

**EMERGENCY
MEDICAL
SERVICES

NATIONAL
EMS
EDUCATION
STANDARDS**

Suggested citation format: National Highway Traffic Safety Administration. *The National EMS Education Standards*. Washington, DC: U.S. Department of Transportation/National Highway Traffic Safety Administration, 2008. DOT HS #### ###.

Executive Summary

The *National EMS Education Standards* (the *Standards*) represent another step toward realizing the vision of the *1996 EMS Agenda for the Future*, as articulated in the *2000 EMS Education Agenda for the Future: A Systems Approach*.

The *National EMS Education Standards* outline the minimal terminal objectives to be achieved by entry-level EMS personnel within the parameters outlined in the *National EMS Scope of Practice Model*. Although educational programs must adhere to the *Standards*, its format will allow for diverse implementation methods to meet local needs and evolving educational practices. The less prescriptive format of the *Standards* will also allow for ongoing revision of content consistent with scientific evidence and community standards of care.

In implementing the *Standards*, EMS instructors and educational programs will be ~~allowed~~ **have** the freedom to develop their own curricula or use any of the wide variety of publisher's lesson plans and instructional resources which are available at each licensure level.

Consistent with the EMS Education Agenda, EMS accreditation authorities ~~shall~~ **will** use the *Standards* as the framework for evaluation of program curricula.

The *National EMS Education Standards* are not a stand-alone document. ~~Model~~ EMS education programs will incorporate each element of the education system proposed in the *EMS Education Agenda for the Future*. These elements include:

- National EMS Core Content
- National EMS Scope of Practice
- National EMS Education Standards
- National EMS Certification
- National EMS Program Accreditation

This integrated system is essential to achieving the goals of **program** efficiency, consistency of instructional quality, and student competence as outlined in the *Education Agenda*.

Introduction

As a profession, EMS is still in its early developmental stages. The formal progression of an organized civilian EMS system began in the 1960s and continues evolving as we define and enhance our structure, oversight, and organization.

As EMS system operations have developed, so has EMS education. In the early 1970s, registered nurses and physicians taught most EMS programs. There were few student and instructor resources ~~such as textbooks and lesson plans~~ that related directly to prehospital

emergency care. No standards existed to define practice and there was no clear delineation of scopes of practice in EMS.

Historical Development of EMS in the United States

Table 1 outlines key events in the development of EMS in the United States from the 1950s to the present.

Table 1: Historical Development of EMS		
Year(s)	Event/Organization	Result
1950s	American College of Surgeons	Developed the first training program for ambulance attendants
1960	President’s Committee for Traffic Safety	Recognized the need to address “Health, Medical Care and Transportation of the Injured” to reduce traffic fatalities
1966	National Academy of Science published <i>Accidental Death and Disability: The Neglected Disease of Modern Society (The White Paper)</i>	Quantified the scope of traffic-related death in U.S. Described the deficiencies in prehospital care in this country, including: <ul style="list-style-type: none"> ▪ Call for ambulance standards ▪ State-level policies and regulations ▪ Recommendation to adopt methods for providing consistent ambulance services at the local level
1966	Highway Safety Act of 1966	Required each state to adopt highway safety programs to comply with federal standards (including “emergency services”) Impetus for NHTSA leadership in EMS: <ul style="list-style-type: none"> ▪ Directed writing of National Standard Curricula ▪ Provided funding to states to develop State EMS Offices ▪ Took leadership role in EMS system development, including developing model EMS state legislation
1970s	Robert Wood Johnson Foundation and Federal Government	Funded regional EMS systems and demonstration projects
1970s	Crash Injury Management for the Law Enforcement Officer published by NHTSA	40-hour program that evolved into First Responder: NSC in 1979
1970	National Registry of	Held first board meeting, with goal to

	EMTs (NREMT)	provide uniform standards for credentialing ambulance attendants.
1971	<i>Emergency Care and Transportation of the Sick and Injured</i> published by the American Academy of Orthopedic Surgeons (AAOS)	One of the first EMS textbooks
1973	Emergency Medical Services Act of 1973 enacted by Congress as Title XII of the Public Health Services Act	Over \$300 million in funding for EMS over 8 years: <ul style="list-style-type: none"> ▪ Allowed for EMS system planning and implementation ▪ Required states to focus on EMS personnel and training ▪ Resulted in legislation and regulation of EMS personnel levels
1975	American Medical Association (AMA)	Recognized EMT-Paramedic as an allied health occupation
1977	National Standard Curriculum for EMT-Paramedic published by NHTSA	15 instructional modules
1978	The Essentials for Paramedic Program Accreditation developed by AMA	Joint Review Committee on Education Programs for the EMT-Paramedic (JRCEMT-P) adopted The Essentials as the standard for accreditation
1985	First Responder, EMT-Ambulance, EMT-Intermediate, and EMT-Paramedic: NSC revised by NHTSA	Release of six Division Paramedic Education Program EMT-Paramedic reformatted into six divisions
1990	NHTSA hosts EMS Training Workshop	NHTSA hosts EMS Training Workshop (this workshop provided the initiative for development of all the 90's curriculum, an assessment based education philosophy and the EMS Education and Practice Blueprint. This workshop facilitated the development of the 90's curricula and introduced the assessment based education concept.
1992	EMS Education and Practice Blueprint.	This document served as a template for the revised format of the 90's NSC revision projects.
1992	National Association of	Funded by NHTSA, Maternal and Child

	EMS Physicians (NAEMSP) and National Association of EMS Directors (NAEMSD) Initiated EMS Agenda for the Future	Health Bureau (MCHB), and Health Resources and Services Administration (HRSA)
1994	NREMT Practice Analysis	Conducted practice analysis of EMTs and paramedics: <ul style="list-style-type: none"> ▪ Determined importance of EMS actions based on assessment of frequency and potential for harm ▪ Provided foundation for NREMT test blueprint
1994	EMT-Ambulance revised and renamed EMT-Basic: NSC	
1995	First Responder: NSC is revised	
1996	<i>EMS Agenda for the Future</i> published by NHTSA is created by the National Association of EMS Physicians and National Association of State EMS Directors	Vision statement for integration of EMS into the health care system and funded by NHTSA and Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB), EMSC Program
1998	PEW Health Professions Commission Taskforce on Health Care Workforce Regulation published <i>Strengthening Consumer Protection: Priorities for Health Care Workforce Regulation</i>	Recommended: <ul style="list-style-type: none"> ▪ National Policy Advisory Board to establish standards and model legislative language for uniform scope of practice authority for health professions ▪ Emphasis on states' responsibility to enact uniform scope of practice consistent with the recommendations of the National Policy Advisory Board.
1998	EMT-Paramedic: NSC revised	Release of Paramedic National Standard Curriculum revision
1999	EMT-Intermediate: NSC revised	
2000	<i>Education Agenda for the Future: A Systems Approach</i> published by NHTSA	Funded by NHTSA and HRSA. Designed to develop an integrated system of EMS regulation, certification, and licensure.

2004	<i>2004 National EMS Practice Analysis</i> published by NREMT	Updates the 1994 Practice Analysis
2005	<i>National EMS Core Content</i> published by NHTSA and HRSA	Defines: <ul style="list-style-type: none"> ▪ Domain of knowledge of EMS personnel described within the <i>National EMS Scope of Practice</i> ▪ Universal knowledge and skills of EMS personnel
2005	<i>The State of EMS Education EMS Research Project: Characteristics of EMS Educators</i> by Ruple, et al. In <i>Prehospital Emergency Care</i>	Research related to: <ul style="list-style-type: none"> ▪ Identifying characteristics of EMS instructors ▪ Describing infrastructure available to instructors Identifying instructor attributes necessary for implementing education standards
2006	<i>EMS at the Crossroads</i> Institute of Medicine Report	Recommendations related to <i>EMS Education Agenda</i> : <ul style="list-style-type: none"> ▪ State governments should adopt a common scope of practice for EMS personnel, with state licensing reciprocity ▪ States should require national accreditation of paramedic programs States should accept national certification as a prerequisite for state licensure and local credentialing of EMS providers
2007	<i>National EMS Scope of Practice</i> published by NHTSA	National guideline to define levels of EMS licensure: <ul style="list-style-type: none"> ▪ Guide state legislation ▪ Promote reciprocity between states ▪ Clarify EMS roles for the community

In August 1996, the *EMS Agenda for the Future* (the *Agenda*) was published. This consensus document was developed with funding from the National Highway Traffic Safety Administration (NHTSA) and the Health Resources and Services Administration (HRSA). The National Association of EMS Physicians (NAEMSP) and the National Association of State EMS Directors (NASEMSD) led this process, which involved many stakeholders.

The *Agenda* document was designed to guide government and private organizations in EMS planning, development, and policy-making at the national, state, and local levels. It addressed 14 attributes of EMS, including the EMS education system. The *Agenda* defined a vision for the future of EMS education that “employs sound educational principles,” “based on research,” and “conducted by qualified instructors.” In December

of that year, representatives of 30 EMS-related organizations met at an EMS Education Conference sponsored by NHTSA to identify the necessary steps for implementing that vision.

The outcome of the EMS Education Conference was summarized in the *EMS Education Agenda for the Future: A Systems Approach*. This document included the following recommendations:

- The *National EMS Education and Practice Blueprint* (the *Blueprint*) is a valuable component of the EMS education system. It should be revised by a multidisciplinary panel, led by NHTSA, to more explicitly identify core educational content for each licensure level.
- National EMS education standards are necessary, but need not include specific declarative material or lesson plans. NHTSA should support and facilitate the development of national EMS education standards.
- The *Blueprint* and national EMS education standards should be revised periodically, with major revisions occurring every 5 to 7 years, and minor updates made every 2 to 3 years.

In 1998, NHTSA convened a Blueprint Modeling Group to revise the *Blueprint*. That group determined that the *Blueprint* represented only one component of a comprehensive EMS education system, so they redefined its mission, and the group was renamed the EMS Education Task Force. The Task Force produced a document entitled the *EMS Education Agenda for the Future: A Systems Approach* (the *Education Agenda*).

The EMS education system envisioned in the *EMS Agenda for the Future* was further defined and articulated into the model shown in Figure 1 in the *Education Agenda*. This document states that, to be most effective, each component in the EMS education system should be structured, coordinated, and interdependent.

Figure 1: Model EMS System

The *National EMS Core Content* was published in 2005. **Core Content** ~~This document~~ defines the **entire** domain of **EMS out-of-hospital practice within each licensure level and identifies the universal body of knowledge and skills for EMS providers who do not function as independent practitioners.** ~~Specifically, it lists key areas of knowledge and skills that EMS personnel at a particular level must master.~~ Funded by NHTSA and HRSA, this project was led by the National Association of EMS Physicians and the American College of Emergency Physicians.

The *National EMS Scope of Practice Model (Scope of Practice)* is a consensus document that was published in 2006. ~~This document delineates the practices of personnel at each EMS licensure level and outlines the skills that define the minimum competencies for~~

~~each level of EMS personnel. There is no regulatory authority behind the *Scope of Practice*, but it serves to guide states and other regulatory agencies.~~ **This document defines the levels of EMS personnel and delineates the practices and minimum competencies for each level of EMS personnel. The *Scope of Practice* does not have regulatory authority, but provides guidance to States.** Adherence to the *Scope of Practice* would increase uniformity in EMS practice throughout this country and facilitate reciprocity between states. ~~This project was led by~~ **Leadership for this project was delegated to** the National Association of State EMS Officials and funded by NHTSA and HRSA.

