



HEALTHCARE SCIENCE

COURSE: 25.562 Concepts of Emergency Medicine

UNIT: 3.1 Well-Being of the Emergency Medical Services Provider



INTRODUCTION

Annotation:

This unit will emphasize the importance of the first responder maintaining personal safety first and the challenges they may face in providing care in some emergency situations. The importance of knowing and adhering OSHA guidelines for standard precautions, and ways of managing emotional and stress related issues are included.

Grade(s):

<input type="checkbox"/>	9 th
<input type="checkbox"/>	10 th
<input checked="" type="checkbox"/>	11 th
<input checked="" type="checkbox"/>	12 th

Time:

Five 50 minute class periods

Author:

Mark Elsey, BS, NREMT-P

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-3: Students will evaluate the necessity of scene safety, emotional well-being, and stress management of the Emergency Medical Services provider.

- a. Define, demonstrate, and use standard precautions as described in the rules and regulations set forth by the Occupational Safety and Health Administration (OSHA).
- b. Analyze the need to determine scene safety prior to attempting to provide any emergency medical care.
- c. Evaluate the utilization of personal protective equipment (PPE) necessary for each of the following situations: hazardous materials; rescue operations; violent scenes; crime scenes; electricity, water, and ice; exposure to blood borne pathogens; and exposure to airborne pathogens.
- d. Discuss the emotional aspects of emergency medical care and methods of reducing/alleviating stress.
- e. Demonstrate the correct handling and disposal of all sharps.
- f. Discuss medical oversight and differentiate between indirect (off-line) medical control and direct (online) medical control.

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

Module 1 Preparatory

Lesson 1-2



UNDERSTANDINGS & GOALS

Enduring Understandings:

- EMS providers face emotional and physical challenges when providing care to pre-hospital patients, therefore they must possess certain qualities. It is very important that the providers not only know about potential dangers but also understand how to handle them when they arise. Providers must understand how to manage stress related issues as well as protect themselves from threats to personal safety such as infectious diseases.

Essential Questions:

- Why is it essential for First Responders to take good care of themselves?
- How can stress related issues be identified and managed by EMS providers?
- How can EMS providers protect themselves from risk to personal safety while assisting the patient and family in coping with problems associated with injury or disease?

Knowledge from this Unit: Factual information.

- How to use standard precautions as described in the rules and regulations set forth by the Occupational Safety and Health Administration (OSHA).
- The need to determine scene safety prior to attempting to provide any emergency medical care.
- The utilization of personal protective equipment (PPE) necessary for each of the following situations: hazardous materials; rescue operations; violent scenes; crime scenes; electricity, water and ice; exposure to blood borne pathogens; and exposure to airborne pathogens.
- The emotional aspects of emergency medical care and methods of reducing/alleviating stress.
- How to correctly handle and dispose of all sharps.
- Define stressor.
- Common traits among individuals who have difficulty with managing stress
- Signs of stress in First Responders.
- Define and discuss symptoms of post-traumatic stress disorder
- The importance of medical oversight and how it is provided

Skills from this Unit: Performance.

- Demonstrate, and use standard precautions as described in the rules and regulations set forth by the Occupational Safety and Health Administration (OSHA).
- How to determine scene safety prior to attempting to provide any emergency medical care.

- Evaluate the utilization of personal protective equipment (PPE) necessary for each of the following situations: hazardous materials; rescue operations; violent scenes; crime scenes; electricity, water and ice; exposure to blood borne pathogens; and exposure to airborne pathogens.
- Discuss the emotional aspects of emergency medical care and methods of reducing/alleviating stress.
- Demonstrate correct handling and disposal of all sharps.
- Define stressor.
- List common traits among individuals with Type A personalities.
- List signs of stress in First Responders.
- Define posttraumatic stress disorder.
- List symptoms of post-traumatic stress disorder.



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
- ☒ Objective assessment - multiple-choice, true- false, etc.
 - ☒ Quizzes/Tests
 - ☒ Unit test
- ☒ Group project
- ☒ Individual project
- ☐ 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
- ☒ Subjective assessment/Informal observations
 - ☐ Essay tests
 - ☐ Observe students working with partners
 - ☒ Observe students role playing
- ☐ Peer-assessment
 - ☐ Peer editing & commentary of products/projects/presentations using rubrics
 - ☐ Peer editing and/or critiquing
- ☒ Dialogue and Discussion
 - ☐ Student/teacher conferences
 - ☒ Partner and small group discussions
 - ☒ Whole group discussions
 - ☐ Interaction with/feedback from community members/speakers and business partners
- ☐ Constructed Responses
 - ☐ Chart good reading/writing/listening/speaking habits
 - ☐ Application of skills to real-life situations/scenarios
- ☐ Post-test

