GEORGIA | PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

HEALTHCARE SCIENCE

COURSE: 25.562 Concepts of Emergency Medicine

UNIT: 28.1 EMS Operations - Gaining Access/Extrication/Triage/ Hazardous Materials

INTRODUCTION

Annotation:

This unit will give the student a deeper understanding of the Emergency Medical Services operations. The students will learn and practice how to safely handle more serious medical and injury related emergencies through application of the appropriate knowledge and skills. They will also learn about how the First Responder functions in cooperation with other EMS personnel.

Grade(s):

	9th
	10th
X	11th
X	12th

Time:

Ten 50 minute periods

Author:

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Additional Author(s):

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.

FOCUS STANDARDS

GPS Focus Standards: Please list the standard and elements covered.

HS-CEM-15:

Students will demonstrate the ability to effectively manage a scene, using components of access, extrication, triage, and hazardous materials.

- **a.** Discuss the phases of out-of-hospital rescues and evaluate various methods of gaining access to victims, distinguishing between simple and complex access.
- **b.** Define the fundamental components of extrication and discuss the role of the Emergency Medical Services Provider.
- **c.** Identify what equipment is required for personal safety during extrication and analyze the proper use of medical/non-medical equipment needed to respond to an extrication call.
- **d.** State the steps that should be taken to protect the patient during extrication.
- **e.** Discuss the criteria for a multiple casualty situation and the role of the First Responder in assisting with management of the incident.
- **f.** Summarize the components of basic triage (modified START plan) and demonstrate in a given scenario of mass-casualty incidence.
- **g.** Discuss the circumstances that usually require a helicopter/medevac unit transport and demonstrate how to set up the landing zone for a helicopter/medevac unit.
- **h.** State the information the First Responder must be prepared to provide the medevac unit.
- **i.** Demonstrate the steps for approaching and managing a hazardous scene while providing for personal, team, and bystanders' safety (simulation).

GPS Academic Standards:

ELA11C1: The student demonstrates understanding and control of the rules of the English language, realizing that usage involves the appropriate application of conventions and grammar in both written and spoken formats.

National / Local Standards / Industry / ISTE:

See module at:

www.nhsta.gov/people/injury/ems/pub/frnsc.doc

Lesson 7-1 & 7-2

EMS Operations

UNDERSTANDINGS & GOALS

Enduring Understandings:

- Emergency services operations function and respond to calls 24 hours per day.
- A broad range of services are provided of which the First Responder plays an important role.
- It is important that First Responders are prepared not only to respond to minor illnesses and emergencies but also prepared for more serious medical and injury incidents.
- Personal safety and the safety of others must always be at the first in any situation.
- It is important that First Responders understand their role and the role of others in gaining access, extricating, and triaging patients as well as in various hazardous situations.

Essential Questions:

- How can you prepare for gaining access and extricating the patient?
- How can the First Responder prepare for acts of terrorism and mass casualty?
- Why are gaining access and extricating a patient complicated tasks that must be practiced?
- What is the role of the First Responder in hazardous situations?

Knowledge from this Unit:

- The role of the First Responder in extrication.
- Various methods of gaining access to the patient.
- Differences between simple and complex access
- What the First Responder should do if there is reason to believe that there is a hazard at the scene
- The role the First Responder should perform until appropriately trained personnel arrive at the scene of a hazardous materials situation.
- How to predict the various resources and tools needed to perform the gaining of access and extrication of patients in a pre-hospital setting.
- How to describe a plausible scenario that involves a radiologic dispersal device (RDD)
- Describe incidents involving biological or chemical agents.
- Summarize the components of the Homeland Security act and discuss the TSA and the roles and responsibilities of the First Responder
- Know what equipment is required for personal safety during extrication and how to use it.

Skills from this Unit:

- Formulate and explain the components of triage and the role of a First Responder in a mass casualty/ hazmat situation or an act of terrorism.
- Demonstrate the steps for approaching and managing a hazardous scene while providing for personal, team, and bystanders' safety (simulation).
- Given a plausible scenario that involves a radiological dispersal device (RDD), demonstrate the role of the First Responder.
- Given incidents involving biological or chemical agents, demonstrate the role of the First Responder.
- Identify what equipment is required for personal safety during extrication and analyze the proper use of medical/non-medical equipment needed to respond to an extrication call.

