

HealthCenter21: Emergency Medical Services Correlation to:

2009 National EMS Educational Standards for Emergency Medical Responder - EMR

MODULES AND UNITS

Preparatory

- EMS System
- EMS Providers: EMR and EMT
- Safety and Wellness
- Body Mechanics
- System Communication
- Documentation
- Therapeutic Communication
- Legal and Ethical Issues

Anatomy and Physiology

- Intro to Anatomy and Physiology
- Respiratory System
- Cardiovascular System
- Skeletal System
- Muscular System
- Nervous System
- Digestive System
- Urinary System
- Reproductive System
- Endocrine System
- Integumentary System
- Lymphatic System
- Sensory System

Medical Terminology

- Word Parts: Roots
- Word Parts: Suffixes and Prefixes
- Abbreviations
- Anatomic References

Pharmacology

- Pharmacology

Airway

- Airway Management
- Artificial Ventilation
- Respiration Management

Patient Assessment

- Scene Size-up
- Primary Assessment
- History Taking
- Vital Signs
- Secondary Trauma Assessment
- Secondary Medical Assessment
- Monitoring Devices
- Reassessment

Shock and Resuscitation

- Shock
- Resuscitation
- Basic Adult CPR
- Pediatric CPR
- Airway Obstructions

Medical

- Infectious Diseases
- Respiratory Emergencies
- Cardiac Emergencies
- Acute Abdominal Pain
- Neurological Emergencies
- Diabetic Emergencies
- Behavioral Emergencies
- Allergic Reactions
- Poisoning Emergencies
- Genitourinary and Gynecological

Trauma

- Bleeding
- Soft Tissue Trauma
- Chest Trauma
- Abdominal and Genitourinary Trauma
- Orthopedic Trauma
- Head, Face, and Neck Trauma
- Spinal Trauma
- Environmental Trauma
- Multi-System Trauma
- Trauma Considerations

Special Populations

- Obstetrics
- Pediatrics
- Geriatrics
- Special Challenges

EMS Operations

- Ambulance Operations
- Air Medical
- Incident Management
- Multiple-Casualty Incidents
- Vehicle Extrication
- Hazardous Materials
- Terrorism and Disasters

Certification Preparation

- Certification Preparation

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Overview

This document demonstrates the correlation between the HealthCenter21: Emergency Medical Services curriculum supplied by Applied Educational Systems and the *2009 National EMS Educational Standards for Emergency Medical Responder – EMR*, published by the National Highway Traffic Safety Administration. The content areas are listed across the top row of the chart. The marks in the columns indicate that the standard is supported as part of the HealthCenter21 course.

Source for standards listed on the following pages:

National Highway Traffic Safety Administration. *National Emergency Medical Services Education Standards*. 2009 <www.ems.gov>.

2009 National EMS Educational Standards for EMR Provider	HC21: Emergency Medical Services	Preparatory	Anatomy and Physiology	Medical Terminology	Pharmacology	Airway	Patient Assessment	Shock and Resuscitation	Medical	Trauma	Special Populations	EMS Operations	Certification Preparation
Preparatory													
Uses simple knowledge of the EMS system, safety/well being of the EMR, medical/legal issues at the scene of an emergency while awaiting a higher level of care.	ü	X											
EMS Systems													
EMS Systems	ü	X											
Roles/responsibilities/professionalism of EMS personnel	ü	X											
Quality improvement	ü	X											
Research													
Impact of research on EMR care	ü	X											
Data collection	ü	X											
Workforce Safety and Wellness													
Standard safety precautions	ü	X											

HealthCenter21 – Emergency Medical Services Correlation to: 2009 National EMS Educational Standards for EMR Provider

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Personal protective equipment	Ü	X											
Stress management	Ü	X											
Dealing with death and dying	Ü	X											
Prevention of response-related injuries	Ü	X											
Lifting and moving patients	Ü	X											
Documentation													
Recording patient findings	Ü	X											
EMS System Communication													
Communication needed to call for resources	Ü	X											
Communication needed to transfer care of the patient	Ü	X											
Communication needed to interact within the team structure	Ü	X											

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Therapeutic Communication													
Principles of communicating with patients in a manner that achieves a positive relationship	ü	X											
Interviewing techniques	ü	X											
Medical/Legal and Ethics													
Consent/refusal of care	ü	X											
Confidentiality	ü	X											
Advanced directives	ü	X											
Tort and criminal actions	ü	X											
Evidence preservation	ü	X											
Statutory responsibilities	ü	X											
Mandatory responsibilities	ü	X											
Ethical principles/moral obligations	ü	X											
End of life issues	ü	X											

