

# State of Wisconsin

## EMT-Basic: A Practice Based Approach to EMS Education

Review and Revision of the EMT-Basic  
Curriculum

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DHFS Bureau of Local Health Support and EMS Section  
EMS Advisory Board  
EMS Education Committee

This revised curriculum is the product of a collaborative effort between the following State agencies and their respective committees:

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# State of Wisconsin EMT Basic: A Practice Based Approach to EMS Education

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## ***Project Perspectives and Rational for Change***

This project has its origin with the State of Wisconsin DHFS Bureau of Local Health Support and EMS Section and the EMS Advisory Board. The EMS Advisory Board, being assisted by its various committees, addresses specific issues and develops recommendations on a wide variety of EMS related topics, including education and training. Historically, Wisconsin has been a leader in EMS practice and education, as evidenced by its current use of an expanded curriculum, as well as its progressive Scope of Practice for the EMT Basic.

In 2004, the Advisory Board's EMS Education Committee established firm directives for the review and revision of the National EMT Basic curriculum for use in Wisconsin. Although not the first revision made to this curriculum by the State, it would become, by far, one of the largest. Due to project size, a subcommittee, the EMT-Basic Curriculum Revision Committee, was created out of its diverse membership of EMS leaders from throughout the state. During that same year, the committee would be expanded to include a broader representation of EMS educators from several EMS Training Centers, including the Wisconsin Technical College System, to work upon the numerous tasks associated with the review and revision process.

The list of specific charges, tasks and assignments, of the EMT-Basic Curriculum Revision Subcommittee, included:

- ✓ Review the EMS Stakeholder Survey for relevance to EMT Basic curriculum revisions. The survey results identified educational concerns and helped establish a rationale for curricula changes.
- ✓ Review of the core content of EMT Basic curriculum for purpose of revisions to meet newly approved Wisconsin Scope of Practice for the EMT-Basic
- ✓ Review of optional content of EMT Basic curriculum for purpose of revisions to meet the newly approved, and broadened, Wisconsin Scope of Practice for the EMT-Basic. The EMT-Basic Scope of Practice document can be accessed at [http://dhfs.wisconsin.gov/ems/system/PDF\\_files/Basic\\_scope\\_of\\_practice\\_01-06.pdf](http://dhfs.wisconsin.gov/ems/system/PDF_files/Basic_scope_of_practice_01-06.pdf)
- ✓ Review of the NREMT Practice Analysis

- ✓ Review, revise and create objectives relevant to each module of the curriculum, as well as the additional sections that were previously added by the State
- ✓ Create competencies relevant to each objective
- ✓ Recommend alternative delivery methods specific to EMT-Basic curriculum objectives
- ✓ Recommend approximate hours needed to accomplish curriculum content areas
- ✓ Identify transitional components that would lend validity to gearing the curriculum in the direction of a diagnostic based education
- ✓ Recommend curriculum implementation methods
- ✓ Initiate an EMT-Basic curriculum Roll-Out
- ✓ Identify a pilot course timeframe
- ✓ Specify an appropriate implementation date

Deadline dates were set for each charge, with completion and roll-out scheduled for February 2006. All charges, assignments and tasks have been completed and the final deadline successfully met.

Unanimous approvals were received by the WTCS EMS Training Center Advisory Council on February 3, by the EMS Education Committee on February 7 and by the EMS Advisory Board on February 8, 2006. A curriculum implementation date was established for August 2006.

### ***Revision Highlights and Module Reorganization***

The net product of this collaborative effort has resulted in a vast number of modifications to the format, as well as changes to the objectives and declarative content of the EMT-Basic curriculum that will be utilized to educate and train EMT Basics in Wisconsin.

One of the most significant changes relates to a shift away from an “assessment based” curriculum to one that establishes the value of a “practice based” approach to EMS education and improved patient care. Critical thinking, differential diagnosis creation, problem solving and management plan development will be strongly emphasized throughout. Case studies and scenario presentations are excellent strategies to employ when guiding learners through a process of comprehending objectives that focus on higher domains of learning. The inclusion of information on how to create and successfully use case studies in the classroom has been provided by Doug Smith from the Platinum Educational Group. Doug’s research and practice will serve to enhance our approach to varied teaching and learning styles. His planning guides are included in the appendices.

