Course Title: EMT Refresher

Course Prefix & No.: EMSP 1105

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<tr>
<th>LEC:</th>
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<th>Credit Hours:</th>
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COURSE DESCRIPTION:

This course reviews material previously learned by the participant. The intent of this course is to maintain a provider’s competence in knowledge and skill performance. EMSP 1105 is designed to meet the hours to renew certification as well as those who may need remediation to gain certification.

COURSE PREREQUISITE (S): None

RATIONALE:

EMSP 1105 will meet the required mandatory core and flexible core content to renew or gain certification for EMS Providers at the level that they are certified.

REQUIRED TEXTBOOK (S) and/or MATERIALS:

Title: NA
Edition:
Author:
Publisher:
Materials:

Attached course outline written by: Peggy Dean          Date: 4/13/06
Reviewed/Revised by: Peggy Dean                    Date: 10/13/12-Mar 2019
Effective quarter of course outline: FA/13 – FA/18            Date: 10/13/12
Academic Dean:  Stacey Ocander                  Date: 10/13/12-Mar 2019

Course Objectives, Topical Unit Outlines, and Unit Objectives must be attached to this form.
TITLE: EMT Refresher

PREFIX/NO: EMSP 1105

COURSE OBJECTIVES:

- Provide ventilatory support for a patient.
- Assess and provide care to the adult and geriatric patient experiencing a medical emergency
- Assess and provide care to the adult or geriatric patient experiencing a trauma emergency
- Assess and provide care to the pediatric patient experiencing a medical or trauma emergency
- Discuss the use of proper body mechanics when lifting and moving a patient

TOPICAL UNIT OUTLINE/UNIT OBJECTIVES:

1.1 Describe the indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a patient by:
(C-1) / 2-1.43
- Mouth-to-mouth
- Mouth-to-nose
- Mouth-to-mask
- One person bag-valve-mask
- Two person bag-valve-mask
- Three person bag-valve-mask
- Flow-restricted, oxygen-powered ventilation device

1.2 Compare the ventilation techniques used for an adult patient to those used for pediatric patients. (C-3) / 2-1.45

1.3 Describe indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a patient

1.4 Define how to ventilate with a patient with a stoma, including mouth-to-stoma and bag-valve-mask-to-stoma ventilation. (C-1) / 2-1.54

1.5 Describe the special considerations in airway management and ventilation for patients with facial injuries. (C-1) / 2-1.55

1.6 Describe the special considerations in airway management and ventilation for the pediatric patient. (C-1) / 2-1.56

At the completion of this unit, the EMT will be able to:

2.1 Identify the major therapeutic objectives in the treatment of patients with any cardiac emergencies. (C-1) / 5-2.51

2.2 Identify the major mechanical, pharmacological and electrical therapeutic interventions. (C-3) / 5-2.52

2.3 Based on field impressions, identify the need for rapid intervention for the patient in cardiovascular compromise. (C-3) / 5-2.53

ESO Revised 3-13-01
2.8 Specify the measures that may be taken to prevent or minimize complications in the patient suspected of myocardial infarction. (C-3) / 5-2.83

2.9 Describe the most commonly used cardiac drugs in terms of therapeutic effect and dosages, routes of administration, side effects and toxic effects. (C-3) / 5.2.84

2.10 List the interventions prescribed for the patient in acute congestive heart failure. (C-2) / 5-2.94

2.11 Describe the most commonly used pharmacological agents in the management of congestive heart failure in terms of therapeutic effect, dosages, routes of administration, side effects and toxic effects. (C-1) / 5-2.95

2.12 Identify the EMT responsibilities associated with management of a patient with cardiac emergencies. (C-2) / 5-2.101

2.13 From the priority of clinical problems identified, state the management responsibilities for the patient with a hypertensive emergency. (C-2) / 5-2.109

