skills examiner for each 6 students.

PRESENTATION

Declarative (What)

- I. Purpose of the evaluation
- II. Items to be evaluated
- III. Feedback from evaluation

APPLICATION

Procedural (How)

1. Written evaluation based on the cognitive and affective objectives of [Lessons 2-1 through 2-11](#).
2. Practical evaluation stations based on the psychomotor objectives of [Lessons 2-1 through 2-11](#).

Contextual (When, Where and Why)

1. The final lesson in this module is designed to bring closure to the module and to assure that students are prepared to move to the next module.
2. This modular evaluation is given to determine the effectiveness of the presentation of materials and how well students have retained the material.
3. This is an opportunity for the students to make necessary adjustments in study habits or for the instructor to adjust the manner in which material is presented.

INSTRUCTOR ACTIVITIES

1. Supervise student evaluation.
2. Reinforce student progress in cognitive, affective, and psychomotor domains.
3. Redirect students having difficulty with content (complete remediation forms).

REMEDIATION

Identify students or groups of students that are having difficulty with this subject content. Complete remediation sheet from the instructor's course guide. If students continue to have difficulty demonstrating knowledge of the cognitive and affective objectives, or demonstrating proficiency in psychomotor skills, the students should be counseled, remediated and re-evaluated. If no progress is noted, or this continues to be a problem, the student or students should be dismissed from the program.