

2012 Mississippi EMT Transitional Refresher Curriculum EMT Refresher Training- Curriculum Transition: EMT-Basic – EMT Timeline: February 2012-March 2015

Introduction

This document provides the statewide curriculum framework for EMT Transitional Refresher education. The curriculum is based on the 2009 National EMS Education Standards and Emergency Medical Technician Instructional Guidelines and includes content and skills in the standards and guidelines.

Organizational Guidelines

The transitional refresher will require a minimum of 24 clock hours of instruction to be provided by the state community colleges and consist of 3 8-hour sessions. The 8-hour sessions may be taken independent of each other. Each community college will issue a completion certificate for each session. Attendance policies follow the usual policies of each respective community college. Students should not be subject to call and should not leave the instructional area for significant periods of time. Certification in CPR will not be included in the refresher course.

Textbooks

The community college program offering EMT Refresher education sessions may require textbooks. Programs requiring textbooks should provide a list of any required textbooks prior to the first session.

Evaluations

Each session must include cognitive and skill evaluations. Students must score at least 75% on the cognitive exams and perform all critical criteria associated with each skill. The student may be remediated and may retest the cognitive and/or skill evaluations one (1) time on the same test date. An additional two (2) attempts will be permitted on either the cognitive and/or skill evaluations within 30 days from the original test date. Three (3) failures of the cognitive and/or skill evaluations constitute failure of the entire session. Skill sheets may be downloaded directly from the NREMT.

Course Size

The instructor/assistant to student ratio must meet the following minimums:

Lecture	1:35
Lab/Skill Evaluations	1:10

Sequence and Topics

Session 1: EMS Systems and Patient Assessment

Session 2: Airway and Medical Emergencies

Session 3: Trauma, Special Populations and EMS Operations/Updates

Approval Process

The Mississippi State Department of Health, Bureau of Emergency Medical Services will approve all prospective EMT Transitional Refresher training prior to the 1st class session. To request approval, the sponsor must submit:

- **Course Request/Instructor Verification form (30 days prior to the 1st session)**
- **Copies of the primary instructor's credentials.**

The Mississippi State Department of Health, Bureau of Emergency Medical Services will provide copies of the approved **Course Request/Instructor Verification** to the program prior to the 1st class session, and will provide an approved course number.

Paperwork Requirements/Course Completion

- Final Course Roster (submitted to MS DOH BEMS w/in 2 weeks)
- Program must provide students with a completion certificate for each session
- Program must retain copies of the following documents for at least 5 years:
 - Handbooks/Syllabi
 - Course Schedules
 - Lesson Plans and/or Instructional Outlines
 - Assessments and Evaluations, including skill evaluation sheets

Learning Outcomes- Correlated to the National EMS Educational Standards for EMT

- Applies fundamental knowledge of the EMS system, safety/well-being of the EMT, and medical/legal and ethical issues to the provision of emergency care.
- Applies fundamental knowledge of the anatomy and function of all human systems to the practice of EMS.
- Uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals.
- Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.
- Applies a fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, cardiac failure or arrest, and post-resuscitation management.
- Applies fundamental knowledge of life span development to patient assessment and management.
- Uses simple knowledge of the principles of illness and injury prevention in emergency care.
- Applies fundamental knowledge of the medications that the EMT may assist/administer to a patient during an emergency.
- Applies knowledge (fundamental depth, foundational breadth) of anatomy and physiology to patient assessment and management in order to assure a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.
- Applies scene information and patient assessment findings (scene size-up, primary and secondary assessment, patient history, reassessment) to guide emergency management.

- Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.
- Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient.
- Applies a fundamental knowledge of growth, development, aging and assessment findings to provide basic emergency care and transportation for a patient with special needs.
- Knowledge of operational roles and responsibilities to ensure patient, public, and personnel safety.

Objectives- Session 1: EMS Systems and Patient Assessment

Discuss and review the following:

- National Standard Curriculum vs. the National EMS Educational Standards
 - Development of the National EMS Educational Standards
 - Levels of EMS credentialing
 - Key changes with the National EMS Educational Standards
- Components of the EMS System, Medical Control and Quality Assurance
- Communications and Documentation
- Medico, Legal and Ethical Concerns
 - Emphasis on confidentiality and HIPAA
- Wellness and Safety Concerns
 - Emphasis on standard precautions vs. BSI
- Emotional Wellness
- Lifting and Moving
- Lifespan Development
- Therapeutic Communications
- Patient Assessment (including detailed discussion of the following sections)
 - Scene Size-up
 - Primary Assessment (including A-B-C vs. C-A-B as it relates to AHA guidelines)
 - History Taking
 - Secondary Assessment
 - Re-assessment