The *Scope of Practice* describes four levels of EMS personnel licensure: Emergency Medical Responder (EMR), Emergency Medical Technician (EMT), Advanced Emergency Medical Technician (AEMT), and Paramedic. The *Scope of Practice* further defines practice, suggests minimum educational preparation, and designates appropriate psychomotor skills at each level of licensure. Further, the document describes each level of licensure as distinct and distinguished by unique “skills, practice environment, knowledge, qualifications, services provided, risk, level of supervisory responsibility, and amount of autonomy and judgment/critical thinking/decision-making.”

The *National EMS Education Standards* (the *Standards*), **led by the National Association of EMS Educators**, replace the NHTSA National Standard Curricula at all licensure levels. The *Standards* define the competencies, clinical behaviors, and judgments that must be met by entry-level EMS personnel to meet practice guidelines defined in the *National EMS Scope of Practice Model*. Content and concepts defined in the *National EMS Core Content* are also integrated within the *Standards*.

National EMS Certification (Certification) and National EMS Education Program Accreditation (Accreditation) are the “bookends” that support the other key elements of the system. ~~They ensure consistency and quality of EMS education programs. These components are essential safeguards for the communities that EMS personnel serve.~~ **The Education Agenda recommends an individual must graduate from a nationally accredited EMS education program to be eligible for National EMS Certification. This recommendation was also supported by the Institute of Medicine report - *The Future of Emergency Care: EMS at the Crossroads*. Essential components of the EMS Agenda include a single National EMS Accreditation Agency and a single National EMS Certification Agency to ensure consistency and quality of EMS personnel.**

The National EMS Education Standards

The *National EMS Education Standards* (the *Standards*) comprise three components (Table 1):

1. Competency (designated in yellow)
2. Elaboration of knowledge within that competency, when appropriate (designated in blue)
3. Description of the clinical behaviors and judgments essential for entry-level EMS personnel at each licensure level (designated in green)

Table 2: Format of National EMS Education Standards				
	EMR	EMT	AEMT	Paramedic
Content Area	Competency	Competency	Competency	Competency
Elaboration of Knowledge	Additional knowledge related to the competency	Additional knowledge related to the competency	Additional knowledge related to the competency	Additional knowledge related to the competency
	Clinical behaviors and judgments	Clinical behaviors and judgments	Clinical behaviors and judgments	Clinical behaviors and judgments

Each statement in the *Standards* presumes that the expected knowledge and behaviors are within the scope of practice for that EMS licensure level, as defined by the *National EMS Scope of Practice Model*. Each competency applies to patients of all ages, unless a specific age group is identified.

The *Standards* also assume there is a progression in practice from the Emergency Medical Responder level to the Paramedic level. That is, licensed personnel at each level are responsible for all knowledge, judgments, and behaviors at their level and at all levels preceding their level. For example, a Paramedic is responsible for knowing and doing everything identified in that specific area, as well as knowing and doing all tasks in the three preceding levels.

The descriptors used to illustrate the increasing complexity of knowledge and behaviors through the progression of licensure levels originate, in part, from the *National EMS Scope of Practice Model*. These terms reflect the differences in the breadth, depth, and actions required at each licensure level (Figure 2).

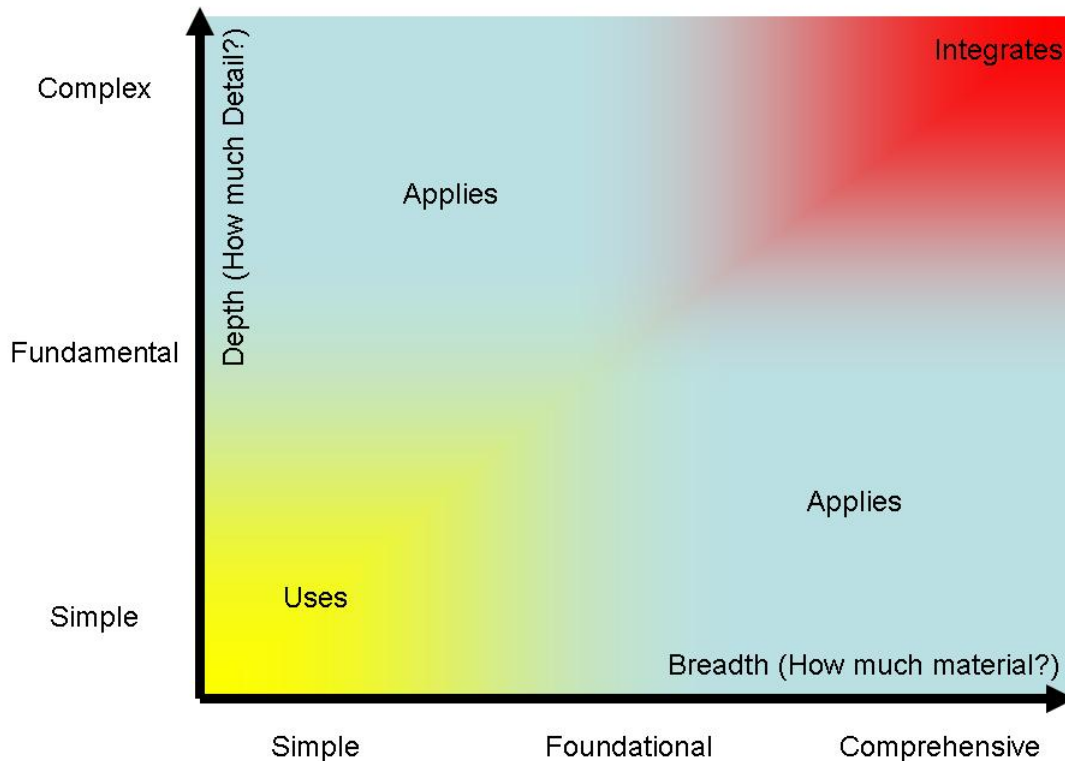


Figure 2: Terminology Graph

For example, in reference to the pathophysiology competency in the *Standards* document, an EMR should “use a simple understanding of shock...,” whereas a paramedic should “integrate a comprehensive understanding of pathophysiology of major human systems.” When the term “comprehensive” is used, it is presumed that the knowledge is complex as well. In this example, the knowledge that the entry level Paramedic must master in the area of pathophysiology is significantly greater in both depth and breadth than that of the entry level EMR.

The *DEPTH* of knowledge is the amount of detail a student needs to know about a particular topic. The *BREADTH* of knowledge refers to the number of topics or issues a student needs to learn in a particular competency. For example, the Emergency Medical Responder needs to have a thorough understanding (*DEPTH*) about how to safely and effectively use the bag valve mask; however, the EMR is taught a limited number of concepts (*BREADTH*) surrounding management of a patient’s airway.

To describe the intended *DEPTH* of knowledge of a particular concept within a provider level, the Project Team uses the terms *simple*, *fundamental*, and *complex*. This terminology is also used to better illustrate the progression of the depth of knowledge from one particular level to another. For example, the EMR’s *depth* of knowledge for bleeding control is simple while the EMT’s *depth* of knowledge about bleeding control is fundamental.

To better describe the intended BREADTH of knowledge for the concepts and topics that need to be known within a given provider level, the Project Team uses the terms *simple*, *foundational*, and *comprehensive*. An illustration of this at the EMT level is when an EMT has a *comprehensive breadth* of knowledge about scene safety and a *foundational breadth* of knowledge about cardiovascular disorders. Obviously an EMT needs to know as much about scene safety as any other level; however, the EMT does not need to know as much about cardiovascular disorders as a Paramedic.

~~The sequence of presentation of the subject matter within the *Standards* in no way implies that an education program must develop a curriculum based on the *Standards* in that same sequence. The intent is that the *National EMS Education Standards* will guide the development of lesson plans using an educationally sound curriculum development process that meets the needs of students within an approved EMS education program.~~

National EMS Education Standards Version 3.0

From the National EMS Scope of Practice Model: EMS Personnel Licensure Levels

Emergency Medical Responder (EMR)

The primary focus of the Emergency Medical Responder is to initiate immediate lifesaving care to critical patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide lifesaving interventions while awaiting additional EMS response and to assist higher level personnel at the scene and during transport. Emergency Medical Responders function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Responders perform basic interventions with minimal equipment.

Emergency Medical Technician (EMT)

The primary focus of the Emergency Medical Technician is to provide basic emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Emergency Medical Technicians perform interventions with the basic equipment typically found on an ambulance. The Emergency Medical Technician is a link from the scene to the emergency health care system.

Advanced Emergency Medical Technician (AEMT)

The primary focus of the Advanced Emergency Medical Technician is to provide basic and limited advanced emergency medical care and transportation for critical and emergent patients who access the emergency medical system. This individual possesses the basic knowledge and skills necessary to provide patient care and transportation. Advanced Emergency Medical Technicians function as part of a comprehensive EMS response, under medical oversight. Advanced Emergency Medical Technicians perform interventions with the basic and advanced equipment typically found on an ambulance. The Advanced Emergency Medical Technician is a link from the scene to the emergency health care system.

Paramedic

The Paramedic is an allied health professional whose primary focus is to provide advanced emergency medical care for critical and emergent patients who access the emergency medical system. This individual possesses the complex knowledge and skills necessary to provide patient care and transportation. Paramedics function as part of a comprehensive EMS response, under medical oversight. Paramedics perform interventions with the basic and advanced equipment typically found on an ambulance. The Paramedic is a link from the scene into the health care system.

Each educational level assumes mastery of previously stated competencies. Each individual must demonstrate each competency within his or her scope of practice and for patients of all ages.

	EMR	EMT	AEMT	Paramedic
Preparatory	Uses a simple understanding 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.	Applies a fundamental understanding of the EMS system, safety/well being of the EMT, medical/legal and ethical issues to the provision of emergency care.	Applies a fundamental understanding of the EMS system, safety/well being of the AEMT, medical/legal and ethical issues to the provision of emergency care.	Integrates a comprehensive understanding of EMS systems, the safety/well being of the paramedic, and medical/legal and ethical issues which is intended to improve the health of EMS personnel, patients, and the community.
EMS Systems	Simple depth, simple breadth <ul style="list-style-type: none"> • EMS systems • Roles/ responsibilities/ professionalism of EMS personnel 	EMR Material PLUS: Simple depth, foundational breadth <ul style="list-style-type: none"> • EMS systems • History of EMS • Roles/ responsibilities/ professionalism of EMS personnel • Quality improvement • Patient safety 	EMT Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> • Quality improvement • Patient safety 	AEMT Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> • History of EMS Complex depth, comprehensive breadth <ul style="list-style-type: none"> • EMS systems • Roles/ responsibilities/ professionalism of EMS personnel • Quality improvement • Patient safety
Research	Simple depth, simple breadth <ul style="list-style-type: none"> • Impact of research on EMR care • Data collection 	EMR Material PLUS: Simple depth, simple breadth <ul style="list-style-type: none"> • Data collection • Evidence-based decision making 	Same As Previous Level	AEMT Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> • Research principles and statistics to interpret literature and advocate evidence-based practice

