

The Phoenix Document

An Evolution from National Standard Curriculum to the Virginia EMS Education Standards

Training Levels Included:

- Advanced Emergency Medical Technician (AEMT)



Introduction:

This document identifies the differences in essential knowledge content between the National Standard Curricula/Virginia Standard Curricula and the 2010 Virginia EMS Education Standards (VEMSES). **EMS Instructors and Coordinators should use this document as a tool in conjunction with the specific *Instructor Guidelines (IG)* for the certification level(s) that are being instructed and the *Virginia Scope of Practice – Procedures & Formulary* to ensure that the required material/skills are appropriately covered by the instructor/coordinator.**

Instructor/Coordinators may also use this document to identify topics for continuing education programs to assure current certified Virginia Providers meet the same knowledge competencies of Virginia Providers certified after the implementation of the VEMSES.

Advanced Emergency Medical Technician (AEMT)

See the Instructor Guidelines for the Advanced EMT (151 pages) at:
<http://www.ems.gov/pdf/811077d.pdf>

Knowledge and Skill Comparison

The order of content is not meant to imply the order of delivery.

a. Advanced Emergency Medical Technician: New Course Considerations

When planning and conducting a new AEMT course, the Program Director or Course Coordinator must incorporate all considerations at the EMR and EMT levels plus:

- Clinical skills
- Field experience as a team leader
- Review and verify integration of the clinical behavior/judgment section of Education Standards, particularly related to lab and clinical and field activities.
- Include affective evaluation and professional behavior in student assessment

b. Advanced Emergency Medical Technician: Skills

c. Advanced Emergency Medical Technician: Content

Preparatory – EMS Systems

- EMS Systems – more detailed discussion on patient safety issues, strategies to decrease medical errors
- Research – extremely limited information on evidence based decision making
- Workforce Safety and Wellness – emphasizes the difference between body substance isolation and personal protective equipment; brief discussion on bariatric issues, neonatal isolettes and medical restraint
- Documentation - the Health Insurance Portability and Accountability Act (HIPAA) did not exist when either of the EMT-Intermediate curricula was authored
- Therapeutic Communications – more detailed information about improving communication with the patient
- Medical/Legal/Ethics – the Health Insurance Portability and Accountability Act (HIPAA) did not exist when the EMT-Intermediate curriculum was authored; should include a state-specific discussion on privileged communication; includes a brief discussion on living wills, surrogate decision makers, and civil and criminal court cases; ethics

Anatomy and Physiology

- More detailed discussion than in the previous version

Medical Terminology

- Although not detailed, this content is new to this level

Pathophysiology

- This content is new to this level but only focuses on respiratory and perfusion dysfunction along with shock

Life-Span Development

- New information at this level

Public Health

- New information at this level; related to EMS Agenda for the Future issues

Pharmacology

- Principles of Pharmacology – new information at this level

- Medication Administration – added the five rights of medication administration; more detailed information
- Emergency Medications – specific list of medications

Airway Management, Respiration, and Oxygenation

- Anatomy and Physiology – much more detailed than in the previous EMT-Intermediate curriculum
- Artificial Ventilation - much more detailed than in the previous EMT-Intermediate curriculum
- Respiration - much more detailed minimal new content added to this level in the previous EMT-Intermediate curriculum

Patient Assessment

- Scene Size-Up – no new information here but a re-emphasis on the need for scene safety for everyone present
- Primary Assessment - new terminology that more closely mimics other health care professionals
- History Taking - new terminology that more closely mimics other health care professionals
- Secondary Assessment - new terminology that more closely mimics other health care professionals; more thorough than in the previous curriculum
- Monitoring Devices –blood glucose monitoring, non-invasive blood gas and chemistry monitoring (e.g. capnography, pulse oximetry, etc.)

Medicine

- Medical Overview – re-use of the new assessment terminology
- Abdominal and Gastrointestinal Disorders – minimal new content added to this level
- Immunology – all new information
- Infectious Diseases – this section should include updated infectious disease information, for example methicillin-resistant Staphylococcus aureus, hepatitis, and Acquired Immune Deficiency Syndrome update; should include a discussion on cleaning and sterilizing equipment and decontaminating the ambulance
- Endocrine – increased emphasis on pathophysiology and acknowledgement of the increasing prevalence and incidence of diabetes in the community
- Psychiatric – includes new material on excited delirium
- Cardiovascular – increased emphasis on anatomy, physiology and pathophysiology; increased emphasis on specific cardiovascular emergencies
- Toxicology – all new information

