

**Virginia Department of Health**  
**Office of Emergency Medical Services**



**Quarterly Report to the**  
**State EMS Advisory Board**

**August 13, 2010**

# **Executive Management, Administration & Finance**

**Office of Emergency Medical Services  
Report to The  
State EMS Advisory Board  
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**MISSION STATEMENT:**

To reduce death and disability resulting from sudden or serious injury and illness in the Commonwealth through planning and development of a comprehensive, coordinated statewide emergency medical services (EMS) system; and provision of other technical assistance and support to enable the EMS community to provide the highest quality emergency medical care possible to those in need.

**I. Executive Management, Administration & Finance**

**a) EMS Providers as Vaccinators**

During the 2010 General Assembly, House Bill 173 (Pogge) and Senate Bill 328 (Stuart) were combined resulting in legislation authorizing emergency medical technicians (EMTs) certified at the intermediate and paramedic levels that are operating under the direction of their Operational Medical Director (OMD) to administer vaccines to any person in accordance with established protocols of the Board of Health. EMS providers that administer vaccines will be required to utilize the Virginia Immunization Information System (VIIS) to document and record their activity. This legislation, as a result of an emergency clause, became effective March 23, 2010 with the Governor's signature.

Previously, EMS providers had not been recognized by the *Code of Virginia* as having the ability to administer vaccines under routine circumstances. EMS providers could be authorized to administer vaccines in the event of a declared emergency by the Governor and under the direction and authorization of the Commissioner of Health.

The Office of EMS (OEMS) was assigned the responsibility in developing a policy following existing guidelines and protocols established by the Board of Nursing and the Board of Health. Attached are two documents:

- Policy for Vaccine Administration by Emergency Medical Services Providers in Virginia
- Process Plan for Distribution of Policy for Vaccine Administration by Emergency Medical Services Providers in Virginia

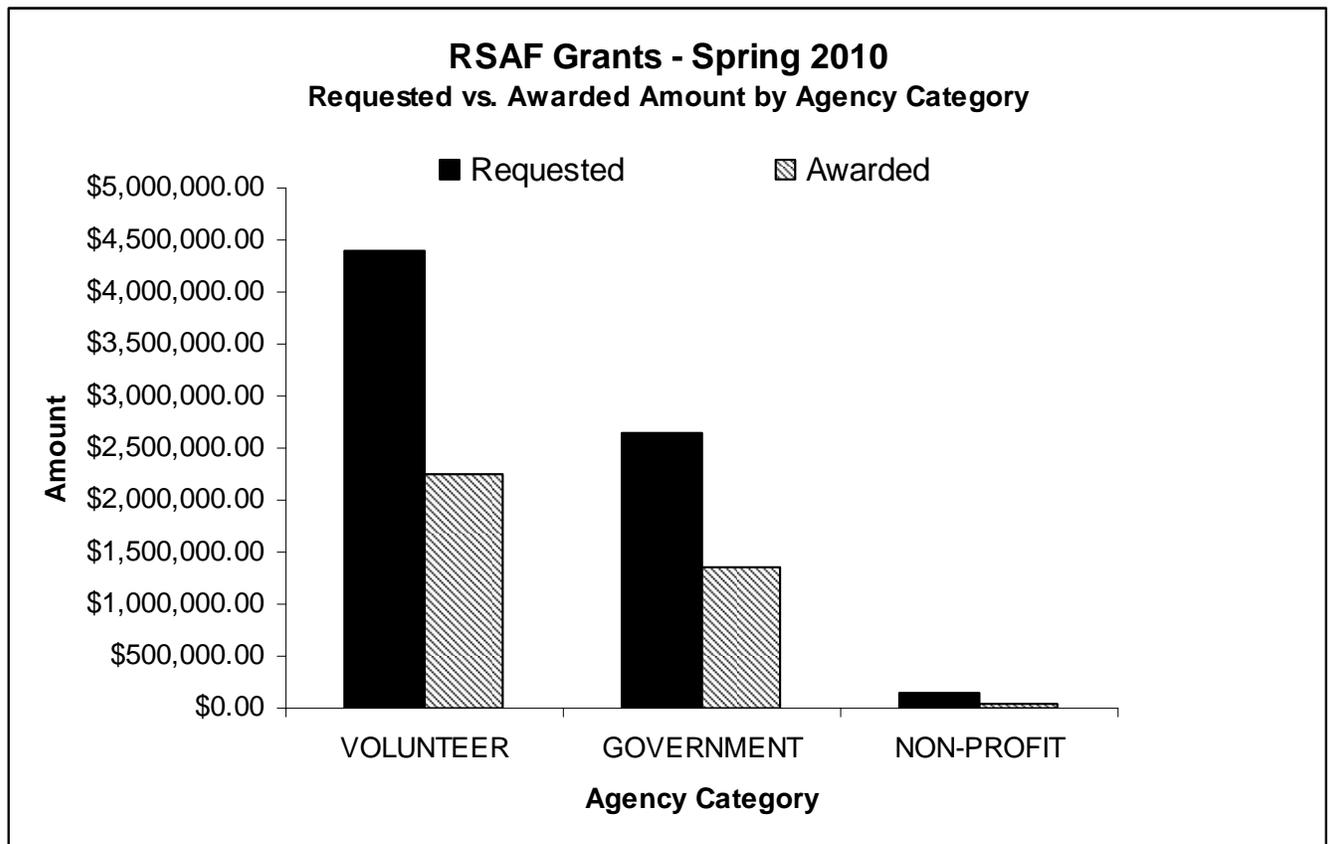
Please note that both documents are still under further review by the Office of Attorney General and subject to change. Both documents can be found in **Appendix A**.

**b) Financial Assistance for Emergency Medical Services (FAEMS) Grant Program, known as the Rescue Squad Assistance Fund (RSAF)**

The 2010 RSAF Spring cycle was awarded on July 1, 2010 awarding 101 agencies funding in the amount of \$3,643,383.00 (see **Appendix B**). The grant deadline was March 15, 2010; OEMS received 113 grant applications requesting \$7,203,196.00 in funding. The following agency categories were awarded funding for the Spring 2010 grant cycle:

- 68 Volunteer Agencies requesting \$2,243,813.00
- 28 Government Agencies requesting \$1,351,800.00
- 5 Non-Profit Agencies requesting \$47,770.00

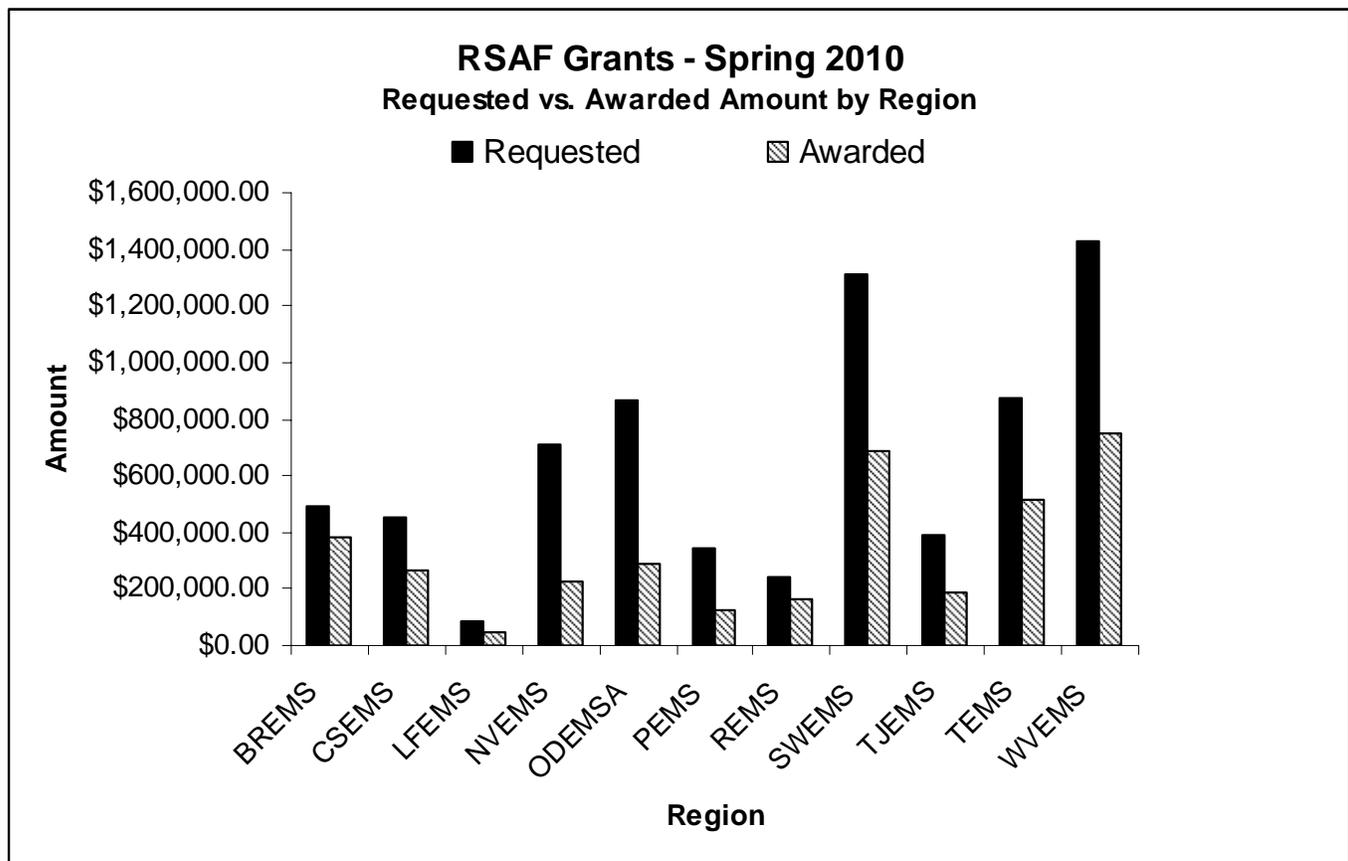
Figure 1: Requested vs. Awarded Amount by Agency Category



The following regional areas were awarded funding in the following amounts:

- Blue Ridge EMS Council – 7 agencies awarded funding of \$384,626.00
- Central Shenandoah EMS Council – 10 agencies awarded funding of \$264,741.00
- Lord Fairfax EMS Council – 3 agencies awarded funding of \$49,042.00
- Northern Virginia EMS Council – 3 agencies awarded funding of \$228,558.00
- Old Dominion EMS Alliance – 16 agencies awarded funding of \$288,323.00
- Peninsulas EMS Council – 6 agencies awarded funding of \$125,344.00
- Rappahannock EMS Council – 6 agencies awarded funding of \$166,915.00
- Southwestern Virginia EMS Council – 16 agencies awarded funding of \$688,316.00
- Thomas Jefferson EMS Council – 3 agencies awarded funding of \$184,107.00
- Tidewater EMS Council – 10 agencies awarded funding of \$515,719.00
- Western Virginia EMS Council – 20 agencies awarded funding of \$746,298.00
- Non-Affiliated Agencies – 1 agency awarded funding of \$1,365.00

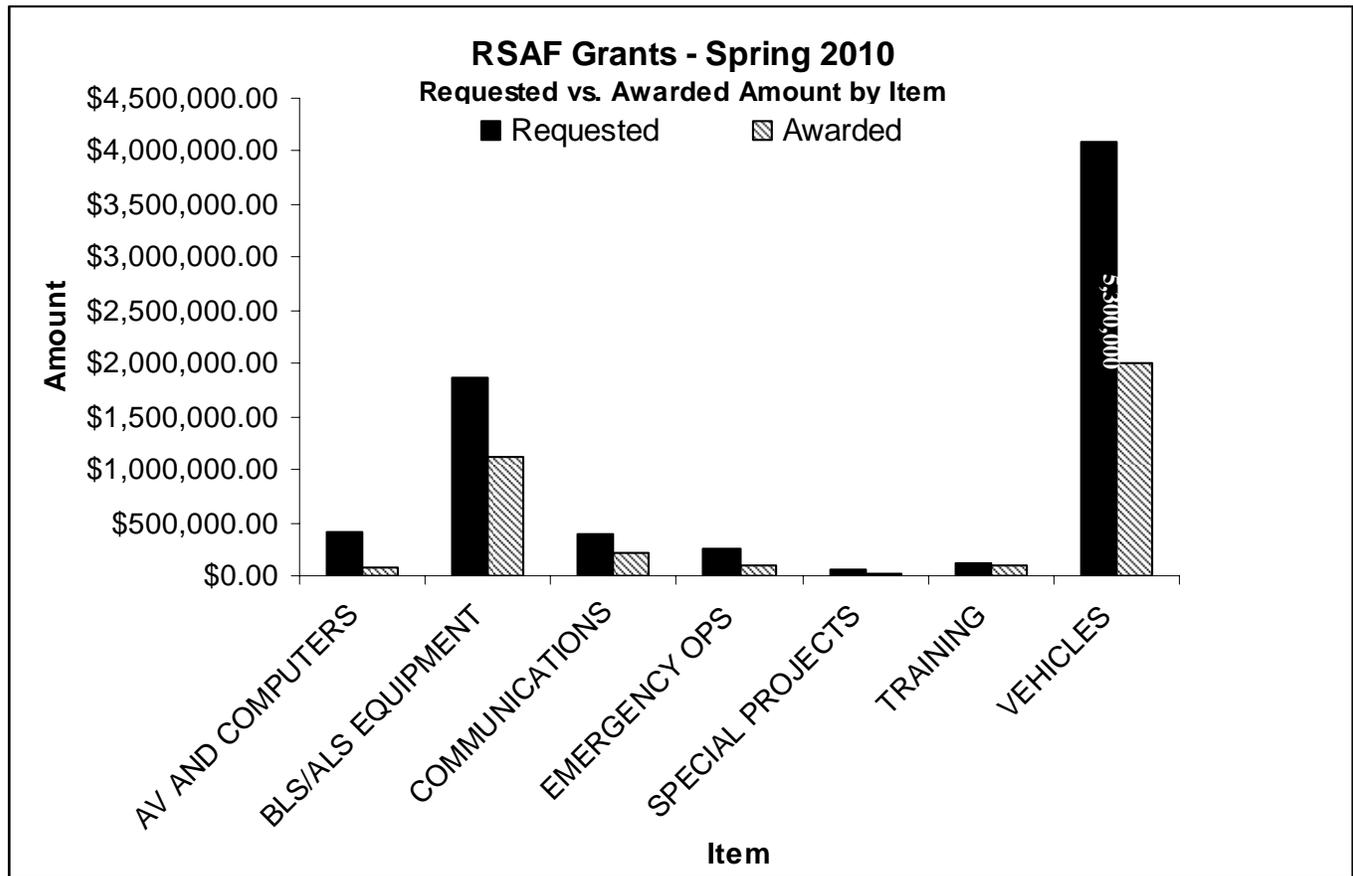
Figure 2: Requested vs. Awarded Amount by Region



RSAF Grants agencies by item categories:

- Audio Visual and Computers - \$411,468.00
  - Includes projectors, computers, toughbooks, mounting equipment and other audio visual equipment.
- Basic and Advanced Life Support Equipment - \$1,867,726.00
  - Includes any medical care equipment for sustaining life, including defibrillation, airway management, and supplies.
- Communications - \$398,876.00
  - Includes items for EMS dispatching, Emergency Medical Dispatch (EMD), mobile/portable radios, pagers, and other communications system technology.
- Emergency Operations - \$255,121.00
  - Includes items such as Mass Casualty Incident (MCI) trailers and equipment, Disaster Medical Assistance Team (DMAT) equipment, extrication equipment, and Health and Medical Emergency Response Team (HMERT) vehicles and equipment. The Emergency Operations category also includes any other equipment or items needed in order to rapidly mobilize and dispatch help in emergency situations.
- Special Projects - \$62,610.00
  - Includes projects such as Recruitment and Retention, Management and Leadership, Medication Kits, Special Events Material and other innovative programs.
- Training - \$125,337.00
  - This category includes all training courses and training equipment such as manikins, simulators, skill-trainers and any other equipment or courses needed to teach EMS practices.
- Vehicles - \$4,082,057.00
  - Includes ambulances, quick response vehicles, all-terrain vehicles, crash/rescue trucks and tow vehicles.

Figure 3: Requested vs. Awarded Amount by Item



The next RSAF Grant cycle will open August 1, 2010 and close September 15, 2010. The Fall 2010 grant cycle will be awarded on January 1, 2011.

**c) Department of Homeland Security (DHS), Emergency Medical Services Registry (EMSR) Grant Program, known as the Virginia Pre Hospital Information Bridge (VPHIB)**

The funding awarded by the DHS closed on June 30, 2010 for the 2007 and 2008 DHS grant cycles, the final reports will be submitted to VDEM at the end of this quarter. Overall, OEMS has provided \$4,275,215.00 in funding to 129 localities (340 agencies) a total amount of 1,182 ToughBooks through DHS, OEMS and RSAF funding.

**d) 2010 Department of Homeland Security (DHS) Grant Application**

OEMS submitted a grant application to VDEM on April 7, 2010 for the 2010 State Homeland Security Grant Program (SHSGP) for funding in the amount of \$1,565,650.00 for the Virginia Emergency Medical Services Interoperable Communications (VEMSIC) Project. This project will provide portable radios, vehicle chargers, mounting kits for vehicular installation and speaker microphones for each licensed patient-transport vehicle

for EMS agencies recognized by OEMS as a designated emergency response agency (DERA) as defined by the Virginia Administrative Code 12 VAC 5-31-370. This project will be distributed to the local agencies through OEMS by a competitive grant process in order to provide the localities with voice capability that is used daily for basic operability and during major incidents. The voice capability will increase response capabilities for EMS agencies and offer resources to increase patient care. The increased communication between agencies will aid in patient tracking, resource allocation and overall daily issues that may arise, offering an imperative resource during a major event.

#### **e) State Board of Health**

Office of EMS staff presented one action item to the State Board of Health on Friday, July 16, 2010. The Regulations Governing the Durable Do Not Resuscitate (DDNR) program were presented to the State Board of Health for final adoption. The Board unanimously approved the final amendments to the proposed regulations. As such the DDNR Regulations enter the final stage of the Administrative Process. They will now be submitted to the Department of Planning and Budget for final review and then be sent to the Governor for final approval to become law.

In 2007 the Office of EMS began a comprehensive review of the DDNR program and the Regulations Governing DDNR. This analysis included the following review:

- Compliance with the mandates as stipulated in all applicable sections of the *Code of Virginia*.
- Compliance with mandates as stipulated in the Virginia Administrative Code.
- Quality of the program in serving the end user (citizens exercising their rights under the “Health Care Decision Act”.)
- Quality of the DDNR program by qualified health care entities/providers.
- Review all education and public information materials.
- Assess the DDNR program within the Office of EMS.

OEMS met with and held a series of meetings with stakeholders including VHHA, Virginia Health Care Association, DSS, VDH Licensure & Certification, VA Association for Nonprofit Homes for the Aging, Virginia Association for Home Care & Hospice, Matt Cobb with OAG participated and other input received from hospitals systems, hospital chaplains etc.

The changes to the DDNR regulations are focused on improving the process and not a shift in treatment related policy and include:

<b>Issue</b>	<b>Addressed in Draft Regulations</b>
Requiring an "original" copy of the paper DDNR leads to logistical problems assuring the form travels successfully between health care facilities	Legible photocopies allowed in draft records.
Some long term care facilities maintained a stock of physician signed DDNR forms and added the patients name upon EMS arrival. This was occurring in an effort to maintain the original form.	Legible photocopies allowed in draft records.
There is a reluctance of hospitals and long-term care facilities to send original copies of the DDNR when transferring patients for fear that they will not get the form back	Removing the requirement that DDNR forms be on distinctive paper and allow a standardized form to be downloaded eases the ability to replace the document
	The new standard form would come with three copies; patient copy, medical record copy, and copy to use for ordering DNR jewelry
Existing language related to "Other DNR" confusing to EMS providers.	Revised language more clearly states "physician written signature."
Outdated language did not include current treatment measures that should be listed	"Other advanced airway management" stricken and current devices such as LMA, Combi Tube and similar devices better described.
Over use of DDNR forms by requesters. Facilities requested volumes of forms well above the need and include the forms in welcome packets etc.	Creating a downloadable form is consistent with other state programs and will save \$50K per year in printing costs, decrease administrative costs, and be more convenient for constituents.
EMS providers frequently do not honor DDNR's because the lack of an original state form.	Allowing photocopies and system-wide education on the revised regulations will assure the patient's wishes are honored and reduce anxiety among EMS providers.

# **EMS on the National Scene**

## **II. EMS On the National Scene**

### **a) NTSB Offers New Course in Rotorcraft Accident Investigation**

The National Transportation Safety Board has developed a five-day course in rotorcraft accident investigation that will be delivered at its training center near Washington in August. The course, which has been in development for more than a year, was designed to provide investigators from regulatory authorities, investigative agencies, private industry, and potential parties to an NTSB investigation, an overview of the procedures, methods and skills required to perform a comprehensive rotorcraft accident investigation. The training will be offered August 16-20, 2010, at the NTSB Training Center in Ashburn, Virginia. Those interested in learning more should see the complete description of the training, registration information, and cost to attend at [http://www.nts.gov/TC/CourseInfo/AS102\\_2010.htm](http://www.nts.gov/TC/CourseInfo/AS102_2010.htm)

### **b) MMWR Reports Public Health Surveillance Using Emergency Medical Service Logs**

In 2008, 206 million travelers to the United States arrived via the U.S.–Mexico border. Notifications of infectious diseases among travelers are made primarily by U.S. Customs and Border Protection officers to CDC quarantine stations. To evaluate the utility of using emergency medical service (EMS) dispatch and response logs for travelers with symptoms or signs suggestive of infectious diseases, CDC screened medical records of patients transported by EMS during 2009 from the four ports of entry in El Paso, Texas. Although the use of EMS data in the early detection of reportable infectious diseases has not been studied previously, EMS data have been found to be a useful means for real-time syndromic surveillance for early detection of outbreaks and specific health conditions.

### **c) Louisiana Announces EMS Reciprocity Process Related to the Gulf Oil Spill Cleanup**

An Executive Order (EO) [BJ 2010 –9] has been issued by Louisiana Governor Bobby Jindal that describes the process of reciprocity for temporary EMS workers to assist in medical aid efforts related to the Gulf Oil Spill cleanup. Individuals who are “duly licensed and in good standing in another state” may apply for temporary reciprocity. The EO outlines the steps that will enable EMS workers to respond to mutual aid requests, EMAC deployments, and/or employment offers from British Petroleum for direct assistance. This information is NOT a call for volunteers. Individuals should NOT respond to Louisiana to provide EMS care nor should they contact the Louisiana Dept of Health or EMS Office to request information about volunteering with the oil spill cleanup. The required application form for EMS reciprocity in Louisiana is available online.

#### **d) CoAEMSP Releases Revised Accreditation Policies and Procedures**

The revised Policies and Procedures Manual was approved at the February Board meeting by the CoAEMSP Board of Directors. Included for the first time is the new Accreditation Glossary.

As a reminder, the CoA has approved a Bachelors Degree Plan for Program Directors to assist programs meet this requirement by 2013. The plan provides an extended period of time for the program director of a program seeking Initial Accreditation to obtain his/her Bachelors degree. **To be eligible for this plan, the program must submit its Initial Accreditation Self Study Report (ISSR) and fees to the CoAEMSP for evaluation prior to January 1, 2011.** Doing so will allow the program director to demonstrate that qualification by current enrollment and continual satisfactory academic progress (defined as a minimum of 15 semester hours per year) toward a Bachelors degree until successfully completed.

#### **e) EMS Accreditation Fact Sheet Now Available**

The CoAEMSP is making available an EMS accreditation fact sheet that contains valuable history, facts, and research regarding EMS accreditation. The CoAEMSP believes state officials, program directors, educators and others in the EMS community will find this document valuable in moving the EMS accreditation initiative forward. The EMS Accreditation Fact Sheet can serve as an excellent resource for educating legislators, college deans, students, state representatives and others.

#### **f) New NIOSH Report: Preventing Exposures to Bloodborne Pathogens among Paramedics**

Patient care puts paramedics at risk of exposure to blood. These exposures carry the risk of infection from bloodborne pathogens such as hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV), which causes AIDS. A national survey of 2,664 paramedics contributed new information about their risk of exposure to blood and identified opportunities to control exposures and prevent infections. Please go to: <http://www.cdc.gov/niosh/docs/wp-solutions/2010-139/>

#### **g) NIOSH Provides Fast Facts to Prevent Worker Illness and Injury**

The National Institute for Occupational Safety and Health (NIOSH) has published 6 new fact sheets aimed at promoting worker safety, which are applicable to EMS personnel:

- NIOSH Fast Facts: Protecting Yourself from Heat Stress (Pub. No. 2010-114, April 2010)
- NIOSH Fast Facts: Protecting Yourself from Cold Stress (Pub. No. 2010-115, April 2010)

- NIOSH Fast Facts: Protecting Yourself from Sun Exposure (Pub. No. 2010-116, April 2010)
- NIOSH Fast Facts: Protecting Yourself from Stinging Insects (Pub. No. 2010-117, April 2010)
- NIOSH Fast Facts: Protecting Yourself from Poisonous Plants (Pub. No. 2010-118, April 2010)
- NIOSH Fast Facts: Protecting Yourself from Ticks and Mosquitoes (Pub. No. 2010-119, April 2010)

#### **h) NHTSA Announces RFP for Safety Initiative**

NHTSA's Office of EMS is pleased to announce a Request for Proposals (RFP) to develop a Culture of Safety in EMS. This effort will include planning for and facilitating a National EMS "Culture of Safety" National Conference and development and dissemination of a National EMS "Culture of Safety" Strategy. This strategy will include information about "where we are" and "where we want to be" with both patient and EMS personnel safety. Note: The deadline date has passed for the RFP, but OEMS believes this is an important topic and we will keep everyone posted on this development.