ASSESSMENT(S)

Assessment Method Type: Select one or more of the following. Please consider the type(s) of differentiated instruction you will be using in the classroom.

____ Pre-test
X Objective assessment - multiple-choice, true- false, etc.
_x_ Quizzes/Tests
_x_ Unit test
X Group project
X Individual project
X Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
__ Self-check rubrics
__ Self-check during writing/planning process
__ Journal reflections on concepts, personal experiences and impact on one's life
__ Reflect on evaluations of work from teachers, business partners, and competition judges
__ Academic prompts
__ Practice quizzes/tests
X Subjective assessment/Informal observations
__ Essay tests
_x_ Observe students working with partners
_x_ Observe students role playing
____ Peer-assessment
__ Peer editing & commentary of products/projects/presentations using rubrics
__ Peer editing and/or critiquing
X Dialogue and Discussion
__ Student/teacher conferences
__ Partner and small group discussions
_x_ Whole group discussions
_x_ Interaction with/feedback from community members/speakers and business partners
X Constructed Responses
__ Chart good reading/writing/listening/speaking habits
_x_ Application of skills to real-life situations/scenarios
____ Post-test

Assessment(s) Title:

- GPS Power Point
- Vocabulary Contract
- Unit Workbook pages
- Unit Quiz
- Unit Written assessment

Assessment(s) Description/Directions:

- Students complete a PowerPoint program to show what types of equipment is made to help in extrication of a patient that is not carried on an ambulance.
- Learners will complete the Practical Evaluations using NREMT candidate skill sheets from www.nremt.org, candidate section; basic skills.
- Learners will complete the workbook pages related to this unit. Workbook pages will be graded on a 100 point scale.
- Students will complete a written exam on a scale of 0-100 to assess understanding of the components of access, extrication, triage, and hazardous materials.
- Students will complete the Chapter Key Terms (Definitions) using a vocabulary contract. Vocabulary Contract will be graded on a 100 point scale.

Attachments for Assessment(s): Please list.

LEARNING EXPERIENCES

Instructional planning: Include lessons, activities and other learning experiences in this section with a brief description of the activities to ensure student acquisition of the knowledge and skills addressed in the standards. Complete the sequence of instruction for each lesson/task in the unit.

Sequence of Instruction

1. Identify the Standards. Standards should be posted in the classroom for each lesson.

HS-CEM-15. Students will demonstrate the ability to effectively manage a scene, using components of access, extrication, triage, and hazardous materials.

2. Review Essential Questions.

- How can you prepare for gaining access and extricating the patient?
- How can the First Responder prepare for acts of terrorism and mass casualty?

- Why is gaining access and extricating a patient complicated tasks that must be practiced?
- What are some areas around your home that could a site of a mass casualty?

3. Identify and review the unit vocabulary.

Extrication- any actions that disentangle and free from entrapment

Staging sector-area that may be needed if MCI escalates to avoid scene congestion called a Level II staging area for any First Alarm Medical incident.

Incident management system-a system designed to permit EMS personnel to handle all phases of a multiple-casualty incident

Extrication sector- staging area in a MCI which is to determine, in conjunction with Triage, the location, number and condition of patients and whether triage will be performed before or after patients are extricated from the impact area. Extrication is also responsible to assign and supervise extrication teams, extricate and deliver patients to the treatment area, and notify Command when all patients have been removed from impact area.

Support or Supply sector-staging area in a MCI responsible for the procurement, delivery and stockpiling of medical supplies needed at the scene.

Placard- Labels on hazardous materials that provide general clues, using placard color, symbol, class and division number, and a hazard name or four-digit identification number to indicate the material properties and physical state of the material.

Hazardous Material- materials that can cause harm

Triage- a way of sorting patients for care and transport based on the level of severity of their injury or illness

Transportation sector- staging area in a MCI designated to obtain all modes of transportation needed to take patients to the hospital.