2.16 Identify the EMT responsibilities associated with management of a patient in cardiogenic shock. (C-2) / 5-2.120

2.17 Identify the critical actions necessary in caring for the patient with cardiac arrest. (C-3) / 5-2.125

2.18 Describe the most commonly used pharmacological agents in the management of cardiac arrest in terms of therapeutic effects. (C-3) / 5-2.129

2.20 Develop, execute, and evaluate a treatment plan based on the field impression for the heart failure patient. (C-3) / 5-2.168

2.22 Develop, execute and evaluate a treatment plan based on the field impression for the patient with a hypertensive emergency. (C-3) / 5-2.171

2.24 Integrate pathophysiological principles to the assessment and field management of a patient with chest pain. (C-3) / 5-2.183

3.1 Describe physical manifestations in anaphylaxis. (C-1) / 5-5.13

3.2 Differentiate manifestations of an allergic reaction from anaphylaxis. (C-3) / 5-5.14

3.3 Recognize the signs and symptoms related to anaphylaxis. (C-1) / 5-5.15

3.4 Differentiate among the various treatment and pharmacological interventions used in the management of anaphylaxis. (C-3) / 5-5.16

3.5 Correlate abnormal findings in assessment with the clinical significance in the patient with anaphylaxis. (C-3) / 5-5.18

3.6 Develop a treatment plan based on field impression in the patient with allergic reaction and anaphylaxis. (C-3) / 5-5.19

3.7 List signs and symptoms of near-drowning. (C-1) 5-10.54

3.8 Describe the lack of significance of fresh versus saltwater immersion, as it relates to near-drowning. (C-3) / 5-10.55

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3.9 Discuss the incidence of "wet" versus "dry" drownings and the differences in their management. (C-3) 5-10.56

3.10 Discuss the complications and protective role of hypothermia in the context of near-drowning. (C-1) / 5-10.57

3.11 Correlate the abnormal findings in assessment with the clinical significance in the patient with near-drowning. (C-3) / 5-10.58

3.12 Differentiate among the various treatments and interventions in the management of near-drowning. (C-3) 5-10.59

3.13 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the near-drowning patient. (C-3) / 5-10.60

3.14 Differentiate toxic substance emergencies based on assessment findings. (C-3) / 5-8.60

3.15 Correlate abnormal findings in the assessment with the clinical significance in the patient exposed to a toxic substance. (C-3) / 5-8.61

3.16 Correlate the abnormal findings in assessment with the clinical significance in patients with the most common poisonings by overdose. (C-3) / 5-8.44

3.17 Correlate the abnormal findings in assessment with the clinical significance in patients using the most commonly abused drugs. (C-3) / 5-8.53

3.18 List the clinical uses, street names, pharmacology, assessment finding and management for patient who have taken the following drugs or been exposed to the following substances: (C-1) / 5-8.56

- Cocaine
- Marijuana and cannabis compounds
- Amphetamines and amphetamine-like drugs
- Barbiturates
- Sedative-hypnotics
- Cyanide
- Narcotics/ opiates
- Cardiac medications
- Caustics
- Common household substances
- Drugs abused for sexual purposes/ sexual gratification
- Carbon monoxide
- Alcohols
- Hydrocarbons
- Psychiatric medications
- Newer anti-depressants and serotonin syndromes
- Lithium
At the completion of this unit, the EMT will be able to:

4.1 State the reasons for performing a rapid trauma assessment. (C-1) / 3-3.35

4.2 Recite examples and explain why patients should receive a rapid trauma assessment. (C-1) / 3-3.36

4.3 Apply the techniques of physical examination to the trauma patient. (C-1) / 3-3.37

4.4 Describe the areas included in the rapid trauma assessment and discuss what should be evaluated. (C-1) / 3-3.38

4.5 Differentiate cases when the rapid assessment may be altered in order to provide patient care. (C-3) / 3-3.39

4.6 Discuss the treatment plan and management of hemorrhage and shock. (C-1) / 4-2.8

4.7 Develop, execute and evaluate a treatment plan based on the field impression for the hemorrhage or shock patient. (C-3) / 4-2.44