#### **i) Chief Medical Officer Designation Supported by NEMSMA and IAFC-EMS Section**

The National EMS Management Association (NEMSMA) and the International Association of Fire Chiefs –EMS Section (IAFC EMS Section) express their support of the Chief Medical Officer (CMO) designation offered through the Commission on Professional Credentialing. The program specifies minimum academic achievements and a competency required for designation, and assesses contributions to the emergency medical services field through professional articles, public speaking, teaching, and research, as well as professional memberships and community and civic involvement. Members of both the NEMSMA Board of Directors and IAFC EMS Section Executive Board hold the CMO credential and are available to assist prospective CMOs in answering questions about the program, determining eligibility, and facilitating portfolio review. Go to: <http://www.publicsafetyexcellence.org/professional-credentialing/about-credentialing-cpc.aspx>

#### **j) 2009 National EMS Practice Analysis Now Available**

The 2009 National EMS Practice Analysis has been completed and is currently being printed. You may purchase a copy for only \$5.00 via the NREMT website: <http://www.nremt.org/>. The primary purpose of a practice analysis is to develop a clear and accurate picture of the current practice of a job or profession, in this case the provision of emergency medical care in the out-of-hospital environment. The results of the practice analysis are used throughout the entire National Registry of Emergency Medical Technicians (NREMT) examination development process, which helps to ensure a connection between the examination content and actual practice. The practice analysis helps to answer the questions, "What are the most important aspects of practice?" and

"What constitutes safe and effective care?" It also enables the NREMT to develop examinations that reflect contemporary, real-life practice of out-of-hospital emergency medical care.

#### **k) NFPA Announces Sharp Drop in Firefighter Fatalities In 2009**

Earlier this month, the National Fire Protection Association announced that for the first time in three years the number of on-the-job firefighter deaths dropped below 100. Eighty-two firefighters died in the line of duty last year, substantially fewer than the 10-year average of 98 and down even more from the 105 who died in 2008. This is the lowest annual total since NFPA recorded 79 deaths in 1993 and the third lowest total since NFPA began this study in 1977. The report shows that the number one cause of on-duty firefighter fatalities remains sudden cardiac death. Since 1970 the number of cardiac deaths has decreased, but still accounts for over 40% of on-duty deaths in 2009. For the full report please go to: <http://www.nfpa.org/assets/files/PDF/osfff.pdf>.

### **National Association of State EMS Officials (NASEMSO)**

*Note: The Virginia Office of EMS is an active participant in the NASEMSO and has leadership roles in each NASEMSO Council*

#### **l) NASEMSO Leadership Meets with ACS Committee on Trauma**

Key leadership from the NASEMSO Executive Committee and American College of Surgeons Committee on Trauma convened prior to the NASEMSO Mid-Year Meeting to discuss potential areas of collaboration. The two organizations discussed mutual goals involving state COT committees, model systems, regionalization and systems of care, patient safety, systems benchmarking, standards for definitive care centers, emergency preparedness and surge capacity, air transport of trauma patients, rural trauma and EMS, transportation, federal advocacy, and a culture of safety for EMS providers. NASEMSO appreciates the opportunity to meet with our COT partners and looks forward to exciting future opportunities!

#### **m) NASEMSO Releases Education Agenda Implementation Report to NEMSAC**

At its 2010 Mid-Year meeting, NASEMSO provided a rollout of its latest report on implementation of the EMS Education Agenda. The Report to the National EMS Advisory Committee (NEMSAC) on Statewide Implementation of the Education Agenda is based on results of the 2009 NASEMSO annual implementation survey. This document is intended to provide an overview of statewide implementation of the Education Agenda. Data was collected in 2009, and state EMS directors were given an opportunity to revise their information in April 2010. The report is merely a "snapshot in time" and should not be received or interpreted as a strict policy decision by any state. States retain the authority to implement the Education Agenda in a way that best meets their needs.

NASEMSO expresses its deep appreciation to all 50 states and the territories of the District of Columbia (DC), the US Virgin Islands (VI), and the Northern Mariana Islands (MP) for their contributions to this survey.

**n) NASEMSO Training Coordinators Council Votes to Change Name to Reflect Broader Mission**

The National Council of State EMS Training Coordinators affiliated with NASEMSO in 2006, becoming the Association's fourth official Council. Through a recent survey, the Council recognized that the scope of EMS education and related functions at the state EMS office level for the position generically referred to as the "state EMS training coordinator" has expanded to include functions such as certification and licensure, examination and testing, compliance, quality improvement, program accreditation, and investigation of complaints. At its recent meeting, the Council voted to change its name to the "Education and Professional Standards" Council to better reflect the current responsibilities of its members. The name change will become official upon ratification by NASEMSO's Executive Committee later this month.

**o) NASEMSO Comments at IOM Forum on PPE for Healthcare Workers**

Conflicting information promulgated by national organizations, the scientific community, and the news media about the use of masks, respirators, and the utility of fit-testing diminishes the ability of the health care community, including Emergency Medical Services (EMS) to promote consistent practice among its practitioners.

During the recent *Institute of Medicine Workshop on Current Research Issues—Personal Protective Equipment for Healthcare Workers to Prevent Transmission of Pandemic Influenza and Other Viral Respiratory Infections*, NASEMSO strongly encouraged greater collaboration among IOM's many partners to provide a consistent message regarding the role(s) and efficacy of fit-testing, surgical masks, and N-95 respirators in the transmission of disease. The NASEMSO statement is available on the NASEMSO web site under "Advocacy."

**p) NASEMSO Congratulates NEMSIS Colleagues on Recent HL7 Success!!**

In 2009, several EMS stakeholders described a Project Charter for the NEMSIS Data Standardization. This charter outlines the direction of the project to develop Health Level Seven (HL7) standards based on the National EMS Information System (NEMSIS) data set following the *HL7 Development Framework* (HDF). The first activity was to create a Domain Analysis Model (DAM) that can then be used to create a variety of interoperability standards. To obtain full HL7 approval and NEMSIS integration, a total of 3 components must be developed and successfully balloted. During a recent meeting of the HL7 partnership, the NEMSIS DAM was unanimously approved with zero negative comments. This is an incredible achievement and the first major step to integrate EMS into Health IT initiatives. NASEMSO congratulates the entire NEMSIS team on this outstanding accomplishment!!!

**q) NASEMSO Coordinating Comment on Proposed Exam Integration**

Attendees to the 2010 NASEMSO Mid-Year Meeting and associated NASEMSO webinar had the opportunity to hear Implementation Team Chairman, Dan Manz and NREMT Associate Director, Rob Wagoner explain a proposed matrix (“strawman”) that addresses the outcome of a stakeholder meeting on exam integration held in April 2010. The draft has been developed to facilitate discussion among state EMS officials related to NREMT exams and the new Scope of Practice Model and the Education Standards. The matrix is based on results from the 2009 NASEMSO Annual Survey on statewide implementation of the Education Agenda with consideration to national re-registration cycles. The document has been posted in the “Toolkit” under Transition Materials on NASEMSO Education Agenda web site:

<http://www.nasemso.org/EMSEducationImplementationPlanning/index.asp>.

**r) NASEMSO Joins EMS Organizations in Support of Allocating 700 MHz D Block to Public Safety**

In recent letters to members of Congress, NASEMSO joined several national EMS organizations in calling for legislation that would allocate the 700MHz D Block to public safety for use in conjunction with the 700 MHz broadband spectrum licensed to the national public safety broadband license holder and to coordinate both sets of spectrum through that license holder and its public safety representative board. A bi-partisan bill to allocate the 700 MHz D Block to public safety was introduced into the House of Representatives in late April. The bill "Broadband for First Responders Act of 2010 (H.R. 5081)" has been referred to the House Committee on Energy and Commerce. A companion bill has not yet been introduced in the Senate. A copy of the Senate letter from national organizations is available at:

<http://www.npstc.org/documents/DBlockSenateJointLetter100616.pdf>

In the Federal Communication Commission’s (FCC) recent National Broadband Plan, the agency proposed to hold another commercial auction for the D block. In 2008, FCC efforts to sell the D Block to a single bidder who would run both a commercial service and share the spectrum with public safety agencies via a leasing system collapsed when the auction failed to attract the minimum bid.

**s) NASEMSO Responds to Request for Endorsement on MUCC for Mass Casualty Triage**

In a recent letter to the project coordinator, NASEMSO President Steve Blessing conveyed the Association’s support for the concept of the Modified Uniform Core Criteria (MUCC) for mass casualty field triage. Expressing concern for the lack of evidence, NASEMSO’s endorsement is based on consensus with the National Association of EMS Physicians (NAEMSP), the American College of Surgeons (ACS), and the American College of Emergency Physicians (ACEP.) The intent of the project is to ensure that providers at a mass casualty incident utilize triage methodologies that

incorporate these minimum core criteria in an effort to promote standardization among EMS jurisdictions and agencies. Mass casualty triage systems currently in use can be modified using the MUCC to ensure interoperability. NASEMSO encourages project leaders and the CDC to work to prove the effectiveness of MUCC and encourages additional research to study all major prehospital mass casualty triage systems.

**t) NASEMSO Domestic Preparedness Survey Report Now Available**

NASEMSO recently surveyed its members to ascertain the extent to which state and territorial EMS offices are represented and supported in ongoing multi-agency coordination for readiness and planning. State directors responded to a range of questions related to EMS participation in preparedness activities at the state level, including involvement in the state emergency operations centers, state fusion centers, EMAC requests, the National Ambulance Contract, deployment of ambulances and EMS practitioners, registration of volunteers, funding sources, and more. The results of the survey-- "*State EMS Office Involvement in Domestic Preparedness Efforts NASEMSO 2010 Status Report*" --are now available in a new report on the NASEMSO web site: [http://www.nasemso.org/NewsAndPublications/News/documents/NASEMSO2010 DP Report FINAL Version.pdf](http://www.nasemso.org/NewsAndPublications/News/documents/NASEMSO2010_DP_Report_FINAL_Version.pdf)

The target population for the survey consisted of the EMS Directors of the States, Territories, and the District of Columbia. Of 56 surveys, 53 were returned, for an overall 95% rate of return.

# **Educational Development**

### **III. Educational Development**

#### **Committees**

- A. **The Professional Development Committee (PDC):** The committee met on May 19 and July 7, 2010.
1. Two (2) action items were forwarded to the EMS Advisory Board for approval.
    - a. *DED Proposal for Implementation of the Virginia EMS Education Standards (VEMSES)* (see **APPENDIX C VEMSES**)
    - b. *Testing Requirement for Transition to Education Coordinator Certification* (See **APPENDIX D EC Testing Requirement**)

Copies of past minutes are available on the Office of EMS Web page at: <http://www.vdh.virginia.gov/OEMS/Training/Committees.htm>

- B. **The Medical Direction Committee (MDC)** met on July 8, 2010.
1. Capt. Brad L. Bennett provided a Powerpoint presentation on *Hemorrhage Control and the Use of Tourniquets (TQ)*. The presentation was based upon Tactical Combat Emergency Care (TCCC) Guidelines utilized in Iraq and Afghanistan wars. The vast majority of the injuries incurred in these wars are extremity injuries due to the lack of protection from body armor (Kevlar).
  2. There was a discussion on the policy for *Vaccine Administration by EMS Providers in Virginia* – This document is still being reviewed by the Attorney General’s Office and it was the consensus of the committee to approve the document pending the AG’s Office approval.
  3. The committee voted to add to the *Virginia Scope of Practice Procedures* the following items:
    - a) Intranasal Medication Route
    - b) Carotid Massage/Vagal Maneuvers
  4. The next meeting of MDC is scheduled for October 7, 2010...

Copies of past minutes are available from the Office of EMS web page at: <http://www.vdh.virginia.gov/OEMS/Training/Committees.asp>

## Advanced Life Support Programs

- A. An ALS-Coordinator's Meeting was held on Friday, July 9, 2010 at Jefferson College of Health Sciences in Roanoke with forty-two attendees. An ALS-Coordinator's Seminar (Administrative Program) was held on July 17-18 at the Henrico Public Training Complex. Twenty-two ALS-Coordinator candidates completed the program.

## Basic Life Support Program

### A. Instructor Institutes

1. The Office held an EMS Instructor Institute June 12-16 in conjunction with the VAVRS Rescue College in Blacksburg, VA. Seven full candidates, and two Fire Instructors attended. Eight candidates received full certification and one received conditional certification.
2. The next Instructor Practical Exam is scheduled for August 21, 2010 in the Richmond area. Sixteen people are eligible for the exam.
3. The next Institute is scheduled for September 18-22, 2010 in Richmond, Virginia
4. EMS Providers interested in becoming an Instructor or the process towards becoming an Education Coordinator in the future please contact Greg Neiman, BLS Training Specialist by e-mail at [Gregory.Neiman@vdh.virginia.gov](mailto:Gregory.Neiman@vdh.virginia.gov)

### B. EMS Instructor Updates:

1. The Division of Educational Development continues to hold monthly online Instructor Updates.
2. DED has also scheduled a few in-person updates for 2010. The last in-person update was held in conjunction with the VAVRS Rescue College in Blacksburg on June 12, 2010. Close to 50 Instructors/ALS Coordinators attended. The next in-person update is scheduled on September 25<sup>th</sup>, 2010 at the VAVRS Convention in Virginia Beach.
3. The schedule of future updates can be found on the Web at [http://www.vdh.virginia.gov/OEMS/Training/EMS\\_InstructorSchedule.htm](http://www.vdh.virginia.gov/OEMS/Training/EMS_InstructorSchedule.htm)

## EMS Training Funds

### Special Note about the EMS Training Funds program for FY11

The following message was sent to all EMT-Instructor and ALS-Coordinators with valid e-mail addresses on file with the Office. The message was sent on June 24, 2010 at 4:05 PM.

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Dear Instructor/Coordinator,

Good afternoon from a roadside rest stop on US 360 in beautiful, albeit hot, Green Bay, Virginia. This message is to notify you about several important items regarding to the EMS Training Funds (EMSTF) contracts for FY11.

1. **EMS Training Funds for FY11** – The EMSTF contracts for FY11 are still under review by the Office of the Attorney General. As a result, the contracts will not be available on July 1 of this year.
  - We do not have an anticipated date for the launch of the new program. Please monitor your emails on a routine basis for updates
  - The program will be retroactive for courses with a begin date of July 1, 2010 or later.
  - To ensure that all instructors across the Commonwealth have an equal and fair opportunity to announce courses and secure EMSTF contracts, the following new guidelines will be instituted when we launch the new program, they are:
    - The Office will set a date for the beginning of the program. Please monitor your emails and the OEMS Web site for updates.
    - EMSTF contracts received PRIOR to or mailed PRIOR to the official start date of the program will not be accepted and will be returned to the Instructor/Coordinator.
    - For the first four (4) weeks of the program, the Office will NOT ACCEPT any hand delivered EMSTF contracts
      - During this time, all contracts must be received via United States Postal Service (USPS), United Parcel Service (UPS) or Federal Express (FedEx) with a postmark date, clearly marked
    - These actions are being taken in order to ensure that no one instructor or area of the Commonwealth has an undue advantage over another.
2. **Course Approvals** - If you have course announcements that need to be processed for courses beginning in July or August, please submit those to Tracie Jones now. Our address is Virginia Office of EMS, 1041 Technology Park Drive, Glen Allen, VA 23059.
  - Indicate on the Course Approval Request in the appropriate section whether or not you will be seeking EMSTF funding.

Please visit the EMS Instructor Portal on the OEMS Web site to make sure that your e-mail address is up-to-date. The Office of EMS will utilize this list to send out updates and notifications about the EMSTF program.

If you have questions, please do not hesitate to contact me at [chad.blosser@vdh.virginia.gov](mailto:chad.blosser@vdh.virginia.gov).

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## Financial Update on FY09 and FY10

Statistics for the program for FY09 through July 27, 2010 are listed below:

	<b>Commit \$</b>	<b>Payment \$</b>	<b>Balance \$</b>
<b>Fiscal Year 2009</b>	<b>\$3,177,418.50</b>	<b>\$1,562,237.85</b>	<b>\$1,615,180.65</b>
BLS Initial Course Funding	\$814,237.00	\$552,291.32	\$261,945.68
BLS CE Course Funding	\$113,400.00	\$61,976.27	\$51,423.73
ALS CE Course Funding	\$304,920.00	\$102,606.50	\$202,313.50
BLS Auxiliary Program	\$76,000.00	\$19,520.00	\$56,480.00
ALS Auxiliary Program	\$840,000.00	\$184,222.25	\$655,777.75
ALS Initial Course Funding	\$1,028,861.50	\$641,621.51	\$387,239.99

Statistics for the program for FY10 through July 27, 2010 are listed below:

	<b>Commit \$</b>	<b>Payment \$</b>	<b>Balance \$</b>
<b>Fiscal Year 2010</b>	<b>\$2,148,814.00</b>	<b>\$811,531.15</b>	<b>\$1,337,282.85</b>
BLS Initial Course Funding	\$442,119.00	\$268,178.77	\$173,940.23
BLS CE Course Funding	\$66,360.00	\$36,618.00	\$29,742.00
ALS CE Course Funding	\$191,520.00	\$79,857.50	\$111,662.50
BLS Auxiliary Program	\$136,000.00	\$12,320.00	\$123,680.00
ALS Auxiliary Program	\$468,000.00	\$91,400.00	\$376,600.00
ALS Initial Course Funding	\$844,815.00	\$323,156.88	\$521,658.12

### EMS Education Program Accreditation

- A. The accreditation program is starting to see a lot more activity now that we have reached the point where sites are beginning to go through reaccreditation.
1. Applications for reaccreditation of state EMT-Intermediate accreditation have been received by:
    - a) Central Shenandoah EMS Council – Following a reaccreditation site visit, CSEMS was granted a second 5 year grant of accreditation.
  2. Initial Applications for Intermediate Programs - Applications for initial accreditation at the Intermediate level have been received by:
    - a) Ft. Lee Fire and Emergency Services – An initial visit found that this site was not prepared for accreditation. A following visit is being scheduled for late August or early September.

- b) Nick Klimenko and Associates, Inc. – Following an initial site visit, this site was granted conditional EMT-Intermediate accreditation for 1 year.

3. Initial Applications for Paramedic Programs - Applications for initial accreditation at the Paramedic level have been received by:

- a) Prince William County Fire-Rescue – A site visit took place in late July. Final action on this site visit will take place in late August.

B. For more detailed information, please view the Accredited Site Directory found on the OEMS web site at:

<http://www.vdh.state.va.us/OEMS/Training/Accreditation.htm>

### **On Line Continuing Education**

OEMS initially started with 10 programs posted on TRAINVirginia. Today the course library has grown to 48 programs. There are over 10,000 Virginia EMS providers registered on TRAINVirginia. So far in FY10, OEMS has recorded over 13,500 course completions.

In addition, OEMS developed and instituted a process for third party vendors offering Web based continuing education to participate. The Office has approved four third party vendors: 24-7 EMS, CentreLearn, TargetSafety and HealthStreams. More than 475 OEMS approved online CE courses are currently offered through these vendors. A vigorous screening process assures the programs are of quality and allows for the electronic submission of continuing education to the OEMS technician database.

For more information, visit the OEMS Web page at:

<http://www.vdh.virginia.gov/OEMS/Training/WebBasedCE.htm>

### **EMSAT**

- A. EMSAT celebrated its 20th anniversary program on June 16. The program “Non-Traumatic Chest Pain” included video from the first EMSAT broadcast on satellite TV, interviews with some of the original EMSAT staff and of course, bloopers from the last 20 years.
- B. EMSAT programs for the next three months include:
  - 1. Aug. 18, “Respiratory Distress in Children”
  - 2. Sept. 15, “Chemical and Mechanical Bleeding Control Devices”

<b>Other Activities</b>
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- A. The EMS Advisory Board's Formulary Workgroup met on June 22, 2010 in the OEMS office located at 1001 Technology Park Dr in Glen Allen. The minutes for that meeting can be found at:  
<http://www.vdh.virginia.gov/OEMS/Training/Committees.htm>
  
- B. The EMS Advisory Board's Patient Care Guidelines Workgroup will meet on August 2, 2010 in the OEMS office located at 1001 Technology Park Dr in Glen Allen. Minutes for the workgroup can be found at:  
<http://www.vdh.virginia.gov/OEMS/Training/Committees.htm>
  
- C. Capt. Brad L. Bennett will make a presentation on Tourniquets and Hemostatic Agents Used on the battlefield at the ALS-Coordinator Meeting scheduled during the EMS Symposium on Thursday night November 11, 2010 beginning at 5:30 PM. Registration for the EMS Symposium is NOT required to attend.
  
- D. Warren participated in the Atlantic EMS Council Training Coordinators meeting July 26 and 27.
  
- E. Chad Blosser has coordinated and presented training with the new barcode scanners purchased by the Regional EMS Council through a RSAF grant. To date, training has been held as follows:
  - a. WVEMS – 9 Sessions
  - b. BREMS – 3 Sessions
  - c. PEMS – 2 Sessions
  - d. TEMS – 2 Sessions
  - e. NVEMS – 1 Session
  - f. ODEMSA – 8 Sessions
  - g. CSEMS – 2 Sessions
  - h. REMS – Scheduled for August
  - i. LFEMS – 2 Sessions

# **Emergency Operations**

## **IV. Emergency Operations**

### **Operations**

- **Boy Scout Jamboree**

The Division of Emergency Operations continues to take an active role in the planning 100<sup>th</sup> Annual Boy Scout Jamboree. The HMERT Coordinator and Emergency Operations Manager have continued to attend the Rappahannock EMS Council Planning meetings to ensure that the EMS needs of the event are appropriately prepared for. Staff also met with Caroline County Fire and EMS and Fort A.P. Hill Fire and EMS to discuss possible contingency plans.

After receiving a request from the RESM council, the Office of EMS worked with the Virginia Department of Transportation and the Virginia Department of Fire Programs to develop an offsite staging area that will provide a location of mutual aid resources to be placed prior to responding in to the scene. The Virginia Department of Fire Programs provided two trailers to provide lodging and logistical support for the onsite OEMS Coordinator. The Department of Emergency Management provided an antenna trailer to support onsite radio communications.

- **Virginia 1 DMAT**

VA-1 DMAT was on call for the month of June. Staff have deployed for exercises and training on electronic record keeping and on ICS, accountability, BoO set up and safety, as well as other field training operations. The OEMS HMERT Coordinator attended the NDMS Summit in Las Vegas after it had to be rescheduled and moved due flooding in Nashville. VA-1 DMAT held a field training day on June 22, 2010 in the Williamsburg area for team members.

- Emergency Operations Manager and Assistant Manager met with Dave Johnson and Valeta Daniels, EMS Coordinator for HDH-Forest. HDH is in the planning stages of their annual MCI drill and OEMS Emergency Operations personnel provided guidance and offered support for the exercise.

## Planning

- **Continuity of Operations Plan**

The After Action Report and Improvement Plan were completed and updates made to the plan based on these reports. These updates include an expansion of the Communication Section and Alternate Location Annex.

- **Staff Briefing on Hurricane Preparedness and Continuity of Operations Plan (COOP) Updates**

The Emergency Operations Planner conducted an “all hands” briefing on June 29, 2010. The meeting provided an opportunity for employees to review COOP updates and the new Building Evacuation Plan (BEEP) for both OEMS offices.

- **National Preparedness Month**

Winnie Pennington, Emergency Planner, participated in the National Preparedness webinar hosted by the Department of Homeland Security (DHS) on May 18, 2010. This was an introductory session to introduce the Toolbox for use in planning for events during the preparedness month to support personal preparedness. Planner continues to develop events for OEMS employees in support of the month.

- **OEMS Emergency Evacuation Planning and Drills**

In conjunction with the Division of Administration, the Emergency Planner developed a Quick Reference Card to assist those using OEMS facilities in responding safely to building emergencies and to safely evacuate the buildings as needed.

- **Virginia Emergency Response Team (VERT) Training for Employees**

Winnie Pennington, Emergency Planner, developed training files for VERT staff members and reviewed records of VERT trained staff members sending updated records to the Virginia Department of Emergency Management (VDEM) VERT Coordinator and EP&R Training Coordinator. The Planner continues to work with staff to ensure that they have completed the required training. Winnie also continues to plan a refresher training for VERT Staff members.

The Emergency Planner also continues to update the VERT Employee handbook as necessary.

- **Family Assistance Center (FAC) Planning**

On May 24, 2010 and July 27, 2010 the Emergency Planner participated with the Department of Social Services (DSS), DEM, Office of the Chief Medical Examiner (OCME) and EP&R in discussions about updating the FAC plan to reflect additional roles for VDH and others to make the plan more scalable, mobile, proactive, and multi-functional.