There are now six modules to the revised curriculum and highlights from each will be outlined in this section. Recommended hours for each module as well as suggestions for the utilization of alternative delivery formats will be identified. Note that no change has been made in the current number of hours (144) to adequately cover all objectives.

**Module 1: Preparatory**

The Preparatory module no longer includes a “complete” study of the human body so early in the course. Anatomy and physiology are covered throughout the curriculum where applicable, and are utilized to introduce foundational information relevant to specific body systems. Baseline Vitals were shifted out of this module.

Recommended hours: 12

Recommended delivery formats: A web based approach is suggested for the sections on Well-being of the EMT and Topographical Anatomy and Directional Terms. All other components may be best served by more traditional delivery methods.

**Module 2: Patient Assessment**

The Patient Assessment module now contains baseline vital signs, pulse oximetry, critical thinking, and a section entitled Age Extremes: Geriatrics and Pediatrics. The sections on critical thinking and age extremes serve as introductory and foundational. Consecutive modules encourage the use of problem solving strategies needed to provide effective and appropriate management of all patients. The former module on pediatrics has been disassembled and content distributed throughout the curriculum. Relevant information about geriatric patients is included in all successive modules. Finally, the module has been relocated toward the beginning of the course to better serve as one of the most important foundational tools used by the EMT Basic.

Recommended hours: 24-28

Recommended delivery formats: Problem solving scenarios and case study presentations for each content area are strongly recommended. Most components of this module may be best suited for traditional delivery methods.

**Module 3: Airway Management**

The Airway Management module includes both basic and advanced airway management procedures. The advanced airway objectives have been generalized to include more than one non-visualized airway that the State will consider for those services seeking approval and use.

Recommended hours: 16

Recommended delivery format: Traditional methodology.

**Module 4: Medical Emergencies**

The Medical Emergencies module contains an enhanced amount of foundational information about pharmacology and disease processes, that will serve to enhance the students understanding of how to manage patients across the acuity spectrum. The additional medications approved as part of Wisconsin's Scope of Practice for the EMT Basic are thoroughly covered within this module, as well as a new section on The Acute Abdomen. Greater emphasis will be placed upon understanding the challenges we face with our geriatric and pediatric patients.

Recommended hours: 40-42

Recommended delivery formats: Web based instruction for pharmacology, altered LOC, poisoning/overdose, environmental emergencies, allergies, obstetrics/gynecology and acute abdomen are recommended, along with traditional delivery methods. Case studies and problem solving scenarios are strongly recommended.

**Module 5: Trauma**

The Trauma module contains a broader base of information about injury patterns, types of shock, stages of hemorrhagic shock, and various traumatic injuries associated with specific body regions. Specific sections will provide a thorough understanding of management plans and special considerations we face when providing care for all patients, regardless of age.

Recommended hours: 24-28

Recommended delivery formats: Web based instruction for injury patterns and kinematics of trauma is suggested, as well as traditional methods for all components. Case studies and problem solving scenarios should be utilized for bridging assessment strategies with patient management.

### **Module 6: Operations, Haz Mat, MCI & WMD**

The final module covers objectives pertaining to ambulance operations, extrication, triage, mass casualty incidents, hazardous materials and weapons of mass destruction.

Recommended hours: 6

Recommended delivery formats: Web based instruction, as well as traditional delivery formats are recommended for all components of this module.

### **List of Appendices**

Informational guides and supplemental materials are included in the appendix for your use in teaching and training. They include:

- ✓ Comprehensive listing of the modules and total number of objectives in each module
- ✓ Syllabus template – 4 hour sessions
- ✓ Guides and outlines on critical thinking
- ✓ Templates for creating case studies and problem solving scenarios
- ✓ Patient assessment flowchart and checklists
- ✓ Medication administration check sheets
- ✓ Procedures checklists
- ✓ Drug profile template
- ✓ Letters of support