	EMR	EMT	AEMT	Paramedic
Workforce Safety and Wellness MOVE PROPER USE OF RESTRAINT (IGs) TO THIS SECTION	Simple depth, simple breadth <ul style="list-style-type: none"> • Standard safety precautions • Personal protective equipment • Stress • Prevention of response-related injuries • Lifting and moving patients • Dealing with death and dying 	EMR Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> • Provider safety and well being • Standard safety precautions • Personal protective equipment • Stress • Prevention of work related injuries • Lifting and moving patients • Dealing with death and dying • Disease transmission • Wellness principles 	Same As Previous Level	AEMT Material PLUS: Complex depth, comprehensive breadth <ul style="list-style-type: none"> • Provider safety and well being • Standard safety precautions • Personal protective equipment • Stress • Prevention of work related injuries • Lifting and moving patients • Dealing with death and dying • Disease transmission • Wellness principles
Documentation	Simple depth, simple breadth <ul style="list-style-type: none"> • Recording patient findings 	EMR Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> • Principles of medical documentation and report writing 	EMT Material PLUS: Complex depth, foundational breadth <ul style="list-style-type: none"> • Principles of medical documentation and report writing 	AEMT Material PLUS: Complex depth, comprehensive breadth <ul style="list-style-type: none"> • Principles of medical documentation and report writing
EMS System Communication	Simple depth, simple breadth Communication needed to call for <ul style="list-style-type: none"> • Call for Resources • Transfer care of the patient • Interact within the team structure 	EMR Material PLUS: Fundamental simple depth, foundational simple breadth <ul style="list-style-type: none"> • EMS communication system • Communication with other health care professionals • Team communication and dynamics 	EMT Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> • EMS communication system • Communication with other health care professionals • Team communication and dynamics 	AEMT Material PLUS: Complex depth, comprehensive breadth <ul style="list-style-type: none"> • EMS communication system • Communication with other health care professionals • Team communication and dynamics

	EMR	EMT	AEMT	Paramedic
Therapeutic Communications	<p>Simple depth, simple breadth</p> <p>Principles of communicating with patients in a manner that achieves a positive relationship</p> <ul style="list-style-type: none"> • Interviewing techniques 	<p>EMR Material PLUS:</p> <p>Fundamental depth, foundational breadth</p> <p>Principles of communicating with patients in a manner that achieves a positive relationship</p> <ul style="list-style-type: none"> • Interviewing techniques • Culturally sensitive communication • Verbal defusing strategies • Family presence issues 	<p>Same As Previous Level</p> <p>EMT Material PLUS:</p> <p>Simple depth, simple breadth</p> <p>Principles of communicating with patients in a manner that achieves a positive relationship</p> <ul style="list-style-type: none"> • Dealing with difficult patients • Adjusting communication strategies for age, stage of development, patients with special needs, and differing cultures 	<p>AEMT Material PLUS:</p> <p>Complex depth, comprehensive breadth</p> <p>Principles of communicating with patients in a manner that achieves a positive relationship</p> <ul style="list-style-type: none"> • Interviewing techniques • Factors that affect communication • Dealing with difficult patients • Adjusting communication strategies for age, stage of development, patients with special needs, and differing cultures

<p>Medical/Legal, and Ethics</p>	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Consent/refusal of care • Confidentiality • Advanced directives • Tort and criminal actions • Evidence preservation • Statutory responsibilities • Mandatory reporting • Ethical principles/moral obligations • End of life issues 	<p>EMR Material PLUS:</p> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Consent/refusal of care • Confidentiality • Advanced directives • Tort and criminal actions • Evidence preservation • Statutory responsibilities • Mandatory reporting • Ethical principles/moral obligations 	<p>Same As Previous Level</p>	<p>AEMT Material PLUS:</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Consent/refusal of care • Confidentiality • Advanced directives • Tort and criminal actions • Statutory responsibilities • Mandatory reporting • Health care regulation • Patient rights/advocacy • Ethical principles/moral obligations • End of life issues • Ethical tests and decision making
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	EMR	EMT	AEMT	Paramedic
<p>Anatomy and Physiology</p>	<p>Uses a simple depth and breadth of understanding of the anatomy and function of the upper airway, heart, vessels, blood, lungs, skin, muscles, and bones as the foundation of emergency care.</p>	<p>Applies a fundamental understanding of the anatomy and function of all human systems to the practice of EMS.</p>	<p>Integrates a complex understanding of the anatomy and physiology of the airway, respiratory and circulatory systems to the practice of EMS.</p>	<p>Integrates a complex depth and comprehensive breadth of understanding of the anatomy and physiology of all human systems</p>

	EMR	EMT	AEMT	Paramedic
Medical Terminology	Uses simple medical and anatomical terms.	Uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals.	Same As Previous Level	Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.

	EMR	EMT	AEMT	Paramedic
Pathophysiology	Uses a simple understanding of shock and respiratory compromise to respond to life threats.	Applies a fundamental understanding of the pathophysiology of respiration and perfusion to patient assessment and management.	Applies a comprehensive understanding of the pathophysiology of respiration and perfusion to patient assessment and management.	Integrates a comprehensive understanding of pathophysiology of major human systems.

	EMR	EMT	AEMT	Paramedic
Life Span Development	Uses simple understanding of age-related differences to assess and care for patients.	Applies a fundamental understanding of life span development to patient assessment and management.	Same As Previous Level	Integrates a comprehensive understanding of life span development.

	EMR	EMT	AEMT	Paramedic
Public Health	NA Has an awareness of local public health resources and the role EMS personnel play in public health emergencies.	Uses a simple understanding of the principles of illness and injury prevention to emergency care.	Same As Previous Level Uses a simple understanding of the principles of the role of EMS during public health emergencies.	Applies a fundamental understanding of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.

	EMR	EMT	AEMT	Paramedic
Pharmacology	Uses a simple understanding of the medications that the EMR may self-administer or administer to a peer in an emergency.	Applies a fundamental understanding of the medications that the EMT may assist/administer to a patient during an emergency.	Applies (to patient assessment and management) a fundamental understanding of the medications carried by AEMTs that may be administered to a patient during an emergency.	Integrates a comprehensive understanding of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.
Principles of Pharmacology	NA	Simple depth, simple breadth <ul style="list-style-type: none"> • Kinds of medications used during an emergency 	EMT Material PLUS: Fundamental depth, foundation breadth <ul style="list-style-type: none"> • Medication legislation • Naming • Classifications • Storage and security • Administration routes • Autonomic pharmacology • Metabolism and excretion • Mechanism of medication action • Medication response relationships • Medication interactions • Toxicity 	AEMT Material PLUS: Complex depth, comprehensive breadth) <ul style="list-style-type: none"> • Medication legislation • Naming • Classifications • Schedules • Storage and security • Administration routes • Autonomic pharmacology • Metabolism and excretion • Mechanism of medication action • Phases of medication activity • Pharmacokinetics • Medication response relationships • Medication interactions • Toxicity

<p>Medication Administration</p>	<p>Simple depth, simple breadth Within the scope of practice of the EMR, how to</p> <ul style="list-style-type: none"> • Self-administer medication • Peer-administer medication 	<p>EMR Material PLUS: Fundamental depth, foundation breadth Within the scope of practice of the EMT how to</p> <ul style="list-style-type: none"> • Assist/administer medications to a patient 	<p>EMT Material PLUS: Fundamental depth, foundation breadth Within the scope of practice of the AEMT</p> <ul style="list-style-type: none"> • Administer medications to a patient 	<p>AEMT Material PLUS: Complex depth, comprehensive breadth Within the scope of practice of the paramedic</p> <ul style="list-style-type: none"> • Administer medications to a patient
<p>Emergency Medications</p>	<p>Simple depth, simple breadth Within the scope of practice of the EMR</p> <ul style="list-style-type: none"> • Names • Effects • Indications • Routes of administration • Dosages for the medications administered 	<p>EMR Material PLUS: Fundamental depth, simple breadth Within the scope of practice of the EMT</p> <ul style="list-style-type: none"> • Names • Actions • Indications • Contraindications • Complications • Routes of administration • Side effects • Interactions • Dosages for the medications administered 	<p>EMT Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the AEMT</p> <ul style="list-style-type: none"> • Names • Actions • Indications • Contraindications • Complications • Routes of administration • Side effects • Interactions • Dosages for the medications administered 	<p>AEMT Material PLUS: Complex depth, comprehensive breadth Within the scope of practice of the paramedic</p> <ul style="list-style-type: none"> • Names • Actions • Indications • Contraindications • Complications • Routes of administration • Side effects • Interactions • Dosages for the medications administered

	EMR	EMT	AEMT	Paramedic
Airway Management, Respiration and Artificial Ventilation	Applies an understanding (fundamental depth, foundational breadth) of anatomy and physiology to assure a patent airway, adequate mechanical ventilation, and respiration while awaiting additional EMS response for patients of all ages.	Applies a foundational understanding 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 knowledge of upper airway anatomy and physiology (fundamental depth, foundational breadth) to patient assessment and management in order to assure a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.	Integrates a complex understanding of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.
Airway Management	Fundamental depth, simple breadth Within the scope of practice of the EMR <ul style="list-style-type: none"> • Airway anatomy • Airway assessment • Techniques of assuring a patent airway 	EMR Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the EMT <ul style="list-style-type: none"> • Airway anatomy • Airway assessment • Techniques of assuring a patent airway 	EMT Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the AEMT <ul style="list-style-type: none"> • Airway anatomy • Airway assessment • Techniques of assuring a patent airway 	AEMT Material PLUS: Complex depth, comprehensive breadth Within the scope of practice of the paramedic <ul style="list-style-type: none"> • Airway anatomy • Airway assessment • Techniques of assuring a patent airway

<p>Anatomy and Physiology of Respiration</p>	<p>Fundamental depth, simple breadth Within the scope of practice of the EMR</p> <ul style="list-style-type: none"> • Anatomy of the respiratory system • Physiology and pathophysiology of respiration <ul style="list-style-type: none"> ○ Pulmonary ventilation ○ Oxygenation ○ Respiration <ul style="list-style-type: none"> ▪ External ▪ Internal ▪ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy 	<p>EMR Material PLUS:</p> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Anatomy of the respiratory system • Physiology and pathophysiology of respiration <ul style="list-style-type: none"> ○ Pulmonary ventilation ○ Oxygenation ○ Respiration <ul style="list-style-type: none"> ▪ External ▪ Internal ▪ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy 	<p>EMT Material PLUS:</p> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> • Anatomy of the respiratory system <p>Fundamental depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Physiology and pathophysiology of respiration <ul style="list-style-type: none"> ○ Pulmonary ventilation ○ Oxygenation ○ Respiration <ul style="list-style-type: none"> ▪ External ▪ Internal ▪ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy 	<p>AEMT Material PLUS:</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Anatomy of the respiratory system • Physiology, and pathophysiology of respiration <ul style="list-style-type: none"> ○ Pulmonary ventilation ○ Oxygenation ○ Respiration <ul style="list-style-type: none"> ▪ External ▪ Internal ▪ Cellular respiration • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy
<p>Artificial Ventilation</p>	<p>Fundamental depth, simple breadth</p> <p>Assessment and management of adequate and inadequate ventilation</p> <ul style="list-style-type: none"> • Artificial ventilation • Minute ventilation • Alveolar ventilation • Impact Effect of artificial ventilation on perfusion cardiac output • Supplemental oxygen therapy 	<p>EMR Material PLUS:</p> <p>Fundamental depth, foundational breadth</p> <p>Assessment and management of adequate and inadequate ventilation</p> <ul style="list-style-type: none"> • Artificial ventilation • Minute ventilation • Alveolar ventilation • Impact Effect of artificial ventilation on perfusion cardiac output • Supplemental oxygen therapy 	<p>Same As Previous Level</p> <p>EMT Material PLUS:</p> <p>Complex depth, foundational breadth</p> <p>Assessment and management of adequate and inadequate ventilation</p> <ul style="list-style-type: none"> • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output 	<p>AEMT Material PLUS:</p> <p>Complex depth, comprehensive breadth</p> <p>Assessment and management of adequate and inadequate ventilation</p> <ul style="list-style-type: none"> • Artificial ventilation • Minute ventilation • Alveolar ventilation • Impact Effect of artificial ventilation on perfusion cardiac output • Supplemental oxygen therapy