Material safety Data Sheets (MSDS) - Information sheets that must be provided by the manufacturer for all hazardous products.

Triage sector– staging area in a MCI designated to determine, in close coordination with Extrication, the location, number and condition of patients and whether triage should be performed before or after patients are extricated from the site. Triage is also responsible to assign and supervise triage teams, ensure that patient triage is done in accordance with standard operating procedures.

Treatment sector– staging area in a MCI designated to first determine whether patient treatment will occur "in place" or in a designated treatment area.

4. Assessment Activity.

Interest Approach

As a First Responder, the student may be required to function in the prehospital environment. A solid foundation related to the operational aspects of prehospital care is required. The First Responder should be familiar with the medical and non-medical equipment for use in patient care. The First Responder should also be aware of the phases of a response and their role.

LESSON ONE

Assign GPS's Vocabulary and associated workbook pages, due on day 4 or 5

LECTURE/POWER POINT

FIRST RESPONDER SAFETY

A. Personal considerations
1. Ensure your own safety.
2. Do only what you have been trained to do.
3. Use proper equipment and number of personnel required for the task.
4. Use proper warning devices.
5. Park vehicles in safe positions.

B. Steps to take at the scene
1. Evaluate the scene.
2. Wear proper protective gear.
3. Perform within your training for safety of others and to prevent further accident.
4. Call dispatch for additional equipment and help as needed.

Ask students to research on the internet and gather the information related to EMS injuries and accidents. Have them present to the class.

LESSON TWO

LECTURE/POWER POINT/VIDEO

IF you can get the EMS video called "Car Busters", it would replace the lecture.

MOTOR VEHICLE ACCIDENTS

A. Preparing for a call
1. Phase 1: Preparation-have proper training, tools, equipment, and personnel.
    a. Medical supplies
    b. Non-medical supplies
    c. Equipment and supplies
    d. Personnel
2. Phase 2: Dispatch-be familiar with your dispatch system.
    a. Most are central dispatch with 24-hour access.
    b. Staffed with trained personnel.
    c. Dispatchers will attempt to get as much information as possible from caller and pass on to EMS personnel.
3. Phase 3: En route to scene-First Responder has specific duties.
    a. Fasten seatbelt and have personal protective equipment ready.

b. Contact dispatch and let them know you are en route.
c. Be sure you have essential call information: location, hazards, number of patients.

4. Phase 4: Arrival at scene-approach alertly and cautiously, look for hazards, position vehicle, activate emergency lights and flashers.
    a. Notify dispatch of your arrival.
    b. Perform scene size-up.
5. Phase 5: Transferring patients-help load, lift, and carry patients.
    a. Assist in preparing patient(s) for transport.
    b. Assist in lifting and moving patients using appropriate lifting and moving procedures.
6. Phase 6: After the emergency-prepare for the next call.
    a. Clean and disinfect equipment, restock unit, refuel.
    b. Complete paperwork and file reports.
    c. Notify dispatch that you are back in service.

B. Scene responsibilities
1. Make scene safe.
2. Evaluate situation and call dispatch.
3. Gain access to patients.
4. Evaluate patients and provide emergency care.
5. Free trapped patients.
6. Move patients who are in danger.
7. Move patients if necessary to provide care or to reach another patient in need of lifesaving care.

C. Arrival at scene
1. Pull your vehicle completely off of road surface; turn on your emergency flashers. If possible, park no closer than 50 feet from the scene.
2. Make sure vehicle is in a safe location.
3. Turn off engine and set parking brake.
4. Set flashing lights or flares to warn others.
5. Check scene for safety as you approach.
6. Determine how many potential patients there may be. Alert dispatch as to personnel and equipment needed.
7. Gain access, perform assessments, and provide care.

