

NATIONAL EMS EDUCATION STANDARDS

FR (BEC) to EMR Transition (Approximately 8 hours)

Topic	Guidelines	Time
EMS Systems	<p>Roles, Responsibilities, and Professionalism of EMS Personnel</p> <ul style="list-style-type: none"> A. Roles and Responsibilities B. Professionalism <p><i>How we can work to ensure we have the right attitude with patient care.</i></p>	10 minutes
Research	<p>Evidence-Based Decision-Making</p> <ul style="list-style-type: none"> A. Traditional Medical Practice B. High-Quality Patient Care Should Focus on Procedures Proven Useful in Improving Patient Outcomes C. The Challenge for EMS Is the Relative Lack of Pre-hospital Research <p><i>Impact of research on EMR care.</i></p>	5 minutes
EMS Systems Communication and	<p>Communication With Other Health Care Professionals</p> <p>Fundamental information about transferring patient care to incoming EMTs</p>	10 minutes
Anatomy and Physiology	<p>Life Support Chain</p> <ul style="list-style-type: none"> A. Fundamental Elements Issues Impacting Fundamental Elements <p><i>Brief discussion on the life support chain focusing on oxygenation and perfusion</i></p>	20 minutes
Pathophysiology	<p>I. Respiratory Compromise</p> <ul style="list-style-type: none"> A. Impaired Airway, Respiration, or Ventilation <p>II. Shock</p> <ul style="list-style-type: none"> A. Impaired Blood Flow to the Organs and Cells 	20 minutes
Pharmacology Medication Administration Emergency Medications	<p>I. Self-Administration (Intramuscular Injection by Auto injector)</p> <ul style="list-style-type: none"> A. Advantages B. Disadvantages C. Techniques <p>II. Peer Administration (Intramuscular Injection by Auto injector)</p> <ul style="list-style-type: none"> A. Advantages B. Disadvantages <p><i>The use of an auto injector for self-preservation or for use on one's peers (CHEMICAL ATTACK ONLY): DUODOTE, 2PAM</i></p>	10 minutes
Airway Management	<p>I. Airway Anatomy</p> <p>II. Airway Assessment</p> <p>III. Techniques of Assuring a Patent Airway</p> <p>Consider Age-Related Variations in Pediatric and Geriatric Patients (see Special Patient Populations Section)</p>	15 minutes

Topic	Guidelines	Time
Respiration	<p>I. Anatomy of the Respiratory System</p> <p>A. Includes All Airway Anatomy Covered in the Airway Management Section B. Additional Respiratory System Anatomy C. Vascular Structures That Support Respiration</p> <p>II. Physiology of Respiration</p> <p>A. Pulmonary Ventilation B. Oxygenation C. Respiration</p> <p>III. Pathophysiology of Respiration</p> <p>A. Pulmonary ventilation B. Oxygenation C. Respiration</p> <p><i>Increased understanding of the respiratory system and the vascular system as it relates to respiration.</i></p>	30 minutes
Artificial Ventilation	<p>I. The Management of Inadequate Ventilation</p> <p>II. The Differences Between Normal and Positive Pressure Ventilation</p> <p>III. Consider Age-Related Variations in Pediatric and Geriatric Patients (see Special Patient Considerations)</p>	15 minutes
Patient Assessment	<p>Scene Size Up Primary Assessment History Taking Secondary Assessment On-Going Assessment</p> <p><i>New terminology; age related variations for Pediatric and Geriatric Assessment/Management</i></p>	15 minutes
Neurology	<p>Stroke Causes Assessment Findings and Symptoms Management of Patient With Stroke Assessment Findings or Symptoms</p>	10 minutes
Infectious Diseases	<p>Definitions</p> <ol style="list-style-type: none"> 1. Infectious disease 2. Communicable disease <p>Transmission Routes</p> <ol style="list-style-type: none"> 1. Direct contact 2. Coughing and sneezing 3. Blood borne/Other body fluids 	10 minutes
Endocrine Disorders	<p>Increased level of detail on diabetes</p> <p>I. Introduction II. Diabetes</p> <p><i>The pathophysiology of Type I and Type II diabetes and the uses for oral glucose</i></p>	10 minutes
Psychiatric	<p>New material; includes new material on excited delirium</p> <p><i>Revised restraint techniques. Not really new material but emphasis on proper vs. improper techniques</i></p>	10 minutes