- **Regional Contract Review**

Winnie Pennington assisted in the review of the Regional Council contracts. During the review the Planner updated the Surge and MCI portion of the regional contracts in conjunction with the EMS Planner. Winnie also developed an After Action Review (AAR) template for the Councils to be used for standardized reporting.

- **Statewide Virginia Emergency Training Exercise (VERTEX)**

On June 2, 2010, the Emergency Plan responded to the Virginia Emergency Operations Center (EOC) to participate in the annual VERTEX as a representative of ESF-8.

<b>Committees/Meetings</b>
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- **Verizon Meeting**

The HMERT Coordinator met with representatives from Verizon to discuss options for communications equipment for Symposium.

- **Hospital Emergency Management Committee (HEMC)**

Emergency Operations staff continues to attend meetings with the HEMC. OEMS staff is currently working on adding information to the OEMS communication directory based on the information collected by the Virginia Hospital and Health Care Association on hospital MEDIVAC pad size.

- **EMS Emergency Management Meeting**

The Division of Emergency Operations assisted with the EMS Emergency Management Committee meetings during this quarter. Meetings were held on June 22 and July 29. The primary purpose of the meetings was review and update of the Mass Casualty Incident Management I and II program.

- **Incident Management Team**

Emergency Operations staff continue to attend meetings regarding the incident Management Team

- **Hurricane Evacuation Committee**

The HMERT Coordinator attended the regularly scheduled meetings of the Hurricane Evacuation Coordination Group on May 26, June 23, and July 28. He also participated in radio testing for lane reversal activities.

- **EP&R Team Meetings**

The Emergency Planner continues to attend monthly meetings of the Emergency Preparedness and Response staff.

- **EMS Communications Committee**

The EMS Communications Committee met on April 22, 2010 at the Virginia OEMS facility located at 1001 Technology Park Dr. Glen Allen. Assisting agencies and localities with meeting FCC Narrowbanding requirements and ongoing interoperability efforts were the main focus of the meeting. The next scheduled meeting is Friday, August 13, 2010 at 9:00 a.m.

- **Critical Incident Stress Management (CISM) Committee**

The CISM Committee met on June 24, 2010 at the OEMS Technology Park Drive office. The meeting focused on the development of standards for accreditation for CISM teams within the Commonwealth.

<b>Training</b>
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- **Roadway Incident Safety Workshop**

During this quarter, the HMERT Coordinator attended a meeting of an Advisory Group for Traffic Incident Management for VDOT.

- **HURREVAC Training**

On May 19, 2010 the HMERT Coordinator attended a HURREVAC training at the Virginia EOC.

## Communications

- **OEMS Public Safety Answering Point (PSAP) & 911 Center Accreditation**

There are no pending applications at this time. Mr. Crumpler is working with jurisdictions scheduling site inspections for reaccreditations

- **The Association of Public Safety Communications Officers (APCO)**

Ken Crumpler is working with the Virginia chapters of APCO, NENA and the SIEC on the planning committee for the Fall Conference in Roanoke and is hosting teleconferences for that event. The conference is scheduled for November 2-5, 2010 in Roanoke.

- **Virginia State Interoperability Executive Committee (SIEC)**

OEMS was represented at the SIEC meeting on July 22, 2010 at the Virginia Emergency Operations Center. A presentation on the expansion of 700 Mhz spectrum allotted for public safety was featured.

# **Planning and Regional Coordination**

## **V. Planning and Regional Coordination**

### **Regional EMS Councils**

#### **Regional EMS Council Designation**

The current three year term of designation for the eleven Regional EMS Councils began on July 1, 2010. Each council received confirmation of designation from Dr. Remley prior to the beginning of the term.

#### **Regional EMS Councils**

OEMS is awaiting approval of the 2011 fiscal year Regional EMS Council contracts from VDH administration and the Attorney Generals office.

The Regional EMS Councils submitted their Fourth Quarter contract reports at the end of July. Most of the Regional Councils have conducted their respective Regional EMS Awards programs throughout May, June, and July.

VDH and OEMS have been working with the Southwest Virginia EMS Council with a significant item involving an embezzlement of Council funds by a Council employee (who has since been terminated). SWEMS staff continues to assist the Virginia State Police in the investigation, which is ongoing.

### **Medevac Program**

The safety and utilization workgroups of the Medevac Committee continue work on individual projects. The safety subgroup has continued work on implementation of the WeatherSafe weather turn down program, with the majority of the medevac programs in Virginia participating in the program, and submitting information on a regular basis.

The utilization workgroup – also known as “Project Synergy” – continues working on providing standard education for EMS providers regarding the proper utilization of medevac services, as well as data that will be required for the project - patients transported to hospitals via medevac that had a length of stay of 24 hours or less. They are looking at why those patients were transported by air versus ground, as well as developing a standard means of reporting medevac resource utilization information.

OEMS and Medevac stakeholders continue to monitor developments regarding federal legislation and other documents related to Medevac safety and regulation. These documents can be found on the Medevac page of the OEMS web site.

The Medevac Committee meets again in October 2010.

## State EMS Plan

The Virginia Office of EMS Strategic and Operational Plan is mandated through *The Code of Virginia* to be reviewed and revised on a triennial basis. The current version of the plan was approved by the State Board of Health in October of 2007.

Based on this timeline, OEMS, in coordination with the Executive Committee of the Advisory Board, the Finance, Legislation and Planning (FLAP) Committee, and the chairs of all the standing committees of the Advisory Board submitted planning templates created by OEMS; pertaining to each aspect of the EMS system that committee is tasked with.

A draft of the State EMS Plan was presented at the February meeting of the FLAP committee, and to the Advisory Board in May. Following that meeting, the draft plan was posted to the OEMS web page for public comment. The public comment period ended on July 16, 2010, with 47 comments submitted, which prompted a minor change to the plan, to include language related to the creation and maintenance of a ST Elevation Myocardial Infarction (STEMI) Triage Protocol. This addition is Key Strategic Initiative 4.1.4 of the plan.

The final draft of the plan is attached to this report for final approval by the State EMS Advisory Board on August 13, 2010. **Please see Appendix E**. Upon Advisory Board approval, OEMS will present the final approved Plan to the Board of Health in October.

# **Public Information & Education**

## **VI. Public Information and Education**

### **Symposium**

The 31<sup>st</sup> Annual Symposium registration opened on Monday, August 2<sup>nd</sup>. The pre-conference guide was posted on the OEMS Web site and sent out through the EMS list serv and through the social media networks. The symposium catalog was completed and distributed electronically to providers, agencies, Operation Medical Directors, previous attendees and more. A very small supply of catalogs were printed (printing was provided through a sponsorship) and mailed to select groups. We only printed half of what we printed last year in an attempt to phase out the printed version of the catalog.

This year there will be a career fair held in conjunction with the symposium on Thursday, Nov. 11, from 6 – 9 p.m. PI&E has been working with the technical assistance coordinator to promote this new event to participants and EMS agencies. A form for agencies to sign up designed and distributed. PI&E is working to get EMS agencies that are looking to hire providers to participate. This is being done through e-mail, Web site, social media and connections with VAGEMSA, VAVRS and the Department of Fire Programs.

The PI&E Coordinator designed ads and fliers that were placed in trade publications and newsletters to help get EMS providers to come to the event to meet with agencies. As we get closer to the symposium, there will be a push to promote the event through the e-mail list serv, social media networks and more.

AEMER contracted with Marcia Pescitani to solicit sponsorships for the symposium and other training events through out the year. She was successful in getting Bon Secours to be the presenting sponsor for the symposium this year. We have also received sponsorships from other organizations like Philips, EVB Bank, 24-7 EMS and others. PI&E is working with Marcia to secure additional sponsors, especially for promotional items like a bag, name badge holder and more.

### **Governors Awards**

The Regional EMS Councils have submitted their award nominees for the 2010 Governor's EMS Awards. The awards nominations were compiled by PI&E and distributed to the members of the award selection committee.

Two members were rotated off the committee this year, and one new member was appointed. The committee meeting will be held on August 20<sup>th</sup>, 2010.

This year there will be a significant change to the format of the awards program at symposium. There will not be a sit down dinner, but a reception will be held instead. This new format will no longer require participants to purchase tickets and there will be no limited seating. The program will be the same in that there will be remarks by key EMS and VDH leadership, there will be the EMS Memorial recognition, a key note speaker and there will be a presentation of the awards. Afterward there will be a reception with heavy hors d'oeuvres. This new format will provide a significant cost savings, while opening up the program to more attendees.

Dr. Ed Racht will be the keynote speaker this year. Invitations will be sent to the Governor and one has been sent to Dr. Karen Remley to speak and present the awards.

## **Marketing & Promotion**

### *NASEMSO 2010 Meeting*

Virginia is the host state for the 2010 NASEMSO meeting. As the host state we are working with NASEMSO to provide participant packets, arrange special events and much more. Through grants awarded to AEMER, the PI&E Coordinator designed, produced and ordered the following items:

- A credit card USB drive to hold the materials that are distributed to participants.
- A pocket folder that will hold the USB drive, and important papers that participants will need onsite.
- A page with information facts and historical highlights on Virginia.
- The key card for Norfolk Marriott Hotel rooms.
- A lanyard for name badges.

PI&E is currently working on signage and will coordinate with Norfolk Convention and Visitors Bureau to get guides and information on the area for participants. This event not only showcases Virginia EMS, but it showcases Virginia as a state.

### *State EMS Plan*

The State EMS Plan was available on the OEMS Web site for public comment. PI&E sent out information to EMS agencies and providers to help solicit their input and review. This was done through our traditional methods of outreach.

### *OEMS Web site*

The OEMS Web site is the most common way for providers, agencies and others to get information about OEMS, our programs and to gain access to important information like CEs and training opportunities. There have been some changes to the site in recent years, but PI&E and OEMS executive management have been working on a new way to organize the information. We are gathering input from outside reviewers and discussing

the changes with program managers. Once the change is made, the site will be rolled out and information will be sent to users to help transition to the new design.

## **OEMS Media**

Media inquiries into the Suffolk Firefighter compliance case still continue to be answered. As this is still an open investigation, we can only provide limited information.

Talking points were created if we received media calls on the SWEMS Council embezzlement investigation. At this time, we have received no calls on this matter.

The Washington Post did an article on EMS for children and PI&E coordinated an interview with Dave Edwards, OEMS EMSC Coordinator.

## **VDH Communications**

*Office of Licensure and Certification* –The OEMS PI&E Coordinator provides media coverage and guidance for the Office of Licensure and Certification and has assisted on over a dozen media calls in the past couple months on certificate of public need inquiries, investigations and other media requests for information on OL&C services.

*VDH media coverage* – The OEMS PI&E Coordinator provided support for VDH media inquires and events as needed. There were several occasions where the PI& Coordinator covered all media calls for VDH central office. Media calls for AIDs, heat emergency and heat related deaths, and more were covered.

*Lyme Disease Media Telebriefing* – The OEMS PI&E Coordinator managed a media telebriefing on Lyme disease. This included writing and distributing a press release, managing the arrangements and coordination of the briefing and the media inquiries after the briefing.

*Office of Licensure and Certification and VHHA Press Conference* - The PI&E Coordinator worked with VDH Communications staff to promote and manage a press briefing for OL&C and VHHA.

The PI&E Coordinator continues to collect updates and information on OEMS projects and programs to include in the report to the Secretary and the weekly e-mail from the Commissioner.

# **Regulation & Compliance**

## **VII. Regulation and Compliance**

### **Compliance**

The EMS Program Representatives have completed several investigations on EMS agencies and individuals during the second quarter of 2010. These investigations relate to issues concerning failure to submit quarterly prehospital patient care data, violation of EMS vehicle equipment and supply requirements, failure to secure medications and medication kits, failure to staff the ambulance with minimum personnel and individuals with felony convictions. The following is a summary of the Division's activities:

#### ***Enforcement***

Citations Issued:	7
Providers:	0
Agencies:	7

#### ***Compliance Cases***

New Cases:	7
Suspensions:	5
Revocations:	3
Reinstatements:	2
Cases closed:	9

#### ***EMS Agency Inspections***

Licensed EMS agencies:	679 - Active
Permitted EMS Vehicles:	4,165 - (Active, Reserve, Temporary)
Recertification:	
Agencies:	90
Vehicles:	742
New EMS agencies:	2
Spot Inspections:	37

#### ***Hearings (Formal, IFFC)***

April 16, 2010 – Ailer, Hammond, Patrick  
May 26, 2010 – Shenandoah RS - postponed

*Variances*

Approved: 11

Disapproved: 1

*Consolidated Test Sites*

Scheduled: 60

Cancelled: 1

*OMD/PCD Endorsements*

As of July 28, 2010: 208 Endorsed

<b>EMS Regulations</b>
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1. The final draft of the Durable Do Not Resuscitate Regulations 12VAC5-66 has been approved by the Board of Health at their July 16, 2010 meeting. The proposed date for the regulations to become effective is October 1, 2010.
2. The final draft of the Virginia Emergency Medical Services Regulations 12VAC5-31 has been reviewed and approved by the Regulation and Policy Committee. These regulations will now be submitted to the Attorney General's Office for final review pursuant to Executive Order 14 from Governor McDonnell.

<b>Division Work Activity</b>
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1. Staff has participated in several local meetings and /or conferences to discuss local issues or provide technical assistance. The Division continues to offer invitations to EMS agencies and regional EMS Councils to provide seminars and/or open discussion forums regarding OEMS regulations or other program matters administered by the Division. Meetings included Washington County volunteer association as well a meeting with t Board of Pharmacy on issues regarding electronic signatures by practioners.
2. The Division of Educational Development and the Regulation and Compliance staff continue to monitor the process of the new format for practical skills stations at Consolidated Test Sites.
3. Regulation and Compliance staff represented the Office of EMS in Fire/EMS studies as requested of the Virginia Fire Service Board for Louisa County with a formal presentation on April 19, 2010 to the Louisa County Board of

Supervisors. Staff is now involved in a Fire/EMS study involving Spotsylvania County with another possible jurisdiction in the near future.

4. At the request of Dr. Mark Levine, Deputy Health Commissioner, the OEMS Program Representatives are attending “regional VDH meetings” to include Emergency Preparedness and Response (EP&R) staff in order to improve communication and coordination of activities and management of resources. These meetings will also promote a better understanding of the respective roles and responsibilities of all VDH offices that fall under the Deputy Commissioner of Emergency Preparedness and Response.
5. Staff, representing OEMS, is meeting regularly as subject matter experts in collaboration with the Virginia Association of Volunteer Rescue Squads and the Virginia Department of Fire Programs in their revision to the current Emergency Vehicle Operator’s Curriculum utilized by both entities. Changes will address administrative guidelines as well as changes in Virginia Motor Vehicle Codes.

# **Technical Assistance**

## **VIII. Technical Assistance**

### **EMS Workforce Development Committee**

The Workforce Development Committee has met twice since the last EMS Advisory Board meeting. There was a regular committee meeting on June 29, however a quorum was not present. The committee met again on July 15 to review and discuss the Virginia EMS Officer program. The next meeting is scheduled for September 1, 2010 at 1001 Technology Park Drive Glen Allen, VA 23059-4500.

#### WDC Sub-committee Reports:

##### **a) Standards of Excellence**

The sub-committee is continuing the process of writing the Performance Indicators for the Standards of Excellence program in the areas of Recruitment and Retention, Clinical Standards, Medical Direction, Life Safety, Leadership and Management, and Community Involvement. The next meeting is tentatively scheduled for the morning of August 13, 2010 at the Office of Emergency Medical Services 1001 Technology Park Drive Glen Allen, VA 23059-4500. We welcome your comments and/or participation in the process.

##### **b) EMS Officer Standards**

The Virginia EMS Officer Standards has been completed. The next step is to identify existing resources and develop recommended training curricula for this program. When the Workforce Development Committee met on July 15, 2010 the committee unanimously passed the following motion:

***"The Workforce Development Committee requests that the State EMS Advisory Board approve the Virginia EMS Officer Standards document - February 2010 edition and support the move for developing a RFP for the curriculum development of this program"***

The Virginia EMS Officer Standards were forwarded to the members of the EMS Advisory Board on July 15, 2010 to assure Board members, at their request, have at least four weeks to review the document prior to the next full meeting of the Board. The Board will be asked to approve the above motion at the August 13<sup>th</sup> Board meeting.

##### **c) EMS Career Fair 2010 EMS Symposium**

The first annual Virginia EMS Career Fair is being held at the 2010 Symposium host hotel – the Norfolk Waterside Marriott. The event will be held on Thursday night

November 11, 2010 from 6:00-9:00 PM. This event will attract agencies involved in various levels of EMS, from around the state. This is a unique opportunity for the agencies to provide career information and for individuals to interact with recruiters to learn about potential EMS career options in Virginia. There are only 18 spaces still available. For additional information please see **APPENDIX F.**

### **Keeping the Best (KTB) EMS Workforce Retention Program**

A Keeping the Best! (KTB!) EMS Workforce Retention Workshop was held on June 13, 2010 at the O.W.L Fire Department in Woodbridge, Virginia.

Since 1996 there have been 19 KTB! workshops held. OEMS is working with the regional EMS councils to identify opportunities to offer additional workshops on a regional basis.

### **The Virginia Recruitment and Retention (R&R) Network**

On June 18, 2010 the Richmond Fire Department hosted the Virginia Recruitment and Retention Network meeting was held on June 18, 2010 hosted by the Richmond Fire Department. The focus of the June meeting was to provide a opportunity for vendors to discuss their various programs and services related to EMS recruitment and retention. Information on those vendors is provided below.

#### **d) Harvest Homes for Heroes**

Harvest Homes for Heroes helps with Richmond community service heroes (police officers, Firefighters, Teachers, Nurses and Teachers) become home owners. Harvest Homes4Heroes offers support and access to resources and opportunities for affordable home ownership. More information is available at: [www.harvesthomes4heroes.com](http://www.harvesthomes4heroes.com)

#### **e) Liberty Mutual**

Liberty Mutual has a program called Be Fire Smart – which is an interactive approach to fire safety. There is information for parents, teachers and videos, games and coloring books for children. More information is available at: [www.befiresmart.com](http://www.befiresmart.com)

#### **f) Wills for Heroes**

The Wills for Heroes program was started in South Carolina following the 9/11 Terrorist Attacks on America.

Their programs include:

- Support of pro bono estate planning programs through qualified organizations;

- Coordination of community, business and legal resources to address the needs of families of first responders injured or killed in the line of duty;
- Development of educational materials about estate planning;
- Financial resources to enhance first responder welfare and safety;
- Public education of the need to support first responders and their survivors.

More information is available at: [www.willsforheroes.org](http://www.willsforheroes.org)

#### **g) Hero Care**

Hero care is a non-profit dedicated to addressing the housing and financial needs of essential service workers across the United States. More information is available at: [www.herocare.org](http://www.herocare.org)

#### **h) Fire 20/20**

Fire Chief Robert Creecy told the group that they had hosted a Recruiting and Retaining Diversity in the Fire Service pilot workshop on June 17, 2010. The workshop was provided by Fire 20/20. The workshops provided information on their new model; *Key Stakeholders Work Together as a Team*: Each department's team includes the fire chief, labor leader, recruitment officer, minority group representatives, and human resources staff.

##### *Change Starts on the Inside:*

The workshop focuses first on helping the teams to understand what it takes to develop and grow a department culture that is inclusive, supportive, and fosters mentoring.

##### *Community-Based Recruitment:*

Community leaders are considered valuable recruitment partners. This approach provides additional recruitment resources, helps departments to better understand public safety needs in diverse communities, and offers insights about how the departments' services are viewed and valued.

##### *Marketing with a Fire Science Twist:*

The workshop provides proven marketing strategies to cost-effectively reach new markets to recruit qualified and diverse applicants.

*How It Works:*

*1 Setting A Baseline:*

Each team is asked to complete a “report card” in advance of the workshop. They rate how their department is doing compared to best practices for diversity recruitment, hiring, and retention.

*2 Charting a Course:*

Team members work together to articulate their values and vision pertaining to diversity and inclusivity, and to begin mapping benchmarks towards reaching their goals.

*3 Learning New Strategies:*

Participants discuss new principles, strategies, and tactics aimed at supporting retention, enrolling community members as partners, and ensuring that recruitment campaigns are effective.

*4 Creating An Action Plan:*

Utilizing Fire 2020’s 4M’s Framework (Measure, Mindset, Mentoring, Marketing), teams identify and develop one “Smart Goal” that they can implement within 30-60 days.

*5 Committing To Success:*

Each participant commits to a personal 60-day goal. All the participants agree to attend a six-month follow-up webinar to discuss their success, their challenges, and their action plans. For more information please go to: [www.Fire2020.org](http://www.Fire2020.org)

The next meeting of the Recruitment and Retention Network is scheduled for August 13, 2010, in Hampton, Virginia.

*The states of West Virginia and North Carolina have visited Virginia and attended the Virginia Recruitment and Retention Network meetings. Based on the work of the Virginia Recruitment and Retention Network, West Virginia and North Carolina are starting their own network group for recruitment and retention of emergency services personnel. For more information on the Virginia Recruitment and Retention Network contact David Tesh at: [teshd@chesterfield.gov](mailto:teshd@chesterfield.gov).*

# Trauma and Critical Care

## **IX. Trauma and Critical Care**

### **Durable Do Not Resuscitate (DDNR)**

The draft DDNR regulations were approved by the State Board of Health on July 16<sup>th</sup>. They will be posted for a final 30 day public comment period and then work their way up to being signed by the Governor. Once this has occurred the new regulations will be in effect (estimated as 10/1/10.) OEMS will provide education on the changes. Highlights of the revised regulations include:

- Eliminate the need to print forms on unique distinctive paper (discontinuance of the yellow DDNR).
- The State will maintain a standardized form that can be downloaded by prescribing health care providers.
- Original copies of DDNR's will not be required; legible photo copies will be honored
- The lists of procedures and equipment that can or cannot be used to control an airway have been updated to reflect current practice.

### **Emergency Medical Informatics**

#### **Virginia Pre-Hospital Information Bridge (VPHIB)**

As of August 2<sup>nd</sup>, 2010 the old Prehospital Patient Data Reporting (PPDR) program no longer is capable of receiving data. The final batch of PPDR data will be loaded into the new VPHIB system and the old PPDR program will be permanently physically decommissioned. A "last call" for data in the old format was sent to each agency prior to closing the PPDR program. All data from this point forward, no matter when collected, will now need to be submitted in the new format.

What's next? In addition to supporting agencies that are still coming on board with VPHIB, OEMS will begin working on data output from the system. Currently, the VPHIB program has a tool called "Report Writer (RW)" that allows agencies to access their agency's data using standard and ad-hoc reports. To date OEMS has not focused on providing significant training efforts on using the RW tool. This was done for several reasons including not wanting to overwhelm users during the learning phase and because the legacy data (old PPDR data) will not be completely loaded until September of 2010. ImageTrend has also released an updated Report Writer (RW2) that is much easier to use and allows much more flexibility to agencies when creating reports.

Once OEMS and ImageTrend have completed setting up the new RW2 we will release it to the system and offer webinar and Symposium classes showing agency administrators how to create agency level reports that can be used for performance improvement and operational management if desired. These courses will also demonstrate how agency leadership and OMD's can use the system to perform run reviews and communicate with providers at their agency if desired.

OEMS will continue to maintain performing a monthly training class for the VPHIB system via interactive on-line, or webinar, classes held at the end of each month. The class schedule can be found on the [OEMS Patient Care Information System web page](#).

NEMSIS Version 3 is planned to be released by the end of 2010 or early 2011. NEMSIS 3 is a critically important issue for Virginia EMS agencies that utilize third party software vendors. This version update will be a major update because it will change the technical format of the data as well as cause changes to the dataset. EMS agencies should communicate with their vendors and discuss their ability to move to NEMSIS 3. It has been hypothesized that several existing software companies will leave the EMS market because of the changes coming in version 3. More information can be found at [www.NEMSIS.org](http://www.NEMSIS.org).

A couple of major goals of NEMSIS Version 3 is to make EMS data become HL7 compliant (more below) and to address concerns raised with past versions. HL7 stands for Health Level Seven which is a global health care data standard. By NEMSIS becoming HL7 compliant, EMS electronic medical records will become compatible with hospital medical records. This will allow EMS medical records to gain interoperability with other health records. More information on HL7 can be found at [www.HL7.org](http://www.HL7.org).

For those using the OEMS provided State Bridge or Field Bridge the only changes that you are likely to experience would be that some of the choices within individual data elements may change some. OEMS has closely monitored the development of NEMSIS 3 and our new dataset already reflects many of the changes anticipated in the future. OEMS will provide advanced notice of definitive changes.

### **Virginia Statewide Trauma Registry (VSTR)**

The first quarter's audit for 2010 data submissions disclosed five facilities were in a non-compliant status. After receiving notification, four submitted their data that same month and were back in compliance. The remaining facility requested an extension due to staff turnover issues which we approved and their data will be submitted before our August audit for the second quarter.

A pre-audit of second quarter submissions was just completed in July and it disclosed four facilities had not submitted data. After sending a reminder email, staff from all four hospitals responded promptly and advised their data would be submitted before we conduct our next official audit in August.

Data submissions for the entire year of 2009 had improved dramatically from previous years and we had several quarters of complete compliance without having to send out non-compliance letters.

## Trauma System

### a) Trauma System Oversight and Management Committee (TSO&MC)

The TSO&MC last met on June 3, 2010 and the draft minutes to this meeting can be found posted on the Virginia Town Hall website as required. Key items of the meeting include the trauma program directors meeting, trauma performance improvement (TPI) efforts, burn injury review, Trauma Center designation criteria, Trauma Center Fund, and review of the outstanding regional trauma triage plans.