D. Closed upright vehicle
1. Stabilize vehicle (every vehicle-every time).
2. Vehicle positions-possible situations:
    a. Inclined surface-vehicle on a slanting surface that may allow forward or backward roll. Use blocks or similar wedging objects to stabilize vehicle.
    b. Slippery surface-ice, snow, or oil can cause vehicle to slide as you gain access. Block wheels.
    c. Tilted vehicle-upright but tilted to one side or slanted sideways on a hill. Do not work on downside; tie lines to frame of vehicle and secure to stable object.
    d. Stacked vehicle-vehicles on top of one another. Chock wheels of both; insert materials between elevated portions of vehicle and stable surface; secure vehicles with lines as necessary.
3. Gaining access
    a. Open doors-access to patient may be made by opening one of the car doors. Often, a door may be easily unlocked.

1) First see if patient is able to unlock door.
2) Then try various simple tools.

b. Windows-if doors are jammed or inaccessible, best means of gaining access may be through a window. First see if patient can roll one down.
1) Rear and side windows are typically made of tempered glass.
a) Will shatter when struck.
b) Represent quickest means of gaining access to a closed vehicle with jammed or inaccessible doors.
c) Strike windows with a very sharp instrument (a jack handle point will do) in one of lower corners.
d) Peel glass away from corner.
2) Front windshield
a) May be removed by removing molding from around glass with a screwdriver.
b) Lift out glass after seal has been cut.
c) In some newer model vehicles, windshields are set in mastic and a special knife is required to cut through glue.
3) Steps
a) Stabilize vehicle; try door access first.
b) Protect yourself with appropriate equipment.
c) Select a window away from patient.
d) Gain access through window; attempt to open door from inside.
e) Turn off ignition, put in park, set brake.

E. Overturned closed vehicle
1. General rules
a. Vehicle should be left in position in which it is found; that is, upside down or on its side.
b. Righting vehicle could cause additional injuries to patient.

F. Vehicle on its side
1. Stability-no attempt should be made to enter vehicle until its stability is assured.
a. Shore up if necessary with any available materials (spare tire, wheel chocks from trucks, timber, rocks, etc.)
b. Tie vehicle that is in a precarious position on a cliff or hillside to solid object.
c. Be alert for possibility of spilled gasoline.
2. Opening doors-if a door is opened, it should be tied open. A prop could be knocked out and a slamming door could cause additional injuries.
3. Windows-if doors do not open, breaking rear window is fastest means of gaining access.

G. Patients pinned beneath vehicles
1. Summon appropriate rescue personnel.
2. Procedures
a. Raise vehicle using a jack.
b. Use blocks and a pry bar.
c. Ask bystanders to assist in moving vehicle.

H. Patients caught in wreckage

1. For patients whose heads, arms, or other body parts have been thrown through a car window
    a. Pad extruded body part with bandaging materials.
    b. Use knife or pliers to break or fold away glass so patient can be freed.
2. For patients pinned inside vehicles
    a. Power tools may be necessary to free patients; however, simple procedures may be appropriate.
        1) If a foot is caught and is uninjured, it may be possible to free it by removing patient's shoe.
        2) Front seat may be moved to give additional working space.
        3) Back seat might be lifted out completely.
        4) Knife could be used to cut seat belts. If victims are dangling upside down in seat belts, they must be supported as the belt is being cut.

Contact the local junk yard and have several cars delivered to the school. If possible have the local fire department come out and show the students extrication techniques.

LESSON THREE

LECTURE/POWER POINT

BUILDINGS

A. First Responder responsibilities
    1. Alert dispatch and call for additional help if you cannot easily gain access.
    2. Try opening doors.
    3. Try opening windows.
    4. Look quickly for a key under mats or in mailboxes.
    5. Call bystanders and neighbors to see if they have a key.
    6. Break glass in order to unlock doors or windows.

B. Entering buildings
    1. Break windows or door window glass.
    2. Make certain that patient is not lying near other side of the glass.
    3. Use a hammer, jack handle, or pinch bar to break glass near one of its edges.
    4. If you do not have tools, throw a rock or other suitable object through glass.
    5. Carefully clear all glass from frame and reach in to unlock door or window. If your only point of entry is through a window that will not open, break and clear out all glass and frames necessary for you to enter.
    6. Make certain that you are stepping upon a safe floor when entering.

LESSON FOUR

LECTURE/VIDEO/POWER POINT

HAZARDS

A. Fire
    1. NEVER approach vehicle that is in flames. Approach only if you are in protective equipment and have training and appropriate extinguishing equipment.