Assessment(s) Title:

- A-Type paper
- Vocabulary Contract
- Unit Workbook pages
- Unit Quiz
- Unit Written assessment

Assessment(s) Description/Directions:

- Students will create a Multi-Media presentation on stress assessed by the project rubric on www.teachnology.com or individual teacher made rubric.
- As a group, students complete a written report and research presentation on stress. Recommended to divide components of the plan into different partners in a team. Utilize an individualized, teacher made rubric or both the team work and project rubric at www.teachnology.com.
- Report on summarized articles related to Type-A personalities using a teacher made rubric or research rubric from www.teachnology.com.
- Students will review and summarize scholarly medical articles related to EMS and report on their findings in a report. Reports will be evaluated using a teacher made rubric or research rubric from www.teachnology.com.
- Learners will complete the workbook pages related to this unit. Workbook pages will be graded on a 100 point scale.
- Students complete a written exam on a scale of 0-100 to assess understanding of emergency medical care.
- 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):

Vocabulary Contract



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-3. Students will evaluate the necessity of scene safety, emotional well-being, and stress management of the Emergency Medical Services provider.

2. Review Essential Questions.

- Why is it essential for First Responders to take good care of themselves?
- How can stress related issues be identified and managed by EMS providers?
- How can EMS providers protect themselves from risk to personal safety while assisting the patient and family in coping with problems associated with injury or disease?

3. Identify and review the unit vocabulary.

- Depression- a mental state characterized by a pessimistic sense of inadequacy and a despondent lack of activity
- OSHA- Occupational Safety and Health Administration
- BSI- Body Substance Isolation
- PPE- Personal Protective Equipment
- Hazardous material- Harmful substances
- HIV- Human Immunodeficiency Virus
- HBV- Hepatitis B Virus
- Stress - A physical, mental, or emotional factor that causes bodily or mental tension
- MCI's- Multi-Casualty Incident
- CISD- Critical Incident Stress Debriefing

4. Assessment Activity.

Interest Approach

This is a good unit to show a video about infectious disease.

LESSON ONE

Give students KWL form: This allows students to record what they **know** about stress and **what they learn**, and compare.

Assign Unit Vocabulary and workbook pages to be handed in by day three.

Discuss with class the emotional aspects of emergency care:

Causes of stress

1. mass casualties
2. pediatrics
3. death
4. violence
5. abuse and neglect
6. death or injury of coworker

Take time for open discussion and questions

Discuss with the class the stages of death and dying.

1. **Denial** ("Not me.")—defense mechanism creating a buffer between shock of dying and dealing with the illness/injury
2. **Anger** ("Why me?")
 - (1) First Responders may be the target of the anger
 - (2) Don't take anger or insults personally
 - (a) Be tolerant
 - (b) Do not become defensive
 - (3) Employ good listening and communication skills
 - (4) Be empathetic

Anger may be misdirected toward the First Responder—do not take this personally.

3. **Bargaining** ("OK, but first let me . . .")—agreement that, in the patient's mind, will postpone the death for a short time depression

Patients will often bargain with themselves, their physician (or EMS personnel), or God.

4. **Depression** ("OK, but I haven't . . .")
 - (1) Characterized by sadness and despair
 - (2) Patient is usually silent and retreats into his or her own world
5. **Acceptance** ("OK, I am not afraid.")
 - (1) Does not mean the patient will be happy about dying
 - (2) The family will usually require more support during this stage than the patient

Describe approaches for dealing with patients and families.

Discuss how the First Responder should be dealing with the dying patient and family members

- a. Patient needs include dignity, respect, sharing, communication, privacy, and control
- b. Family members may express rage, anger, and despair
- c. Listen empathetically
- d. Do not falsely reassure
- e. Use a gentle tone of voice
- f. Let the patient know everything that can be done to help will be done
- g. Use a reassuring touch, if appropriate
- h. Comfort the family

Use role playing to enforce ways of dealing with patients or families who are dealing with death or dying. Play the part of the distressed patient or family member yourself at first, until students with no experiences have a basis for role playing.

LESSON TWO. Stress and Critical Incident Stress Debriefing (CISD) are covered as we discuss the stressful situations that might happen to an EMS worker

Ask the students to do internet research on Type A, B personalities and then create a Venn Diagram to compare and contrast on personalities types. This will help the students understand how different personality types react to stress and how they interact.

Cover the signs and symptoms of stress.