The TPI committee remains in its infancy and the bulk of its June 3<sup>rd</sup> meeting discussed the development of a standard trauma triage report. A sample report is attached as **Appendix G**. Prior to the next TSO&MC meeting prehospital and trauma registry data will be used to beta test the trauma triage report. Once the TPI committee is satisfied with the report, regional reports will be developed and disseminated.

A work group comprised of trauma stakeholders and leadership from the Virginia burn centers has been working on reviewing burn related trauma registry data and existing Trauma Center designation criteria specific to burn care. The purpose of the review is to assess if burn patients are reaching definitive burn care in a timely fashion and if Trauma Center site reviews adequately address the oversight of burn care. Results will be used for PI and educational efforts as needed and also contribute to the revision of the Trauma Center designation criteria.

The TSO&MC discussed the need to perform a full review and update of the Trauma Center designation manual. The most recent version of the Virginia Statewide Trauma Center Designation Program Hospital Resource Manual is from 2005. Since 2005 the American College of Surgeon's has released an updated version of their "Resources for Optimal Care of the Injured Patient" which the Virginia criteria is based on. The committee would also like to revisit some criterion that they wish to have stated more clearly. There are also several new stakeholders that can benefit from the experience of reviewing and revising the criteria.

The Trauma Center Fund was also discussed during the June 3<sup>rd</sup> meeting. A Trauma Center Fund Panel had been established and presented a draft revision of the Trauma Center Fund Disbursement Policy at the December 2009 TSO&MC meeting. No further progress had been made since this meeting primarily because the fund stood serious potential during the last legislative session of being significantly decreased. Now that this is no longer the case, the committee would like to see the draft completed. Additionally, increased communication and education to hospital staffs that manage the

funding on the hospital that are not system stakeholders is a goal with the release of the next disbursement policy revision.

During the March 2010 TSO&MC meeting the committee was asked by the OEMS to assist in reviewing and approving this year's regional trauma triage plans. During the March meeting the BREMS, CSEMS, ODEMSA, and REMS were not approved by the committee. With the exception of the CSEMS these plans were accepted at the June meeting. The CSEMS plan continues to be worked on at the regional level.

**b) Trauma Center Fund**

Each July 1<sup>st</sup> OEMS staffs revise the percentages that each designated trauma center will receive from the Trauma Center Fund for the upcoming fiscal year. The percentages are developed using motor vehicle crash data submitted to the Virginia State Trauma Registry. This year's percentages are noted in the table below:

Trauma Center	Percent Distribution FY10	# Qualified Admission Days CY09	Percent Distribution FY11	Percent Difference
<b>I</b>				
Roanoke Memorial Hospital	11.91%	4,655	14.67%	2.76%
Inova Fairfax Hospital	19.34%	4,330	13.65%	-5.69%
Norfolk General Hospital	13.21%	4,026	12.69%	-0.52%
UVA Health System	14.85%	4,414	13.91%	-0.94%
VCU Health Systems	25.70%	8,235	25.96%	0.26%
<b>II</b>				
Lynchburg General Hospital	3.49%	1,040	3.28%	-0.21%
Mary Washington	1.86%	1,373	4.33%	2.47%
Riverside Regional Medical Ctr.	2.81%	939	2.96%	0.15%
Winchester Medical Ctr.	3.20%	1,145	3.61%	0.41%
<b>III</b>				
New River Valley Medical Ctr.	0.21%	47	0.15%	-0.06%
CJW Medical Ctr.	0.64%	328	1.03%	-0.39%
Montgomery Regional Hospital	0.09%	79	0.25%	0.16%
Southside Regional Medical Ctr.	0.18%	197	0.62%	0.44%
Virginia Beach Gen'l Hospital	2.51%	915	2.88%	0.37%
Total	100.00%	31,723	100.00%	

The Trauma Center Fund Panel and OEMS continue to work on revising the Trauma Center Fund Disbursement policy and hope to release the revised document in September 2010.

The most recent trauma fund distributions and more information on the Trauma Center Fund can be found on the OEMS Trauma System Web page at: <http://www.vdh.virginia.gov/OEMS/Trauma/TraumaSystem.htm>

**c) OnStar Creates Injury Severity Prediction to Improve Automatic Crash Response.**

OnStar has developed an Injury Severity Prediction based on the findings of a Centers for Disease Control and Prevention expert panel which will allow OnStar advisors to alert first responders when a vehicle crash is likely to have caused serious injury to the occupants. Using a collection of built in vehicle sensors, OnStar Automatic Crash Response system sends crash data to an advisor if the vehicle is involved in a moderate or severe front, rear or side-impact crash. The data includes crash severity, along with the direction of impact, air bag deployment, multiple impacts and vehicle type. This information will then be used to automatically calculate the Injury Severity Prediction which comes back as a Normal or High score. When an advisor tells first responders there is an Injury Severity Prediction of High it will signify that there is a higher risk of severe injury and help the responders determine what level of care required and the transport destination for patients. This estimate should be available to OnStar advisors early next year. More information can be found at <http://www.onstar.com/web/portal/pressrelease?articleID=235302>.

In related news, Stewart C. Wang, M.D. and his team at the University of Michigan Program for Injury Research and Education direct a federally funded program that educates EMS and medical personnel in the proper use of Automatic Crash Response data and Injury Severity Prediction as it relates to triaging and treating patients. To bring these lessons to life, the team uses real automobile crash cases and their resulting injuries to illustrate each concept. Modules are available for EMS, law enforcement and fire, and emergency department personnel. More information can be found at <http://www.crashedu.org/>.

**Stroke System**

The new Statewide Stroke Triage Plan was approved by the State Board of Health on April 23<sup>rd</sup>, 2010. The stroke plan formalizes acute stroke as a time sensitive critical illness equal to that of trauma care. The plan will be posted on the OEMS website and an implementation packet developed to assist agencies, councils and other entities to utilize to teach the importance of stroke triage and/or developing their own stroke plan so that it meets or exceeds the state plan.

**STEMI System**

OEMS continues to participate as an active member of the Virginia Heart Attack Coalition (VHAC) which functions in concert to the American Heart Associations (AHA) Mission Life Line (ML). A significant change that occurred during this quarter was that

the AHA made some significant strategic plan changes for FY11 and Keltcie Delamar who has become well known to the EMS STEMI and stroke efforts has acquired new duties and as of July 1<sup>st</sup> no longer serves in the role of coordinating these efforts. Other AHA staffs are continuing to assist VHAC with maintaining momentum.

In a joint efforts by the Virginia chapter of the American College of Cardiology (ACC) and private donors to Virginia's STEMI system through AHA funding has been created to support a full time VHAC/ML state coordinator. This position will be maintained by AHA and recruiting should start soon.

More information, a link to register your STEMI system and recent successful cases can be found on the VHAC website at <http://virginiaheartattackcoalition.org>. As of this writing there are 22 registered STEMI systems in Virginia including:

1. Virginia Heart Attack Coalition – Statewide coalition
2. Bon Secours St. Mary's Hospital and St. Frances Medical Center – Central Region
3. FSVA Memorial Regional Medical Center – Central Region
4. Old Dominion EMS Alliance - Central Region
5. Southside Regional Medical Center - Central Region
6. Virginia Commonwealth University - Central Region
7. Bon Secours Heart and Vascular Institute Mary View Hospital – Eastern Region
8. Bon Secours Mary Immaculate Hospital – Eastern Region
9. Chesapeake General Hospital – Eastern Region
10. Chesapeake Fire Department – Eastern Region
11. City of Virginia Beach Dept. of EMS – Eastern Region
12. Peninsula EMS Council – Eastern Region
13. Riverside Health System – Eastern Region
14. Sentara Norfolk Hospitals – Eastern Region
15. Inova Alexandria – Northern Region
16. Inova Fairfax Hospital-Loudoun Hospital/IHVI - Northern Region
17. Mary Washington Healthcare - Northern Region
18. Reston Hospital Center - Northern Region
19. Code MI (Winchester) – Northwest Region
20. University of Virginia and area communities – Northwest Region
21. Centra Lynchburg Hospital – Southern Region
22. Heart Alert Program (Roanoke) – Western Region

## **Emergency Medical Services for Children (EMSC)**

### **a) EMSC State Partnership Grant**

In March the Health Resources & Services Administration (HRSA) awarded OEMS a new EMSC State Partnership Grant. Each of the 50 states and 6 U.S. protectorates is eligible for one EMSC grant and OEMS its first in 2007. This federal grant will contribute \$130,000 annually to support EMS for Children initiatives in Virginia for the next 3-6 years, and ensure that Virginia's progress toward achieving specific National EMSC Performance Measures is being measured and encouraged.

### **b) Surveying of Hospitals and EMS Agencies**

EMS for Children programs in every state will be surveying hospitals and EMS agencies in 3-month blocks during 2010; hospital surveys will begin in May or June, and EMS agency surveys will begin shortly after that. For hospitals, the performance measures being assessed related to the presence or absence of pediatric emergency transfer guidelines and agreements. For EMS agencies, the surveys concentrate on pediatric equipment carried on ambulances and EMS access to both on and off-line pediatric medical control at the scene of pediatric emergencies.

### **c) Small Hospitals Offered Assistance toward Improving Pediatric Readiness**

The EMSC program presented to the Small Rural Hospital Conference in April concerning pediatric readiness Critical Access Hospitals (CAH) and other small rural hospitals. Also included in the presentation was a discussion of summary recommendations by the Institute of Medicine (IOM) related to their special report "Emergency Care for Children: Growing Pains".

On-site informal pediatric assessments are being offered to interested hospitals, which can result in technical help and potential grant funding to aid in improvement.

### **d) Immobilizing Children in Ambulances**

The status of EMS industry efforts to effectively immobilize children during ambulance transport will be a special presentation topic during the July 8, 2010 EMSC Committee. This topic has become a special focus of the Committee, which is now gathering best practices and other resources for eventual inclusion on the EMSC website. The EMSC Committee is also exploring ways to aid in disseminating to EMS providers the excellent gang violence educational resources developed by the Attorney General's office.

### **e) EMSC Family Representative Leaves Committee**

Betsy Smith, RN, NREMT-P, long-time Family Representative for the Virginia EMS for Children program will be leaving the EMSC Committee and her position because of other demands. Betsy was instrumental in developing and instructing the Special Children's

Outreach and Prehospital Education (SCOPE) course, and she also compiled fantastic pediatric instructor resource kits (complete with special manikins and dolls) for an EMSC Committee project. The kits were distributed to every EMS regional council in Virginia and are still in use. Betsy had recently been sharing the Family Representative role with Petra M. Connell, PhD (the previous EMSC Coordinator for Virginia), and fortunately Petra will be continuing with the EMSC program as its Family Representative.

**Respectfully Submitted**

**Office of Emergency Medical  
Services Staff**

# APPENDIX

A

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# Policy for Vaccine Administration by Emergency Medical Services Providers in Virginia

## Purpose

This policy is designed to provide guidance to Virginia Emergency Medical Services (EMS) Operational Medical Directors (OMD), EMS agencies, and EMS providers in the development of a program for the administration of vaccines by appropriately certified, authorized, and supervised EMS providers.

## Background

Previously, EMS providers had not been recognized by the *Code of Virginia* as having the ability to administer vaccines under routine circumstances. EMS providers could be authorized to administer vaccines in the event of a declared emergency by the Governor and under the direction and authorization of the Commissioner of Health.

Amendments to the *Code of Virginia*, effective March 29, 2010 recognized certain EMS providers among those identified as able to administer vaccinations to minors. Amendments to the *Code of Virginia*, effective March 29, 2010 recognized certain EMS providers as being authorized to administer vaccinations under the authority of their operational medical director without the physical presence of the medical director. **Appendix A**

## Personnel and Responsibilities

An Operational Medical Director serves as the “prescriber” identified in the *Code of Virginia*, and as the supervising physician for the EMS providers administering vaccines.

- A prescriber is a practitioner licensed in the Commonwealth who is authorized pursuant to §§ 54.1-3303 and 54.1-3408 to issue a prescription for a covered substance or a practitioner licensed in another state to so issue a prescription for a covered substance
- OMD's supervising a vaccination program must hold current endorsement as an EMS physician in Virginia and be affiliated with the EMS agency developing the vaccination program
- The OMD is ultimately responsible for the supervision of the vaccination program
- Provides authorization for purchase of vaccine and other necessary supplies for vaccine administration
- Ensures appropriate physical management and handling of vaccine
- Ensures that the vaccine program is registered with the Virginia Immunization Information System (VIIS)

- Develops/approves protocols for approval and training of vaccinators, provision of specific vaccine information/education and informed consent to recipients of vaccine, specific procedures for administration of vaccine and management of any vaccination related complications, development and approval of appropriate record keeping, reporting of vaccination information and any adverse events or complications, and implementation of an ongoing quality management program for the vaccination program.
- A model protocol for the administration of vaccines by pharmacists in Virginia has been developed by the Board of Nursing and provides a concise outline of requirements for a vaccination program, as well as vaccine specific information on patient screening and provision of consent, administration of specific vaccines, and record keeping including sample documents and record forms:  
<http://www.virginiapharmacists.org/associations/7940/files/updated%202006%20Immunization%20Protocol.doc>

EMS providers participating in a vaccination program must:

- Hold a valid, unrestricted Virginia certification as an Intermediate or Paramedic
- Must be affiliated with the Virginia EMS agency developing the vaccination program
- Must be individually approved by their agency OMD as a vaccinator
- Must follow protocols approved by their OMD for vaccine administration

The EMS Agency developing the vaccination program must:

- Hold current licensure as an ALS agency in Virginia

### Procedures

The OMD must direct the development of a plan for purchase/acquisition of vaccine, including proper storage and handling of each type of vaccine according to recommendations by the Centers for Disease Control (CDC) and the vaccine's manufacturer.

- Specific information regarding vaccine management in general as well as information for specific vaccines is available from the CDC:  
<http://www.cdc.gov/vaccines/recs/storage/default.htm>
- The OMD must ensure that each provider who will administer vaccine has been individually approved by the OMD and has

received appropriate training in the handling of the vaccine, screening and provision of information and informed consent to vaccine recipients, specific administration protocols for each vaccine administered, observation of vaccine recipients and management of complications of vaccine administration (including severe allergic reaction) and the maintenance of appropriate records regarding vaccine administration.

- The OMD/Agency will keep a written record of those providers approved to administer vaccine: an example is provided in **Appendix B**
- General information regarding vaccine administration as well as vaccine-specific information is available from the CDC: <http://www.cdc.gov/vaccines/recs/vac-admin/default.htm>
- The OMD must assure that before administering any vaccine, a copy of the most recent Vaccine Information Statements (VIS) is provided to the recipient or their legal guardian. Provision of the appropriate VIS is required by Federal law for many vaccines. Such information must be reviewed with the adult recipient, or if a minor by their parent, legal guardian or person standing in loco parentis to confirm their understanding of the benefits and risks of the intended vaccine. Non-English speaking individuals seeking vaccination for themselves or their child/children should be provided a copy of the VIS in their native language. VIS are available for specific vaccines in a variety of languages: <http://www.cdc.gov/vaccines/pubs/vis/default.htm>
- The Operational Medical Director must assure that every provider screens every recipient for indications and contraindications prior to administering the vaccine. Screening tools shall at a minimum follow CDC and manufacturer's recommendations. Examples are available for children and teens: <http://www.immunize.org/catg.d/p4060.pdf>, and for adults: <http://www.immunize.org/catg.d/p4065.pdf>
- A record of vaccine administration must be kept in the recipient's vaccination record and a second copy kept at the administering location documenting the date that the vaccine was administered, the route, dose, site, manufacturer and lot number, the publication date of the Vaccine Information Statements (VIS), along with the name and title of the person administering the vaccine. Sample vaccination recording materials are available through the CDC: <http://www.cdc.gov/vaccines/recs/immuniz-records.htm#recording>

- Vaccine record keeping should conform to guidelines of the Virginia Immunization Information System (VIIS), and each vaccination program should be registered with the VIIS. Information regarding registration and record keeping is available: <https://viis.vdh.virginia.gov/VIIS/portalHeader.do>
- The OMD must also develop a protocol for the care and observation of vaccine recipients, and for management of adverse events related to vaccine administration. These protocols would be expected to dovetail with existing agency patient care protocols for the management of serious allergic reactions and anaphylaxis
- The OMD must ensure that the vaccination program is prepared to identify and report adverse reactions to vaccine administration, and be familiar with the Vaccine Adverse Event Reporting System (VAERS). Information regarding adverse events associated with vaccination is available generally through the CDC: <http://www.cdc.gov/vaccines/vac-gen/safety/default.htm>, and specifically about the VAERS: <http://vaers.hhs.gov/about/index>

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## **Appendix A**

§ 32.1-46.02. Administration of influenza vaccine to minors.

The Board shall, together with the Board of Nursing and by August 31, 2009, develop and issue guidelines for the administration of influenza vaccine to minors by licensed pharmacists, registered nurses, or licensed practical nurses, certified emergency medical technicians-intermediate, or emergency medical technicians-paramedic pursuant to § 54.1-3408. Such guidelines shall require the consent of the minor's parent, guardian, or person standing in loco parentis, and shall be consistent with applicable guidelines developed by the Centers for Disease Control and Prevention.

§ 54.1-3408. Professional use by practitioners.

- I. A prescriber may authorize, pursuant to a protocol approved by the Board of Nursing, the administration of vaccines to adults for immunization, when a practitioner with prescriptive authority is not physically present, *by* (i) by licensed pharmacists, (ii) by registered nurses, or (iii) licensed practical nurses under the immediate and direct supervision of a registered nurse. A prescriber acting on behalf of and in accordance with established protocols of the Department of Health may authorize the administration of vaccines to any person by a pharmacist or, nurse, certified emergency medical technician-intermediate, or emergency medical technician-paramedic under the direction of an operational medical director when the prescriber is not physically present. Emergency medical services personnel shall provide documentation of the vaccines to be recorded in the Virginia Immunization Information System.



# **POLICY FOR VACCINE ADMINISTRATION BY EMERGENCY MEDICAL SERVICES PROVIDERS IN VIRGINIA**

## **Background**

During the 2010 General Assembly, House Bill 173 (Pogge) and Senate Bill 328 (Stuart) were combined resulting in legislation authorizing emergency medical technicians (EMTs) certified at the intermediate and paramedic levels that are operating under the direction of their Operational Medical Director (OMD) to administer vaccines to any person in accordance with established protocols of the Board of Health. EMS providers that administer vaccines will be required to utilize the Virginia Immunization Information System (VIIS) to document and record their activity. This legislation, as a result of an emergency clause, became effective March 23, 2010 with the Governor's signature.

## **Participants**

The Office of EMS (OEMS) was assigned the responsibility in developing a policy following existing guidelines and protocols established by the Board of Nursing and the Board of Health. Participants included the following:

Marissa Levine, MD, MPH, Deputy Commissioner, Emergency Preparedness and Response  
George Lindbeck, MD, State EMS Medical Director, OEMS  
Gary R. Brown, Director, OEMS  
P. Scott Winston, Assistant Director, OEMS  
Warren Short, Manager, Education and Training, OEMS  
Michael D. Berg, Manager, Regulation and Compliance, OEMS  
Elizabeth Singer, Public Relations Coordinator, OEMS  
Marian Hunter, Asst. Public Relations Coordinator, OEMS  
Jim Farrell, Director, Division of Immunization, VDH  
Joanne Wakeham, Community Health Services, VDH  
Sandra Sommer, Division of Immunization, VDH

## **Legal review**

This document including proposed policy for vaccination administration by Emergency Medical Services Providers in Virginia has been reviewed and approved by Eric Gregory, JD, Liaison to the Health Department, Virginia Office of the Attorney General.

## **Distribution Plan**

Information and awareness regarding the change in the legislation authorizing EMS providers to administer vaccine will be provided to the following stakeholders: Operational Medical Directors, EMS agencies, and the Virginia EMS Advisory Board constituent groups, local health districts, Virginia Board of Nursing and any additional identified stakeholder groups.

## **Educational Plan**

The Office of EMS will include education for Operational Medical Directors during their initial and recurrent training programs. Regular updates will be provided as needed. The OEMS staff will also receive training from Division of Immunization. In addition, the Office of EMS will establish a public information program to include but not limited to:

1. E-mail to OMDs – a detailed letter will be e-mailed to all OMDs. We have an updated e-mail list of the OMDs and this will be the most efficient way to communicate this policy to them.
2. OEMS Web site – the news of this bill and policy will be featured on the home page. The policy and information will be placed under the EMS Medical Direction tab and then under important documents.
3. Social Media – an update on the policy being released and a link to it on the OEMS Web page will be posted on Face Book, Twitter and MySpace.
4. Regional EMS Councils – the link and information will be distributed to the Regional EMS Councils with a request for them to post it to their Web sites and to share on their e-mail list serves
5. Article – an article will be written about this to be included in the OEMS news letter that will be distributed to the OEMS list serv. This article will also be submitted to the VAVRS, VA Fire Chiefs and VA Firefighters newsletters.
6. Partner groups – in addition to submitting the articles to VAVRS, Fire Chiefs, Firefighters and VAGEMSA, we will also send information to their leadership and request that they share it with their members.
7. Talking points – these will be created to assist OEMS staff when answering questions about this policy and will allow PI&E to have approved messages ready in the event there is media interest. These talking points will also be provided to the program representatives in the field, as they will likely be fielding many questions.

## Vaccine Program Tracking

The Office will modify the EMS agency inspection to capture the following information:

1. Do you have a vaccination program
  - a. Internal
  - b. External
  - c. Both
2. Program administration
  - a. Authorized Prescriber
  - b. Administrator
3. List your VIIS number

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# APPENDIX

## B

**Office of Emergency Medical Services  
Rescue Squad Assistance Fund (RSAF) Grant Awards  
July 1, 2010 – June 30, 2011**

1. **APPOMATTOX COUNTY SHERIFF'S OF (BR-G01/06-10) - APPOM Co. PD 11**  
10 CARDIAC SCIENCE POWERHEART G-3 - \$5,975.00 (50/50) State/Local Match  
**Conditions:** 27 - *Must submit a maintenance/sustainability plan to the OEMS for awarded item.*

**TOTAL - \$5,975.00**

2. **ARLINGTON COUNTY EMS (NV-G02/06-10) - ARLINGTON Co., PD 08**  
10 Stryker Pro Cot - \$56,840.00 (50/50) State/Local Match

**TOTAL - \$56,840.00**

3. **BATH HIGHLAND VOL FIRE DEPT (CS-G02/06-10) - BATH Co., PD 06**  
1 Panasonic Tough Book - \$2,920.00 (80/20) State/Local Match  
**Conditions:** 29 - *Must use the Panasonic ToughBook 19 to comply with pre-hospital patient care reporting of the OEMS minimum dataset in the technical format prescribed by OEMS.*

**TOTAL - \$2,920.00**

4. **BIG ISLAND EMERGENCY CREW INC (BR-G02/06-10) - BED CO, PD 11**  
6 P7170 - \$8,022.00 (50/50) State/Local Match  
1 Power ambulance cot - \$5,684.00 (50/50) State/Local Match  
**Conditions:** 28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*

**TOTAL - \$13,706.00**

5. **BIG STONE GAP RESCUE SQUAD INC (LE-G03/06-10) - WISE Co., PD 01**  
1 STRYKER MX-PRO #6082 - \$3,184.00 (80/20) State/Local Match

**TOTAL - \$3,184.00**

6. **BLUE RIDGE VOL RESCUE SQUAD (PI-G05/06-10) - PATRICK Co., PD 12**  
1 Lifepak 15 - \$22,000.00 (100/0) State/Local Match

**TOTAL - \$22,000.00**

7. **BOTETOURT COUNTY EMER SER (WV-G03/06-10) - BOT Co., PD 05**  
1 Type I Ford Ambulance - \$92,000.00 (80/20) State/Local Match  
**Conditions:** 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*  
1 Swiftwater Rescue Equipment - \$7,841.73 (50/50) State/Local Match  
**Conditions:** 21 - *Special condition(s) - see attached.*

**TOTAL - \$99,841.73**

8. **BRIDGEWATER VOL FIRE DEPT (CS-G04/06-10) - ROCKINGHAM Co., PD 06**  
1 Philips HeartStart MRx - \$15,368.80 (80/20) State/Local Match  
1 Philips HeartStart FRx - \$1,135.20 (80/20) State/Local Match  
  
**TOTAL - \$16,504.00**
9. **BROSVILLE-CASCADE FIRE DEPT (PI-G04/06-10) - PITTSYLVANIA Co., PD 12**  
1 LIFEPAK 15 - \$17,600.00 (80/20) State/Local Match  
  
**TOTAL - \$17,600.00**
10. **BRUNSWICK VOL RESCUE SQUAD (SS-G03/06-10) - BRUNSWICK Co., PD 13**  
3 E Z IO Power Driver - \$2,053.60 (80/20) State/Local Match  
3 King Airways - \$1,188.00 (80/20) State/Local Match  
  
**TOTAL - \$3,241.60**
11. **BUCKINGHAM CO VOL RESCUE SQUAD (SC-G02/06-10) - BUCKINGHAM Co., PD 14**  
1 Ford F550 - \$42,000.00 (50/50) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.  
21 - Special condition(s) - see attached.  
  