4.8 Relate assessment findings associated with head/ brain injuries to the pathophysiologic process. (C-3) / 4-5.43

4.9 Classify head injuries (mild, moderate, severe) according to assessment findings. (C-2) / 4-5.44

4.10 Relate assessment findings associated with concussion, moderate and severe diffuse axonal injury to pathophysiology. (C-3) / 4-5.49

4.11 Relate assessment findings associated with skull fracture to pathophysiology. (C-3) / 4-5.52

4.12 Relate assessment findings associated with cerebral contusion to pathophysiology. (C-3) / 4-5.55

4.13 Relate assessment findings associated with intracranial hemorrhage to pathophysiology, including:

- Epidural
- Subdural
- Intracerebral
- Subarachnoid
4.14 Integrate the pathophysiological principles to the assessment of a patient with head/brain injury. (C-3) / 4-5.63

4.15 Differentiate between the types of head/brain injuries based on the assessment and history. (C-3) / 4-5.64

4.16 Formulate a field impression for a patient with a head/brain injury based on the assessment findings. (C-3) / 4-5.65

4.17 Describe the assessment findings associated with spinal injuries. (C-1) / 4-6.6

4.18 Identify the need for rapid intervention and transport of the patient with spinal injuries. (C-1) / 4-6.8

4.19 Integrate the pathophysiological principles to the assessment of a patient with a spinal injury. (C-3) / 4-6.9

4.20 Differentiate between spinal injuries based on the assessment and history. (C-3) / 4-6.10

4.21 Formulate a field impression based on the assessment findings (spinal injuries). (C-3) / 4-6.11

4.22 Develop a patient management plan based on the field impression (spinal injuries). (C-3) / 4-6.12

4.23 Describe the assessment findings associated with traumatic spinal injuries. (C-1) / 4-6.14

4.24 Describe the management of traumatic spinal injuries. (C-1) / 4-6.15

4.25 Integrate pathophysiological principles to the assessment of a patient with a traumatic spinal injury. (C-3) / 4-6.16

4.26 Differentiate between traumatic and non-traumatic spinal injuries based on the assessment and history. (C-3) / 4-6.17

4.27 Formulate a field impression for traumatic spinal injury based on the assessment findings. (C-3) / 4-6.18

4.28 Develop a patient management plan for traumatic spinal injury based on the field impression. (C-3) / 4-6.19

4.29 Describe the assessment findings associated with non-traumatic spinal injuries. (C-1) / 4-6.21

4.30 Describe the management of non-traumatic spinal injuries. (C-1) / 4-6.22

4.31 Integrate pathophysiological principles to the assessment of a patient with non-traumatic spinal injury. (C-3) / 4-6.23

4.32 Differentiate between traumatic and non-traumatic spinal injuries based on the assessment and history. (C-3) / 4-6.24

