

WVOEMS Approved EMT Refresher (NCCP standards)

The National Component requires **20 hours** of the topic hours listed for recert: Modules I thru V.

Module I

4 hours

TOPIC – <i>Airway and Neurological Management</i>	TIME LINE
Ventilation ETCO2	1 Hour
Oxygenation CPAP	30 Min.
Neurological – (Seizures / CNS)	
Injury	1 Hour
Stroke	1 Hour
EMS Research / Evidence Based Medicine	30 Min.

Required Objectives:

1. Discuss and describe the ventilatory process
2. Identifying adequate vs. inadequate breathing
 - a. Tidal volume
 - b. Minute volume
 - c. Vital capacity
 - d. Hypoxia
 - e. Hypoxic drive
 - f. Dyspnea
3. Describe ventilatory assist and measurement of adequacy-ETCO2
 - When to oxygenate and when to ventilate.
4. Discuss cellular metabolism thru oxygenation.
5. Discuss Internal vs. External respiration
 - Difference between respiratory arrest and failure
6. Discuss use of CPAP* (optional per agency medical direction)
7. Define altered mental status
8. Define diverse types of seizures: generalized, partial, status epilepticus
9. List possible causes of seizures
10. Explain the importance to recognize seizure activity and identify other problems associated with seizures
11. Describe the postictal state and the patient care interventions
12. Identify the s/s of a pt. with a traumatic brain injury
13. Discuss the current research and practices for the use of selective spinal immobilization
14. Discuss differences between ischemic vs. hemorrhagic stroke and TIA
15. Discuss s/s of stroke and some mimics
16. Discuss causes of stroke
17. Discuss identifying, assessing and treatment of the stroke patient.
18. Discuss importance of knowing the timeline of stroke events.
19. Discuss transport to appropriate stroke facilities
20. Explain the practical use of research in EMS care
21. Define different research methods in EMS research
22. Explain the process of conducting a literature review for EMS research

Module II**4 hours**

TOPIC – <i>Cardiac Management & Considerations</i>	TIME LINE
Cardiac Arrest 12 Lead EKG AED	2 Hours
ROSC	30 Min.
VAD	30 Min.
Pain Management	30 Min.
Toxicological - Opioids	30 Min.

Required Objectives:

1. Describe the A & P, pathophysiology, assessment and management of a myocardial infarction
2. Describe the purpose and demonstrate the application of the 12 lead ECG monitor/transmission
3. Discuss pathophysiology, assessment and management of a cardiac arrest
4. Discuss and demonstrate the application of an AED, indications and contraindications
5. Describe ROSC and effectively manage hemodynamic instability
6. Determine causes of cardiac arrest
 - a. Make treatment choices based on the cause
 - b. Determine appropriate destination
7. Describe the process of induced hypothermia
8. Understand the function of VAD's
9. Discuss patient care issues/differences in assessment involved in patients with a VAD
10. Determine differences between acute and chronic pain management
11. Discuss conducting pain assessments appropriately by patient's age
12. Discuss non-pharmacological pain management options
13. Identify common synthetic stimulants and natural or synthetic THC (Tetrahydrocannabinol)
 - a. Recognize the effects
 - b. Synthetic stimulants
 - c. Natural and synthetic THC
14. Identify common opioids
 - Recognize the effects
15. Discuss management and treatment of the opioid overdose patient

Module III**4 hours**

TOPIC – <i>Medical Emergencies I/Ops I Management & Considerations</i>	TIME LINE
Diabetic Emergencies	1 Hour
Psychiatric / Behavioral	30 Min.
EMS Culture of Safety	30 Min.
Immunological Emergencies	30 Min.
Infectious Diseases	30 Min.
EMS Provider Hygiene, Safety, and Vaccinations	30 Min.
At Risk Populations	30 Min.