**TOTAL - \$42,000.00**
12. **BUENA VISTA RESCUE SQUAD (CS-G05/06-10) - BUENA VISTA Co., PD 06**  
1 Phillips Monitors - \$9,605.50 (50/50) State/Local Match  
  
**TOTAL - \$9,605.50**
13. **CAPRON VOL FIRE & FIRST AID SQ (TI-G04/06-10) - SOUTHAMPTON Co. PD 20**  
1 2010 Ford 450, Wheel coach - \$106,835.20 (80/20) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.  
28 - Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.  
  
**TOTAL - \$106,835.20**
14. **CAROLINE CO DEPT FIRE & RESCUE (RA-G01/06-10) - CAROLINE Co., PD 16**  
7 Panasonic Toughbook computer - \$25,550.00 (100/0) State/Local Match  
**Conditions:** 21 - Special condition(s) - see attached.  
1 2011 Chev G4500 553C Horton - \$71,997.00 (50/50) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.  
  
**TOTAL - \$97,547.00**
15. **CASTLEWOOD FIRE AND RESCUE INC (CP-G01/06-10) - RUSSELL Co., PD 02**  
1 Ford F-450 4WD - \$106,835.20 (80/20) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.  
  
**TOTAL - \$106,835.20**

16. **CENTRAL LIFE SAVING & RESCUE (SS-G04/06-10) - BRUNSWICK Co., PD 13**

1 AutoPulse - \$11,928.00 (80/20) State/Local Match

Conditions: 28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*

**TOTAL - \$11,928.00**

17. **CHASE CITY RESCUE SQUAD (SS-G05/06-10) - MECKLENBURG Co., PD 13**

1 FORD TYPE I AMB 4WD - \$66,772.00 (50/50) State/Local Match

Conditions: 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*

**TOTAL - \$66,772.00**

18. **CHINCOTEAGUE VOL FIRE COMPANY (ES-G01/06-10) - ACCOMACK Co., PD 22**

1 2011 Ford/Braun E450 Ambulance - \$74,671.50 (50/50) State/Local Match

Conditions: 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*

**TOTAL - \$74,671.50**

19. **CHURCHVILLE VOL FIRE & RESCUE (CS-G06/06-10) - AUGUSTA Co., PD 06**

3 stryker stair-pro stair chair - \$6,938.40 (80/20) State/Local Match

1 2010 ford F-450 Medtec - \$106,835.20 (80/20) State/Local Match

Conditions: 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*

21 - *Special condition(s) - see attached.*

2 TOUGH BOOKS - \$3,650.00 (50/50) State/Local Match

Conditions: 21 - *Special condition(s) - see attached*

29 - *Must use the Panasonic ToughBook 19 to comply with pre-hospital patient care reporting of the OEMS minimum dataset in the technical format prescribed by OEMS.*

28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*

**TOTAL - \$117,423.60**

20. **CITY OF BRISTOL FIRE DEPT (MT-G06/06-10) - BRISTOL Co., PD 03**

3 HeartStart MRx ALS monitor - \$50,400.00 (100/0) State/Local Match

5 HeartStart FRx Defibrillators - \$5,676.00 (80/20) State/Local Match

**TOTAL - \$56,076.00**

21. **CITY OF STAUNTON FIRE DEPT (CS-G07/06-10) - STAUNTON Co., PD 06**

3 Laerdal Compact Suction Unit 3 - \$1,317.60 (80/20) State/Local Match

1 Philips MRx Monitor - \$15,369.20 (80/20) State/Local Match

**TOTAL - \$16,686.80**

22. **CITY OF VA BEACH DEPT OF EMS (TI-G02/06-10) - VIRGINIA BEACH Co., PD 20**

4 (Aed/Manual) with 12 Lead - \$42,000.00 (50/50) State/Local Match

11 (AED/Manual) with 3 lead - \$68,756.78 (50/50) State/Local Match

**TOTAL - \$110,756.78**

23. **CLARKSVILLE VOLUNTEER FIRE DEP (SS-G02/06-10) - MECKLENBURG Co., PD 13**  
1 HURST POWER UNIT, TOOLS - \$18,275.00 (50/50) State/Local Match  
1 HIGH AND LOW AIR BAG - \$5,020.00 (80/20) State/Local Match

**TOTAL - \$23,295.00**

24. **COLONIAL BEACH VOL FIRE DEPT (RA-G06/06-10) - WESTMORELAND Co., PD 16**  
2 Panasonic Toughbook - \$3,650.00 (50/50) State/Local Match  
**Conditions:** 28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*

**TOTAL - \$3,650.00**

25. **DANTE RESCUE SQUAD INC (CP-G02/06-10) - RUSSELL Co., PD 02**  
6 Mobile and Base Radios - \$13,570.04 (80/20) State/Local Match

**TOTAL - \$13,570.04**

26. **DANVILLE LIFESAVING/1ST AID (PI-G06/06-10) - DANVILLE Co., PD 12**  
1 Rescue 42 Stabilization Equip. - \$51,006.50 (50/50) State/Local Match

**TOTAL - \$51,006.50**

27. **DAVENPORT LIFESAVING CREW INC (CP-G03/06-10) - BUCHANAN Co., PD 02**  
1 2010 Ford F450 4X4 ambulance - \$106,835.20 (80/20) State/Local Match  
**Conditions:** 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*  
21 - *Special condition(s) - see attached.*  
28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*

**TOTAL - 106,835.20**

28. **FAIRFIELD VOL RESCUE SQUAD (CS-G08/06-10) - ROCKBRIDGE Co., PD 06**  
10 Motorola HT-1250 Portable Radi - \$5,560.00 (80/20) State/Local Match  
10 Speaker Microphone - \$330.00 (50/50) State/Local Match  
1 ALS Monitor/Defibrillator - \$21,000.00 (100/0) State/Local Match  
**Conditions:** 28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*

**TOTAL - \$26,890.00**

29. **FIELDALE-COLLINSVILLE RS (PI-G02/06-10) - HENRY Co., PD 12**  
1 LIFE PAK 15 - \$17,600.00 (80/20) State/Local Match  
1 Megacode ALS Trainer - \$4,013.50 (50/50) State/Local Match

**TOTAL - \$21,613.50**

30. **FLOYD COUNTY EMS INC (NR-G01/06-10) - FLOYD Co., PD 04**  
1 2010 Ford Explorer 4WD +access - \$22,220.00 (80/20) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.
- TOTAL - \$22,220.00**
31. **FRANKLIN COUNTY PUBLIC SAFETY (PI-G07/06-10) - FRANKLIN COUNTY, PD 12**  
1 Physio Control LP-15 12 Lead - \$17,600.00 (80/20) State/Local Match
- TOTAL - 17,600.00**
32. **GLADE SPRINGS VOL LIFESAVING (MT-G01/06-10) - WASHINGTON Co., PD 03**  
1 2009 Chevrolet 4500 4WD - \$27,000.00 (50/50) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.
- TOTAL - \$27,000.00**
33. **GOODSON-KINDERHOOK VOL FD (MT-G07/06-10) - WASHINGTON Co., PD 03**  
2 Port Suction units - \$878.40 (80/20) State/Local Match  
2 Stair pro (stair chair) - \$3,868.80 (80/20) State/Local Match
- TOTAL - \$4,747.20**
34. **GREENSVILLE VOL RESCUE SQUAD (CR-G01/06-10) - EMPORIA Co., PD 19**  
4 PANASONIC TOUGH BOOKS - \$14,600.00 (100/0) State/Local Match  
**Conditions:** 28 - Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.  
29 - Must use the Panasonic ToughBook 19 to comply with pre-hospital patient care reporting of the OEMS minimum data set in the technical format prescribed by OEMS.
- TOTAL - \$14,600.00**
35. **HAYSI RESCUE SQUAD (CP-G04/06-10) - DICKENSON Co., PD 02**  
1 Type I Ambulance 4WD F-450 - \$106,835.20 (80/20) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.  
21 - Special condition(s) - see attached.
- TOTAL - \$106,835.20**
36. **HENRY CO DEPT OF PUBLIC SAFETY (PI-G03/06-10) - HENRY Co., PD 12**  
1 TRAINING EQUIPMENT - \$50,512.80 (80/20) State/Local Match  
**Conditions:** 28 - Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.
- TOTAL - \$50,512.80**

37. **HOPEWELL BUREAU OF FIRE (CR-G02/06-10) - HOPEWELL Co., PD 19**  
3 PANASONIC TOUGHBOOK CR-19 - \$5,475.00 (50/50) State/Local Match  
**Conditions:** 21 - *Special condition(s) - see attached.*  
29 - *Must use the Panasonic ToughBook 19 to comply with pre-hospital patient care reporting of the OEMS minimum dataset in the technical format prescribed by OEMS.*
- TOTAL - \$5,475.00**
38. **IRON GATE FIRE DEPARTMENT (WV-G02/06-10) - ALLEGHANY Co., PD 05**  
1 DODGE TYPE 1 AMB. - 4WD - \$116,955.20 (80/20) State/Local Match  
**Conditions:** 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*  
10 - *Agency must upgrade to transport agency.*
- TOTAL - \$116,955.20**
39. **ISLE OF WIGHT VOL RESCUE SQUAD (TI-G05/06-10) - ISLE OF WIGHT Co., PD 20**  
1 Physio Control Lucas 2 - \$7,833.34 (50/50) State/Local Match
- TOTAL - \$7,833.34**
40. **JAMES CITY CO FIRE DEPARTMENT (VP-G01/06-10) - JAMES CITY CO, PD 21**  
2 Demo E Series AED w/12-lead - \$12,100.00 (50/50) State/Local Match  
2 ALS Baby 200 (Complete) & Acc. - \$3,058.00 (50/50) State/Local Match  
1 Pediatric Intubation Trainer - \$637.00 (50/50) State/Local Match  
1 Neonatal Intubation Trainer - \$270.00 (50/50) State/Local Match  
2 Infant Airway Mngmt Trainer - \$663.00 (50/50) State/Local Match  
1 Baby Umbi - \$312.00 (50/50) State/Local Match  
**Conditions:** 28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*
- TOTAL - \$17,040.00**
41. **JEB STUART RESCUE SQUAD (PI-G08/06-10) - PATRICK Co., PD 12**  
1 ALS/BLS INTERCEPT FOR COUNTY - \$13,821.50 (50/50) State/Local Match  
**Conditions:** 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*  
28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*
- TOTAL - \$13,821.50**
42. **KEMPSVILLE VOL RESCUE SQUAD (TI-G01/06-10) - VIRGINIA BEACH Co., PD 20**  
4 MTX 2500 Motorola Portables - \$6,290.00 (50/50) State/Local Match  
1 Stryker Powered Ambulance Cot - \$5,684.00 (50/50) State/Local Match
- TOTAL - \$11,974.00**
43. **KENBRIDGE EMERGENCY SQUAD (SC-G03/06-10) - LUNENBURG Co., PD 14**  
1 UHF Repeater/Inst./Antenna Sys - \$2,867.02 (80/20) State/Local Match  
2 I.O. Drills & Supplies - \$2,184.00 (80/20) State/Local Match
- TOTAL - \$5,051.02**

44. **KENTUCK VOLUNTEER FIRE DEPT (PI-G01/06-10) - PITTSYLVANIA Co., PD 12**  
1 MANIKENS AND AED TRAINER - \$1,172.00 (80/20) State/Local Match  
1 PROJECTOR/SCREEN/MOUNTING - \$713.60 (80/20) State/Local Match  
1 Toshiba Satellite Laptop - \$606.00 (80/20) State/Local Match

**TOTAL – 2,491.60**

45. **KERR'S CREEK VOL FIRE DEPT (CS-G09/06-10) - ROCKBRIDGE Co., PD 06**  
1 Life Pack 15 - \$17,600.00 (80/20) State/Local Match  
2 PANASONIC TOUGHBOOK CF-19 - \$7,300.00 (100/0) State/Local Match  
**Conditions:** 21 - *Special condition(s) - see attached.*  
29 - *Must use the Panasonic ToughBook 19 to comply with pre-hospital patient care reporting of the OEMS minimum dataset in the technical format prescribed by OEMS.*  
16 Motorola Minitor V Pagers - \$6,476.80 (80/20) State/Local Match  
6 Motorola Astro Digital XTS1500 - \$7,760.00 (80/20) State/Local Match  
**Conditions:** 31 - *Agency must submit a statement of explanation of why previous grant funds were not drawn down prior to expiration of grant.*

**TOTAL - \$39,136.80**

46. **KING & QUEEN RESCUE SQUAD (MP-G02/06-10) - KING AND QUEEN Co., PD 18**  
1 Zoll E Series AED with pacing - \$16,800.00 (80/20) State/Local Match

**TOTAL - \$16,800.00**

47. **LAKESIDE VOL RESCUE SQUAD (MR-G02/06-10) - HENRICO Co., PD 15**  
1 Phillips Heartstart MRx ECG Mo - \$11,000.00 (50/50) State/Local Match

**TOTAL - \$11,000.00**

48. **LORD FAIRFAX EMS COUNCIL (LF-G01/06-10) - WINCHESTER Co., PD 07**  
3 Adult Airway Trainer - \$3,318.00 (100/0) State/Local Match  
**Conditions:** 27 - *Must submit a maintenance/sustainability plan to the OEMS for awarded item.*  
5 Heartstart Frx AED Trainer - \$1,620.00 (100/0) State/Local Match  
**Conditions:** 27 - *Must submit a maintenance/sustainability plan to the OEMS for awarded item.*

**TOTAL - \$4,938.00**

49. **LOUISA COUNTY EMS (TJ-G03/06-10) - LOUISA Co., PD 10**  
1 Body-Mount Int'l 4300 Cab/Chas - \$166,717.60 (80/20) State/Local Match  
**Conditions:** 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*

**TOTAL - \$166,717.60**

50. **LOUISA COUNTY SHERIFF'S OFFICE (TJ-G02/06-10) - LOUISA Co., PD 10**

5 MANIKENS - ADULT, CHILD, INFANT - \$1,984.00 (80/20) State/Local Match

**Conditions:** 21 - *Special condition(s) - see attached.*

2 AED Trainer - \$536.00 (80/20) State/Local Match

**Conditions:** 21 - *Special condition(s) - see attached.*

1 CPR INSTRUCTOR MATERIALS - \$428.00 (80/20) State/Local Match

**Conditions:** 21 - *Special condition(s) - see attached.*

1 Training Video Set - \$479.20 (80/20) State/Local Match

1 AED and Business Package - \$629.00 (50/50) State/Local Match

**Conditions:** 21 - *Special condition(s) - see attached.*

**TOTAL - \$4,056.20**

51. **LYNCHBURG FIRE DEPARTMENT (BR-G04/06-10) - LYNCHBURG Co., PD 11**

1 ALS ground transport ambulance - \$166,717.60 (80/20) State/Local Match

**Conditions:** 1 - *Vehicle must be available for service 24 hours a day, 7 days*

21 - *Special condition(s) - see attached.*

**TOTAL - \$166,717.60**

52. **LYNCHBURG LIFESAVING/1ST AID (BR-G05/06-10) - LYNCHBURG Co., PD 11**

1 Zoll Auto Pulse - \$11,928.00 (80/20) State/Local Match

**Conditions:** 28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*

**TOTAL - \$11,928.00**

53. **MECKLENBURG CO LIFESAV/RESCUE (SS-G01/06-10) - MECKLENBURG Co., PD 13**

5 Motorola HT1250 128ch VHF Port - \$3,292.16 (80/20) State/Local Match

1 PHILIPS HEART START MRXALS - \$16,800.00 (80/20) State/Local

1 Stryker Power Pro Stretcher - \$9,094.40 (80/20) State/Local Match

1 Stryker Stair Chair - \$1,209.00 (50/50) State/Local Match

**Conditions:** 30 - *Agency must draw down previous grant funds prior to reimbursement of this award.*

**TOTAL - 30,395.56**

54. **MEHERRIN VOLUNTEER FIRE & RESC (SC-G04/06-10) - LUNENBURG Co., PD 14**

2 EZ-IO G3 - \$1,650.00 (50/50) State/Local Match

10 Motorola HT1250 - UHF Radio - \$3,375.00 (50/50) State/Local Match

**Conditions:** 31 - *Agency must submit a statement of explanation of why previous grant funds were not drawn down prior to expiration of grant.*

**TOTAL - \$5,025.00**

55. **MID-COUNTY VOL RESCUE SQUAD (NN-G01/06-10) - NORTHUMBERL Co., PD 17**

2 CPAP machines/equipment - \$3,632.50 (50/50) State/Local Match

10 Motorola HT-1250 radio w/acc. - \$4,695.00 (50/50) State/Local Match

**TOTAL - \$8,327.50**

56. **MONELISON VOL RESCUE SQUAD (BR-G06/06-10) - AMHERST Co., PD 11**  
1 Ford F450 Horton Ambulance - \$66,772.00 (50/50) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.
- TOTAL - \$66,772.00**
57. **MONETA RESCUE SQUAD (BR-G07/06-10) - BEDFORD COUNTY, PD 11**  
1 Type I, Dodge 4500, 4WD - \$116,955.20 (80/20) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.
- TOTAL - \$116,955.20**
58. **MONTVALE RESCUE SQUAD (BR-G08/06-10) - BEDFORD COUNTY, PD 11**  
2 i.v.training arms. - \$525.00 (50/50) State/Local Match  
1 Adult Airway simulator - \$699.50 (50/50) State/Local Match  
1 Auscultation Trainer - \$1,347.50 (50/50) State/Local Match
- TOTAL - \$2,572.00**
59. **MOUNT CROSS VOL FIRE DEPT INC (PI-G09/06-10) - PITTSYLVANIA Co., PD 12**  
2 Physio Control Lifepak 15 - \$35,200.00 (80/20) State/Local Match
- TOTAL - \$35,200.00**
60. **NANSEMOND-SUFFOLK RESCUE SQUAD (TI-G06/06-10) - SUFFOLK Co., PD 20**  
1 LIFEPAK 15 monitor/defib - \$11,000.00 (50/50) State/Local Match  
**Conditions:** 21 - Special condition(s) - see attached.
- TOTAL - \$11,000.00**
61. **NATURAL BRIDGE VOL FIRE DEPT (CS-G01/06-10) - ROCKBRIDGE Co., PD 06**  
1 HP Desk top Computer/Monitor - \$679.20 (80/20) State/Local Match  
**Conditions:** 11 - Computer awards require establishment of internet account; providing OEMS with agency e-mail address; electronic submission of PPDR & grant application as applicable.
- TOTAL - \$679.20**
62. **NICKELSVILLE RESCUE SQUAD (LE-G02/06-10) - SCOTT Co., PD 01**  
2 PHILIPS MRX MONITORS - \$33,600.00 (80/20) State/Local Match  
2 Hurst ML28 Spreader/ Moc II - \$10,720.00 (80/20) State/Local Match
- TOTAL - \$44,320.00**
63. **NORTH HALIFAX VOLUNTEER FIRE (SS-G07/06-10) - HALIFAX Co., PD 13**  
1 AUTOVENT 4000 W/CPAP DS - \$1,816.00 (50/50) State/Local Match
- TOTAL - \$1,816.00**

64. **NORTHAMPTON COUNTY DEPT OF EMS (ES-G02/06-10) - NORTH Co., PD 22**  
6 AED Manual Defib w/12 Lead - \$100,800.00 (80/20) State/Local Match  
**Conditions:** 21 - *Special condition(s) - see attached.*

**TOTAL - \$100,800.00**

65. **OLD DOMINION EMS ALLIANCE (MR-G03/06-10) - RICHMOND CITY, PD 15**  
400 Drug Boxes - \$16,000.00 (100/0) State/Local Match  
**Conditions:** 27 - *Must submit a maintenance/sustainability plan to the OEMS for awarded item.*  
1 Network and PCs - \$3,200.00 (80/20) State/Local Match  
**Conditions:** 1 - *Special condition(s)*  
27 - *Must submit a maintenance/sustainability plan to the OEMS for awarded item.*

**TOTAL - 19,200.00**

66. **PITTSYLVANIA COUNTY (PI-G11/06-10) - PITTSYLVANIA Co., PD 12**  
17 ASTRO XTS 2500 Model II - \$27,200.00 (80/20) State/Local Match

**TOTAL - \$27,200.00**

67. **POWHATAN VOL RESCUE SQUAD (MR-G04/06-10) - POWHATAN Co., PD 15**  
6 Motorola PM1500 Mobile Radio - \$9,190.00 (50/50) State/Local Match  
1 ALS Monitor with 12 led EKG - \$10,500.00 (50/50) State/Local Match

**TOTAL - 19,690.00**

68. **PURCELLVILLE VOL RESCUE SQUAD (NV-G03/06-10) - LOUDOUN Co., PD 08**  
20 EMS Safety Gear - \$5,000.00 (50/50) State/Local Match

**TOTAL - \$5,000.00**

69. **RADFORD UNIVERSITY EMS (NR-G02/06-10) - RADFORD Co., PD 04**  
1 2011 Chevrolet Tahoe Rescue - \$15,000.00 (50/50) State/Local Match  
**Conditions:** 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*

**TOTAL - \$15,000.00**

70. **RAPPAHANNOCK EMS COUNCIL (RA-G02/06-10) - FREDERICKSBURG Co., PD 16**  
1 Phillips HeartStart MRx Defib - \$14,733.60 (80/20) State/Local Match

**TOTAL - \$14,733.60**

71. **READ MOUNTAIN FIRE/RESCUE (WV-G04/06-10) - ROANOKE COUNTY, PD 05**  
1 Rugged PowerPro-XT Cots - \$5,684.00 (50/50) State/Local Match

**TOTAL - \$5,684.00**

72. **REMINGTON VOL FIRE DEPT/RESCUE (RA-G03/06-10) - FAUQUIER Co., PD 09**  
1 STRYKER POWER PRO AMBULANCE - \$5,684.00 (80/20) State/Local Match  
1 PHYSIO CONTROL AED WITH ALL EQ - \$1,497.50 (50/50) State/Local Match  
**Conditions:** 21 - *Special condition(s) - see attached.*  
27 - *Must submit a maintenance/sustainability plan to the OEMS for awarded item.*  
28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*

**TOTAL - \$7,181.50**

73. **RICHMOND AMBULANCE AUTHORITY (MR-G05/06-10) - RICHMOND CITY, PD 15**  
30 Laerdal Compact Suction Unit 3 - \$8,235.00 (50/50) State/Local Match  
10 Adult CPR Mannequins - \$415.00 (50/50) State/Local Match  
**Conditions:** 21 - *Special condition(s) - see attached.*  
10 Infant CPR Mannequins - \$275.00 (50/50) State/Local Match  
**Conditions:** 21 - *Special condition(s) - see attached.*  
12 AED Training Unit - \$390.00 (50/50) State/Local Match  
**Conditions:** 28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*

**TOTAL - \$9,315.00**

74. **RICHMOND COUNTY EMS (NN-G05/06-10) - RICHMOND COUNTY, PD 17**  
1 Physio-Control Life Pak 15 - \$17,600.00 (80/20) State/Local Match  
2 Zoll Autopulse - \$23,856.00 (80/20) State/Local Match

**TOTAL - \$41,456.00**

75. **ROANOKE COUNTY FIRE & RESCUE (WV-G01/06-10) - ROANOKE COUNTY, PD 05**  
1 Type 1 4wd Amb. Chassis - \$65,000.00 (50/50) State/Local Match  
**Conditions:** 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*

**TOTAL - \$65,000.00**

76. **ROANOKE FIRE- EMS DEPARTMENT (WV-G05/06-10) - ROANOKE CITY, PD 05**  
1 Chevrolet Type III Ambulance - \$59,323.50 (50/50) State/Local Match  
**Conditions:** 1 - *Vehicle must be available for service 24 hours a day, 7 days a week.*

**TOTAL - \$59,323.50**

77. **ROCKINGHAM COUNTY FIRE/RESCUE (CS-G10/06-10) – HARRISON Co., PD 06**  
100 Motorola Minitor V - \$28,240.00 (80/20) State/Local Match  
1 ALS BABY and Heartsim 200 - \$1,844.80 (80/20) State/Local Match

**TOTAL - \$30,084.80**

78. **ROSELAND RESCUE SQUAD INC (TJ-G01/06-10) - NELSON Co., PD 10**  
2 Capnography modules for LP12s - \$7,648.86 (80/20) State/Local Match  
1 POWER PRO AMBULANCE COT - \$5,684.00 (50/50) State/Local Match

**TOTAL - \$13,332.86**

79. **SHAWSVILLE VOLUNTEER RESCUE SQ (NR-G03/06-10) – MONTGOM Co., PD 04**

- 1 E Series Defibrillator - \$16,800.00 (80/20) State/Local Match
- 1 Zoll AutoPulse System - \$11,928.00 (80/20) State/Local Match
- 2 Stryker Stair Pro Stair Chair - \$3,869.76 (80/20) State/Local Match
- 15 Motorola CP-200-XLS - \$3,396.00 (80/20) State/Local Match
- 5 Motorola Minitor V - \$912.50 (50/50) State/Local
- 2 MX-Pro R3 Ambulance Cot - \$4,375.80 (50/50) State/Local Match