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Anatomy and Physiology													
Uses simple knowledge of the anatomy and function of the upper airway, heart, vessels, blood, lungs, skin, muscles, and bones as the foundation of emergency care.	ü		X										
Medical Terminology													
Uses simple medical and anatomical terms.	ü			X									
Pathophysiology													
Uses simple knowledge of shock and respiratory compromise to respond to life threats.	ü							X	X				
Life Span Development													
Uses simple knowledge of age-related differences to assess and care for patients.	ü							X	X		X		
Public Health													
Has an awareness of local public health resources and the role EMS personnel play in public health emergencies.													

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Pharmacology													
Uses simple knowledge of the medications that the EMR may self-administer or administer to a peer in an emergency.	ü											X	
Medication Administration													
Within the scope of practice of the EMR, how to self-administer medication	ü											X	
Within the scope of practice of the EMR, how to peer-administer medication	ü											X	
Emergency Medications													
Within the scope of practice of the EMR, names, effects, indications, routes of administration, dosages for the medications administered.	ü											X	
Airway Management, Respiration and Artificial Ventilation													
Applies Knowledge of anatomy and physiology to assure a patent airway, adequate mechanical ventilation, and respiration while awaiting additional EMS response for patients of all ages.	ü					X							
Airway Management													
Airway anatomy	ü					X							

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Airway assessment	Ü					X							
Techniques of assuring a patent airway	Ü					X							
Respiration													
Anatomy of the respiratory system	Ü		X										
Physiology and pathophysiology of respiration	Ü					X			X				
Pulmonary ventilation	Ü					X							
Oxygenation	Ü					X							
Respiration	Ü					X							
External	Ü					X							
Internal	Ü					X							
Cellular	Ü					X							

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Assessment and management of adequate and inadequate respiration	Ü					X							
Supplemental oxygen therapy	Ü					X							
Artificial Ventilation													
Assessment and management of adequate and inadequate ventilation	Ü					X							
Artificial ventilation	Ü					X							
Minute ventilation	Ü					X							
Alveolar ventilation	Ü					X							
Effect of artificial ventilation on cardiac output	Ü					X							
Assessment													
Uses scene information and simple patient assessment findings to identify and manage immediate life threats and injuries within the scope of practice of the EMR.	Ü						X						
Scene Size Up													

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Scene safety	☺						X						
Scene management	☺						X						
Impact of the environment on patient care	☺						X						
Addressing hazards	☺						X						
Violence	☺						X						
Need for additional or specialized resources	☺						X						
Standard precautions	☺						X						
Primary Assessment													
Primary assessment for all patient situations	☺						X						
Level of consciousness	☺						X						
ABCs	☺						X						

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Identifying life threats	Ü						X						
Assessment of vital functions	Ü						X						
Begin interventions needed to preserve life	Ü						X						
History Taking													
Determining the chief complaint	Ü						X						
Mechanism of injury/nature of illness	Ü						X						
Associated signs and symptoms	Ü						X						
Secondary Assessment													
Performing a rapid full body scan	Ü						X						
Focused assessment of pain	Ü						X						
Assessment of vital signs	Ü						X						

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Reassessment													
How and when to reassess patients	ü						X						
Medicine													
Recognizes and manages life threats based on assessment findings of a patient with a medical emergency while awaiting additional emergency response.	ü							X	X				
Medical Overview													
Assessment and management of a medical complaint	ü						X		X				
Neurology													
Anatomy, presentations, and management of decreased level of responsiveness	ü								X				
Anatomy, presentations, and management of seizure	ü								X				
Anatomy, presentations, and management of stroke	ü								X				

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Abdominal and Gastrointestinal Disorders													
Anatomy, presentations, management of shock associated with gastrointestinal bleeding	ü								X				
Immunology													
Recognition and management of shock and difficulty breathing related to anaphylactic reactions	ü								X				
Infectious Diseases													
Awareness of a patient who may have an infectious disease	ü								X				
Awareness of how to decontaminate equipment after treating a patient	ü								X				
Endocrine Disorders													
Awareness that diabetic emergencies cause altered mental status	ü								X				
Psychiatric													
Recognition of behaviors that pose a risk to the EMR, patient or others	ü								X				