	EMR	EMT	AEMT	Paramedic
Patient Assessment	Use scene information and simple patient assessment findings to identify and manage immediate life threats and injuries within the scope of practice of the EMR.	Applies scene information and patient assessment findings (scene size up, primary and secondary assessment, patient history, reassessment) to guide emergency management.	Same As Previous Level	Integrate scene and patient assessment findings with an understanding of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.
Scene Size Up	<p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Scene safety <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Scene management <ul style="list-style-type: none"> ○ Impact of the environment on patient care ○ Addressing hazards ○ Violence ○ Need for additional or specialized resources ○ Standard precautions 	<p>EMR Material PLUS:</p> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Scene management <ul style="list-style-type: none"> ○ Impact of the environment on patient care ○ Addressing hazards ○ Violence ○ Need for additional or specialized resources ○ Standard precautions ○ Scene stabilization ○ Security ○ Multiple patient situations 	<p>Same As Previous Level</p> <p>EMT Material PLUS:</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Scene management <ul style="list-style-type: none"> ○ Need for additional or specialized resources ○ Standard precautions 	<p>AEMT Material PLUS:</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Scene management <ul style="list-style-type: none"> ○ Impact of the environment on patient care ○ Addressing hazards ○ Violence ○ Need for additional or specialized resources ○ Standard precautions ○ Scene stabilization ○ Security ○ Multiple patient situations

<p>Primary Assessment</p>	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Primary assessment for all patient situations <ul style="list-style-type: none"> ○ Level of consciousness ○ ABCs ○ Identifying life threats ○ Assessment of vital functions • Begin interventions needed to preserve life 	<p>EMR Material PLUS: Fundamental depth, simple breadth)</p> <ul style="list-style-type: none"> • Primary assessment for all patient situations <ul style="list-style-type: none"> ○ Initial general impression ○ Level of consciousness ○ ABCs ○ Identifying life threats ○ Assessment of vital functions • Integration of treatment/ procedures needed to preserve life 	<p>EMT Material PLUS: Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Primary assessment for all patient situations <ul style="list-style-type: none"> ○ Initial general impression ○ Level of consciousness ○ ABCs ○ Identifying life threats ○ Assessment of vital functions • Integration of treatment/ procedures needed to preserve life 	<p>AEMT Material PLUS: Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Primary assessment for all patient situations <ul style="list-style-type: none"> ○ Initial general impression ○ Level of consciousness ○ ABCs ○ Identifying life threats ○ Assessment of vital functions • Integration of treatment/ procedures needed to preserve life
<p>History Taking</p>	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Determining the chief complaint • Mechanism of injury/nature of illness • Associated signs and symptoms 	<p>EMR Material PLUS: Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Investigation of the chief complaint • Mechanism of injury/nature of illness • Past medical history • Associated signs and symptoms • Pertinent negatives 	<p>Same As Previous Level</p>	<p>AEMT Material PLUS: Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Components of the patient history • Interviewing techniques • How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation
<p>Secondary Assessment</p>	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Performing a rapid full body scan • Focused assessment of pain 	<p>EMR Material PLUS: Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Techniques of physical examination <ul style="list-style-type: none"> ○ Respiratory system ○ Cardiovascular system ○ Neurological system ○ Musculoskeletal system ○ All anatomical regions 	<p>EMT Material PLUS: Complex depth, foundational breadth</p> <p>Assessment of</p> <ul style="list-style-type: none"> • Lung sounds • Shock 	<p>AEMT Material PLUS: Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Techniques of physical examination for all major <ul style="list-style-type: none"> ○ Body systems ○ Anatomical regions

Monitoring Devices	NA	Simple depth, simple breadth Within the scope of practice of the EMT <ul style="list-style-type: none"> Obtaining and using information from patient monitoring devices including (but not limited to) <ul style="list-style-type: none"> Pulse oximetry Non-invasive blood pressure 	EMT Material PLUS: Within the scope of practice of the AEMT Simple depth, simple breadth <ul style="list-style-type: none"> Obtaining and using information from patient monitoring devices including (but not limited to) <ul style="list-style-type: none"> Blood glucose determination 	AEMT Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the paramedic <ul style="list-style-type: none"> Obtaining and using information from patient monitoring devices including (but not limited to): <ul style="list-style-type: none"> Continuous ECG monitoring 12 lead ECG interpretation Capnography Basic blood chemistry
Reassessment	Simple depth, simple breadth <ul style="list-style-type: none"> How and when to reassess patients 	EMR Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> how and when to perform a reassessment for all patient situations 	Same As Previous Levels	AEMT Material PLUS: Complex depth, comprehensive breadth <ul style="list-style-type: none"> How and when to perform a reassessment for all patient situations

	EMR	EMT	AEMT	Paramedic
Medicine	Recognizes and manages life threats based on assessment findings of a patient with a medical emergency while awaiting additional emergency response.	Applies fundamental understanding to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.	Applies fundamental understanding to provide basic and selected advanced emergency care and transportation based on assessment findings for an acutely ill patient.	Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint.
Medical Overview	Simple depth, simple breadth Assessment and management of a <ul style="list-style-type: none"> Medical complaint 	EMR Material PLUS: Fundamental Simple depth, foundational breadth Pathophysiology, assessment, and management of <ul style="list-style-type: none"> Medical complaints to include <ul style="list-style-type: none"> Transport mode Destination decisions 	Same As Previous Level EMT Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of <ul style="list-style-type: none"> Medical complaints to include <ul style="list-style-type: none"> Transport mode Destination decisions 	AEMT Material PLUS: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of <ul style="list-style-type: none"> Medical complaints to include <ul style="list-style-type: none"> Transport mode Destination decisions

<p>Neurology</p>	<p>Simple depth, simple breadth Anatomy, presentations, and management of</p> <ul style="list-style-type: none"> • Decreased level of responsiveness • Seizure • Stroke 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Seizure • Status epilepticus • Stroke • Transient ischemic attack • Headache 	<p>Same As Previous Level EMT Material PLUS: Complex depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Seizure 	<p>AEMT Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Seizure • Status epilepticus • Stroke • Transient ischemic attack • Headache <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Cranial nerve disorders • Spinal cord compression • Demyelinating disorders • Hydrocephalus • Neurologic inflammation/infection • Movement disorders • Dementia • Parkinson’s disease • Tumors • Wernicke’s encephalopathy
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<p>Abdominal and Gastrointestinal Disorders</p>	<p>Simple depth, simple breadth Anatomy, presentations and management of shock associated with abdominal emergencies</p> <ul style="list-style-type: none"> • Gastrointestinal bleeding 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Acute and chronic gastrointestinal hemorrhage <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Peritonitis • Ulcerative diseases 	<p>Same As Previous Level</p>	<p>AEMT Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Acute and chronic gastrointestinal hemorrhage • Peritonitis • Ulcerative diseases • Liver disorders <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Irritable bowel syndrome • Infectious disorders • Inflammatory disorders • Pancreatitis • Hernias • Gall bladder and biliary tract disorders • Bowel obstruction <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Rectal abscess • Rectal foreign body obstruction • Mesenteric ischemia
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<p>Immunology</p>	<p>Simple depth, simple breadth Recognition and management of shock and difficulty breathing related to</p> <ul style="list-style-type: none"> • Anaphylactic reactions 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment, and management of hypersensitivity disorders and/or emergencies</p> <ul style="list-style-type: none"> • Anaphylactic reactions 	<p>EMT Material PLUS: Complex depth, comprehensive breadth Anatomy, physiology, pathophysiology, assessment, and management of hypersensitivity disorders and/or emergencies</p> <ul style="list-style-type: none"> • Anaphylactic reactions 	<p>AEMT Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major immune system disorders and/or emergencies Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Hypersensitivity • Anaphylactic reactions • Anaphylactoid reactions <p>Fundamental depth, foundational breadth)</p> <ul style="list-style-type: none"> • Collagen vascular disease • Transplant related problems
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<p>Infectious Diseases</p>	<p>Simple depth, simple breadth Awareness of</p> <ul style="list-style-type: none"> • A patient who may have contracted an infectious disease • How to decontaminate equipment after treating a patient suspected of having an infectious disease 	<p>EMR Material PLUS: Simple depth, simple breadth Assessment and management of</p> <ul style="list-style-type: none"> • A patient who may have contracted an infectious disease • How to decontaminate the ambulance and equipment after treating a patient suspected of having an infectious disease 	<p>Same As Previous Level AEMT Material PLUS: Fundamental depth, foundational breadth Assessment and management of</p> <ul style="list-style-type: none"> • A patient who may be infected with a bloodborne pathogen <ul style="list-style-type: none"> ○ HIV ○ Hepatitis B 	<p>AEMT Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, reporting requirements, prognosis, and management of common or major infectious and communicable diseases and/or emergencies Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Hepatitis • HIV related diseases • Meningococcal meningitis • Pneumonia <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Tuberculosis • Tetanus • Rabies • Viral diseases • Sexually transmitted disease • Scabies and lice • Lyme disease • Gastroenteritis • Fungal infections • Antibiotic resistant infections
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<p>Endocrine Disorders</p>	<p>Simple depth, simple breadth Awareness that</p> <ul style="list-style-type: none"> • Diabetic emergencies cause altered mental status 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Acute diabetic emergencies 	<p>EMT Material PLUS: Complex depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Acute diabetic emergencies 	<p>AEMT Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Acute diabetic emergencies • Diabetes <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Adrenal disease • Pituitary and thyroid disorders
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<p>Psychiatric</p>	<p>Simple depth, simple breadth Recognition of</p> <ul style="list-style-type: none"> Behaviors that pose a risk to the EMR, patient or others 	<p>EMR Material PLUS: Simple depth, simple breadth</p> <ul style="list-style-type: none"> Basic principles of the mental health system <p>Fundamental depth, foundational breadth Assessment and management of</p> <ul style="list-style-type: none"> Acute psychosis Suicidal/risk Agitated delirium 	<p>Same As Previous Level</p>	<p>AEMT Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> Acute psychosis Agitated delirium <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> Addictive behavior Mood and thought disorders Factitious disorders Neurotic disorder Organic psychoses Patterns of violence/abuse/neglect Personality disorders Psychosomatic disorders
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<p>Cardiovascular</p>	<p>Simple depth, simple breadth Anatomy, signs, symptoms and management</p> <ul style="list-style-type: none"> • Chest pain • Cardiac arrest 	<p>EMR Material PLUS: Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Heart failure • Hypertensive emergencies <p>Fundamental depth, foundational breadth</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Acute coronary syndrome <ul style="list-style-type: none"> ○ Angina pectoris ○ Myocardial infarction • Aortic aneurysm/dissection • Thromboembolism • Heart failure • Hypertensive emergencies 	<p>EMT Material PLUS: Fundamental depth, simple breadth</p> <ul style="list-style-type: none"> • Heart failure • Hypertensive emergencies <p>Complex depth, foundational breadth</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Acute coronary syndrome • Ischemic heart diseases <ul style="list-style-type: none"> ○ Angina pectoris ○ Myocardial infarction 	<p>AEMT Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Acute coronary syndrome • Ischemic heart diseases <ul style="list-style-type: none"> ○ Angina pectoris ○ Myocardial infarction • Aortic aneurysm/dissection, • Thromboembolism • Cardiac failure • Hypertensive emergencies • Heart failure • Vascular disorders <ul style="list-style-type: none"> ○ Abdominal aortic aneurysm ○ Arterial occlusion ○ Venous thrombosis • Non-traumatic cardiac tamponade • Cardiac rhythm disturbances • Cardiogenic shock <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Infectious diseases of the heart <ul style="list-style-type: none"> ○ Endocarditis ○ Pericarditis • Congenital abnormalities
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<p>Toxicology</p>	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Recognition and management of <ul style="list-style-type: none"> ◦ Carbon monoxide poisoning ◦ Nerve agent poisoning • How and when to contact a poison control center 	<p>EMR Material PLUS:</p> <p>Fundamental depth, foundational breadth</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Inhaled poisons • Ingested poisons • Injected poisons • Absorbed poisons • Alcohol intoxication and withdrawal 	<p>EMT Material PLUS:</p> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Opiate toxidrome 	<p>AEMT Material PLUS:</p> <p>Complex depth, comprehensive breadth</p> <p>Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of the following toxidromes and poisonings:</p> <ul style="list-style-type: none"> • Sympathomimetics • Sedative/hypnotics • Opiates • Anticholinergics • Cholinergics • Carbon monoxide • Alcohol intoxication and withdrawal • OTC and prescription medications • Illegal drugs
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<p style="text-align: center;">Respiratory</p>	<p>Simple depth, simple breadth Anatomy, signs, symptoms and management of respiratory emergencies including those that affect the</p> <ul style="list-style-type: none"> • Upper airway • Lower airway 	<p>EMR Material PLUS: Anatomy, physiology, pathophysiology, assessment, and management of Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Epiglottitis • Spontaneous pneumothorax • Pulmonary edema • Asthma • Chronic obstructive pulmonary disease • Environmental/industrial exposure • Toxic gas • Pulmonary embolism • Pneumonia <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Pertussis • Cystic fibrosis • Pulmonary embolism • Pneumonia • Viral respiratory infections 	<p>EMT Material PLUS: Complex depth, foundational breadth Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Asthma • Chronic obstructive pulmonary disease • Pneumonia 	<p>AEMT Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Acute upper airway infections • Pleural effusion • Spontaneous pneumothorax • Obstructive/restrictive lung diseases • Pulmonary infections <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Neoplasm • Pertussis • Cystic fibrosis
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Hematology	NA	<p>Simple depth, simple breadth</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Sickle cell crisis • Clotting disorders 	<p>EMT Material PLUS:</p> <p>Fundamental depth, foundational breadth</p> <p>Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Sickle cell crisis 	<p>AEMT Material PLUS:</p> <p>Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major hematological diseases and/or emergencies</p> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> • Sickle cell crisis <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Blood transfusion complications • Hemostatic disorders • Lymphomas • Red blood cell disorders • White blood cell disorders • Coagulopathies
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<p>Genitourinary/Renal</p>	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Blood pressure assessment in hemodialysis patients 	<p>EMR Material PLUS:</p> <p>Simple depth, simple breadth</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Complications related to <ul style="list-style-type: none"> ○ Renal dialysis ○ Urinary catheter management (not insertion) • Kidney stones 	<p>EMT Material PLUS:</p> <p>Fundamental depth, simple breadth</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Complications related to renal dialysis • Kidney stones 	<p>AEMT Material PLUS:</p> <p>Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major renal urogenital disorders and/or emergencies</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Complications of <ul style="list-style-type: none"> ○ Acute renal failure ○ Chronic renal failure ○ Dialysis • Renal calculi <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Acid base disturbances • Fluid and electrolyte • Infection • Male genital tract conditions
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<p>Gynecology</p>	<p>Simple depth, simple breadth Recognition and management of shock associated with</p> <ul style="list-style-type: none"> • Vaginal bleeding 	<p>EMR Material PLUS: Anatomy, physiology, assessment findings, and management of gynecological diseases and/or emergencies Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Vaginal bleeding • Sexual assault <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Infections 	<p>Same As Previous Level</p>	<p>AEMT Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major gynecological diseases and/or emergencies Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Vaginal bleeding • Sexual assault <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Infections • Pelvic Inflammatory Disease • Ovarian cysts • Dysfunctional uterine bleeding • Foreign body
<p>Non-Traumatic Musculoskeletal Disorders</p>	<p>NA</p>	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Non-traumatic fractures 	<p>Same As Previous Level</p>	<p>AEMT Material PLUS: Fundamental depth, foundation breadth Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major non-traumatic musculoskeletal disorders</p> <ul style="list-style-type: none"> • Bony abnormalities • Disorders of the spine • Joint abnormalities • Muscle abnormalities • Overuse syndromes