**Conditions:** 28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*

**TOTAL - \$41,282.06**

80. **SHENANDOAH COUNTY FIRE/RESCUE (LF-G02/06-10) - SHENANDOAH Co., PD 07**

- 52 King Airway Kits see narrative - \$10,504.00 (100/0) State/Local Match

**TOTAL - \$10,504.00**

81. **SMYTH COUNTY SHERIFF'S OFFICE (MT-G03/06-10) - SMYTH Co., PD 03**

- 10 AED - \$6,475.00 (50/50) State/Local Match

**Conditions:** 27 - *Must submit a maintenance/sustainability plan to the OEMS for awarded item.*

**TOTAL - \$6,475.00**

82. **SOUTHSIDE VA EMERGENCY CREW (CR-G03/06-10) - PETERSBURG Co., PD 19**

- 1 Panasonic CF19 Toughbooks - \$1,825.00 (50/50) State/Local Match

**Conditions:** 29 - *Must use the Panasonic ToughBook 19 to comply with pre-hospital patient care reporting of the OEMS minimum dataset in the technical format prescribed by OEMS.*

- 1 Zoll E Series Cardiac Monitor - \$10,500.00 (50/50) State/Local Match
- 1 AutoPulse System - \$7,193.75 (50/50) State/Local Match

**TOTAL – 19,518.75**

83. **SPOTSYLVANIA VOL RESCUE SQUAD (RA-G04/06-10) – SPOTSYLV Co., PD 16**

- 1 ALS Simulation Manikin - \$21,982.87 (50/50) State/Local Match
- 1 LP 15 - \$11,000.00 (50/50) State/Local Match
- 1 LP 12 Upgrade - \$7,386.58 (50/50) State/Local Match

**Conditions:** 21 - *Special condition(s) - see attached.*

**TOTAL – 40,369.45**

84. **STAFFORD CO EMERGENCY MANAGMENT (RA-G05/06-10) - STAF Co., PD 16**

- 2 Panasonic PT F300U Projector - \$2,433.00 (50/50) State/Local Match
- 2 Dell Desktop Computer - \$1,000.00 (50/50) State/Local Match

**Conditions:** 11 - *Computer awards require establishment of internet account; providing OEMS with agency e-mail address; electronic submission of PPDR & grant application as applicable.*

**TOTAL – 3,433.00**

85. **STANLEY VOLUNTEER RESCUE SQUAD (LF-G03/06-10) - PAGE Co., PD 07**  
2 Philips HeartStart MRx Monitor - \$33,600.00 (80/20) State/Local Match
- TOTAL - \$33,600.00**
86. **STONEWALL JACKSON VFD & RS (NV-G04/06-10) - PRINCE WILLIAM Co., PD 08**  
1 Type I Excellence Ambulance - \$166,717.60 (80/20) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.
- TOTAL - \$166,717.60**
87. **STUART VOLUNTEER FIRE DEPARTMENT (PI-G12/06-10) - PATRICK Co., PD 12**  
1 Monitor/AED - \$16,800.00 (80/20) State/Local Match
- TOTAL - \$16,800.00**
88. **SUFFOLK FIRE DEPARTMENT (TI-G07/06-10) - SUFFOLK Co., PD 20**  
2 LifePak 15 ECG / 12 lead - \$22,000.00 (50/50) State/Local Match  
3 Power Pro Ambulance Cot - \$16,669.00 (50/50) State/Local Match  
6 Suction units - \$1,647.00 (50/50) State/Local Match  
**Conditions:** 28 - *Must be compliant with the OEMS Pre-Hospital Patient Care Reporting (PPCR) required by Virginia Code §32.1-116.1.*
- TOTAL - \$40,316.00**
89. **SWOOPE VOLUNTEER FIRE COMPANY (CS-G11/06-10) - AUGUSTA Co., PD 06**  
4 protective gear, extrication - \$850.00 (50/50) State/Local Match  
1 stabilization jacks, kit - \$3,960.00 (80/20) State/Local Match
- TOTAL - \$4,810.00**
90. **TANNERSVILLE RESCUE SQUAD (CP-G05/06-10) - TAZEWELL Co., PD 02**  
1 POWER PRO AMBULANCE COT - \$9,094.40 (80/20) State/Local Match  
2 STAIR PRO/STAIR CHAIR - \$3,868.80 (80/20) State/Local Match
- TOTAL - \$12,963.20**
91. **TAPPAHANNOCK-ESSEX VFD (MP-G04/06-10) - ESSEX Co., PD 18**  
1 ML-27 Spreaders - \$4,000.00 (50/50) State/Local Match  
1 Cutters - \$2,750.00 (50/50) State/Local Match  
1 "Tar Heel" tool - \$2,000.00 (50/50) State/Local Match
- TOTAL - 8,750.00**

92. **TAZEWELL CO FIRE DEPT STAT 1 (CP-G07/06-10) - TAZEWELL Co., PD 02**  
1 TYPE III AMBULANCE - \$81,600.00 (80/20) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.  
21 - Special condition(s) - see attached.  
1 Phillips MRX combination - \$16,800.00 (80/20) State/Local Match  
**TOTAL - \$98,400.00**
93. **TAZEWELL CO. 911 CENTER CP-G06/06-10 TAZEWELL Co., PD 02**  
4 PowerPhone EMD/CACH 1yr Mat. \$34,320.00 (80/20) State/Local Match  
  
1 PowerPhone EMD/CACH Training \$7,200.00 (80/20) State/Local Match  
**TOTAL - \$41,520.00**
94. **TIDEWATER EMS COUNCIL (TI-G08/06-10) - NORFOLK Co., PD 20**  
35 Emergency Medication Kits - \$7,532.58 (100/0) State/Local Match  
**Conditions:** 27 - Must submit a maintenance/sustainability plan to the OEMS for awarded item.  
**TOTAL - \$7,532.58**
95. **TUNSTALL VOLUNTEER FIRE DEPT (PI-G13/06-10) - DANVILLE Co., PD 12**  
1 Physio Control LP 1000 Advance - \$2,396.00 (80/20) State/Local Match  
1 Ford F550 4x4 ,Towing, BLS - \$42,750.00 (50/50) State/Local Match  
**Conditions:** 1 - Vehicle must be available for service 24 hours a day, 7 days a week.  
**TOTAL - \$45,146.00**
96. **VIRGINIA BEACH VOL RESCUE SQD (TI-G03/06-10) VIRGINIA BEACH Co., PD 20**  
4 Phys Con LP15 Monitor/Defib - \$44,000.00 (50/50) State/Local Match  
**TOTAL - \$44,000.00**
97. **VIRGINIA GOVERNMENTAL EMS ADMI (NA-G01/06-10) - NON-AFFI Co., PD 00**  
1 Funding for Web Site - \$1,365.40 (100/0) State/Local Match  
**Conditions:** 21 - Special condition(s) - see attached.  
**TOTAL - \$1,365.40**
98. **WASHINGTON COUNTY FIRE/RESCUE (MT-G05/06-10) - WASHINGTON Co., PD 03**  
2 Dell XT2XFR LAPTOP - \$7,160.00 (100/0) State/Local Match  
**Conditions:** 11 - Computer awards require establishment of internet account; providing OEMS with agency e-mail address; electronic submission of PPDR & grant application as applicable.  
**TOTAL - \$7,160.00**
99. **WASHINGTON COUNTY SHERIFF'S OF (MT-G04/06-10) - WASHINGTON Co., PD 03**  
3 PowerPhone Total Response - \$26,000.00 (80/20) State/Local Match  
20 PowerPhone EMD and QA training - \$19,920.00 (80/20) State/Local Match  
**TOTAL - \$ 45,920.00**

100. **WESTMORELAND CO RESCUE SQUAD (NN-G02/06-10) - WESTMORE Co., PD 17**  
2 Life Pack 15 - \$33,000.00 (50/50) State/Local Match

**TOTAL - \$33,000.00**

101. **WISE COUNTY SHERIFF'S OFFICE (LE-G01/06-10) - WISE Co., PD 01**  
10 Powerheart AED - \$6,475.00 (50/50) State/Local Match

**Conditions:** 27 - *Must submit a maintenance/sustainability plan to the OEMS for awarded item.*

**TOTAL - \$6,475.00**

**TOTAL AWARDED - \$3,643,383.00**

# Appendix C

Virginia EMS Education Standards (VEMSES)

	EMR	EMT	AEMT	INTERMEDIATE	PARAMEDIC
<b>1</b> Preparatory	Uses simple knowledge of the EMS system, safety/well-being of the EMR, medical/legal issues at the scene of an emergency while awaiting a higher level of care.	Applies fundamental knowledge of the EMS system, safety/well-being of the EMT, medical/legal and ethical issues to the provision of emergency care.	Applies fundamental knowledge of the EMS system, safety/well-being of the AEMT, medical/legal and ethical issues to the provision of emergency care.	Same as previous level	Integrates comprehensive knowledge 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.
<b>1A</b> EMS Systems	Simple depth, simple breadth <ul style="list-style-type: none"> <li>• EMS systems</li> <li>• Roles/ responsibilities/ professionalism of EMS personnel</li> <li>• Quality improvement</li> </ul>	EMR Material PLUS: Simple depth, foundational breadth <ul style="list-style-type: none"> <li>• EMS systems</li> <li>• History of EMS</li> <li>• Roles/ responsibilities/ professionalism of EMS personnel</li> <li>• Quality improvement</li> <li>• Patient safety</li> </ul>	EMT Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> <li>• Quality improvement</li> <li>• Patient safety</li> </ul>	Same as previous level	Intermediate Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> <li>• History of EMS</li> <li>• Complex depth, comprehensive breadth</li> <li>• EMS systems</li> <li>• Roles/ responsibilities/ professionalism of EMS personnel</li> <li>• Quality improvement</li> <li>• Patient safety</li> </ul>
<b>1B</b> Research	Simple depth, simple breadth <ul style="list-style-type: none"> <li>• Impact of research on EMR care</li> <li>• Data collection</li> </ul>	EMR Material PLUS: Simple depth, simple breadth <ul style="list-style-type: none"> <li>• Evidence-based decision making</li> </ul>	Same as Previous Level	Same as previous level	Intermediate Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> <li>• Research principles to interpret literature and advocate evidence-based practice</li> </ul>
<b>1C</b> Workforce Safety and Wellness	Simple depth, simple breadth <ul style="list-style-type: none"> <li>• Standard safety precautions</li> <li>• Personal protective equipment</li> <li>• Stress management <ul style="list-style-type: none"> <li>o Dealing with death and dying</li> </ul> </li> <li>• Prevention of response related injuries</li> <li>• Lifting and moving patients</li> </ul>	EMR Material PLUS: Fundamental depth, foundational breadth <ul style="list-style-type: none"> <li>• Standard safety precautions</li> <li>• Personal protective equipment</li> <li>• Stress management <ul style="list-style-type: none"> <li>o Dealing with death and dying</li> </ul> </li> <li>• Prevention of work related injuries</li> <li>• Lifting and moving patients</li> <li>• Disease transmission</li> <li>• Wellness principles</li> </ul>	Same as Previous Level	Same as previous level	Intermediate Material PLUS: Complex depth, comprehensive breadth <ul style="list-style-type: none"> <li>• Provider safety and wellbeing</li> <li>• Standard safety precautions</li> <li>• Personal protective equipment</li> <li>• Stress management <ul style="list-style-type: none"> <li>o Dealing with death and dying</li> </ul> </li> <li>• Prevention of work related injuries</li> <li>• Lifting and moving patients</li> <li>• Disease transmission</li> <li>• Wellness principles</li> </ul>

1D	Documentation	Simple depth, simple breadth • Recording patient findings	EMR Material PLUS: Fundamental depth, foundational breadth • Principles of medical documentation and report writing	EMT Material PLUS: Complex depth, foundational breadth • Principles of medical documentation and report writing	Same as previous level	Intermediate Material PLUS: Complex depth, comprehensive breadth • Principles of medical documentation and report writing
1E	EMS System Communication	Simple depth, simple breadth Communication needed to • Call for Resources • Transfer care of the patient • Interact within the team structure	EMR Material PLUS: Simple depth, simple breadth • EMS communication system • Communication with other health care professionals • Team communication and dynamics	EMT Material PLUS: Fundamental depth, foundational breadth • EMS communication system • Communication with other health care professionals • Team communication and dynamics	Same as previous level	Intermediate Material PLUS: Complex depth, comprehensive breadth • EMS communication system • Communication with other health care professionals • Team communication and dynamics
1F	Therapeutic Communication	Simple depth, simple breadth Principles of communicating with patients in a manner that achieves a positive relationship • Interviewing techniques	EMR Material PLUS: Simple depth, simple breadth Principles of communicating with patients in a manner that achieves a positive relationship • Adjusting communication strategies for age, stage of development, patients with special needs, and differing cultures Fundamental depth, foundational breadth • Interviewing techniques • Verbal defusing strategies • Family presence issues	EMT Material PLUS: Simple depth, simple breadth Principles of communicating with patients in a manner that achieves a positive relationship • Dealing with difficult patients	Same as previous level	Intermediate Material PLUS: Complex depth, comprehensive breadth Principles of communicating with patients in a manner that achieves a positive relationship • Factors that affect communication • Interviewing techniques • Dealing with difficult patients • Adjusting communication strategies for age, stage of development, patients with special needs, and differing cultures
1G	Medical/Legal and Ethics	Simple depth, simple breadth • Consent/refusal of care • Confidentiality • Advance Directives • Tort and criminal actions • Evidence preservation • Statutory responsibilities • Mandatory reporting • Ethical principles/moral obligations • End-of-life issues	EMR Material PLUS: Fundamental depth, foundational breadth • Consent/refusal of care • Confidentiality • Advance Directives • Tort and criminal actions • Evidence preservation • Statutory responsibilities • Mandatory reporting • Ethical principles/moral obligations	Same as Previous Level	AEMT Material PLUS: Complex depth, comprehensive breadth • Consent/refusal of care • Confidentiality • Advance Directives • Tort and criminal actions • Statutory responsibilities • Mandatory reporting • Health care regulation • Patient rights/advocacy • End-of-life Issues • Ethical principles/moral obligations • Ethical tests and decision making	Intermediate Material PLUS: Complex depth, comprehensive breadth • Consent/refusal of care • Confidentiality • Advance Directives • Tort and criminal actions • Statutory responsibilities • Mandatory reporting • Health care regulation • Patient rights/advocacy • End-of-life Issues • Ethical principles/moral obligations • Ethical tests and decision making

Virginia EMS Education Standards (VEMSES)

2	Anatomy and Physiology	Uses simple knowledge of the anatomy and function of the upper airway, heart, vessels, blood, lungs, skin, muscles, and bones as the foundation of emergency care.	Applies fundamental knowledge of the anatomy and function of all human systems to the practice of EMS.	Integrates complex knowledge of the anatomy and physiology of the airway, respiratory and circulatory systems to the practice of EMS.	Integrates complex knowledge of the anatomy and physiology of the airway, respiratory, circulatory, muscular skeletal, nervous, integumentary, endocrine, and digestive systems as well as a fundamental appreciation of the immune system to the practice of EMS.	Integrates a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems
3	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	Uses foundational anatomical and medical terms and abbreviations in written and oral communication with colleagues and other health care professionals consistent with the systems described in A&P.	Integrates comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with colleagues and other health care professionals.
4	Pathophysiology	Uses simple knowledge of shock and respiratory compromise to respond to life threats.	Applies fundamental knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.	Applies comprehensive knowledge of the pathophysiology of respiration and perfusion to patient assessment and management.	Applies comprehensive knowledge of the pathophysiology of respiration and perfusion to patient assessment. This includes management as well as a foundational appreciation for the other body systems included for this level.	Integrates comprehensive knowledge of pathophysiology of major human systems.
5	Life Span Development	Uses simple knowledge of age related differences to assess and care for patients.	Applies fundamental knowledge of life span development to patient assessment and management.	Same as Previous Level	Same as Previous Level	Integrates comprehensive knowledge of life span development.
6	Public Health	Have an awareness of local public health resources and the role EMS personnel play in public health emergencies.	Uses simple knowledge of the principles of illness and injury prevention in emergency care.	Uses simple knowledge of the principles of the role of EMS during public health emergencies.	Same as Previous Level	Applies fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.

Virginia EMS Education Standards (VEMSES)

7	Pharmacology	Uses simple knowledge of the medications that the EMR may self-administer or administer to a peer in an emergency.	Applies fundamental knowledge of the medications that the EMT may assist/administer to a patient during an emergency.	Applies to patient assessment and management fundamental knowledge of the medications carried by AEMTs that may be administered to a patient during an emergency.	Applies comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.	Integrates comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and improve the overall health of the patient.
7A	Principles of Pharmacology	No knowledge related to this competency is applicable at this level.	Simple depth, simple breadth • Medication safety • Kinds of medications used during an emergency	EMT Material PLUS: Fundamental depth, foundation breadth • Medication safety • Medication legislation • Naming • Classifications • Storage and security • Autonomic pharmacology • Metabolism and excretion • Mechanism of action • Medication response relationships • Medication interactions • Toxicity	AEMT Material PLUS: Complex depth, comprehensive breadth) • Medication safety • Medication legislation • Naming • Classifications • Schedules • Pharmacokinetics • Storage and security • Autonomic pharmacology • Metabolism and excretion • Mechanism of action • Phases of medication activity • Medication response relationships • Medication interactions • Toxicity	Intermediate Material PLUS: Complex depth, comprehensive breadth) • Medication safety • Medication legislation • Naming • Classifications • Schedules • Pharmacokinetics • Storage and security • Autonomic pharmacology • Metabolism and excretion • Mechanism of action • Phases of medication activity • Medication response relationships • Medication interactions • Toxicity
7B	Medication Administration	Simple depth, simple breadth Within the scope of practice of the EMR, how to • Self-administer medication • Peer-administer medication	EMR Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the EMT how to • Assist/administer medications to a patient	EMT Material PLUS: Fundamental depth, foundational breadth • Routes of administration • Within the scope of practice of the AEMT, administer medications to a patient	AEMT Material PLUS: Complex depth, comprehensive breadth • Routes of administration • Within the scope of practice of the intermediate, administer medications to a patient	Intermediate Material PLUS: Complex depth, comprehensive breadth • Routes of administration • Within the scope of practice of the paramedic, administer medications to a patient
7C	Emergency Medications	Simple depth, simple breadth Within the scope of practice of the EMR • Names • Effects • Indications • Routes of administration • Dosages for the medications administered	EMR Material PLUS: Fundamental depth, simple breadth within the scope of practice of the EMT • Names • Actions • Indications • Contraindications • Complications • Routes of administration • Side effects • Interactions • Dosages for the medications administered	EMT Material PLUS: Fundamental depth, foundational breadth within the scope of practice of the AEMT • Names • Actions • Indications • Contraindications • Complications • Routes of administration • Side effects • Interactions • Dosages for the medications administered	Same as Previous Level	Intermediate Material PLUS: Complex depth, comprehensive breadth within the scope of practice of the paramedic • Names • Actions • Indications • Contraindications • Complications • Routes of administration • Side effects • Interactions • Dosages for the medications administered

<p><b>8</b> Airway Management, Respiration and Artificial Ventilation</p>	<p>Applies knowledge (fundamental depth, foundational breadth) of general anatomy and physiology to assure a patent airway, adequate mechanical ventilation, and respiration while awaiting additional EMS response for patients of all ages.</p>	<p>Applies knowledge (fundamental depth, foundational breadth) of general 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.</p>	<p>Applies knowledge (fundamental depth, foundational breadth) of additional upper airway 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.</p>	<p>Applies complex knowledge 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.</p>	<p>Integrates complex knowledge 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.</p>
<p><b>8A</b> Airway Management</p>	<p>Fundamental depth, simple breadth Within the scope of practice of the EMR • Airway anatomy • Airway assessment • Techniques of assuring a patent airway</p>	<p>EMR Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the EMT • Airway anatomy • Airway assessment • Techniques of assuring a patent airway</p>	<p>EMT Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the AEMT • Airway anatomy • Airway assessment • Techniques of assuring a patent airway</p>	<p>AEMT Material PLUS: Complex depth, comprehensive breadth Within the scope of practice of the intermediate • Airway anatomy • Airway assessment • Techniques of assuring a patent airway</p>	<p>Intermediate Material PLUS: Complex depth, comprehensive breadth Within the scope of practice of the paramedic • Airway anatomy • Airway assessment • Techniques of assuring a patent airway</p>
<p><b>8B</b> Respiration</p>	<p>Fundamental depth, simple breadth • Anatomy of the respiratory system • Physiology and pathophysiology of respiration o Pulmonary ventilation o Oxygenation o Respiration □ External □ Internal □ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy</p>	<p>EMR Material PLUS: Fundamental depth, foundational breadth • Anatomy of the respiratory system • Physiology and pathophysiology of respiration o Pulmonary ventilation o Oxygenation o Respiration □ External □ Internal □ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy</p>	<p>EMT Material PLUS: Complex depth, foundational breadth • Anatomy of the respiratory system Fundamental depth, comprehensive breadth • Physiology and pathophysiology of respiration o Pulmonary ventilation o Oxygenation o Respiration □ External □ Internal □ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy</p>	<p>AEMT Material PLUS: (SAP) Complex depth, comprehensive breadth • Anatomy of the respiratory system • Physiology, and pathophysiology of respiration o Pulmonary ventilation o Oxygenation o Respiration □ External □ Internal □ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy</p>	<p>Intermediate Material PLUS: Complex depth, comprehensive breadth • Anatomy of the respiratory system • Physiology, and pathophysiology of respiration o Pulmonary ventilation o Oxygenation o Respiration □ External □ Internal □ Cellular • Assessment and management of adequate and inadequate respiration • Supplemental oxygen therapy</p>

8C	Artificial Ventilation	Fundamental depth, simple breadth Assessment and management of adequate and inadequate ventilation • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output	EMR Material PLUS: Fundamental depth, foundational breadth Assessment and management of adequate and inadequate ventilation • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output	EMT Material PLUS: Complex depth, foundational breadth Assessment and management of adequate and inadequate ventilation • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output	AEMT Material PLUS: Complex depth, comprehensive breadth Assessment and management of adequate and inadequate ventilation • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output	Intermediate Material PLUS: Complex depth, comprehensive breadth Assessment and management of adequate and inadequate ventilation • Artificial ventilation • Minute ventilation • Alveolar ventilation • Effect of artificial ventilation on cardiac output
9	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, and reassessment) to guide emergency management.	Same as Previous Level	Applies scene and patient assessment findings with knowledge of 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.	Integrate scene and patient assessment findings with knowledge 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.
9A	Scene Size-Up	Complex depth, comprehensive breadth • Scene safety Fundamental depth, foundational breadth • Scene management o Impact of the environment on patient care o Addressing hazards o Violence o Need for additional or specialized resources o Standard precautions	EMR Material PLUS: Fundamental depth, foundational breadth • Scene management o Multiple patient situations	Same as Previous Level	AEMT Material PLUS: Complex depth, comprehensive breadth • Scene management o Impact of the environment on patient care o Addressing hazards o Violence o Multiple patient situations	Intermediate Material PLUS: Complex depth, comprehensive breadth • Scene management o Impact of the environment on patient care o Addressing hazards o Violence o Multiple patient situations

9B	Primary Assessment	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> <li>• Primary assessment for all patient situations                             <ul style="list-style-type: none"> <li>o Level of consciousness</li> <li>o ABCs</li> <li>o Identifying life threats</li> <li>o Assessment of vital functions</li> </ul> </li> <li>• Begin interventions needed to preserve life</li> </ul>	<p>EMR Material PLUS: Fundamental depth, simple breadth</p> <ul style="list-style-type: none"> <li>• Primary assessment for all patient situations                             <ul style="list-style-type: none"> <li>o Initial general impression</li> <li>o Level of consciousness</li> <li>o ABCs</li> <li>o Identifying life threats</li> <li>o Assessment of vital functions</li> </ul> </li> <li>• Integration of treatment/procedures needed to preserve life</li> </ul>	<p>EMT Material PLUS: Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Primary assessment for all patient situations                             <ul style="list-style-type: none"> <li>o Initial general impression</li> <li>o Level of consciousness</li> <li>o ABCs</li> <li>o Identifying life threats</li> <li>o Assessment of vital functions</li> </ul> </li> <li>• Integration of treatment/procedures needed to preserve life</li> </ul>	Same as Previous Level	<p>Intermediate Material PLUS: Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Primary assessment for all patient situations                             <ul style="list-style-type: none"> <li>o Initial general impression</li> <li>o Level of consciousness</li> <li>o ABCs</li> <li>o Identifying life threats</li> <li>o Assessment of vital functions</li> </ul> </li> <li>• Integration of treatment/procedures needed to preserve life</li> </ul>
9C	History Taking	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> <li>• Determining the chief complaint</li> <li>• Mechanism of injury/nature of illness</li> <li>• Associated signs and symptoms</li> </ul>	<p>EMR Material PLUS: Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Investigation of the chief complaint</li> <li>• Mechanism of injury/nature of illness</li> <li>• Past medical history</li> <li>• Associated signs and symptoms</li> <li>• Pertinent negatives</li> </ul>	Same as Previous Level	<p>AEMT Material PLUS:(SAP) Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Components of the patient history</li> <li>• Interviewing techniques</li> <li>• How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation</li> </ul>	<p>Intermediate Material PLUS: Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Components of the patient history</li> <li>• Interviewing techniques</li> <li>• How to integrate therapeutic communication techniques and adapt the line of inquiry based on findings and presentation</li> </ul>
9D	Secondary Assessment	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> <li>• Performing a rapid full body scan</li> <li>• Focused assessment of pain</li> <li>• Assessment of vital signs</li> </ul>	<p>EMR Material PLUS: Fundamental depth, foundational breadth</p> <p>Techniques of physical examination</p> <ul style="list-style-type: none"> <li>• Respiratory system                             <ul style="list-style-type: none"> <li>o Presence of breath sounds</li> </ul> </li> <li>• Cardiovascular system</li> <li>• Neurological system</li> <li>• Musculoskeletal system</li> <li>• All anatomical regions</li> </ul>	<p>EMT Material PLUS: Complex depth, foundational breadth</p> <p>Assessment of</p> <ul style="list-style-type: none"> <li>• Lung sounds</li> </ul>	<p>AEMT Material PLUS: (SAP) Complex depth, comprehensive breadth</p> <p>Techniques of physical examination for all major</p> <ul style="list-style-type: none"> <li>• Body systems</li> <li>• Anatomical regions</li> </ul>	<p>Intermediate Material PLUS: Complex depth, comprehensive breadth</p> <p>Techniques of physical examination for all major</p> <ul style="list-style-type: none"> <li>• Body systems</li> <li>• Anatomical regions</li> </ul>