Demonstrate the following psychomotor skill competencies

- Patient Assessment- Medical
- Patient Assessment- Trauma

Objectives- Session 2: Airway and Medical Emergencies

Discuss and review the following:

- Airway and respiratory system anatomy, physiology and pathophysiologies
- Including detailed discussion of the following:
 - Metabolism and perfusion
 - Ventilation
 - Oxygenation

- Respiration
- Assessment
- Respiratory Distress vs. Respiratory Failure
- Oxygenation and Ventilation
- Use of supplemental oxygen in EMS care
 - PSI Considerations
 - Safe Residual Pressure
 - Duration of Flow Formula
 - Humidification
 - Nonrebreathing mask
 - Partial nonrebreathing mask
 - Venturi mask
 - Nasal Cannula
 - Bag-valve-mask ventilation
 - Oxygen-powered, Flow-Restricted Ventilation Device
 - Transport Ventilators
 - CPAP
 - Pulse Oximetry
- Medical Emergencies (Including assessment, care and transport considerations)
- Pharmacology and Toxicological Emergencies
 - Oxygen
 - Activated Charcoal-Prospicive Removal from the Formulary
 - Aspirin
 - Epi Pen
 - MDIs/Nebulized breathing treatments
 - Nitroglycerin
 - Oral Glucose
 - Emphasize the 6 rights of medication administration
- Neurological anatomy, physiology and pathophysiologies
- Cardiovascular anatomy, physiology and pathophysiologies
- Endocrine anatomy, physiology and pathophysiologies
- Gastrointestinal/Genitourinary anatomy, physiology and pathophysiologies
- Hematological anatomy, physiology and pathophysiologies
- Behavioral pathophysiologies
 - Appropriate use of restraints emphasized in the National EMS Educational Standards
- Communicable/Infectious Diseases
 - Standard Precautions
 - Contagious Respiratory Illnesses
 - Influenza
 - Hepatitis
 - Herpes Simplex
 - HIV/AIDS

- Meningitis
- MRSA- Methicillin-Resistant Staphylococcus aureus
- Pertussis
- Syphilis
- Tuberculosis
- Gynecological anatomy, physiology and pathophysiologies

Demonstrate the following psychomotor skill competencies

- Apneic Patient- BVM
- Upper Airway Adjuncts and Suctioning
- Oxygen Administration
- Administration of Medications
- Using transport ventilators (if program has resources)
- Cardiac arrest management- CPR and AED

Objectives- Session 3: Trauma, Special Populations and EMS Operations/Updates

Discuss and review the following:

- Mississippi Trauma System
- Mississippi Destination Guidelines
- Criteria/considerations for air medical support
- Bleeding, Shock and Resuscitation
- Anatomy, physiology as it relates to trauma involving the following systems:
 - Chest trauma
 - Abdomen trauma
 - Soft-tissue trauma
 - Musculoskeletal trauma
 - Head and spine trauma
 - Multisystem trauma
 - Environmental trauma
- Obstetrical and gynecological anatomy, physiology and pathophysiologies
- Pediatric anatomy, physiology and pathophysiologies
- Geriatric anatomy, physiology and pathophysiologies
- Anatomical, physiological and pathophysiological considerations in caring for patients with special challenges
- EMS responses to the following:
 - Terrorism
 - Hazardous materials
 - Roadway emergencies involving extrication and rescue
 - Emphasis on safety
 - Federal guidelines-reflective wear

Demonstrate the following psychomotor skill competencies:

- Bleeding control and shock management

- Traction splinting
- Long bone splinting
- Joint Splinting
- Spinal Immobilization-Seated
- Spinal Immobilization-Supine

References

Field Triage Decision Scheme. (2011). Retrieved November 9, 2011, from <http://www.cdc.gov/fieldtriage/>

Barnes, L. (2011). *Emergency Care and Transportation of the Sick and Injured* (10th ed.). Sudbury, Mass.; Toronto: Jones and Bartlett.

Limmer, D. (2012). *Emergency Care* (12th ed.). Upper Saddle River, N.J.: Pearson Brady.

National EMS Educational Standards. (2009). Retrieved November 9, 2011, from <http://www.ems.gov/education/nationalstandardandncs.html>

National EMS Standards Gap Analysis Template. (2009, July 17). Retrieved November 9, 2011, from http://www.naemse.org/data/content/positionpapers/2009_NASEMSO_Gap_Analysis_Template.pdf

NREMT Essay: 2010 AHA Guidelines. (2011). Retrieved November 9, 2011, from https://www.nremt.org/nremt/about/2010_aha_guidelines.asp

Parvensky Barwell, C. (2012). *Emergency Medical Technician Transition Manual: Bridging the Gap to the National EMS Education Standards*. Burlington, MA: Jones & Bartlett Learning.