4.33 Formulate a field impression for non-traumatic spinal injury based on the assessment findings. (C-3) 4-6.25

4.34 Develop a patient management plan for non-traumatic spinal injury based on the field impression. (C-3) / 4-6.26

4.35 Discuss the management of thoracic injuries. (C-1) / 4-7.7

4.36 Identify the need for rapid intervention and transport of the patient with chest wall injuries. (C-1) / 4-7.11

4.37 Discuss the management of chest wall injuries. (C-1) / 4-7.12
4.38 Discuss the management of lung injuries. (C-1) / 4-7.15
4.39 Identify the need for rapid intervention and transport of the patient with lung injuries. (C-1) / 4-7.16
4.40 Discuss the management of myocardial injuries. (C-1) / 4-7.19
4.41 Identify the need for rapid intervention and transport of the patient with myocardial injuries. (C-1) / 4-7.20
4.42 Discuss the management of vascular injuries. (C-1) / 4-7.23
4.43 Identify the need for rapid intervention and transport of the patient with vascular injuries. (C-1) / 4-7.24
4.44 Discuss the management of diaphragmatic injuries. (C-1) / 4-7.27
4.45 Identify the need for rapid intervention and transport of the patient with diaphragmatic injuries. (C-1) / 4-7.28
4.46 Discuss the management of esophageal injuries. (C-1) / 4-7.31
4.47 Identify the need for rapid intervention and transport of the patient with esophageal injuries. (C-1) / 4-7.32
4.48 Discuss the management of tracheo-bronchial injuries. (C-1) / 4-7.35
4.49 Identify the need for rapid intervention and transport of the patient with tracheo-bronchial injuries. (C-1) / 4-7.36
4.50 Discuss the management of traumatic asphyxia. (C-1) / 4-7.39
4.51 Identify the need for rapid intervention and transport of the patient with traumatic asphyxia. (C-1) / 4-7.40
4.52 Develop a patient management plan based on the field impression (thoracic injuries). (C-3) / 4-7.44
4.53 Describe the management of abdominal injuries. (C-1) / 4-8.8
4.54 Develop a patient management plan for patients with abdominal trauma based on the field impression. (C-3) / 4-8.12
4.55 Formulate a field impression based upon the assessment findings for a patient with abdominal injuries. (C-3) / 4-8.36
4.56 Develop a patient management plan for a patient with abdominal injuries, based upon field impression. (C-3) / 4-8.37
5.1 Describe techniques for successful assessment of infants and children. (C-1) / 6-2.8
5.2 Describe techniques for successful treatment of infants and children. (C-1) / 6-2.9
5.3 Discuss the appropriate equipment utilized to obtain pediatric vital signs. (C-1) / 6-2.14
5.4 Determine appropriate airway adjuncts for infants and children. (C-1) 6-2.15
5.5 Discuss complications of improper utilization of airway adjuncts with infants and children. (C-1) 6-2.16

5.6 Discuss appropriate ventilation devices for infants and children. (C-1) 6-2.17

5.7 Discuss complications of improper utilization of ventilation devices with infants & children. (C-1) 6-2.18

5.8 Discuss appropriate endotracheal intubation equipment for infants and children. (C-1) / 6-2.19

5.9 Identify complications of improper endotracheal intubation procedure in infants and children. (C-1) / 6-2.20

5.10 List the indications and methods for gastric decompression for infants and children. (C-1) / 6-2.21

5.11 Differentiate between upper airway obstruction and lower airway disease. (C-3) / 6-2.25

5.12 Describe the general approach to the treatment of children with respiratory distress, failure, or arrest from upper airway obstruction or lower airway disease. (C-3) / 6-2.26

5.13 Discuss the common causes of hypoperfusion in infants and children. (C-1) / 6-2.27

5.14 Evaluate the severity of hypoperfusion in infants and children. (C-3) / 6-2.28

5.16 Discuss the primary etiologies of cardiopulmonary arrest in infants and children. (C-1) / 6-2.30

5.20 Describe the primary etiologies of altered level of consciousness in infants and children. (C-1) 6-2.34

5.21 Identify common lethal mechanisms of injury in infants and children. (C-1) / 6-2.35
5.22 Discuss anatomical features of children that predispose or protect them from certain injuries. (C-1) / 6-2.36

5.23 Describe aspects of infant and children airway management that are affected by potential cervical spine injury. (C-1) / 6-2.37

5.24 Identify infant and child trauma patients who require spinal immobilization. (C-1) / 6-2.38

5.25 Discuss fluid management and shock treatment for infant and child trauma patient. (C-1) / 6-2.39

5.26 Discuss the parent/ caregiver responses to the death of an infant or child. (C-1) / 6-2.44

5.27 Discuss basic cardiac life support (CPR) guidelines for infants and children. (C-1) / 6-2.47

5.28 Identify appropriate parameters for performing infant and child CPR. (C-1) / 6-2.48

5.29 Integrate advanced life support skills with basic cardiac life support for infants and children. (C-3) / 6-2.49

5.31 Discuss appropriate transport guidelines for infants and children. (C-1) / 6-2.51

5.32 Discuss appropriate receiving facilities for low and high risk infants and children. (C-1) / 6-2.52

5.33 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for respiratory distress/ failure in infants and children. (C-1) / 6-2.53