<p><b>9E</b> Monitoring Devices</p>	<p>No knowledge related to this competency is applicable at this level.</p>	<p>Simple depth, simple breadth Within the scope of practice of the EMT • Obtaining and using information from patient monitoring devices including (but not limited to) o Pulse oximetry o Non-invasive blood pressure Blood glucose determination</p>	<p>EMT Material PLUS: Within the scope of practice of the AEMT Simple depth, simple breadth • Obtaining and using information from patient monitoring devices including (but not limited to) o Blood glucose determination</p>	<p>AEMT Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the Intermediate • Obtaining and using information from patient monitoring devices including (but not limited to): o Continuous ECG monitoring o 12 lead ECG interpretation o Carbon dioxide monitoring o Basic blood chemistry</p>	<p>Intermediate Material PLUS: Fundamental depth, foundational breadth Within the scope of practice of the paramedic • Obtaining and using information from patient monitoring devices including (but not limited to): o Continuous ECG monitoring o 12 lead ECG interpretation o Carbon dioxide monitoring o Basic blood chemistry</p>
<p><b>9F</b> Reassessment</p>	<p>Simple depth, simple breadth • How and when to reassess patients</p>	<p>EMR Material PLUS: Fundamental depth, foundational breadth • how and when to perform a reassessment for all patient situations</p>	<p>Same as Previous Levels</p>	<p>AEMT Material PLUS: Complex depth, comprehensive breadth • How and when to perform a reassessment for all patient situations</p>	<p>Intermediate Material PLUS: Complex depth, comprehensive breadth • How and when to perform a reassessment for all patient situations</p>
<p><b>10</b> Medicine</p>	<p>Recognizes and manages life threats based on assessment findings of a patient with a medical emergency while awaiting additional emergency response.</p>	<p>Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.</p>	<p>Applies fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for an acutely ill patient.</p>	<p>Applies 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.</p>	<p>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.</p>
<p><b>10A</b> Medical Overview</p>	<p>Simple depth, simple breadth Assessment and management of a • Medical complaint</p>	<p>EMR Material PLUS: Simple depth, foundational breadth Pathophysiology, assessment, and management of a medical complaints to include • Transport mode • Destination decisions</p>	<p>EMT Material PLUS: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of a medical complaints to include • Transport mode • Destination decisions</p>	<p>Same as Previous Level</p>	<p>Intermediate Material PLUS: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of medical complaints to include • Transport mode • Destination decisions</p>

**10B** Neurology

<p>Simple depth, simple breadth Anatomy, presentations, and management of</p> <ul style="list-style-type: none"> <li>• Decreased level of responsiveness</li> <li>• Seizure</li> <li>• Stroke</li> </ul>	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> <li>• Stroke/ transient ischemic attack</li> <li>• Seizure</li> <li>• Status epilepticus</li> <li>• Headache</li> </ul>	<p>EMT Material PLUS: Complex depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> <li>• Seizure</li> </ul>	<p>AEMT Material PLUS: Anatomy, physiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Fundamental depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Stroke/intracranial hemorrhage/transient ischemic attack</li> <li>• Seizure</li> <li>• Status epilepticus</li> <li>• Headache</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Dementia</li> <li>• Neoplasms</li> <li>• Demyelinating disorders</li> <li>• Parkinson's disease</li> <li>• Cranial nerve disorders</li> <li>• Movement disorders</li> <li>• Neurologic inflammation/ infection</li> <li>• Spinal cord compression</li> <li>• Hydrocephalus</li> <li>• Wernicke's encephalopathy</li> </ul>	<p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Stroke/intracranial hemorrhage/transient ischemic attack</li> <li>• Seizure</li> <li>• Status epilepticus</li> <li>• Headache</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Dementia</li> <li>• Neoplasms</li> <li>• Demyelinating disorders</li> <li>• Parkinson's disease</li> <li>• Cranial nerve disorders</li> <li>• Movement disorders</li> <li>• Neurologic inflammation/ infection</li> <li>• Spinal cord compression</li> <li>• Hydrocephalus</li> <li>• Wernicke's encephalopathy</li> </ul>
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<p><b>10C</b></p>	<p>Abdominal and Gastrointestinal Disorders</p>	<p>Simple depth, simple breadth Anatomy, presentations and management of shock associated with abdominal emergencies • Gastrointestinal bleeding</p>	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment, and management of • Acute and chronic gastrointestinal hemorrhage Simple depth, simple breadth • Peritonitis • Ulcerative diseases</p>	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>	<p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Complex depth, comprehensive breadth • Acute and chronic gastrointestinal hemorrhage • Liver disorders • Peritonitis • Ulcerative diseases Fundamental depth, foundational breadth • Irritable bowel syndrome • Inflammatory disorders • Pancreatitis • Bowel obstruction • Hernias • Infectious disorders • Gall bladder and biliary tract disorders Simple depth, simple breadth • Rectal abscess • Rectal foreign body obstruction • Mesenteric ischemia</p>
<p><b>10D</b></p>	<p>Immunology</p>	<p>Simple depth, simple breadth Recognition and management of shock and difficulty breathing related to • Anaphylactic reactions</p>	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment, and management of hypersensitivity disorders and/or emergencies • Anaphylactic reactions</p>	<p>EMT Material PLUS: Complex depth, comprehensive breadth Anatomy, physiology, pathophysiology, assessment, and management of hypersensitivity disorders and/or emergencies • Allergic and anaphylactic reactions</p>	<p>Same as Previous Level</p>	<p>Intermediate 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 • Hypersensitivity • Allergic and anaphylactic reactions • Anaphylactoid reactions Fundamental depth, foundational breadth • Collagen vascular disease • Transplant related problems</p>

10E	<p>Infectious Diseases</p>	<p>Simple depth, simple breadth Awareness of</p> <ul style="list-style-type: none"> <li>• A patient who may have an infectious disease</li> <li>• How to decontaminate equipment after treating a patient</li> </ul>	<p>EMR Material PLUS: Simple depth, simple breadth Assessment and management of</p> <ul style="list-style-type: none"> <li>• A patient who may have an infectious disease</li> <li>• How to decontaminate the ambulance and equipment after treating a patient</li> </ul>	<p>AEMT Material PLUS: Fundamental depth, foundational breadth Assessment and management of</p> <ul style="list-style-type: none"> <li>• A patient who may be infected with a bloodborne pathogen                             <ul style="list-style-type: none"> <li>o HIV</li> <li>o Hepatitis B</li> </ul> </li> <li>• Antibiotic resistant infections</li> <li>• Current infectious diseases prevalent in the community</li> </ul>	<p>Same as Previous Level</p>	<p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, reporting requirements, prognosis, and management of Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• HIV-related disease</li> <li>• Hepatitis</li> <li>• Pneumonia</li> <li>• Meningococcal meningitis</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Tuberculosis</li> <li>• Tetanus</li> <li>• Viral diseases</li> <li>• Sexually transmitted disease</li> <li>• Gastroenteritis</li> <li>• Fungal infections</li> <li>• Rabies</li> <li>• Scabies and lice</li> <li>• Lyme disease</li> <li>• Rocky Mountain Spotted Fever</li> <li>• Antibiotic resistant infections</li> </ul>
10F	<p>Endocrine Disorders</p>	<p>Simple depth, simple breadth Awareness that</p> <ul style="list-style-type: none"> <li>• Diabetic emergencies cause altered mental status</li> </ul>	<p>EMR Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> <li>• Acute diabetic emergencies</li> </ul>	<p>EMT Material PLUS: Complex depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> <li>• Acute diabetic emergencies</li> </ul>	<p>AEMT Material PLUS: Anatomy, physiology, pathophysiology, psychosocial impact, presentations, and management of Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Acute diabetic emergencies</li> <li>• Diabetes</li> </ul>	<p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Acute diabetic emergencies</li> <li>• Diabetes</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Adrenal disease</li> <li>• Pituitary and thyroid disorders</li> </ul>

10G Psychiatric

<p>Simple depth, simple breadth Recognition of</p> <ul style="list-style-type: none"> <li>Behaviors that pose a risk to the EMR, patient or others</li> </ul>	<p>EMR Material PLUS: Simple depth, simple breadth</p> <ul style="list-style-type: none"> <li>Basic principles of the mental health system</li> </ul> <p>Fundamental depth, foundational breadth Assessment and management of</p> <ul style="list-style-type: none"> <li>Acute psychosis</li> <li>Suicidal/risk</li> <li>Agitated delirium</li> </ul>	<p>Same as Previous Level</p>	<p>Fundamental depth, breadth</p> <ul style="list-style-type: none"> <li>Basic principles of the mental health system</li> </ul> <p>Assessment and management of</p> <ul style="list-style-type: none"> <li>Acute psychosis</li> <li>Suicidal/risk</li> <li>Agitated delirium</li> </ul> <p>Commonly prescribed psychiatric medications</p>	<p>Intermediate 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"> <li>Acute psychosis</li> <li>Agitated delirium</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>Cognitive disorders</li> <li>Thought disorders</li> <li>Mood disorders</li> <li>Neurotic disorders</li> <li>Substance-related disorders / addictive behavior</li> <li>Somatoform disorders</li> <li>Factitious disorders</li> <li>Personality disorders</li> <li>Patterns of violence/abuse/neglect</li> <li>Organic psychoses</li> </ul>
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10H Cardiovascular

<p>Simple depth, simple breadth Anatomy, signs, symptoms and management</p> <ul style="list-style-type: none"> <li>• Chest pain</li> <li>• Cardiac arrest</li> </ul>	<p>EMR Material PLUS: Anatomy, physiology, pathophysiology, assessment, and management of</p> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Acute coronary syndrome                             <ul style="list-style-type: none"> <li>o Angina pectoris</li> <li>o Myocardial infarction</li> </ul> </li> <li>• Aortic aneurysm/dissection</li> <li>• Thromboembolism</li> </ul> <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> <li>• Heart failure</li> <li>• Hypertensive emergencies</li> </ul>	<p>EMT Material PLUS: Anatomy, physiology, pathophysiology, assessment, and management of</p> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Acute coronary syndrome                             <ul style="list-style-type: none"> <li>o Angina pectoris</li> <li>o Myocardial infarction</li> </ul> </li> </ul> <p>Fundamental depth, simple breadth</p> <ul style="list-style-type: none"> <li>• Heart failure</li> <li>• Hypertensive emergencies</li> </ul>	<p>AEMT Material PLUS: Anatomy, physiology, pathophysiology, presentations, prognosis, and management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Acute coronary syndrome                             <ul style="list-style-type: none"> <li>o Angina pectoris</li> <li>o Myocardial infarction</li> </ul> </li> <li>• Heart failure</li> <li>• Hypertensive emergencies</li> <li>• Cardiogenic shock</li> <li>• Vascular disorders                             <ul style="list-style-type: none"> <li>o Abdominal aortic aneurysm</li> <li>o Venous thrombosis</li> </ul> </li> <li>• Aortic aneurysm/dissection,</li> <li>• Thromboembolism</li> <li>• Cardiac rhythm disturbances</li> </ul>	<p>Intermediate 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"> <li>• Acute coronary syndrome                             <ul style="list-style-type: none"> <li>o Angina pectoris</li> <li>o Myocardial infarction</li> </ul> </li> <li>• Heart failure</li> <li>• Non-traumatic cardiac tamponade</li> <li>• Hypertensive emergencies</li> <li>• Cardiogenic shock</li> <li>• Vascular disorders                             <ul style="list-style-type: none"> <li>o Abdominal aortic aneurysm</li> <li>o Arterial occlusion</li> <li>o Venous thrombosis</li> </ul> </li> <li>• Aortic aneurysm/dissection,</li> <li>• Thromboembolism</li> <li>• Cardiac rhythm disturbances</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Infectious diseases of the heart                             <ul style="list-style-type: none"> <li>o Endocarditis</li> <li>o Pericarditis</li> </ul> </li> <li>• Congenital abnormalities</li> </ul>
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10I	Toxicology	<p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> <li>• Recognition and management of <ul style="list-style-type: none"> <li>o Carbon monoxide poisoning</li> <li>o Nerve agent poisoning</li> </ul> </li> <li>• How and when to contact a poison control center</li> </ul>	<p>EMR Material PLUS: Fundamental depth, foundational breadth</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> <li>• Inhaled poisons</li> <li>• Ingested poisons</li> <li>• Injected poisons</li> <li>• Absorbed poisons</li> <li>• Alcohol intoxication and withdrawal</li> </ul>	<p>EMT Material PLUS: Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Opiate toxidrome</li> </ul>	<p>AEMT Material PLUS: Fundamental depth, comprehensive breadth</p> <p>Anatomy, physiology, pathophysiology, presentations, and management of the following toxidromes and poisonings:</p> <ul style="list-style-type: none"> <li>• Cholinergics</li> <li>• Anticholinergics</li> <li>• Sympathomimetics</li> <li>• Sedative/hypnotics</li> <li>• Opiates</li> <li>• Alcohol intoxication and withdrawal</li> <li>• Over-the-counter and prescription medications</li> <li>• Carbon monoxide</li> <li>• Illegal drugs</li> </ul>	<p>Intermediate Material PLUS: 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"> <li>• Cholinergics</li> <li>• Anticholinergics</li> <li>• Sympathomimetics</li> <li>• Sedative/hypnotics</li> <li>• Opiates</li> <li>• Alcohol intoxication and withdrawal</li> <li>• Over-the-counter and prescription medications</li> <li>• Carbon monoxide</li> <li>• Illegal drugs</li> <li>• Herbal preparations</li> </ul>
10J	Respiratory	<p>Simple depth, simple breadth</p> <p>Anatomy, signs, symptoms and management of respiratory emergencies including those that affect the</p> <ul style="list-style-type: none"> <li>• Upper airway</li> <li>• Lower airway</li> </ul>	<p>EMR Material PLUS: Anatomy, physiology, pathophysiology, assessment, and management of</p> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Epiglottitis</li> <li>• Spontaneous pneumothorax</li> <li>• Pulmonary edema</li> <li>• Asthma</li> <li>• Chronic obstructive pulmonary disease</li> <li>• Environmental/industrial exposure</li> <li>• Toxic gas</li> </ul> <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> <li>• Pertussis</li> <li>• Cystic fibrosis</li> <li>• Pulmonary embolism</li> <li>• Pneumonia</li> <li>• Viral respiratory infections</li> </ul>	<p>EMT Material PLUS: Complex depth, foundational breadth</p> <p>Anatomy, physiology, pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> <li>• Asthma</li> <li>• Obstructive/restrictive disease</li> <li>• Pneumonia</li> </ul>	<p>AEMT Material PLUS: Anatomy, physiology, pathophysiology, presentations, management of</p> <p>Fundamental depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Spontaneous pneumothorax</li> <li>• Obstructive/restrictive lung diseases</li> <li>• Pulmonary infections</li> </ul>	<p>Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of</p> <p>Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Acute upper airway infections</li> <li>• Spontaneous pneumothorax</li> <li>• Obstructive/restrictive lung diseases</li> <li>• Pulmonary infections</li> </ul> <p>Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Neoplasm</li> <li>• Pertussis</li> <li>• Cystic fibrosis</li> </ul>

10K	Hematology	No knowledge related to this competency is applicable at this level.	Simple depth, simple breadth Anatomy, physiology, pathophysiology, assessment, and management of • Sickle cell crisis • Clotting disorders	EMT Material PLUS: Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of • Sickle cell crisis	AEMT Material PLUS: Anatomy, physiology, pathophysiology, presentations, and management of common or major hematological diseases and/or emergencies Simple depth, foundational breadth • Sickle cell disease Fundamental depth, foundational breadth • Blood transfusion complications	Intermediate Material PLUS: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major hematological diseases and/or emergencies Complex depth, foundational breadth • Sickle cell disease Fundamental depth, foundational breadth • Blood transfusion complications • Hemostatic disorders • Lymphomas • Red blood cell disorders • White blood cell disorders • Coagulopathies
10L	Genitourinary/Renal	Simple depth, simple breadth • Blood pressure assessment in hemodialysis patients	EMR Material PLUS: Simple depth, simple breadth Anatomy, physiology, pathophysiology, assessment, and management of • Complications related to o Renal dialysis o Urinary catheter management (not insertion) • Kidney stones	EMT Material PLUS: Fundamental depth, simple breadth Anatomy, physiology, pathophysiology, assessment, and management of • Complications related to renal dialysis • Kidney stones	Same as Previous Level	Intermediate Material Plus: Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of Complex depth, comprehensive breadth • Complications of o Acute renal failure o Chronic renal failure o Dialysis • Renal calculi Fundamental depth, foundational breadth • Acid base disturbances • Fluid and electrolyte • Infection • Male genital tract conditions

10M	Gynecology	Simple depth, simple breadth Recognition and management of shock associated with • Vaginal bleeding	EMR Material Plus: Anatomy, physiology, assessment findings, and management of Fundamental depth, foundational breadth • Vaginal bleeding • Sexual assault (to include appropriate emotional support) Simple depth, simple breadth • Infections	Same as Previous Level	AEMT Material Plus: Anatomy, physiology, pathophysiology, presentations, and management of common or major gynecological diseases and/or emergencies Fundamental depth, Foundational breadth • Vaginal/Uterine bleeding • Sexual assault Fundamental depth, foundational breadth • Infections • Pelvic Inflammatory Disease • Ovarian cysts • Vaginal foreign body	Intermediate 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 • Vaginal bleeding • Sexual assault Fundamental depth, foundational breadth • Infections • Pelvic Inflammatory Disease • Ovarian cysts • Dysfunctional uterine bleeding • Vaginal foreign body
10N	Non-Traumatic Musculoskeletal Disorders	No knowledge related to this competency is applicable at this level.	Fundamental depth, foundational breadth Anatomy, physiology, pathophysiology, assessment and management of • Non-traumatic fractures	Same as Previous Level	Same as Previous Level	Intermediate Material Plus: Fundamental depth, foundation breadth Anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, and management of common or major non-traumatic musculoskeletal disorders • Disorders of the spine • Joint abnormalities • Muscle abnormalities • Overuse syndromes
10O	Diseases of the Eyes, Ears, Nose, and Throat	Simple depth, simple breadth Recognition and management of • Nose bleed	Same as Previous Level	Same as Previous Level	AEMT Material Plus: Simple depth, foundational breadth Knowledge of anatomy, physiology, pathophysiology, presentations, management of • Common or major diseases of the eyes, ears, nose, and throat, including nose bleed	Intermediate Material Plus: Fundamental depth, foundational breadth Knowledge of anatomy, physiology, epidemiology, pathophysiology, psychosocial impact, presentations, prognosis, management of • Common or major diseases of the eyes, ears, nose, and throat, including nose bleed

Virginia EMS Education Standards (VEMSES)

<b>11</b>	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 fundamental knowledge of the causes, pathophysiology, and management of shock, respiratory failure or arrest, cardiac failure or arrest, and post resuscitation management.	Applies fundamental knowledge 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.	Applies fundamental knowledge 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 comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states. Integrates a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.
<b>12</b>	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 knowledge to provide basic emergency care and transportation based on assessment findings for an acutely injured patient.	Applies fundamental knowledge to provide basic and selected advanced emergency care and transportation based on assessment findings for an acutely injured patient.	Applies assessment findings with principles of pathophysiology to formulate a field impression to implement a Foundational treatment/disposition plan 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.
<b>12A</b>	Trauma Overview	No knowledge related to this competency is applicable at this level.	Fundamental depth, foundational breadth Pathophysiology, assessment, and management of the trauma patient • Trauma scoring • Rapid transport and destination issues • Transport mode	Same as Previous Level	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment and management of the trauma patient • Trauma scoring • Transport and destination issues
<b>12B</b>	Bleeding	Simple depth, simple breadth Recognition and management of • Bleeding	EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of • Bleeding	EMT Material Plus: Complex depth, comprehensive breadth • Fluid resuscitation	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of • Bleeding

12C	Chest Trauma	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> <li>• Blunt versus penetrating mechanisms</li> <li>• Open chest wound</li> <li>• Impaled object</li> </ul>	<p>EMR Material Plus: Fundamental depth, simple breadth Pathophysiology, assessment and management</p> <ul style="list-style-type: none"> <li>• Blunt versus penetrating mechanisms</li> <li>• Hemothorax</li> <li>• Pneumothorax                             <ul style="list-style-type: none"> <li>o Open</li> <li>o Simple</li> <li>o Tension</li> </ul> </li> <li>• Cardiac tamponade</li> <li>• Rib fractures</li> <li>• Flail chest</li> <li>• Commotio cordis</li> </ul>	<p>EMT Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> <li>• Traumatic aortic disruption</li> <li>• Pulmonary contusion</li> <li>• Blunt cardiac injury</li> <li>• Hemothorax</li> <li>• Pneumothorax                             <ul style="list-style-type: none"> <li>o Open</li> <li>o Simple</li> <li>o Tension</li> </ul> </li> <li>• Cardiac tamponade</li> <li>• Rib fractures</li> <li>• Flail chest</li> <li>• Commotio cordis</li> <li>• Traumatic asphyxia</li> </ul>	Same as Previous Level	<p>Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> <li>• Traumatic aortic disruption</li> <li>• Pulmonary contusion</li> <li>• Blunt cardiac injury</li> <li>• Hemothorax</li> <li>• Pneumothorax                             <ul style="list-style-type: none"> <li>o Open</li> <li>o Simple</li> <li>o Tension</li> </ul> </li> <li>• Cardiac tamponade</li> <li>• Rib fractures</li> <li>• Flail chest</li> <li>• Commotio cordis</li> <li>• Tracheobronchial disruption</li> <li>• Diaphragmatic rupture</li> <li>• Traumatic asphyxia</li> </ul>
12D	Abdominal and Genitourinary Trauma	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> <li>• Blunt versus penetrating mechanisms</li> <li>• Evisceration</li> <li>• Impaled object</li> </ul>	<p>EMR Material Plus: Fundamental depth, simple breadth Pathophysiology, assessment and management of</p> <ul style="list-style-type: none"> <li>• Solid and hollow organ injuries</li> <li>• Blunt versus penetrating mechanisms</li> <li>• Evisceration</li> <li>• Injuries to the external genitalia</li> <li>• Vaginal bleeding due to trauma</li> <li>• Sexual assault</li> </ul>	<p>EMT Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> <li>• Vascular injury</li> <li>• Solid and hollow organs injuries</li> <li>• Blunt versus penetrating mechanisms</li> <li>• Evisceration</li> <li>• Retroperitoneal injuries</li> <li>• Injuries to the external genitalia</li> <li>• Vaginal bleeding due to trauma</li> <li>• Sexual assault</li> </ul>	Same as Previous Level	<p>Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> <li>• Vascular injury</li> <li>• Solid and hollow organ injuries</li> <li>• Blunt versus penetrating mechanisms</li> <li>• Evisceration</li> <li>• Retroperitoneal injuries</li> <li>• Injuries to the external genitalia</li> </ul>