2. NEVER attempt to enter building that is on fire.
3. NEVER enter smoke-filled room or building. NEVER attempt to enter closed building or room giving off grayish-yellow smoke (which indicates a hazardous backdraft condition).
4. DO NOT enter building unless others know you are doing so. Always work with partner.
5. NEVER open door that is hot to touch.
6. NEVER use elevator if there is a possibility of fire in building.
7. If you find yourself in smoke, stay close to floor and crawl to safety.

B. Gas
1. Be alert for odors of gas at vehicle accidents and in buildings.
2. Move patients and clear bystanders if odors are present.
    a. Report gas leaks or spills to dispatch.
    b. Do NOT turn on lights or use any electrical equipment (including radios), open flames, or flares.

C. Electrical wires
1. If there are fallen wires or other electrical hazards, summon power company or appropriate rescue group immediately.
2. DO NOT attempt a rescue if fallen wires block your path to patient.
    a. Call dispatch and give them location. Request that power be turned off.
    b. Unless the power company says power is off, assume that it is on even though streetlights are off. Keep bystanders clear.
    c. Tell patients to stay in vehicle and avoid touching its sides.
    d. If there is a fire, patients must jump from vehicle (a child could be thrown). They must not make contact with vehicle and ground simultaneously.

D. Hazardous materials
1. Protect yourself and others at scene; set up HOT/COLD zones.
2. Call dispatch for appropriate help. Stay clear and position yourself in a safe area.
    a. Give nature and location of problem.
    b. Give estimate of number of patients in and out of danger zone.
    c. Describe special problems at scene (fire, crowds, traffic).
3. Give following information if possible:
    a. Type of hazardous material
    b. Name or ID number from placard
    c. Shipper or manufacturer
    d. Type of container, carrier, or storage facility
    e. Estimate of material at the scene
    f. State of material (contained, leaking, escaping gas, spilled powder)
    g. Estimate of how long scene has been dangerous
    h. Any other possible hazards
    i. Weather conditions (wind, rain) that might affect incident
4. Patient care may be a continuation of HAZMAT decontamination
    a. Flush skin, clothing, and eyes for at least 20 minutes.
    b. Remove contaminated clothing, shoes, and jewelry.
    c. Wrap patients in blankets.
    d. Contact experts and remain in COLD zone.

E. Radiation accidents
1. Stay clear of radiation accidents and protect yourself from exposure.
2. Call dispatch for appropriate assistance.
3. Look for radiation hazard labels.
4. Types of radiation patients
    a. Clean-exposed to external dose of radiation, not fallout; no risk to rescuer.
    b. Dirty, internal contamination-patient must be externally cleansed before care is rendered.
    c. Dirty, external contamination-patient must be decontaminated before contact

and care.

Ask the students to research the local area around their house to see what potential hazards exist. Have them pair and share with the class.

LESSON FIVE

LECTURE/POWER POINT/VIDEO

TRIAGE

A. Priorities
   1. Definition-method of sorting patients for care and transport based on severity of their injuries or illnesses.
   2. First-on-the-scene First Responders' responsibilities
      a. Triage multiple patients.
      b. Initiate care.
      c. When EMTs arrive, pass on information and continue to assist in triage and care.
      d. Tagging helps identify priority of patients.

B. Four-category triage
   1. Priority 1 (red tag)-treatable life-threatening illness or injuries
      a. Airway and breathing problems
      b. Uncontrolled or severe bleeding
      c. Altered mental status
      d. Severe medical problems
      e. Shock (hypoperfusion)
      f. Severe burns
   2. Priority 2 (yellow tag)-serious but not life-threatening injuries
      a. Burns without airway problems
      b. Major or multiple bone or joint injuries
      c. Back injuries with or without spinal cord damage
   3. Priority 3 (green tag)-"walking wounded"
      a. Minor musculoskeletal injuries (pain or stiffness, but able to move normally)
      b. Minor soft-tissue injuries (minor lacerations, bruises)
   4. Priority 4 (or Priority 0-gray or black tag)-dead or fatally injured
      a. Exposed brain matter
      b. Cardiac arrest (no pulse for over 20 minutes except with cold-water drowning and extreme hypothermia)
      c. Severed trunk
      d. Decapitation
      e. Incineration

C. START plan (simple triage and rapid treatment)
   1. Modified triage system
   2. Steps
      a. Step one: delayed patients
         1) Rescuers direct all patients who can walk to assigned area.
         2) Rescuers move to closest patients who cannot walk and continue triage.
      b. Step two: respiration check
         1) Each patient who cannot walk is assessed for respirations.