5.34 Discuss the pathophysiology of respiratory distress/ failure in infants and children. (C-1) / 6-2.53

5.35 Discuss the assessment findings associated with respiratory distress/ failure in infants and children. (C-1) / 6-2.55

5.36 Discuss the management/ treatment plan for respiratory distress/ failure in infants and children. (C-1) / 6-2.56

5.37 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for hypoperfusion in infants and children. (C-1) / 6-2.57

5.38 Discuss the pathophysiology of hypoperfusion in infants and children. (C-1) 6-2.58
5.39 Discuss the assessment findings associated with hypoperfusion in infants and children. (C-1) / 6-2.59

5.40 Discuss the management/treatment plan for hypoperfusion in infants and children. (C-1) / 6-2.60

5.41 Discuss the assessment findings associated with cardiac dysrhythmias in infants and children. (C-1) / 6-2.63

5.42 Discuss the management/treatment plan for cardiac dysrhythmias in infants and children. (C-1) / 6-2.64

5.43 Describe the epidemiology, including the incidence, morbidity/mortality, risk factors and prevention strategies for trauma in infants and children. (C-1) / 6-2.69

5.44 Discuss the pathophysiology of trauma in infants and children. (C-1) / 6-2.70

5.45 Discuss the assessment findings associated with trauma in infants and children. (C-1) / 6-2.71

5.46 Discuss the management/treatment plan for trauma in infants and children. (C-1) / 6-2.72

6.1 Discuss the importance of completing an ambulance equipment/supply checklist. (C-1)

6.2 Given a scenario involving arrival at the scene of a motor vehicle collision, assess the safety of the scene and propose ways to make the scene safer. (C-3) / 1-2.11

6.3 List factors that contribute to safe vehicle operations. (C-1) / 1-2.12

6.4 Describe the considerations that should be given to: (C-1) / 1-2.13
   a. Using escorts
   b. Adverse environmental conditions
   c. Using lights and siren
   d. Proceeding through intersections
   e. Parking at an emergency scene

6.5 Discuss the concept of "due regard for the safety of all others" while operating an emergency vehicle. (C-1) / 1-2.14

6.6 Explain how EMS providers are often mistaken for the police. (C-1) / 8-5.1

ESO Revised 3-13-01
6.7 Explain specific techniques for risk reduction when approaching the following types of routine EMS scenes: (C-1) / 8-5.2
   a. Highway encounters
   b. Violent street incidents
   c. Residences and "dark houses"

6.8 Describe warning signs of potentially violent situations. (C-1) / 8-5.3

6.9 Explain emergency evasive techniques for potentially violent situations, including: (C-1) / 8-5.4
   a. Threats of physical violence.
   b. Firearms encounters
   c. Edged weapon encounters

6.10 Explain EMS considerations for the following types of violent or potentially violent situations: (C-1) / 8-5.5
   a. Gangs and gang violence
   b. Hostage/ sniper situations
   c. Clandestine drug labs
   d. Domestic violence
   e. Emotionally disturbed people
   f. Hostage/ sniper situations

6.11 Explain the following techniques: (C-1) / 8-5.6
   a. Field "contact and cover" procedures during assessment and care
   b. Evasive tactics
   c. Concealment techniques

6.12 Describe police evidence considerations and techniques to assist in evidence preservation. (C-1) 8-5.7

6.13 Describe the problems that a paramedic might encounter in a hostile situation and the techniques used to manage the situation. (C-1) / 1-2.10

6.14 Describe the equipment available for self-protection when confronted with a variety of adverse situations. (C-1) / 1-2.15

6.15 Differentiate proper from improper body mechanics for lifting and moving patients in emergency and non-emergency situations. (C-3) / 1-2.9
## COURSE OBJECTIVES/ASSESSMENT MEASURES

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