- Brainstorming activity. Divide class into three groups and have large sheets of paper and makers available in three areas of the room. Sheets of paper should be titled: "Sources of Stress in my life," "Healthy ways to deal with stress," "Unhealthy ways to deal with stress" (note: if large size class, can have six sheets of paper and title two each of the same; move into groups on same side of classroom.) Tell students this is a silent activity. Students are to respond to the title on the sheet of paper for their group. Give each group 1-2 minutes; then have them rotate to the next sheet of paper. After groups have rotated to each sheet of paper, have students return to their seats.
- Tape sheets of paper to wall or board. Read student response and discuss.

Finish with CISD and how it can help Public Safety personnel.

D. Critical incident stress debriefing (CISD)

1. A team of peer counselors and mental health professionals who help emergency care workers deal with critical incident stress
2. Meeting is held within 24 to 72 hours of a major incident
 - a. Open discussion of feelings, fears, and reactions
 - b. Not an investigation or interrogation
 - c. All information is confidential
 - d. CISD leaders and mental health personnel evaluate the information and offer suggestions on overcoming stress
3. Designed to accelerate the normal recovery process after experiencing a critical incident
 - a. Works well because feelings are ventilated quickly
 - b. Debriefing environment is non-threatening
4. How to access local CISD system

LESSON THREE. Students learn which types of PPE's are needed for different events.

Discuss with class BSI (Body Substance Isolation), sample policy and form for reporting exposure can be found at http://www.uph.org/Portals/0/EMS_IC.4.10.73-AddendumsA&B.pdf or by typing in search for sample forms for reporting exposures

- Risk to the First Responder
- How to deal with risk
 1. OSHA Guidelines

2. Gloves
 3. Eye protection
 4. gloves
 5. gowns
 6. Disposing of PPE properly
- Bloodborne and airborne pathogens
 1. HIV
 2. HBV
 - Airborne pathogens
 1. TB
 2. Meningitis

****Discuss the fact that it is impossible to tell by looking who may carry infectious diseases, making it important to protect themselves on every call.**

Have students practice putting on BSI equipment until students can do it smoothly and without wasting undue amounts of time. Role play with BSI in place so they can realize that some adjustments must be made when wearing BSI, as in speaking more clearly when wearing a mask. Include proper removal and disposal of BSI equipment in the role playing.

LESSON FOUR.

Protecting First Responders and Scene safety is discussed as students realize that their safety is paramount.

*****Students don BSI equipment and participate in an annual “condiment day” tradition where they squirt each other with mustard, ketchup and mayonnaise to see which BSI items held up and who got infected.**

After this exercise discuss with the class

- Scene Safety
 - a. Hazardous material incidents
 - b. Rescue operations
 - c. Violent and crime scenes
 1. Request for help
 2. wait until scene is secure
 3. preserve your own life
 4. Put on appropriate PPE

Administer Unit quiz of no more than 5 questions. Grade and return for review.

LESSON FIVE

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

Administer the Units written assessment, approximately 8 multiple choice, and 2 short answers.

Grade and return.

Prepare students for GPS CEM-4

Attachments for Learning Experiences: Please list.

Notes & Reflections: May include notes to the teacher, pre-requisite knowledge & skills, suggestions, etc.

If time permits: View the movie “My Life” with Michael Keaton and Nicole Kidman.

This movie walks the viewer through the five stages of death and dying from both patient and family view points.

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:

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.

Air & 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): Supplemental files not listed in assessment, learning experiences, and performance task.

Materials & Equipment:

AV Equipment: **Projector, computer and access to internet for Multimedia slides.** Use various audiovisual materials relating to the well-being of the EMT-Basic. 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 the objectives of the curriculum are met.

Multimedia Slides to accompany GPS CEM-3-sample available at
<http://www.templejc.edu/dept/ems/pages/powerpoint.html> and click on well-being of EMT

Rubric for donning and removing gloves, and gown

EMS and other Equipment: Eye protection, gowns, gloves, masks, caps, forms for reporting exposures.
Ketchup, mustard, BBQ sauce, Mayonnaise, Towels, water
Large sheets of paper and markers

Additional Materials: Local CISD team and access information; access procedures and OSHA/state regulations regarding BSI; and *Hazardous Materials, The Emergency Response Handbook*. Additional EMS equipment: waterless hand-washing systems.

What 21st Century Technology was used in this unit:

X	Slide Show Software
	Interactive Whiteboard
	Student Response System
	Web Design Software
	Animation Software
	Email

	Graphing Software
	Calculator
x	Desktop Publishing
	Blog
	Wiki
X	Website

	Audio File(s)
	Graphic Organizer
	Image File(s)
X	Video
	Electronic Game or Puzzle Maker