2) Respiration is used to classify patients as
   a) Dead/nonsalvageable (tagged)-no respirations
   b) Immediate (tagged)-respirations above 30 per minute
   c) Delayed (no tag)-respirations below 30 per minute

c. Step three: circulation assessment
   1) Respiratory checked patients classified as "immediate" or "delayed" checked for adequate perfusion (presence or absence of radial pulse)
      a) Any patient with radial pulse assumed to have adequate perfusion, is considered "delayed," but not yet tagged.
      b) Any patient without radial pulse is assumed to have inadequate perfusion, is tagged "immediate."
   2) If major bleeding found, apply direct pressure.
   3) Elevate legs of any patient without radial pulse.

d. Step four: mental assessment
   1) Any patient with adequate respirations and perfusion who can follow simple directions is given "normal mental status and is tagged "delayed."
   2) Any patient with adequate respirations and perfusion who cannot follow simple direction is tagged "immediate."

Ask the drama department to help with this lesson. They could get moulaged and spread out in a mock mass casualty incident. Then the students could practice triage.

LESSON SIX

****REVIEW....This will allow continued practice of the patient assessment that was taught in CEM-8. Run through the review and allow the students to practice.

PATIENT ASSESSMENT

A. Pulse (vital sign)
   1. Rapid, full-fear, overexertion, heat stroke and advanced heat exhaustion, high blood pressure, early stages of internal bleeding
   2. Rapid, thready-shock, blood loss, developing heat exhaustion, diabetic coma, falling blood pressure
   3. Slow, full-stroke, skull fracture
   4. No pulse-carotid 5 cardiac arrest, distal 5 injuries to extremity (usually a fracture or dislocation)

B. Respiration (vital sign)
   1. Rapid, shallow-shock, heart problems, heat exhaustion, insulin shock, congestive heart failure
   2. Deep, gasping, labored-airway obstruction, congestive heart failure, heart problems, lung disease, lung injury from excessive heat, chest injuries, diabetic coma
   3. Snoring-stroke, fractured skull, drug or alcohol abuse, airway obstruction
   4. Stridor-high-pitched sounds on inspiration
   5. Crowing-airway obstruction, airway injury due to excessive heat

6. Gurgling-airway obstruction, lung disease, lung damage due to excessive heat
7. Coughing blood-chest wound, rib fracture, internal injuries

C. Skin temperature (vital sign)
1. Cool, moist-shock, bleeding, body losing heat, heat exhaustion
2. Cool, dry-exposure to cold
3. Cool, clammy-shock
4. Hot, dry-heat stroke, high fever, chemical (pesticide) exposure
5. Hot, moist-heat exhaustion or heat stroke, infectious disease

D. Skin color (vital sign)
1. Red-high blood pressure, heart attack, heat stroke, diabetic coma, minor burn
2. White, pale, ashen-shock, heart attack, excessive bleeding, heat exhaustion, fright, insulin shock
3. Blue-heart failure, airway obstruction, lung disease, certain poisonings, shock

E. Pupils of eyes (vital sign)
1. Dilated, unresponsive to light-cardiac arrest, unconsciousness, shock, bleeding, heat stroke, drugs (LSD, uppers)
2. Constricted-damage to central nervous system, drugs (heroin, morphine, codeine)
3. Unequal-stroke, head injury