Required objectives:

1. Explain the role glucose plays on the cells
2. Explain the role of insulin
3. Define and explain diabetes and the two types
 - a. Hyperglycemia
 - b. hypoglycemia
4. Discuss assessing the patient with a history of diabetes and an altered mental status
5. Describe the interventions for care and treatment of both the conscious and unconscious patient with a history of diabetes who is having a hypoglycemic episode
6. Explain the management of hyperglycemia
7. Define a behavioral crisis
8. Discuss special considerations for assessing and managing a behavioral crisis or psychiatric emergency
9. Define agitated delirium and describe the care for a patient with agitated delirium
10. State the risk factors for suicide
11. Define culture of safety
12. Identify and explain the six core elements necessary to advance an EMS culture of Safety
Identify the role of the EMS provider in establishing a culture of safety within EMS organizations
13. Understand and define the terms allergic reaction vs. anaphylaxis
14. Discuss causes of an allergic reaction
15. Discuss the assessment, management and treatment of a patient having an allergic vs. anaphylaxis reaction
16. Describe some age-related contraindications to using epinephrine to treat an allergic reaction in a geriatric patient
17. Define infectious disease and communicable disease
18. Define bloodborne vs. airborne transmission
19. Understand mode of transmission
20. Explain post-exposure management
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. Recognize the unique characteristics of at-risk populations
26. Recognize circumstances that may indicate abuse
 - a. Domestic abuse
 - b. Human trafficking
 - c. Non-accidental trauma
27. State appropriate actions of EMS professionals in the presence of abused pts.

Module IV**4 hours**

TOPIC – <i>Medical Emergencies II Management & Considerations</i>	TIME LINE
Special Healthcare Needs	1.5 Hours
OB Emergencies	30 Min.
Pediatric Cardiac Arrest	2 Hours

Required Objectives:

1. Identify common special needs patients seen in EMS
2. Relate the role of caregivers of the special needs patient to the EMS Professional's patient care
3. Describe patient assessment of a special needs patient Identify abnormal presentations during childbirth and nuchal cord presentations
4. Discuss management of abnormal presentation and nuchal cord presentation during delivery
5. Recognize the need for neonatal resuscitation during delivery
6. Describe steps for neonatal resuscitation
7. Describe routine care of a newborn not requiring resuscitation
8. Describe current techniques of one and two rescuer CPR for pediatric cardiac arrest
9. Demonstrate current techniques of one and two rescuer CPR for pediatric cardiac arrest

Module V**4 hours**

TOPIC – Trauma/Ops II Management & Considerations	TIME LINE
Trauma and Field Triage	1 Hour
Hemorrhage Control	30 Min.
Pediatric Transport	30 Min.
Ambulance Safety	30 Min.
Crew Resource Management	1 Hour
Evidence Based Guidelines	30 Min.

Required Objectives:

1. Identify triage criteria for the trauma patient in the Field Triage Decision Scheme
2. State the four steps of the CDC's Field Triage Decision Scheme
3. Examine local protocols
4. Identify and treat severe hemorrhage
5. Define the indications, effects, and contraindications for the use of
 - a. Tourniquets
 - b. Hemostatic agents
6. Explain how to appropriately secure a child safety restraint to a stretcher
7. Discuss the difference between the NHTSA recommendations for safe transport of children based on the condition of the child
8. Discuss the on-going initiatives to increase the safety of children during ambulance transport and the limitations of those current recommendations
9. Define Crew Resource Management
10. Explain the benefits of CRM to EMS
11. Explain the concept of communication in the team environment using advocacy/inquiry or appreciative inquiry
12. State characteristics of effective team leaders
13. State characteristics of effective team members
14. Explain how the use of CRM can reduce errors in patient care
15. Define evidence based medicine and practice
16. Identify resources available through NASEMSO to aid states and agencies in developing evidence based guidelines
17. Explain the benefits of evidence based guidelines for patients
18. Discuss federal initiatives developed to monitor and analyze ground ambulance crashes
 - a. Reference: NHTSA Advances Ground Ambulance Safety
19. Identify the significance of ambulance crashes through the use of national data
20. Evaluate policies and procedures at one's own EMS service related to protecting the patient and providers safety during ground ambulance transport

Module VI

4 hours +

TOPIC – Skills Performance
Patient Assessment - Trauma
Patient Assessment - Medical (<i>includes baseline vital assessment</i>) <i>Must include one (1) of the following:</i> <ul style="list-style-type: none">• Oral Glucose Administration• Nitroglycerine Administration• Nebulized medication Administration• Epinephrine Administration
Bleeding Control / Shock Management
Airway Management
Cardiac Arrest / AED Management
Evidence Based Guidelines

Required Objectives:

See WVOEMS approved psychomotor objectives