Diseases of the Eyes, Ears, Nose, and Throat	Simple depth, simple breadth Recognition and management of <ul style="list-style-type: none"> Nose bleed 	Same As Previous Level	Same As Previous Level	AEMT Material PLUS: Fundamental depth, foundational breadth Knowledge of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of <ul style="list-style-type: none"> Common or major diseases of the eyes, ears, nose, and throat, including nose bleed
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	EMR	EMT	AEMT	Paramedic
Shock and Resuscitation	Uses assessment information to recognize shock, respiratory failure or arrest, and cardiac arrest based on assessment findings and manages the emergency while awaiting additional emergency response.	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 understanding to provide basic and selected advanced emergency care and transportation based on assessment findings for a patient in shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management.	Integrates a comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states. Integrates a comprehensive knowledge of the causes, pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.

	EMR	EMT	AEMT	Paramedic
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.	Applies fundamental understanding to provide basic emergency care and transportation based on assessment findings for an acutely injured patient.	Applies fundamental understanding to provide basic and selected advanced emergency care and transportation based on assessment findings for an acutely injured patient.	Integrates assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient.

<p>Trauma Overview</p>	<p>NA</p>	<p>EMR Material PLUS: Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Pathophysiology of the trauma patient • Assessment of the trauma patient • Management of the trauma patient • Trauma scoring • Rapid transport and destination issues • Transport mode 	<p>Same As Previous Level</p>	<p>AEMT Material PLUS: Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Pathophysiology of the trauma patient • Assessment of the trauma patient • Management of the trauma patient • Trauma scoring • Rapid transport and destination issues
<p>Bleeding</p>	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Bleeding • Hemorrhagic shock 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Bleeding • Hemorrhagic shock 	<p>EMT Material PLUS: Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Fluid resuscitation 	<p>AEMT Material PLUS: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Bleeding • Hemorrhagic shock

<p>Chest Trauma</p>	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Sucking chest wound • Blunt vs. penetrating mechanisms • Open chest wound • Impaled object 	<p>EMR Material PLUS: Fundamental depth, simple breadth Pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Blunt vs. penetrating mechanisms • Rib fractures • Flail chest • Simple pneumothorax • Tension pneumothorax • Open pneumothorax • Hemothorax • Pericardial Cardiac tamponade • Commotio cordis • Aortic dissection/disruption • Cardiac/pulmonary contusion • Penetrating chest trauma 	<p>EMT Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Rib fractures • Flail chest • Pulmonary contusion • Simple pneumothorax • Tension pneumothorax • Open pneumothorax • Hemothorax • Pericardial Cardiac tamponade • Commotio cordis • Traumatic aortic dissection/disruption • Traumatic asphyxia • Blunt Cardiac injury • Penetrating chest trauma 	<p>AEMT Material PLUS: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Rib fractures • Flail chest • Pulmonary contusion • Simple pneumothorax • Tension pneumothorax • Open pneumothorax • Hemothorax • Blunt Cardiac injury • Pericardial Cardiac tamponade • Commotio cordis • Traumatic Aortic dissection/disruption • Tracheobronchial disruption • Diaphragmatic rupture • Traumatic asphyxia • Penetrating chest trauma
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<p>Abdominal and Genitourinary Trauma</p>	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Blunt vs. penetrating mechanisms • Impaled object • Evisceration 	<p>EMR Material PLUS: Fundamental depth, foundational simple breadth Pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Blunt vs. penetrating mechanisms • Evisceration • Vascular injury • Solid and hollow organ injuries • Penetrating abdominal injuries • Traumatic Vaginal bleeding due to trauma • Sexual assault • Injuries to external genitalia 	<p>Same As Previous Level EMT Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Blunt vs. penetrating mechanisms • Evisceration • Solid and hollow organ injuries • Vaginal bleeding due to trauma • Sexual assault • Injuries to external genitalia • Retroperitoneal injuries • Vascular injury 	<p>AEMT Material PLUS: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Blunt vs. penetrating mechanisms • Evisceration • Solid and hollow organ injuries • Penetrating abdominal injuries • Injuries to the external genitalia • Retroperitoneal injuries • Injuries to the diaphragm • Vascular injury
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<p>Orthopedic Trauma</p>	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Open fractures • Closed fractures • Dislocations • Amputations 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Upper and lower extremity orthopedic trauma • Open fractures • Closed fractures • Dislocations • Sprains/strains • Amputations/replantation • Pelvic fractures 	<p>EMT Material PLUS: Complex depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Pelvic fractures • Amputations/replantation <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Compartment syndrome 	<p>AEMT Material PLUS: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Sprains/strains • Pediatric fractures ⊖ Epiphyseal ⊖ Greenstiek ⊖ Torus • Tendon laceration/ transection/ rupture (Achilles and patellar) • Compartment syndrome <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> • Upper and lower extremity orthopedic trauma • Open fractures • Closed fractures • Dislocations • Amputations/replantation • Pelvic fractures • Compartment syndrome
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<p>Soft Tissue Trauma</p>	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Wounds • Burns <ul style="list-style-type: none"> ○ Electrical ○ Chemical ○ Thermal • Chemicals in the eye and on the skin 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of soft tissue trauma</p> <ul style="list-style-type: none"> • Wounds <ul style="list-style-type: none"> ○ Avulsions ○ Bite wounds ○ Lacerations ○ Puncture wounds ○ Incisions • Burns <ul style="list-style-type: none"> ○ Electrical ○ Chemical ○ Thermal ○ Radiation <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Crush syndrome 	<p>Same As Previous Level EMT Material PLUS: Fundamental depth, simple breadth</p> <ul style="list-style-type: none"> ▪ Crush syndrome 	<p>AEMT Material PLUS: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Wounds <ul style="list-style-type: none"> ○ Avulsions ○ Bite wounds ○ Lacerations ○ Puncture wounds • Burns <ul style="list-style-type: none"> ○ Electrical ○ Chemical ○ Thermal • High-pressure injection • Crush syndrome
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<p>Head, facial, neck, and spine trauma</p>	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Life threats • Spine trauma 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Dental trauma • Facial fractures • Scalp lacerations/avulsions • Skull fractures • Penetrating neck trauma • Laryngeotracheal injuries • Spine trauma <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • Facial fractures • Skull fractures • Foreign bodies in the eyes • Dental trauma 	<p>EMT Material PLUS: Complex depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Facial fractures • Laryngeotracheal injuries 	<p>AEMT Material PLUS: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Le Fort fractures Unstable facial fractures • Orbital fractures • Perforated tympanic membrane <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Scalp lacerations/avulsions • Skull fractures • Penetrating neck trauma • Laryngeotracheal injuries • Spine trauma <ul style="list-style-type: none"> ○ Dislocations/subluxations ○ Fractures ○ Sprains/strains • Mandibular fractures
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<p>Central Nervous System Trauma</p>	<p>NA</p>	<p>Fundamental depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Traumatic brain injury • Spinal cord injury 	<p>EMT Material PLUS: Complex depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Traumatic brain injury 	<p>AEMT Material PLUS: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Cauda equina syndrome • Nerve root injury • Peripheral nerve injury <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Traumatic brain injury • Spinal cord injury • Spinal shock
<p>Special Considerations in Trauma</p>	<p>Simple depth, simple breadth Recognition and management of trauma in</p> <ul style="list-style-type: none"> • Pregnancy Pregnant patient • Pediatric patient • Geriatric patient 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of trauma in the</p> <ul style="list-style-type: none"> • Pregnant patient • Pediatric patient • Elderly Geriatric patient • Cognitively impaired patient 	<p>EMT Material PLUS: Complex depth, foundational breadth Pathophysiology, assessment, and management of trauma in the</p> <ul style="list-style-type: none"> • Pregnant patient • Pediatric patient • Elderly Geriatric patient • Cognitively impaired patient 	<p>AEMT Material PLUS: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of trauma in the</p> <ul style="list-style-type: none"> • Pregnant patient • Pediatric patient • Elderly Geriatric patient • Cognitively impaired patient