Topic	Guidelines	Time
Cardiovascular	<p>I. Anatomy of the Cardiovascular System II. Physiology III. Pathophysiology IV. Assessment V. Management (refer to the current American Heart Association Guidelines) VI. Specific Cardiovascular Emergencies (refer to current American Heart Association Guidelines) VII. Pharmacological Agents VIII. Consider Age-Related Variations for Pediatric and Geriatric Patients for Assessment and Management of Cardiac Compromise</p> <p><i>Increased emphasis on anatomy, physiology and pathophysiology; increased emphasis on specific cardiovascular emergencies, addition of aspirin information for acute coronary syndrome</i></p>	30 minutes
Respiratory	<p>I. Anatomy of the Respiratory System A. Upper Airway B. Lower Airway C. Lungs and Accessory Structures II. Normal Respiratory Effort A. Assessment Findings and Symptoms and Management for Respiratory Conditions III. Specific Respiratory Conditions</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of:</p> <ul style="list-style-type: none"> • Epiglottitis • Spontaneous pneumothorax • Pulmonary edema • Asthma • Chronic obstructive pulmonary disease • Environmental/industrial exposure • Toxic gas • Pertussis • Cystic fibrosis • Pulmonary embolism • Pneumonia • Viral respiratory infections <p><i>Cover additional information on the above disease processes. Previous curriculum only covered respiratory distress without any discussion of disease processes</i></p>	30 minutes
Genitourinary/Renal	<p>Dialysis A. Hemodialysis B. Peritoneal Dialysis C. Special Considerations for Hemodialysis Patients D. Complications/Adverse Effects of Dialysis</p> <p><i>This is new material and important since there are many people who are on hemodialysis; some at home with peritoneal dialysis and some at dialysis centers</i></p>	15 minutes

Topic	Guidelines	Time
Shock and Resuscitation	Shock content was moved from trauma to emphasize the fact that it occurs in contexts other than trauma; the cardiac arrest information was moved from cardiology for the same reason; brief discussion on devices to assist circulation, although subject to local protocol; shock should be taught in a more comprehensive context rather than simply as a consequence of bleeding	5 minutes
Head, Facial, Neck, and Spine Trauma	Review of Anatomy and Physiology of the Head, Face, and Neck <i>Increase level of detail. Emphasize the potential harm of hyperventilation</i>	10 minutes
Special Considerations in Trauma	Trauma in Pregnancy A. Special Unique Considerations for Pregnant Patient Involved in Trauma B. Special Anatomy, Physiology, and Pathophysiology Considerations C. Unique Types of Injuries and Conditions D. Unique Assessment Considerations E. Unique Management Considerations Trauma in the Pediatric Patient A. Special Unique Considerations for Pediatric Patient Involved in Trauma B. Unique Anatomy, Physiology, and Pathophysiology Considerations C. Unique Assessment Considerations D. Unique Management Considerations Trauma in the Elderly Patient A. Special Considerations for Geriatric Patients Involved in Trauma B. Unique Anatomy, Physiology, and Pathophysiology Considerations C. Unique Assessment Considerations D. Unique Management Considerations Trauma in the Cognitively Impaired Patient A. Unique Considerations for Injured Cognitively Impaired Patients B. Unique Anatomy, Physiology, and Pathophysiology Considerations C. Unique Assessment Consideration D. Unique Management Consideration <i>Discussion regarding the unique issues with each population and how care may differ with each group of patients</i>	30 minutes
Obstetrics	General System Physiology, Assessment, and Management Complications of Pregnancy <i>More detailed discussion on complications of pregnancy; uses the terms preeclampsia, eclampsia and premature rupture of membranes (which do not require a lengthy discussion)</i>	10 minutes
Geriatrics	Changes associated with aging, psychosocial aspects of aging and age-related assessment and treatment modifications for the major or common geriatric diseases and/or emergencies <ul style="list-style-type: none"> • Cardiovascular diseases • Respiratory diseases • Neurological diseases • Endocrine diseases • Alzheimer's • Dementia 	30 minutes

Topic	Guidelines	Time
Patients with Special Challenges	<p>I. Abuse and Neglect II. Homelessness/Poverty III. Bariatric Patients IV. Technology Assisted/Dependent V. Hospice Care and Terminally Ill VII. Sensory Deficits VIII. Homecare IX. Patient With Developmental Disability <i>Elder abuse, homelessness, poverty, bariatric, more technology dependent, hospice, sensory deficit, homecare, and developmental disabilities added</i></p>	20 minutes
Principles of Safely Operating a Ground Ambulance	<p>Risks and Responsibilities of Emergency Response A. Safety Issues During Transport <i>Increased depth of discussion on the risks of emergency response and leaving the scene</i></p>	10 minutes
MCI MCI Due to Terrorism and Disaster	<p>Triage: References Centers for Disease Control (CDC) Field Triage Decision Scheme: The National Trauma Triage Protocol Risks and Responsibilities of Operating on the Scene of a Natural or Man-Made Disaster A. Role of EMS B. Safety</p>	10 minutes
Air Medical	<p>Safe Air Medical Operations A. Types B. Advantages C. Disadvantages D. Patient Transfer E. Landing Zone Selection and Preparation F. Approaching the Aircraft G. Communication Issues Criteria for Utilizing Air Medical Response A. Indications for Patient Transport B. Activation <i>Patient transfer issues Interaction with Air Medical personnel, scene safety, LZ selection and prep</i></p>	10 minutes