F. Level of consciousness
1. Confusion-fright, anxiety, illness, minor head injury, alcohol or drug abuse, mental illness, shock, epilepsy
2. Stupor-head injury, alcohol or drug abuse, stroke
3. Brief unconsciousness-head injury, fainting, epilepsy
4. Coma-stroke, allergy shock, head injury, poisoning, drug or alcohol abuse, diabetic coma, heat stroke or advanced heat exhaustion, shock, heart attack

G. Paralysis or loss of sensation
1. One side of body-stroke, head injury
2. Arms only-spinal injury in neck
3. Legs only-spinal injury along back
4. Arms and legs-spinal injury in neck and possibly along back
5. No pain, obvious injury-spinal cord or brain damage, shock, hysteria, drug or alcohol abuse

LESSON SEVEN

****REVIEW....This will allow continued knowledge that was taught in CEM-3.

Run through the review and allow the students to practice operations, patient assessments and extrication techniques.

FIRST RESPONDER STRESS

A. Be aware of mental and physical stress levels at multiple-casualty incidents.

B. Critical incident stress debriefing should be available after such incidents.

LESSON EIGHT

If members of the local flight crew are available, this presentation may be completed by them. If they are unavailable, a site visit may be beneficial to the helicopters base.

LECTURE/POWER POINT/VIDEO

HELICOPTER OPERATIONS/MEDICAL TRANSPORT

A. Reasons for requesting
   1. Patient must be transported to specialty center more than reasonable distance or drive time from incident.
   2. High-priority patient is trapped and extrication time will be prolonged.
   3. Patient is in a remote area that cannot be reached by ground units, or ambulance access is blocked.
   4. Air transport crew has higher level of needed medical skills than do ground crews.
   5. Patient is high priority with any of the following:
      a. Shock
      b. Chest or abdominal trauma with respiratory distress or shock
      c. Serious mechanism of injury with altered vital signs
      d. Penetrating injuries to any body cavity
      e. Carbon monoxide poisoning
      f. Heart attack
      g. Amputation of limbs or digits (especially fingers)

B. Provide information to helicopter
   1. Your name, department name, call-back number or frequency
   2. Nature of the incident
   3. Exact location of the incident, including landmarks and crossroads or latitude and longitude if known and appropriate
   4. Exact location of the landing zone

C. Set up landing zone
   1. Flat area, clear of obstructions
   2. At least 50 feet from the incident
   3. If landing area must be on highway, stop traffic in BOTH directions.
   4. Warn crew of nearby obstructions such as utility lines, radio towers, antennas, and trees.
   5. Mark corners of landing area with high-visibility objects; never shine lights up at helicopter at night.
   6. Keep rescue crews and bystanders at least 200 feet from landing area.
   7. DO NOT approach helicopter until pilot signals.
   8. Approach the unit in a crouch to avoid rotors; on slope, approach only from downhill side.
   9. Secure loose items when approaching so nothing will blow into rotor blades.

LESSON NINE

This day allows for summarization of the GPS and review before the unit's written assessment. It also allows the instructor to have addition time for a practical evaluation.

LESSON TEN

Ask students to clear their desks and use a pen or pencil.

Administer the GPS written assessment.

Grade and return.

Prepare students for GPS CEM-16

Attachments for Learning Experiences: Please list.

Notes & Reflections:

Remediation Sheets or "Ticket out the Door"

The remediation sheet should be completed after every class to identify individual students or groups of students having difficulty demonstrating the cognitive, affective or psychomotor objectives of the lesson. The instructor should provide appropriate remediation to the individual or group before the next class. Instructors should assist students to achieve success in the program.

These sheets should be copied and placed at the end of each lesson.

First Responder Remediation Sheet

Date	Student
Area of Difficulty	
Action Plan	
Completed	

CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Attachments for Culminating Performance Task: Please list.

UNIT RESOURCES

Web Resources:

http://spiritwoodambulance.ca/First%20Responders/FR%20PP%20PDF/Mass%20Casualty%20Incidents%20v2.pdf

This is a Multimedia presentation on Mass Casualties

EMS-Related Organizations
The organizations listed below offer resources for specific EMS interests and information. Some organizations offer training opportunities through local branches. To obtain membership, dues, and participation information, write to the organization(s) most closely associated with your interests.
This is only a sampling of EMS-related organizations. EMS journals and other EMS professionals may provide information on additional organizations.