Environmental Emergencies	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Submersion incidents • Temperature-related illness 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Submersion incidents • Temperature-related illness • Bites and envenomations • Dysbarism • Electrical injury • Radiation exposure 	Same As Previous Level	<p>AEMT Material PLUS: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Submersion incidents • Temperature-related illness • Bites and envenomations • Dysbarism • Electrical injury • High altitude illness
Multi-System Trauma	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Multi-system trauma 	<p>EMR Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Multi-system trauma • Blast injuries 	<p>EMT Material PLUS: Complex depth, foundational breadth Pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> • Multi-system trauma 	<p>AEMT Material PLUS: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> • Multi-system trauma • Blast injuries

	EMR	EMT	AEMT	Paramedic
Special Patient Populations	<p>Recognizes and manages life threats based on simple assessment findings for a patient with special needs while awaiting additional emergency response.</p>	<p>Applies a fundamental knowledge of growth, development, and aging and assessment findings to provide basic emergency care and transportation for a patient with special needs.</p>	<p>Applies a fundamental knowledge of growth, development, and aging and assessment findings to provide basic and selected advanced emergency care and transportation for a patient with special needs.</p>	<p>Integrates assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for patients with special needs.</p>

<p>Obstetrics</p>	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> • Normal delivery • Vaginal bleeding in the pregnant patient 	<p>EMR Material PLUS: Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Anatomy and physiology of normal pregnancy • Pathophysiology of complications of pregnancy • Assessment of the pregnant patient • Management of <ul style="list-style-type: none"> ○ Normal delivery ○ Abnormal delivery <ul style="list-style-type: none"> ▪ Nuchal cord ▪ Prolapsed cord ▪ Breech delivery ○ Third trimester bleeding <ul style="list-style-type: none"> ▪ Placenta previa ▪ Abruptio ○ Spontaneous abortion/miscarriage ○ Ectopic pregnancy ○ Preeclampsia/Eclampsia 	<p>Same As Previous Level</p>	<p>AEMT Material PLUS: Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Anatomy and physiology of pregnancy • Pathophysiology of complications of pregnancy • Assessment of the pregnant patient <p>Psychosocial impact, presentations, prognosis, and management of</p> <ul style="list-style-type: none"> • Normal delivery • Abnormal delivery <ul style="list-style-type: none"> ○ Nuchal cord ○ Prolapsed cord ○ Breech • Spontaneous abortion/miscarriage • Ectopic pregnancy • Eclampsia • Antepartum hemorrhage • Pregnancy induced hypertension • Third trimester bleeding <ul style="list-style-type: none"> ○ Placenta previa ○ Abruptio placenta • High risk pregnancy • Complications of labor <ul style="list-style-type: none"> ○ Fetal distress ○ Premature labor ○ Premature rupture of membranes ○ Rupture of uterus • Complication of delivery • Post partum complications <p>Foundational depth, foundational breadth</p> <ul style="list-style-type: none"> • Hyperemesis gravidarum • Post partum depression
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Neonatal care	<p>Simple depth, simple breadth</p> <p>Assessment and management of the</p> <ul style="list-style-type: none">• Newborn	<p>EMR Material PLUS:</p> <p>Assessment and management</p> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none">• Newborn• Neonatal resuscitation	Same As Previous Level	<p>AEMT Material PLUS:</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none">• Anatomy and physiology of neonatal circulation• Assessment of the newborn <p>Presentation and management</p> <ul style="list-style-type: none">• Newborn• Neonatal resuscitation
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<p>Pediatrics</p>	<p>Simple depth, simple breadth Age-related assessment findings, and age-related assessment and treatment modifications-for pediatric-specific major diseases and/or emergencies</p> <ul style="list-style-type: none"> • Upper airway obstruction • Lower airway reactive disease • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome 	<p>EMR Material PLUS:</p> <p>Fundamental depth, foundational breadth</p> <p>Age-related assessment findings, age-related, and developmental stage related assessment and treatment modifications for pediatric specific major diseases and/or emergencies</p> <ul style="list-style-type: none"> • Upper airway obstruction • Lower airway reactive disease • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome • Gastrointestinal disease 	<p>Same As Previous Level</p>	<p>AEMT Material PLUS:</p> <p>Age-related assessment findings, age-related anatomic and physiologic variations, age-related and developmental stage related assessment and treatment modifications of the pediatric-specific major or common diseases and/or emergencies</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Foreign body (upper and lower) airway obstruction • Bacterial tracheitis • Asthma • Bronchiolitis <ul style="list-style-type: none"> ◦ Respiratory Syncytial Virus (RSV) • Pneumonia • Croup • Epiglottitis • FBLAO • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome (SIDS) • Hyperglycemia • Hypoglycemia <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Pertussis • Cystic fibrosis • Bronchopulmonary dysplasia • Congenital heart diseases • Hydrocephalus and ventricular shunts
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<p>Geriatrics</p>	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> • impact of age-related changes on assessment and care 	<p>EMR Material PLUS:</p> <p>Fundamental depth, foundational breadth</p> <p>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</p> <ul style="list-style-type: none"> • Cardiovascular diseases • Respiratory diseases • Neurological diseases • Endocrine diseases • Alzheimer’s • Dementia 	<p>EMT material PLUS:</p> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> • Fluid resuscitation in the elderly 	<p>AEMT material PLUS:</p> <p>Normal and abnormal changes associated with aging, pharmacokinetic changes, psychosocial and economic aspects of aging, polypharmacy, and age-related assessment and treatment modifications for the major or common geriatric diseases and/or emergencies</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> • Cardiovascular diseases • Respiratory diseases • Neurological diseases • Endocrine diseases • Alzheimer’s • Dementia • Delirium <ul style="list-style-type: none"> ○ Acute confusional state to each specific condition <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> • Herpes zoster • Inflammatory arthritis
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<p>Patients with Special Challenges</p>	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> Recognizing and reporting abuse and neglect 	<p>EMR Material PLUS: fundamental Simple depth, foundational Simple breadth Healthcare implications of</p> <ul style="list-style-type: none"> Abuse Neglect Homelessness Poverty Bariatrics Technology dependent Hospice/ terminally ill Tracheostomy care/dysfunction <small>(simple depth, simple breadth)</small> Homecare Sensory deficit/loss Developmental disability 	<p>Same As Previous Level Fundamental depth, foundational breadth Healthcare implications of</p> <ul style="list-style-type: none"> Abuse Neglect Homelessness Poverty Bariatrics Technology dependent Hospice/ terminally ill Tracheostomy care/dysfunction Homecare Sensory deficit/loss Developmental disability 	<p>AEMT material PLUS: Complex depth, comprehensive breadth Healthcare implications of</p> <ul style="list-style-type: none"> Abuse Neglect Poverty Bariatrics Technology dependent Hospice/ terminally ill Tracheostomy care/ dysfunction <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> Homecare Sensory deficit/loss Developmental disability
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	EMR	EMT	AEMT	Paramedic
<p>EMS Operations</p>	<p>Knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety</p>	<p>Same As Previous Level</p>	<p>Same As Previous Level</p>	<p>Same As Previous Level</p>
<p>Principles of Emergency Response and Transportation Safely Operating a Ground Ambulance</p>	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> Risks and responsibilities of emergency response 	<p>EMR Material PLUS: Fundamental depth, simple breadth</p> <ul style="list-style-type: none"> Risks and responsibilities of emergency response and transport 	<p>Same As Previous Level</p>	<p>Same As Previous Level</p>

Incident Management	<p>Fundamental Simple depth, foundational Simple breadth</p> <ul style="list-style-type: none"> Establish and work within the incident management system 	<p>Same As Previous Level</p> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> Establish and work within the incident management system 	<p>Same As Previous Level</p>	<p>Same As Previous Level</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> Establish and work within the incident management system
Multiple Casualty Incidents	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> Triage principles Resource management 	<p>Same as Previous Level</p> <p>EMR Material PLUS:</p> <p>Simple depth, foundational breadth</p> <ul style="list-style-type: none"> Triage <ul style="list-style-type: none"> Performing Re-Triage Destination Decisions 	<p>Same As Previous Level</p>	<p>Same As Previous Level</p>
Air Medical	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> Safe air medical operations Criteria for utilizing air medical response 	<p>Same As Previous Level</p>	<p>Same As Previous Level</p>	<p>Same As Previous Level</p> <p>AEMT Material PLUS:</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> Medical risks/needs/advantages
Vehicle Extrication	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> Safe vehicle extrication Use of simple hand tools 	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>
Hazardous Materials	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> Risks and responsibilities of operating in a cold zone at a hazardous material incident or other special incident 	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>

<p>Terrorism and Disasters (this section subject to ongoing collective and cooperative review and input from all stakeholders including the Department of Transportation, Department of Homeland Security and the Department of Health and Human Services)</p>	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none">• Risks and responsibilities of operating on the scene of a natural or man made disaster	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>
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Clinical Behavior/Judgment				
	EMR	EMT	AEMT	Paramedic
Assessment	Perform a simple assessment to identify life threats, identify injuries requiring immobilization and conditions requiring treatment within the scope of practice of the EMR: including foreign substance in the eyes and nerve agent poisoning.	Perform a basic history and physical examination to identify acute complaints and monitor changes. Identify the actual and potential complaints of emergency patients.	Perform a basic history and physical examination to identify acute complaints and monitor changes. Identify the actual and potential complaints of emergency patients.	Perform a comprehensive history and physical examination to identify factors affecting the health and health needs of a patient. Formulate a field impression based on an analysis of comprehensive assessment findings, anatomy, physiology, pathophysiology, and epidemiology. Perform health screening. Relate assessment findings to underlying pathological and physiological changes in the patient’s condition. Integrate and synthesize the multiple determinants of health and clinical care.
Therapeutic communication and cultural competency	Communicates to obtain and clearly transmit information with an awareness of cultural differences.	Communicate in a culturally sensitive manner.	Communicate in a culturally sensitive manner.	Effectively communicate in a manner that is culturally sensitive and intended to improve the patient outcome.