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Cardiovascular													
Anatomy, signs, symptoms and management of chest pain	Ü								X				
Anatomy, signs, symptoms and management of cardiac arrest	Ü							X	X				
Toxicology													
Recognition and management of carbon monoxide poisoning	Ü								X				
Recognition and management of nerve agent poisoning	Ü											X	
How and when to contact a poison control center	Ü								X				
Respiratory													
Anatomy, signs, symptoms and management of respiratory emergencies including those that affect the upper airway	Ü								X				
Anatomy, signs, symptoms and management of respiratory emergencies including those that affect the lower airway	Ü								X				

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Genitourinary/Renal													
Blood pressure assessment in hemodialysis patients	Ü								X				
Gynecology													
Recognition and management of shock associated with vaginal bleeding	Ü								X				
Diseases of the Eyes, Ears, Nose, and Throat													
Recognition and management of nose bleed	Ü									X			
Shock and Resuscitation													
Uses assessment information to recognize shock, respiratory failure or arrest, and cardiac arrest based on assesment findings and manages the emergency while awaiting additional emergency response.	Ü							X					
Trauma													
Uses simple knowledge to recognize and manage life threats based on assessment findings for an acutely injured patient while awaiting additional emergency medical response.	Ü									X			

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Bleeding													
Recognition and management of bleeding	Ü									X			
Chest Trauma													
Recognition and management of blunt vs. penetrating mechanisms	Ü									X			
Recognition and management of open chest wound	Ü									X			
Recognition and management of impaled objects	Ü									X			
Abdominal and Genitourinary Trauma													
Recognition and management of blunt vs. penetrating mechanisms	Ü									X			
Recognition and management of evisceration	Ü									X			
Recognition and management of impaled object	Ü									X			

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Orthopedic Trauma													
Recognition and management of open fractures	Ü									X			
Recognition and management of closed fractures	Ü									X			
Recognition and management of dislocations	Ü									X			
Recognition and management of amputations	Ü									X			
Soft Tissue Trauma													
Recognition and management of wounds	Ü									X			
Recognition and management of electrical, chemical and thermal burns	Ü									X			
Recognition and management of chemicals in the eye and on the skin	Ü									X			
Head, Facial, Neck, and Spine Trauma													
Recognition and management of life threats	Ü									X			

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Recognition and management of spine trauma	Ü									X			
Special Considerations in Trauma													
Recognition and management of trauma in pregnant patient	Ü									X			
Recognition and management of trauma in pediatric patient	Ü									X			
Recognition and management of trauma in geriatric patient	Ü									X			
Environmental Emergencies													
Recognition and management of submersion incidents	Ü									X			
Recognition and management of temperature-related illness	Ü									X			
Multi-System Trauma													
Recognition and management of multi-system trauma	Ü									X			

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Special Patient Populations													
Recognizes and manages life threats based on simple assessment findings for a patient with special needs while awaiting additional emergency response.	Ü										X		
Obstetrics													
Recognition and management of normal delivery	Ü										X		
Recognition and management of vaginal bleeding in the pregnant patient	Ü										X		
Neonatal Care													
Newborn care	Ü										X		
Neonatal resuscitation	Ü										X		
Pediatrics													
Upper airway obstruction	Ü										X		
Lower airway reactive disease	Ü										X		

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Respiratory distress/failure/arrest	Ü										X		
Shock	Ü										X		
Seizures	Ü										X		
Sudden infant Death Syndrome	Ü										X		
Geriatrics													
Impact of age-related changes on assessment and care	Ü										X		
Patients with Special Challenges													
Recognizing and reporting abuse and neglect	Ü										X		
EMS Operations													
Knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety	Ü											X	
Principles of Safely Operating a Ground Ambulance													

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Risks and responsibilities of emergency response	Ü											X	
Incident Management													
Establish and work within the incident management system	Ü											X	
Multiple Casualty Incidents													
Triage principles	Ü											X	
Resource management	Ü											X	
Air Medical													
Safe air medical operations	Ü											X	
Criteria for utilizing air medical response	Ü											X	
Vehicle Extrication													
Safe vehicle extrication	Ü											X	

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Use of simple hand tools	Ü											X	
Hazardous Materials													
Risks and responsibilities of operating in a cold zone at a hazardous material or other special incident	Ü											X	
Terrorism and Disaster													
Risks and responsibilities of operating on the scene of a natural or man made disaster	Ü											X	