American Red Cross (ARC)
National Disaster Response
Contact your local Red Cross chapter

American Trauma Society (ATS)
Membership Department
8903 Presidential Parkway, Suite 512
Upper Marlboro, MD 20772-2656

FARMEDIC National Training Center
ATTN: Dave Oliver
Alfred State College
Alfred, NY 14802

Florida EMS Clearinghouse
2002 Old St. Augustine Road, Building D
Tallahassee, FL 32301

International Association of Dive Rescue Specialists (IADRS)
P.O. Box 5259
San Clemente, CA 92674-5259

International Critical Incident Stress Foundation, Inc.
ATTN: Team Information
5018 Dorsey Hall Drive, Suite 104
Ellicott City, MD 21042

National Association For Search And Rescue
4500 Southgate Place, Suite 100
Chantilly, VA 22021

National Association of Emergency Medical Technicians (NAEMT)
102 West Leake Street
Clinton, MS 39056

National Association of EMS Physicians (NAEMSP)
230 McKee Place, Suite 500
Pittsburgh, PA 15213

National Flight Paramedic's Association
35 South Raymond Avenue, Suite 205
Pasadena, CA 91105

National Registry of Emergency Medical Technicians (NREMT)
ATTN: First Responder Department
6610 Busch Boulevard
Columbus, OH 43229

Air Medical Physician Association
(AMPA) Ms. Pat Petersen, Executive Director
383 F St. Salt Lake City, UT 84103
website: www.ampa.org.

Association of Air Medical Services (AAMS)
Ms. Dawn Mancuso, Executive Director
110 North Royal St., Suite 307
Alexandria, VA 22314
703 836 8732; fax 703 836 8920
e-mail: dmancuso@aams.org website: www.aams.org.

National EMS Pilots Association (NEMPSA)
Ms. Dawn Mancuso, Executive Director
110 North Royal St., Suite 307
Alexandria, VA 22314
703 836 8732; fax 703 836 8920
e-mail: dmancuso@aams.org
website: www.nemspa.org.

A**ir & Surface Transport Nurses Association**
(ASTNA) Ms. Karen Wojdyla, Executive Director 9101 E. Kenyon Ave., Suite 3000
Denver, CO 80237
303-770-2220; fax 303-770-1812
e-mail: info@gwami.com
website: www.astna.org.

National Flight Paramedics Association
(NFPA) Ms. Pat Petersen, Executive Director 383 F St. Salt Lake City, UT 84103
801 381 NFPA; fax 801 321 1668
website: www.nfpa.rotor.com.

http://health.state.ga.us/programs/ems/offices
www.mosbyjems.com
www.dhs.gov
www.nhtsa.dot.gov
www.lungusa.org
www.innerbody.com
www.spinalcord.org
www.emsmagazine.com

www.childbirth.org
www.amhrt.org
www.techrescue.org
www.jems.com
www.nremt.org
www.osha.gov
www.cdc.gov

Attachment(s):

Materials & Equipment:

AV Equipment: Use various audiovisual materials relating to ambulance operations. The continuous design and development of new audiovisual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials should be edited to ensure meeting the objectives of the curriculum.

EMS Equipment: An ambulance, properly stocked.

Additional Materials: All equipment listed in section of the lesson plan, personal protective equipment per state and local protocols, maps of your locality, daily ambulance inspection paperwork, state laws relevant to emergency vehicle operations, newspaper clippings reporting accidents involving ambulances, cleaning/disinfecting equipment; also, consider contacting local guests to present special topic areas, including an emergency dispatcher (or schedule a tour of your local dispatch center), highway patrol officer, and flight crew

What 21st Century Technology was used in this unit:

X	Slide Show Software		Graphing Software		Audio File(s)
	Interactive Whiteboard		Calculator		Graphic Organizer
	Student Response System		Desktop Publishing		Image File(s)
	Web Design Software		Blog	X	Video
	Animation Software		Wiki		Electronic Game or Puzzle Maker
	Email	X	Website		