Psychomotor Skills	<p>Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND state Scope of Practice at this level.</p> <p>Airway and Breathing</p> <ul style="list-style-type: none"> • Basic Airway Maneuvers <ul style="list-style-type: none"> • Head-tilt, chin-lift • Jaw thrust • Modified chin lift • FBAO relief - manual • Oropharyngeal airway • Sellick’s maneuver • Positive pressure ventilation devices such as BVM • Suction of the upper airway • Supplemental oxygen therapy <ul style="list-style-type: none"> • Nasal cannula • Non-rebreather mask <p>Assessment</p> <ul style="list-style-type: none"> • Manual B/P <p>Pharmacologic interventions</p> <ul style="list-style-type: none"> • Unit-dose autoinjectors (life-saving medications intended for self or peer rescue in hazardous materials situation, nerve agent antidote kit) <p>Medical/Cardiac care</p> <ul style="list-style-type: none"> • Manual CPR • AED • Assisted normal delivery <p>Trauma care</p> <ul style="list-style-type: none"> • Manual stabilization <ul style="list-style-type: none"> • C-spine injuries • Extremity fractures • Bleeding control • Emergency moves • Eye irrigation 	<p>Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND state Scope of Practice at this level.</p> <p>Airway and Breathing</p> <ul style="list-style-type: none"> • Nasopharyngeal airway • Positive pressure ventilation <ul style="list-style-type: none"> • Manually-triggered ventilators • Automatic transport ventilators • Supplemental oxygen therapy <ul style="list-style-type: none"> • Humidifiers • Partial-rebreather mask • Venturi mask <p>Assessment</p> <ul style="list-style-type: none"> • Pulse oximetry • Automatic B/P <p>Pharmacologic interventions</p> <ul style="list-style-type: none"> • Assist patients in taking their own prescribed medications • Administration of OTC medications with medical oversight <ul style="list-style-type: none"> • Oral glucose for hypoglycemia • Aspirin for chest pain <p>Medical/Cardiac care</p> <ul style="list-style-type: none"> • Mechanical CPR • Assisted complicated delivery <p>Trauma care</p> <ul style="list-style-type: none"> • Spinal immobilization <ul style="list-style-type: none"> • Cervical collars • Seated • Longboard • Rapid extrication • Splinting <ul style="list-style-type: none"> • Extremity • Traction • PASG • Mechanical patient restraint • Tourniquet 	<p>Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND state Scope of Practice at this level.</p> <p>Airway and Breathing</p> <ul style="list-style-type: none"> • Airways not intended for insertion into the trachea <ul style="list-style-type: none"> • Esophageal-tracheal • Multi-lumen airway • Tracheal-bronchial suctioning of an already intubated patient <p>Assessment</p> <ul style="list-style-type: none"> • Blood glucose monitor <p>Pharmacologic interventions</p> <ul style="list-style-type: none"> • Establish and maintain peripheral intravenous access • Establish and maintain intraosseous access in pediatric patient • Administer (nonmedicated) intravenous fluid therapy • Sublingual nitroglycerin (chest pain) • Subcutaneous or intramuscular epinephrine (anaphylaxis) • Glucagon (hypoglycemia) • Intravenous 50% dextrose (hypoglycemia) • Inhaled beta agonists (wheezing) • Intravenous narcotic antagonist (narcotic overdose) • Nitrous oxide (pain) 	<p>Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND state Scope of Practice at this level.</p> <p>Airway and Breathing</p> <ul style="list-style-type: none"> • Oral and nasal endotracheal intubation • FBAO – direct laryngoscopy • Percutaneous cricothyrotomy • Pleural decompression • BiPAP, CPAP, PEEP • Chest tube monitoring • ET/CO2 monitoring • NG/OG tube <p>Assessment</p> <ul style="list-style-type: none"> • ECG interpretation • 12-lead interpretation • Blood chemistry analysis <p>Pharmacologic interventions</p> <ul style="list-style-type: none"> • Intraosseous insertion • Enteral and parenteral administration of approved prescription medications • Access indwelling catheters and implanted central IV ports • Medications by IV infusion • Maintain infusion of blood or blood products • Blood sampling • Thrombolytic initiation • Administer physician approved medications <p>Medical/Cardiac care</p> <ul style="list-style-type: none"> • Cardioversion • Manual defibrillation • Transcutaneous pacing • Carotid massage <p>Trauma care</p> <ul style="list-style-type: none"> • Morgan lens
		Anticipate and prospectively intervene to improve patient outcome.		

<p>Professionalism</p>	<p>Demonstrate professional behavior including: but not limited to, integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, time-management, teamwork/diplomacy, respect, patient advocacy, and careful delivery of service.</p>	<p>Demonstrate professional behavior including: but not limited to, integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, time-management, teamwork/diplomacy, respect, patient advocacy, and careful delivery of service.</p>	<p>Demonstrate professional behavior including: but not limited to, integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, time-management, teamwork/diplomacy, respect, patient advocacy, and careful delivery of service.</p>	<p>Be a role model of exemplary professional behavior including: but not limited to, integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, time-management, teamwork/diplomacy, respect, patient advocacy, and careful delivery of service.</p>
<p>Decision Making</p>	<p>Initiates simple interventions based on assessment findings.</p>	<p>Initiates basic interventions based on assessment findings intended to mitigate the emergency and provide limited symptom relief while providing access to definitive care</p>	<p>Initiates basic and selected advanced interventions based on assessment findings intended to mitigate the emergency and provide limited symptom relief while providing access to definitive care</p>	<p>Performs basic and advanced interventions as part of a treatment plan intended to mitigate the emergency, provide symptom relief, and improve the overall health of the patient. Evaluates the effectiveness of interventions and modifies treatment plan accordingly.</p>
<p>Record Keeping</p>	<p>Record simple assessment findings and interventions</p>	<p>Report and document assessment data and interventions.</p>	<p>Report and document assessment findings and interventions.</p>	<p>Report and document assessment findings and interventions. Collect and report data to be used for epidemiological and research purposes.</p>

<p>Patient Complaints</p>	<p>Perform a patient assessment and provide prehospital emergency care for patient complaints: altered mental status/decreased level of consciousness, apnea, back pain, bleeding, cyanosis, hypotension, multiple trauma, pain, paralysis, poisoning, shock, abdominal pain, GI bleeding, cardiac arrest, chest pain, dyspnea, stridor/drooling, behavioral emergency, abuse/neglect, and eye pain.</p>	<p>Perform a patient assessment and provide prehospital emergency care and transportation for patient complaints: altered mental status/decreased level of consciousness, syncope, apnea, back pain, bleeding, cyanosis, fever, hypotension, multiple trauma, pain, paralysis, poisoning, shock, abdominal pain, GI bleeding, cardiac rhythm disturbances, chest pain, dyspnea, hemoptysis, wheezing, headache, stridor/drooling, anxiety, ataxia, behavioral emergency, pediatric crying/fussiness, dehydration, dizziness/vertigo, edema, fatigue, hypertension, joint pain/swelling, abuse/neglect, rash, weakness, constipation, diarrhea, hematuria, nausea/vomiting, rectal pain, urinary retention, visual disturbances, dysphasia, eye pain, and sore throat.</p>	<p>Perform a patient assessment and provide prehospital emergency care and transportation for patient complaints: altered mental status/decreased level of consciousness, syncope, apnea, back pain, bleeding, cyanosis, fever, hypotension, multiple trauma, pain, paralysis, poisoning, shock, abdominal pain, GI bleeding, cardiac rhythm disturbances, chest pain, dyspnea, hemoptysis, wheezing, headache, stridor/drooling, anxiety, ataxia, behavioral emergency, pediatric crying/fussiness, dehydration, dizziness/vertigo, edema, fatigue, hypertension, joint pain/swelling, abuse/neglect, rash, weakness, constipation, diarrhea, hematuria, nausea/vomiting, rectal pain, urinary retention, visual disturbances, dysphasia, eye pain, and sore throat.</p>	<p>Perform a patient assessment, develop a treatment and disposition plan for patients with the following complains: altered mental status/decreased level of consciousness, syncope, apnea, back pain, bleeding, cyanosis, fever, hypotension, multiple trauma, pain, paralysis, poisoning, shock, abdominal pain, GI bleeding, cardiac rhythm disturbances, chest pain, dyspnea, hemoptysis, wheezing, headache, stridor/drooling, anxiety, ataxia, behavioral emergency, pediatric crying/fussiness, dehydration, dizziness/vertigo, edema, fatigue, hypertension, joint pain/swelling, abuse/neglect, rash, weakness, constipation, diarrhea, hematuria, nausea/vomiting, rectal pain, urinary retention, visual disturbances, dysphasia, eye pain, and sore throat, feeding problems, jaundice, malaise, blood and body fluid exposure, pruritus, tremor, ascites, edie, dysmenorrhea, dysuria, incontinence, cough/hiccough, congestion, ear pain, hearing disturbance, red/pink eye, tinnitus, dental pain.</p>
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<p>Scene Leadership</p>	<p>Manage the scene until a more experienced higher certified EMS team member arrives.</p>	<p>Serve as an EMS team member with more experienced personnel in the lead role on an emergency call. Following a pre- or post-graduation internship and additional experience, serve as a team leader on emergency calls.</p> <p>Serve as an EMS team leader of a basic life support call and a team member with a more experienced provider in the lead role on an advanced emergency call.</p>	<p>Serve as an EMS team leader of a basic life support emergency call. and a team member with a more experienced provider in the lead role on an advanced emergency call.</p>	<p>Function as the team leader of a routine, single patient advanced life support emergency call.</p>
<p>Scene Safety</p>	<p>Ensure the safety of yourself and others during an emergency.</p>	<p>Ensure the safety of yourself and others during an emergency.</p>	<p>Ensure the safety of yourself and others during an emergency.</p>	<p>Ensure the safety of yourself and others during an emergency.</p>

Educational Infrastructure

	EMR	EMT	AEMT	Paramedic
Educational Facilities	<ul style="list-style-type: none"> • Facility sponsored or approved by sponsoring agency • ADA compliant facility • Sufficient space for class size • Controlled environment 	<ul style="list-style-type: none"> • Facility sponsored or approved by sponsoring agency • ADA compliant facility • Sufficient space for class size • Controlled environment 	<ul style="list-style-type: none"> • Facility sponsored or approved by sponsoring agency • ADA compliant facility • Sufficient space for class size • Controlled environment 	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Student Space	<ul style="list-style-type: none"> • Provide space sufficient for students to attend classroom sessions, take notes and participate in classroom activities • Provide space for students to participate in kinematic learning and practice activities 	<ul style="list-style-type: none"> • Provide space sufficient for students to attend classroom sessions, take notes and participate in classroom activities • Provide space for students to participate in kinematic learning and practice activities 	<ul style="list-style-type: none"> • Provide space sufficient for students to attend classroom sessions, take notes and participate in classroom activities • Provide space for students to participate in kinematic learning and practice activities 	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Instructional Resources	<ul style="list-style-type: none"> • Provide basic instructional support material • Provide audio, visual, and kinematic aids to support and supplement didactic instruction 	<ul style="list-style-type: none"> • Provide basic instructional support material • Provide audio, visual, and kinematic aids to support and supplement didactic instruction 	<ul style="list-style-type: none"> • Provide basic instructional support material • Provide audio, visual, and kinematic aids to support and supplement didactic instruction 	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Instructor Preparation Resources	<ul style="list-style-type: none"> • Provide space for instructor preparation • Provide support equipment for instructor preparation 	<ul style="list-style-type: none"> • Provide space for instructor preparation • Provide support equipment for instructor preparation 	<ul style="list-style-type: none"> • Provide space for instructor preparation • Provide support equipment for instructor preparation 	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Storage Space	<ul style="list-style-type: none"> • Provide adequate and secure storage space for instructional materials 	<ul style="list-style-type: none"> • Provide adequate and secure storage space for instructional materials 	<ul style="list-style-type: none"> • Provide adequate and secure storage space for instructional materials 	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Sponsorship	<ul style="list-style-type: none"> • Sponsoring organizations shall be one of the following: <ul style="list-style-type: none"> • Accredited educational 	<ul style="list-style-type: none"> • Sponsoring organizations shall be one of the following: <ul style="list-style-type: none"> • Accredited educational 	<ul style="list-style-type: none"> • Sponsoring organizations shall be one of the following: <ul style="list-style-type: none"> • Accredited educational 	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP)

