

WVOEMS Approved AEMT Refresher (NCCP Standards)

Module 1

4 hours

TOPIC – <i>Airway, Respiration, Ventilation and Neurological Management</i>	TIME LINE
Ventilation ETCO2 Automated Transport Ventilators	2 Hours
Oxygenation CPAP	30 Min.
Neurological Seizures / CNS	30 Min.
Geriatrics	1 Hour

Required Objectives:

1. Differentiate between adequate and inadequate breathing
2. Differentiate between respiratory distress and failure
3. Explain when to oxygenate and when to ventilate a patient
4. Discuss the AHA's position on routine suctioning of the newborn
5. Analyze physiology related to oxygen transport and metabolism
6. Identify the AHA's guidelines on oxygen therapy in the post cardiac arrest, acute coronary syndrome and stroke patient
7. Discuss the role of free radicals related to oxygen therapy
8. Define altered mental status (AMS)
9. State common causes of altered mental status
10. Define status epilepticus/seizures
11. Explain complications associated with seizures
12. Describe the steps in the primary assessment for providing emergency care to a geriatric patient, including the elements of the GEMS diamond.
13. Discuss special considerations when performing the patient assessment process on a geriatric patient
14. Describe the pathophysiology of most common medical conditions including s/s, and the emergency medical care strategies used in the management of each for the geriatric patient.
15. Describe special considerations for a geriatric patient who has experienced trauma
16. Discuss elder abuse and neglect, and its implications in assessment and management of the patient

Module 2**4 hours**

TOPIC – <i>Cardiovascular</i>	TIME LINE
Stroke	1 Hour
Pediatric Cardiac Arrest	2.5 Hours
Acute Coronary Syndrome	1 Hour

Required Objectives:

1. Identify the options for out-of-hospital stroke assessment tools
2. Explain oxygen administration during a stroke emergency
3. Discuss the importance of knowing a timeline of stroke events
4. Identify patients needing rapid transport to the most appropriate stroke hospital
5. Discuss the importance of starting the fibrinolytics check sheet
6. Describe the current techniques of one and two-rescuer CPR
7. Demonstrate the current techniques of one and two-rescuer CPR
8. Demonstrate the proper placement of 12-lead EKGs
9. Assess injury patterns on a 12-lead EKG

Module 3**4 hours**

TOPIC – <i>Cardiovascular / Medical Emergencies</i>	TIME LINE
VAD (<i>Ventricular Assist Devices</i>)	30 Min.
Adult Cardiac Arrest	2 Hours
Post Resuscitation Care	30 Min.
Pain Management	1 Hour

Required objectives:

1. Understand the function of Ventricular Assist Devices
2. State the chain of survival
3. Describe the current techniques of one and two-rescuer CPR
4. Demonstrate the current techniques of one and two-rescuer CPR
5. Effectively manage hemodynamic instability
6. Investigate possible causes of cardiac arrest
 - Make appropriate treatment choices based on the cause
 - Determine the appropriate destination
7. Describe the process of induced hypothermia
8. Conduct pain assessments appropriately by patient's age
9. Critique clinical protocols for pain management
10. Discuss non-pharmacological pain management options
11. Determine the differences between acute and chronic pain management
12. Critique the position paper published by the National Association of EMS Physicians regarding Prehospital Pain Management

Module 4**4 hours**

TOPIC – Trauma / Medical Emergencies	TIME LINE
Trauma Triage	1 Hour
Central Nervous System Injury	1 Hour
Hemorrhage Control	30 Min.
Fluid Resuscitation	30 Min.
Endocrine/Diabetic Emergencies	1 Hour

Required Objectives:

1. Identify the triage criteria in the CDC's Field Triage Decision Scheme
2. State the four steps of the CDC's Field Triage Decision Scheme
3. Review local protocols
4. Identify the signs and symptoms of a patient with a traumatic brain injury (TBI)
5. Differentiate between the various levels of a TBI
6. Discuss the current research and practices for the use of selective spinal immobilization
7. Identify and treat severe hemorrhage.
8. Differentiate among indications, effects, and contraindications for the use of:
 - Tourniquets
 - Junctional Tourniquets
 - Hemostatic agents
9. Explain the concept of permissive hypotension
10. Discuss research regarding fluid resuscitation
11. Explain the role glucose plays on the cells
12. Explain the role of insulin
13. Identify symptoms commonly associated with hypo/hyperglycemia
14. Identify commonly prescribed medications used to treat diabetes
15. Discuss metabolic syndrome
16. Explain the management of hyperglycemia
17. Explain the management of hypoglycemia
18. Compare the functions of different insulin pumps

Module 5**4 hours**

TOPIC – Medication Delivery and Medical Emergencies I	TIME LINE
Toxicological/Opioid Emergencies	30 Min.
Immunological Emergencies Allergic Reaction Anaphylaxis	30 Min.
Pharmacology	1 Hour
Medication Administration	1 Hour
Crew Resource Management	1 Hour

Required Objectives:

1. Identify common synthetic stimulants and natural or synthetic THC
 - Recognize the effects
 - Synthetic stimulants
 - Natural and synthetic THC
2. Identify common opioids
 - Recognize the effects
3. Explain common treatment options for a person experiencing opioid overdose
4. Discuss the physiology related to allergies and anaphylaxis
5. Differentiate between a mild/localized allergic reaction and anaphylaxis
6. Explain the actions of medications used to treat anaphylaxis
 - Epinephrine
7. Review medications utilized by the AEMT level provider in West Virginia.
8. Analyze the benefits of intramuscular (IM) administration compared to the subcutaneous (SQ) route
9. Critique the delivery of medication with a nasal atomizer to other routes of administration
10. Discuss the different routes of delivery of medications and the rates of absorption for those routes
 - IM
 - SQ
 - IN
 - IV
 - IO
11. Define Crew Resource Management (CRM)
12. Explain the benefits of CRM to EMS
13. State the guiding principles of CRM and briefly explain each
14. Explain the concept of communication in the team environment using advocacy/inquiry or appreciative inquiry
15. State characteristics of effective team leaders
16. State characteristics of effective team members
17. Explain how the use of CRM can reduce errors in patient care

Module 6

4 hours

TOPIC – <i>Medical Emergencies II / Operations I</i>	TIME LINE
Psychiatric/Behavioral Emergencies	1 Hour
Infectious Disease	30 Min.
Special Healthcare Needs	1 Hours
OB Emergencies	30 Min.
EMS Provider Hygiene, Safety, and Vaccinations	30 Min.
EMS Culture of Safety	30 Min.

Required Objectives:

1. Describe the components of a mental status examination
2. Perform effective patient restraint methods (verbal and physical)
3. State the risk factors for suicide
4. Analyze the effects of opioids and excited delirium
5. Identify common synthetic stimulants and natural or synthetic THC
 - Recognizing the effects
 - Synthetic stimulants
 - Natural and synthetic THC
6. Describe drug resistant infections
7. State how the transmission of influenza virus (flu) occurs
8. Investigate the role of the EMS provider in disease reporting
9. Compare an epidemic and pandemic
10. Assess the differences between sepsis and septic shock
11. Identify common special needs patients seen in EMS
12. Relate the role of caregivers of the special needs patient to the EMS professional's patient care
13. Describe patient assessment of a special needs patient
14. Identify abnormal presentations present during childbirth
15. Discuss management of a patient with an abnormal presentation during delivery
16. Describe a nuchal cord presentation
17. Discuss the procedures to take when a nuchal cord is present during delivery
18. Recognize the need for neonatal resuscitation during delivery
19. Discuss the management principles of neonatal resuscitation
20. Describe the routine care of a newborn not requiring resuscitation
21. Identify proper hand washing technique
22. Identify appropriate use of alcohol-based hand cleaner
23. Discuss the CDC's recommendations of vaccines for healthcare providers
24. Assess eye safety indications and measures
25. Define culture of safety
26. Identify and explain the six core elements necessary to advance an EMS Culture of Safety
27. Identify the role of the EMS providers in establishing a culture of safety within EMS organizations

Module 7**3 hours**

TOPIC – Operations I	TIME LINE
Ambulance Safety	30 Min.
Pediatric Transport	30 Min.
Field Triage – Disasters/MCIs	30 Min.
EMS Research	30 Min.
At Risk Populations	30 Min.
Evidence Based Guidelines	30 Min.

Required Objectives:

1. Discuss federal initiatives developed to monitor and analyze ground ambulance crashes
2. Identify the significance of ambulance crashes through the use of national data
3. State specific factors that contributed to injuries and fatalities sustained during ambulance crashes
4. Evaluate the policies and procedures at each participant's own EMS service related to protecting patient and provider safety during ground ambulance transport
5. Explain how to appropriately secure a child safety restraint to a wheeled ambulance stretcher
6. Differentiate between the NHTSA recommendations for safe ambulance transport of children based on the condition of the child
7. Discuss the on-going initiatives to increase the safety of children during ambulance transport
8. Discuss the limitations of the current recommendations
9. Relate MUCCs impact on the development of the CDC Field Triage Decision Scheme and SALT
10. Analyze the triage methods for
 - SALT
 - START
 - JumpSTART
11. Identify national initiatives and resources that promote and enable EMS Research
12. Explain the practical use of research in EMS care
13. Explain the scientific method
14. Differentiate among the different research methods
15. Explain the process of conducting a literature review
16. Determine training resources for special populations
 - Human trafficking
 - Domestic violence
17. Recognize the unique characteristics of at-risk populations
18. Determine the appropriate actions of EMS professionals in the presence of at-risk patients
19. Recognize circumstances that may indicate abuse
 - Domestic abuse
 - Human trafficking
 - Non-accidental trauma
20. State appropriate actions of EMS professionals in the presence of abused patients
21. Define evidenced based medicine and practice
22. Identify resources available through NASEMSO to aid states and agencies in developing evidence based guidelines
23. Explain the benefits of EBG to patients