- Respiratory – more in-depth evaluation of a patient with respiratory problems.
- Hematology – brief discussion in sickle cell disease
- Genitourinary/Renal – more detailed discussion of this organ system
- Gynecology – includes brief discussion of sexually transmitted diseases and pelvic inflammatory disease
- Non-Traumatic Musculoskeletal Disorders – new information at this level

Shock and Resuscitation

- This shock content was moved from trauma to emphasize the fact that it can happen in a context other than trauma; the cardiac arrest/ cardiovascular emergencies information was moved from an optional module at the Intermediate-99 level; brief discussion on devices to assist circulation, although subject to local protocol; shock should be taught in a more comprehensive context rather than simply as a consequence of bleeding

Trauma

- Overview – all material at this level represents the same depth and breadth as at the EMT level
- Bleeding – more detailed discussion
- Chest Trauma – more detailed discussion
- Abdominal Trauma – more detailed discussion
- Orthopedic Trauma - more detailed discussion
- Head, Facial, Neck, and Spine Trauma – more detail about neck eye, oral and brain injuries; emphasizes the harm of over ventilation in most situations
- Nervous System Trauma - more detail on brain anatomy; emphasizes the harm of hyperventilation; references the Brain Trauma Foundation; increased emphasis on neurological assessment
- Special Considerations in Trauma – all section new or increased emphasis
- Environmental – all material at this level represents the same depth and breadth as at the EMT level
- Multi-system Trauma – new material at this level; includes discussion of kinematics and blast injury

Special Patient Populations

- Pregnant Patient – more detailed discussion on complications of pregnancy; uses the terms preeclampsia, eclampsia and premature rupture of membranes which do not require a lengthy discussion
- Pediatrics – this section is much more detailed than in the previous version
- Geriatrics – all new section for this level

- Patients with Special Challenges – elder abuse, homelessness, poverty, bariatric, more technology dependant, hospice, sensory deficit, homecare, and developmental disabilities added

EMS Operations

- Principles of Safely Operating a Ground Ambulance - all material at this level represent the same depth and breadth as at the EMT level
- Incident Management – all material at this level represents the same depth and breadth as at the EMT level
- Multiple Casualty Incidents – all material at this level represents the same depth and breadth as at the EMT level
- Air Medical – all material at this level represents the same depth and breadth as at the EMT level
- Vehicle Extrication – all material at this level represents the same depth and breadth as at the EMT level
- Hazardous Materials Awareness – all material at this level represents the same depth and breadth as at the EMT level
- Mass Casualty Incidents Due to Terrorism or Disaster – all material at this level represents the same depth and breadth as at the EMT level

Appendix A: Common Drug List

The drugs listed in this appendix MUST be covered as an educational minimum as indicated by the level of certification being instructed.

DRUG	EMR	EMT	AEMT	I	P
OXYGEN	•	•	•	•	•
ORAL GLUCOSE		•	•	•	•
EPI PEN		•	•	•	•
NITRO (Patient Assist)		•	•	•	•
INHALED BRONCHODILATORS		•	•	•	•
NITROUS OXIDE			•	•	•
ALBUTEROL			•	•	•
ATROPINE				•	•
DEXTROSE 50%			•	•	•
DIPHENHYDRAMINE				•	•
EPINEPHRINE 1:10,000				•	•
FUROSEMIDE				•	•
GLUCAGON			•	•	•
MAGNESIUM SULFATE				•	•
NALOXONE			•	•	•
NITROGLYCERIN TABS/SPRAY/PASTE			•	•	•
ADENOSINE				•	•
DIAZEPAM				•	•
EPINEPHRINE 1:1,000			•	•	•
MORPHINE				•	•
AMIODARONE				•	•
ASPIRIN		•	•	•	•
IPRATROPIUM					•
MIDAZOLAM					•
LIDOCAINE				•	•
DOPAMINE				•	•
THIAMINE				•	•
ACTIVATED CHARCOAL					•
AMYL NITRITE					•
FENTANYL					•
OXYTOCIN					•
PROMETHAZINE					•
LORAZEPAM					•
DILTIAZEM					•

Appendix B: Virginia Scope of Practice – Procedures & Formulary

The Virginia Scope of Practice demonstrates the “practice maximum” for each certification level established by the Virginia Office of EMS. Please utilize this document when instructing EMS programs.

- To link to the Procedures click on the following web link:
http://www.vdh.virginia.gov/OEMS/Files_page/Training/ScopeOfPractice-Procedures.pdf
- To link to the Formulary click on the following web link:
http://www.vdh.virginia.gov/OEMS/Files_page/Training/ScopeOfPractice-Formulary.pdf

Appendix C: PES Practice Analysis

- To link to the PES Practice Analysis click on the following web link:
http://www.vdh.virginia.gov/OEMS/Files_page/Training/PESPracticeAnalysis.pdf