	<p>institution, or</p> <ul style="list-style-type: none"> Public safety organization, or Accredited hospital, clinic, or medical center, or Other state approved institution or organization 	<p>institution, or</p> <ul style="list-style-type: none"> Public safety organization, or Accredited hospital, clinic, or medical center, or Other state approved institution or organization 	<p>institution, or</p> <ul style="list-style-type: none"> Public safety organization, or Accredited hospital, clinic, or medical center, or Other state approved institution or organization 	<p>standards and guidelines (www.coaemsp.org)</p>
Programmatic Approval	<ul style="list-style-type: none"> Sponsoring organization shall have programmatic approval by authority having jurisdiction for program approval (State) 	<ul style="list-style-type: none"> Sponsoring organization shall have programmatic approval by authority having jurisdiction for program approval (State) 	<ul style="list-style-type: none"> Sponsoring organization shall have programmatic approval by authority having jurisdiction for program approval (State) 	<ul style="list-style-type: none"> Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Faculty	<ul style="list-style-type: none"> The course primary instructor should be educated at a level higher than he or she is teaching; however, as a minimum, he or she must be educated at the level he or she is teaching Have completed an approved instructor training program or equivalent 	<ul style="list-style-type: none"> The course primary instructor should be educated at a level higher than he or she is teaching; however, as a minimum, he or she must be educated at the level he or she is teaching Have completed an approved instructor training program or equivalent 	<ul style="list-style-type: none"> The course primary instructor should be educated at a level higher than he or she is teaching; however, as a minimum, he or she must be educated at the level he or she is teaching Have completed an approved instructor training program or equivalent 	<ul style="list-style-type: none"> Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Medical Director Oversight	<ul style="list-style-type: none"> Provide medical oversight for all medical aspects of instruction 	<ul style="list-style-type: none"> Provide medical oversight for all medical aspects of instruction 	<ul style="list-style-type: none"> Provide medical oversight for all medical aspects of instruction 	<ul style="list-style-type: none"> Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Hospital/Clinical Experience	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Students should observe emergency department operations for a minimum of eight hours period of time sufficient to gain an appreciation for the continuum of care If an emergency department experience is not available, another clinical facility experience can be used. 	<ul style="list-style-type: none"> The student must demonstrate the ability to safely administer medications (the student should safely, and while performing all steps of each procedure, properly administer medications at least 15 times to live patient). The student must demonstrate the ability to safely gain vascular access (the student 	<ul style="list-style-type: none"> Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)

		<p>Students should must successfully perform ten patient assessments under the supervision of a qualified preceptor. These can be performed in an emergency department, ambulance, clinic, nursing home, doctor’s office, etc., or on standardized patients if clinical settings are not available.</p>	<p>should safely, and while performing all steps of each procedure, successfully access the venous circulation at least 25 times on live patients of various age groups).</p> <ul style="list-style-type: none"> ▪ The student should demonstrate the ability to effectively ventilate unintubated patients of all age groups (the student should effectively, and while performing all steps of each procedure, ventilate at least 20 live patients of various age groups). • Student must consistently demonstrate the ability to safely and effectively gain venous vascular access in patients of all age groups. • Student must should demonstrate the ability to safely and effectively give inhaled, sublingual, subcutaneous, intramuscular and intravenous medications within the scope of practice to patients of different age groups. • Students must should demonstrate the ability to effectively ventilate unintubated patients of all age groups. • The student must demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with chest pain. • The student must demonstrate 	
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			<p>the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with respiratory distress.</p> <ul style="list-style-type: none"> • The student must demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with altered mental status. • The student must demonstrate the ability to perform an adequate assessment on pediatric, adult and geriatric patients. 	
Field Experience	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Provide students with patient contact experience • Student should observe five emergency calls. • The student must participate in and document patient contacts in a field experience approved by the medical director and program director. 	<ul style="list-style-type: none"> • Provide students with patient contact experience. • The student must demonstrate the ability to serve as a team leader in a variety of prehospital emergency situations. • The student must participate in and document team leadership in a field experience approved by the medical director and program director. 	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Course Length	<ul style="list-style-type: none"> • Course length is based on competency, not hours • Course material can be delivered in several ways: <ul style="list-style-type: none"> • Independent student preparation • Pre- or co-requisites of NIMS, CPR-HCP. • Course length is estimated to take approximately 48-60 clock hours including the four 	<ul style="list-style-type: none"> • Course length is based on competency, not hours • Course material can be delivered in several ways: <ul style="list-style-type: none"> • Independent student preparation • Pre- or co-requisites of NIMS, CPR-HCP. • Course length is estimated to take approximately 166-198 150-190 clock hours including 	<ul style="list-style-type: none"> • Course length is based on competency, not hours • Course material can be delivered in several ways: <ul style="list-style-type: none"> • Independent student preparation • Pre- or co-requisites of NIMS, CPR-HCP. • Course length is estimated to take approximately 140-166 150-250 clock hours after 	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)

	integrated phases of education (didactic, laboratory, clinical and field) to cover material	the four integrated phases of education (didactic, laboratory, clinical and field) to cover material	EMT school including the four integrated phases of education (didactic, laboratory, clinical and field) to cover material	
Course Design	<ul style="list-style-type: none"> • Provide the following components of instruction: <ul style="list-style-type: none"> • Didactic instruction • Skills laboratories 	<ul style="list-style-type: none"> • Provide the following components of instruction: <ul style="list-style-type: none"> • Didactic instruction • Skills laboratories • Hospital/Clinical experience • Field experience 	<ul style="list-style-type: none"> • Provide the following components of instruction: <ul style="list-style-type: none"> • Didactic instruction • Skills laboratories • Hospital/Clinical experience • Field experience 	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Student Assessment	<ul style="list-style-type: none"> • Perform knowledge, skill, and professional behavior evaluation based on educational standards and program objectives • Provide several methods of assessing achievement • Provide assessment that measures, as a minimum, entry level competency in all domains 	SAPL	SAPL	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)
Program Evaluation	<ul style="list-style-type: none"> • Provide evaluation of program instructional effectiveness • Provide evaluation of organizational and administrative effectiveness of program 	SAPL	SAPL	<ul style="list-style-type: none"> • Reference Committee on Accreditation for EMS Professions (CoAEMSP) standards and guidelines (www.coaemsp.org)

Instructional Guidelines

The *Standards* are broad to allow for incorporation of evidence-based changes within the profession as they influence practice and to permit diverse presentation methods. The Instructional Guidelines (IG) are not part of the *National EMS Education Standards*, but ~~rather~~ are a companion document. The IG are intended to provide guidance to instructors, regulators, and publishers regarding the content that may be included within each area of the *Standards*, and to provide interim support as EMS instructors and programs transition from the NSC to the *National EMS Education Standards*. The IG are not intended to be all-inclusive; it is understood that they will become outdated as research, technology, and national organization guidelines dictate changes in patient assessment and care. The IG do not comprise a curriculum and should not be adopted by states.

Glossary for Education Standards

Academic institution— A body or establishment instituted for an educational purpose that provides college credit or awards degrees.

Accreditation— The granting of approval by an official review board after specific requirements have been met. The review board is nongovernmental, and the review is collegial and based on self-assessment, peer assessment, and judgment. The purpose of accreditation is public accountability.

Advanced-level care— Care that has greater potential benefit to the patient, but also greater potential risk to the patient if improperly or inappropriately performed. It is more difficult to attain and maintain competency in, and requires significant background knowledge in basic and applied sciences. This level of care includes invasive and pharmacological interventions.

Affective domain: Describes learning in terms of feelings/emotions, attitudes, and values. (NAMESE: p. 306)

Certification— The issuing of a certificate by a private agency based upon standards adopted by that agency that are based upon competency.

Cognitive domain: Describes learning that takes place through the process of thinking—it deals with facts and knowledge. (NAEMSE: p. 306)

Competency— Expected behavior or knowledge to be achieved within a defined area of practice.

Credentialing agency— An organization that certifies an institution's or individual's authority or claim of competence in a course of study or completion of objectives.

Curriculum— A particular course of study, often in a specialized field. For EMS education, it has traditionally included detailed lesson plans.

Didactic: The instructional theory, the lesson content. (NAEMSE: p. 307)

Domains: A category of learning. (See Affective domain, Cognitive domain, and Psychomotor domain.) (NAEMSE: p. 307)

Entry-level competence— The level of competence expected of an individual who is about to begin a career. The minimum competence necessary to practice safely and effectively.

Instructional Guidelines— A resource document that provides initial guidance for content within the *National EMS Education Standards*—it is not a curriculum and should not be adopted by states.

Licensure— The act of granting an entity permission to do something that the entity could not legally do without such permission. Licensing is generally viewed by legislative bodies as a regulatory effort to protect the public from potential harm. In the health care delivery system, an individual who is licensed tends to enjoy a certain amount of autonomy in delivering health care services. Conversely, the licensed individual must satisfy ongoing requirements that ensure certain minimum levels of expertise. A license is generally considered a privilege, not a right.

Medical oversight: Physician review and approval of clinical content and matters relevant to medical authority.

National EMS Core Content— The document that defines the domain of out-of-hospital care.

National EMS Education Program Accreditation— The accreditation process for institutions that sponsor EMS educational programs.

National EMS Education Standards— The document that defines the terminal objectives for each licensure level.

National EMS Scope of Practice Model— The document that defines the scope of practice of the various levels of EMS licensure.

Patient simulation: an alternative to a human patient to help students improve patient assessment and management skills; a high fidelity patient simulator provides realistic simulation that responds physiologically to student therapies. These simulators have realistic features such as chests that rise and fall with respirations, pupils that react to light, pulses that can be palpated, etc

Post grad internship and/or experience: experience gained after the student has completed and graduated from school.

Practice analysis— A study conducted to determine the frequency and criticality of the tasks performed in practice.

Preceptor: a clinical teacher or instructor who is responsible for evaluating and ensuring student progress during hospital and field experiences. This individual typically has training to be able to function effectively in the role.

Primary instructor: A person who possesses the appropriate academic and/or allied health credentials, and understanding of the principles and theories of education, and required teaching experience necessary to provide quality instruction to students. (NAEMSE: p 309)

Program director: The individual responsible for an educational program or programs.

Psychomotor domain: Describes learning that takes place through the attainment of skills and bodily, or kinesthetic, movements. (NAEMSE: Foundations of Education, An EMS Approach, 2006, Mosby Jems, p309)

Registration agency— An agency that is traditionally responsible for providing a product used to evaluate a chosen area. States may voluntarily adopt this product as part of their licensing process. The registration agency is also responsible for gathering and housing data to support the validity and reliability of their product.

Regulation— A rule or a statute that prescribes the management, governance, or operation parameters for a given group; tends to be a function of administrative agencies to which a legislative body has delegated authority to promulgate rules and regulations to “regulate a given industry or profession.” Most regulations are intended to protect the public health, safety, and welfare.

Scope of practice— The description of what a licensed individual legally can and cannot perform.

Standardized patient: an individual who has been thoroughly trained to accurately simulate a real patient with a medical condition; a standardized patient plays the role of a patient for students learning patient assessment, history taking skills, communication skills, and other skills.

Standard of care— The domain of acceptable practice, as defined by scope of practice, current evidence, industry consensus, and experts. Standard of care can vary, depending on the independent variables of each situation.

Team leader: someone who leads the call and provides guidance and direction for setting priorities, scene and patient assessment and management. The team leader may not actually perform all the interventions, but may assign others to do so.