12E	Orthopedic Trauma	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> <li>• Open fractures</li> <li>• Closed fractures</li> <li>• Dislocations</li> <li>• Amputations</li> </ul>	<p>EMR Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Upper and lower extremity orthopedic trauma</li> <li>• Open fractures</li> <li>• Closed fractures</li> <li>• Dislocations</li> <li>• Sprains/strains</li> <li>• Pelvic fractures</li> <li>• Amputations/replantation</li> </ul>	<p>EMT Material Plus: Pathophysiology, assessment, and management of Simple depth, simple breadth</p> <ul style="list-style-type: none"> <li>• Compartment syndrome</li> </ul> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Pelvic fractures</li> <li>• Amputations/replantation</li> </ul>	<p>AEMT Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Pediatric fractures</li> <li>• Tendon laceration/ transection/ rupture (Achilles and patellar)</li> <li>• Compartment syndrome</li> </ul> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Upper and lower extremity orthopedic trauma</li> <li>• Open fractures</li> <li>• Closed fractures</li> <li>• Dislocations</li> </ul>	<p>Intermediate Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Pediatric fractures</li> <li>• Tendon laceration/ transection/ rupture (Achilles and patellar)</li> <li>• Compartment syndrome</li> </ul> <p>Complex depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Upper and lower extremity orthopedic trauma</li> <li>• Open fractures</li> <li>• Closed fractures</li> <li>• Dislocations</li> </ul>
12F	Soft Tissue Trauma	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> <li>• Wounds</li> <li>• Burns <ul style="list-style-type: none"> <li>o Electrical</li> <li>o Chemical</li> <li>o Thermal</li> </ul> </li> <li>• Chemicals in the eye and on the skin</li> </ul>	<p>EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management</p> <ul style="list-style-type: none"> <li>• Wounds <ul style="list-style-type: none"> <li>o Avulsions</li> <li>o Bite wounds</li> <li>o Lacerations</li> <li>o Puncture wounds</li> <li>o Incisions</li> </ul> </li> <li>• Burns <ul style="list-style-type: none"> <li>o Electrical</li> <li>o Chemical</li> <li>o Thermal</li> </ul> </li> <li>• Radiation</li> </ul> <p>Simple depth, simple breadth</p> <ul style="list-style-type: none"> <li>• Crush syndrome</li> </ul>	<p>EMT Material Plus: Fundamental depth, simple breadth</p> <ul style="list-style-type: none"> <li>□ Crush syndrome</li> </ul>	<p>AEMT Material Plus: Fundamental depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> <li>• Wounds <ul style="list-style-type: none"> <li>o Avulsions</li> <li>o Bite wounds</li> <li>o Lacerations</li> <li>o Puncture wounds</li> </ul> </li> <li>• Burns <ul style="list-style-type: none"> <li>o Electrical</li> <li>o Chemical</li> <li>o Thermal</li> </ul> </li> <li>• High-pressure injection</li> <li>• Crush syndrome</li> </ul>	<p>Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of</p> <ul style="list-style-type: none"> <li>• Wounds <ul style="list-style-type: none"> <li>o Avulsions</li> <li>o Bite wounds</li> <li>o Lacerations</li> <li>o Puncture wounds</li> </ul> </li> <li>• Burns <ul style="list-style-type: none"> <li>o Electrical</li> <li>o Chemical</li> <li>o Thermal</li> </ul> </li> <li>• High-pressure injection</li> <li>• Crush syndrome</li> </ul>

12G	Head, Facial, Neck, and Spine trauma	Simple depth, simple breadth Recognition and management of • Life threats • Spine trauma	EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of • Penetrating neck trauma • Laryngeotracheal injuries • Spine trauma Simple depth, simple breadth • Facial fractures • Skull fractures • Foreign bodies in the eyes • Dental trauma	EMT Material Plus: Complex depth, foundational breadth Pathophysiology, assessment, and management of • Facial fractures • Laryngeotracheal injuries	AEMT Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth • Unstable facial fractures • Orbital fractures Fundamental depth, Foundational breadth • Skull fractures • Penetrating neck trauma • Laryngeotracheal injuries • Spine trauma o Dislocations/subluxations o Fractures o Sprains/strains • Mandibular fractures	Intermediate Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth • Unstable facial fractures • Orbital fractures • Perforated tympanic membrane Complex depth, comprehensive breadth • Skull fractures • Penetrating neck trauma • Laryngeotracheal injuries • Spine trauma o Dislocations/subluxations o Fractures o Sprains/strains • Mandibular fractures
12H	Nervous System Trauma	No knowledge related to this competency is applicable at this level.	Fundamental depth, foundational breadth Pathophysiology, assessment, and management of • Traumatic brain injury • Spinal cord injury	EMT Material Plus: Complex depth, foundational breadth Pathophysiology, assessment, and management of • Traumatic brain injury	Same as Previous Level	Intermediate Material Plus: Pathophysiology, assessment, and management of Fundamental depth, foundational breadth • Cauda equina syndrome • Nerve root injury • Peripheral nerve injury Complex depth, comprehensive breadth • Traumatic brain injury • Spinal cord injury • Spinal shock
12I	Special Considerations in Trauma	Simple depth, simple breadth Recognition and management of trauma in • Pregnant patient • Pediatric patient • Geriatric patient	EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of trauma in the • Pregnant patient • Pediatric patient • Geriatric patient • Cognitively impaired patient	EMT Material Plus: Complex depth, foundational breadth Pathophysiology, assessment, and management of trauma in the • Pregnant patient • Pediatric patient • Geriatric patient • Cognitively impaired patient	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of trauma in the • Pregnant patient • Pediatric patient • Geriatric patient • Cognitively impaired patient

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12J	Environmental Emergencies	Simple depth, simple breadth Recognition and management of • Submersion incidents • Temperature-related illness	EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of • Near drowning • Temperature-related illness • Bites and envenomations • Dysbarism o High-altitude o Diving injuries • Electrical injury • Radiation exposure	Same as Previous Level	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of • Near-drowning • Temperature-related illness • Bites and envenomations • Dysbarism o High-altitude o Diving injuries • Electrical injury • High altitude illness
12K	Multi-System Trauma	Simple depth, simple breadth Recognition and management of • Multi-system trauma	EMR Material Plus: Fundamental depth, foundational breadth Pathophysiology, assessment, and management of • Multi-system trauma • Blast injuries	EMT Material Plus: Complex depth, foundational breadth Pathophysiology, assessment and management of • Multi-system trauma	AEMT Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of • Multi-system trauma • Blast injuries	Intermediate Material Plus: Complex depth, comprehensive breadth Pathophysiology, assessment, and management of • Multi-system trauma • Blast injuries
13	Special Patient Populations	Recognizes and manages life threats based on simple assessment findings for a patient with special needs while awaiting additional emergency response.	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.	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.	Applies assessment findings with principles of pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for patients with special needs.	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><b>13A</b> Obstetrics</p>	<p>Simple depth, simple breadth Recognition and management of</p> <ul style="list-style-type: none"> <li>• Normal delivery</li> <li>• Vaginal bleeding in the pregnant patient</li> </ul>	<p>EMR Material Plus: Fundamental depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Anatomy and physiology of normal pregnancy</li> <li>• Pathophysiology of complications of pregnancy</li> <li>• Assessment of the pregnant patient</li> <li>• Management of                             <ul style="list-style-type: none"> <li>o Normal delivery</li> <li>o Abnormal delivery                                     <ul style="list-style-type: none"> <li>□ Nuchal cord</li> <li>□ Prolapsed cord</li> <li>□ Breech delivery</li> </ul> </li> <li>o Third trimester bleeding                                     <ul style="list-style-type: none"> <li>□ Placenta previa</li> <li>□ Abruptio placenta</li> </ul> </li> <li>o Spontaneous abortion/miscarriage</li> <li>o Ectopic pregnancy</li> <li>o Preeclampsia/Eclampsia</li> </ul> </li> </ul>	<p>Same as Previous Level</p>	<p>AEMT Material Plus: Fundamental depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Anatomy and physiology of pregnancy</li> <li>• Pathophysiology of complications of pregnancy</li> <li>• Assessment of the pregnant patient presentations, and management of                             <ul style="list-style-type: none"> <li>• Normal delivery</li> <li>• Abnormal delivery                                     <ul style="list-style-type: none"> <li>o Nuchal cord</li> <li>o Prolapsed cord</li> <li>o Breech</li> </ul> </li> <li>• Spontaneous abortion/miscarriage</li> <li>• Ectopic pregnancy</li> <li>• Eclampsia</li> <li>• Antepartum hemorrhage</li> <li>• Pregnancy induced hypertension</li> </ul> </li> </ul>	<p>Intermediate Material Plus: Complex depth, comprehensive breadth</p> <ul style="list-style-type: none"> <li>• Anatomy and physiology of pregnancy</li> <li>• Pathophysiology of complications of pregnancy</li> <li>• Assessment of the pregnant patient</li> <li>Psychosocial impact, presentations, prognosis, and management of                             <ul style="list-style-type: none"> <li>• Normal delivery</li> <li>• Abnormal delivery                                     <ul style="list-style-type: none"> <li>o Nuchal cord</li> <li>o Prolapsed cord</li> <li>o Breech</li> </ul> </li> <li>• Spontaneous abortion/miscarriage</li> <li>• Ectopic pregnancy</li> <li>• Eclampsia</li> <li>• Antepartum hemorrhage</li> <li>• Pregnancy induced hypertension</li> </ul> </li> </ul>
<p><b>13B</b></p>				<ul style="list-style-type: none"> <li>Third trimester bleeding                             <ul style="list-style-type: none"> <li>o Placenta previa</li> <li>o Abruptio placenta</li> </ul> </li> <li>• High risk pregnancy</li> <li>• Complications of labor                             <ul style="list-style-type: none"> <li>o Fetal distress</li> <li>o Pre-term</li> <li>o Premature rupture of membranes</li> <li>o Rupture of uterus</li> </ul> </li> <li>• Complication of delivery</li> <li>• Post partum complications</li> </ul>	<ul style="list-style-type: none"> <li>Third trimester bleeding                             <ul style="list-style-type: none"> <li>o Placenta previa</li> <li>o Abruptio placenta</li> </ul> </li> <li>• High risk pregnancy</li> <li>• Complications of labor                             <ul style="list-style-type: none"> <li>o Fetal distress</li> <li>o Pre-term</li> <li>o Premature rupture of membranes</li> <li>o Rupture of uterus</li> </ul> </li> <li>• Complication of delivery</li> <li>• Post partum complications</li> </ul> <p>Foundational depth, foundational breadth</p> <ul style="list-style-type: none"> <li>• Hyperemesis gravidarum</li> <li>• Post partum depression</li> </ul>

13C	Neonatal care	Simple depth, simple breadth • Newborn care • Neonatal resuscitation	EMR Material Plus: Fundamental depth, foundational breadth Assessment and management • Newborn • Neonatal resuscitation	Same as Previous Level	Same as Previous level	Intermediate Material Plus: Complex depth, comprehensive breadth • Anatomy and physiology of neonatal circulation • Assessment of the newborn Presentation and management • Newborn • Neonatal resuscitation
13D	Pediatrics	Simple depth, simple breadth Age-related assessment findings, and age-related assessment and treatment modifications for pediatric specific major diseases and/or emergencies • Upper airway obstruction • Lower airway reactive disease • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome	EMR Material Plus: Fundamental depth, foundational breadth Age-related assessment findings, age-related, and developmental stage related assessment and treatment modifications for pediatric specific major diseases and/or emergencies • Upper airway obstruction • Lower airway reactive disease • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome • Gastrointestinal disease	Same as Previous Level	AEMT Material Plus: 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: Fundamental depth, comprehensive breadth • Foreign body (upper and lower) airway obstruction • Asthma • Bronchiolitis o Respiratory Syncytial Virus (RSV) • Pneumonia • Croup • Epiglottitis • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome (SIDS) • Hyperglycemia • Hypoglycemia	Intermediate Material Plus: 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: Complex depth, comprehensive breadth • Foreign body (upper and lower) airway obstruction • Bacterial tracheitis • Asthma • Bronchiolitis o Respiratory Syncytial Virus (RSV) • Pneumonia • Croup • Epiglottitis • Respiratory distress/failure/arrest • Shock • Seizures • Sudden Infant Death Syndrome (SIDS) • Hyperglycemia • Hypoglycemia Fundamental depth, foundational breadth • Pertussis • Cystic fibrosis • Bronchopulmonary dysplasia • Congenital heart diseases • Hydrocephalus and ventricular shunts

13E	Geriatrics	Simple depth, simple breadth • impact of age-related changes on assessment and care	EMR Material Plus: Fundamental depth, foundational breadth 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 • Cardiovascular diseases • Respiratory diseases • Neurological diseases • Endocrine diseases • Alzheimer's • Dementia	EMT Material Plus: Complex depth, foundational breadth • Fluid resuscitation in the elderly	AEMT Material Plus: Normal and abnormal changes associated with aging, pharmacokinetic changes, polypharmacy, and age-related assessment and treatment modifications for the major or common geriatric diseases and/or emergencies. Fundamental depth, comprehensive breadth • Cardiovascular diseases • Respiratory diseases • Neurological diseases • Endocrine diseases • Alzheimer's • Dementia • Delirium Fundamental depth, foundational breadth • Herpes zoster • Inflammatory arthritis	Intermediate Material Plus: 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 Complex depth, comprehensive breadth • Cardiovascular diseases • Respiratory diseases • Neurological diseases • Endocrine diseases • Alzheimer's • Dementia • Delirium o Acute confusional state Fundamental depth, foundational breadth • Herpes zoster • Inflammatory arthritis
13F	Patients with Special Challenges	Simple depth, simple breadth • Recognizing and reporting abuse and neglect	EMR Material Plus: Simple depth, simple breadth Healthcare implications of • Abuse • Neglect • Homelessness • Poverty • Bariatrics • Technology dependent • Hospice/ terminally ill • Tracheostomy care/dysfunction • Homecare • Sensory deficit/loss • Developmental disability	EMT Material Plus: Fundamental depth, foundational breadth Healthcare implications of • Abuse • Neglect • Homelessness • Poverty • Bariatrics • Technology dependent • Hospice/ terminally ill • Tracheostomy care/dysfunction • Homecare • Sensory deficit/loss • Developmental disability	Same as Previous level	Intermediate Material Plus: Complex depth, comprehensive breadth Healthcare implications of • Abuse • Neglect • Poverty • Bariatrics • Technology dependent • Hospice/ terminally ill • Tracheostomy care/ dysfunction
14	EMS Operations	Knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety	Same as Previous Level	Same as Previous Level	Same as Previous Level	Same as Previous Level

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14A	Principles of Safely Operating a Ground Ambulance	Simple depth, simple breadth • Risks and responsibilities of emergency response	EMR Material Plus: Simple depth, foundational breadth • Risks and responsibilities of transport	Same as Previous Level	Same as Previous Level	Same as Previous Level
14B	Incident Management	Simple depth, simple breadth • Establish and work within the incident management system	EMR Material Plus: Fundamental depth, foundational breadth • Establish and work within the incident management system	Same as Previous Level	Same as Previous Level	Intermediate Material Plus: Complex depth, comprehensive breadth • Establish and work within the incident management system
14C	Multiple Casualty Incidents	Simple depth, simple breadth • Triage principles • Resource management	EMR Material Plus: Simple depth, foundational breadth • Triage • Performing • Re-Triage • Destination Decisions • Post Traumatic and Cumulative Stress	Same as Previous Level	Same as Previous Level	Same as Previous Level
14D	Air Medical	Simple depth, simple breadth • Safe air medical operations • Criteria for utilizing air medical response	Same as Previous Level	Same as Previous Level	AEMT Material Plus: fundamental depth, foundational breadth • Medical risks/needs/advantages	Intermediate Material Plus: Complex depth, comprehensive breadth • Medical risks/needs/advantages
14E	Vehicle Extrication	Simple depth, simple breadth • Safe vehicle extrication • Use of simple hand tools	Same as Previous Level	Same as Previous Level	Same as Previous Level	Same as Previous Level
14F	Hazardous Materials Awareness	Simple depth, simple breadth • Risks and responsibilities of operating in a cold zone at a hazardous material or other special incident	Same as Previous Level	Same as Previous Level	Same as Previous Level	Same as Previous Level
14G	Mass Casualty Incidents due to Terrorism and Disaster (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)	Simple depth, simple breadth • Risks and responsibilities of operating on the scene of a natural or man made disaster	Same as Previous Level	Same as Previous Level	Same as Previous Level	Same as Previous Level

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	Clinical Behavior/Judgment				
C1	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 of a patient. Formulate a field impression based on an analysis of comprehensive assessment findings, anatomy, physiology, pathophysiology. Relate assessment findings to underlying pathological and physiological changes in the patient's condition. Apply the multiple determinants of health and clinical care.
C2	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.	Same as Previous Level
					Effectively communicate in a manner that is culturally sensitive and intended to improve the patient outcome.

C3	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"> <li>• Basic Airway Maneuvers</li> <li>• Head-tilt, chin-lift</li> <li>• Jaw thrust</li> <li>• Modified chin lift</li> <li>• FBAO relief - manual</li> <li>• Oropharyngeal airway</li> <li>• Sellick's maneuver</li> <li>• Positive pressure ventilation devices such as BVM</li> <li>• Suction of the upper airway</li> <li>• Supplemental oxygen therapy</li> <li>• Nasal cannula</li> <li>• Non-rebreather mask</li> </ul> <p>Assessment</p> <ul style="list-style-type: none"> <li>• Manual B/P</li> </ul> <p>Pharmacologic interventions</p> <ul style="list-style-type: none"> <li>• Unit-dose autoinjectors (lifesaving medications intended for self or peer rescue in hazardous materials situation, nerve agent antidote kit)</li> </ul>	<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"> <li>• Nasopharyngeal airway</li> <li>• Positive pressure ventilation</li> <li>• Manually-triggered ventilators</li> <li>• Automatic transport ventilators</li> <li>• Supplemental oxygen therapy</li> <li>• Humidifiers</li> <li>• Partial-rebreather mask</li> <li>• Venturi mask</li> </ul> <p>Assessment</p> <ul style="list-style-type: none"> <li>• Pulse oximetry</li> <li>• Automatic B/P</li> </ul> <p>Pharmacologic interventions</p> <ul style="list-style-type: none"> <li>• Assist patients in taking their own prescribed medications</li> <li>• Administration of OTC medications with medical oversight</li> <li>• Oral glucose for hypoglycemia</li> <li>• Aspirin for chest pain</li> </ul>	<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"> <li>• Airways not intended for insertion into the trachea</li> <li>• Esophageal-tracheal</li> <li>• Multi-lumen airway</li> <li>• Tracheal-bronchial suctioning of an already intubated patient</li> </ul> <p>Assessment</p> <ul style="list-style-type: none"> <li>• Blood glucose monitor</li> </ul> <p>Pharmacologic interventions</p> <ul style="list-style-type: none"> <li>• Establish and maintain peripheral intravenous access</li> <li>• Establish and maintain intraosseous access in pediatric patient</li> <li>• Administer (nonmedicated) intravenous fluid therapy</li> <li>• Sublingual nitroglycerin (chest pain)</li> <li>• Subcutaneous or intramuscular epinephrine (anaphylaxis)</li> <li>• Glucagon (hypoglycemia)</li> </ul>	<p>Safely and effectively perform all psychomotor skills within the National EMS Scope of Practice Model AND Virginia Scope of Practice (VaSoP) at this level.</p> <p>Airway and Breathing</p>	<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"> <li>• Oral and nasal endotracheal intubation</li> <li>• FBAO – direct laryngoscopy</li> <li>• Percutaneous cricothyrotomy</li> <li>• Pleural decompression</li> <li>• BiPAP, CPAP, PEEP</li> <li>• Chest tube monitoring</li> <li>• ETCO2 monitoring</li> <li>• NG/OG tube</li> </ul> <p>Assessment</p> <ul style="list-style-type: none"> <li>• ECG interpretation</li> <li>• 12-lead interpretation</li> <li>• Blood chemistry analysis</li> </ul> <p>Pharmacologic interventions</p> <ul style="list-style-type: none"> <li>• Intraosseous insertion</li> <li>• Enteral and parenteral administration of approved prescription medications</li> <li>• Access indwelling catheters and implanted central IV ports</li> <li>• Medications by IV infusion</li> </ul>
		<p>Medical/Cardiac care</p> <ul style="list-style-type: none"> <li>• Manual CPR</li> <li>• AED</li> <li>• Assisted normal delivery</li> </ul> <p>Trauma care</p> <ul style="list-style-type: none"> <li>• Manual stabilization</li> <li>• C-spine injuries</li> <li>• Extremity fractures</li> <li>• Bleeding control</li> <li>• Emergency moves</li> <li>• Eye irrigation</li> </ul>	<p>Medical/Cardiac care</p> <ul style="list-style-type: none"> <li>• Mechanical CPR</li> <li>• Assisted complicated delivery</li> </ul> <p>Trauma care</p> <ul style="list-style-type: none"> <li>• Spinal immobilization</li> <li>• Cervical collars</li> <li>• Seated</li> <li>• Longboard</li> <li>• Rapid extrication</li> <li>• Splinting</li> <li>• Extremity</li> <li>• Traction</li> <li>• PASG</li> <li>• Mechanical patient restraint</li> <li>• Tourniquet</li> </ul>	<ul style="list-style-type: none"> <li>• Intravenous 50% dextrose (hypoglycemia)</li> <li>• Inhaled beta agonists (wheezing)</li> <li>• Intravenous narcotic antagonist (narcotic overdose)</li> <li>• Nitrous oxide (pain)</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain infusion of blood or blood products</li> <li>• Blood sampling</li> <li>• Thrombolytic initiation</li> <li>• Administer physician approved medications</li> </ul> <p>Medical/Cardiac care</p> <ul style="list-style-type: none"> <li>• Cardioversion</li> <li>• Manual defibrillation</li> <li>• Transcutaneous pacing</li> <li>• Carotid massage</li> </ul> <p>Trauma care</p> <ul style="list-style-type: none"> <li>• Morgan lens</li> </ul>	
C4						

Virginia EMS Education Standards (VEMSES)

<p><b>C5</b> 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>Same as Previous Level</p>	<p>Is 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><b>C6</b> 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>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><b>C7</b> 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>Report and document assessment findings and interventions. Collect and report data to be used for epidemiological and research purposes.</p>

<p><b>C8</b></p> <p>Patient Complaints</p>	<p>Perform a patient assessment and provide prehospital emergency care for patient complaints: abdominal pain, abuse/neglect, altered mental status/decreased level of consciousness, apnea, back pain, behavioral emergency, bleeding, cardiac arrest, chest pain, cyanosis, dyspnea, eye pain, GI bleeding, hypotension, multiple trauma, pain, paralysis, poisoning, shock, and stridor/drooling.</p>	<p>Perform a patient assessment and provide prehospital emergency care and transportation for patient complaints: abdominal pain, abuse/neglect, altered mental status/decreased level of consciousness, anxiety, apnea, ataxia, back pain, behavioral emergency, bleeding, cardiac arrest, cardiac rhythm disturbances, chest pain, constipation, cyanosis, dehydration, diarrhea, dizziness/vertigo, dysphasia, dyspnea, edema, eye pain, fatigue, fever, GI bleeding, headache, hematuria, hemoptysis, hypertension, hypotension, joint pain/swelling, multiple trauma, nausea/vomiting, pain, paralysis, pediatric crying/fussiness, poisoning, rash, rectal pain, shock, sore throat, stridor/drooling, syncope,</p> <p>urinary retention, visual disturbances, weakness, and wheezing.</p>	<p>Perform a patient assessment and provide prehospital emergency care and transportation for patient complaints: abdominal pain, abuse/neglect, altered mental status/decreased level of consciousness, anxiety, apnea, ataxia, back pain, behavioral emergency, bleeding, cardiac arrest, cardiac rhythm disturbances, chest pain, constipation, cyanosis, dehydration, diarrhea, dizziness/vertigo, dysphasia, dyspnea, edema, eye pain, fatigue, fever, GI bleeding, headache, hematuria, hemoptysis, hypertension, hypotension, joint pain/swelling, multiple trauma, nausea/vomiting, pain, paralysis, pediatric crying/fussiness, poisoning, rash, rectal pain, shock, sore throat, stridor/drooling, syncope, urinary retention, visual disturbances, weakness, and wheezing.</p>	<p>Perform a patient assessment, develop a treatment and disposition plan for patients with the following complains: abdominal pain, abuse/neglect, altered mental status/decreased level of consciousness, anxiety, apnea, ascites, ataxia, back pain, behavioral emergency, bleeding, blood and body fluid exposure, cardiac arrest, cardiac rhythm disturbances, chest pain, congestion, constipation, cough/hiccough, cyanosis, dehydration, dental pain, diarrhea, dizziness/vertigo, dysmenorrhea, dysphasia, dyspnea, dysuria, ear pain, edema, eye pain, fatigue, feeding problems, fever, GI bleeding, headache, hearing disturbance, hematuria, hemoptysis, hypertension, hypotension, incontinence, jaundice, joint pain/swelling, malaise, multiple trauma, nausea/vomiting, pain, paralysis,</p> <p>poisoning, pruritus, rash, rectal pain, red/pink eye, shock, sore throat, stridor/drooling, syncope, tinnitus, tremor, urinary retention, visual disturbances, weakness, and wheezing.</p>	<p>Perform a patient assessment, develop a treatment and disposition plan for patients with the following complains: abdominal pain, abuse/neglect, altered mental status/decreased level of consciousness, anxiety, apnea, ascites, ataxia, back pain, behavioral emergency, bleeding, blood and body fluid exposure, cardiac arrest, cardiac rhythm disturbances, chest pain, congestion, constipation, cough/hiccough, cyanosis, dehydration, dental pain, diarrhea, dizziness/vertigo, dysmenorrhea, dysphasia, dyspnea, dysuria, ear pain, edema, eye pain, fatigue, feeding problems, fever, GI bleeding, headache, hearing disturbance, hematuria, hemoptysis, hypertension, hypotension, incontinence, jaundice, joint pain/swelling, malaise, multiple trauma, nausea/vomiting, pain, paralysis,</p> <p>poisoning, pruritus, rash, rectal pain, red/pink eye, shock, sore throat, stridor/drooling, syncope, tinnitus, tremor, urinary retention, visual disturbances, weakness, and wheezing.</p>
<p><b>C9</b></p> <p>Scene Leadership</p>	<p>Manage the scene until care is transferred to an EMS team member licensed at a higher level arrives.</p>	<p>Entry-level EMTs serve as an EMS team member on an emergency call with more experienced personnel in the lead role. EMTs may serve as a team leader following additional training and/or experience.</p>	<p>Serve as an EMS team leader of an emergency call.</p>	<p>Function as the team leader of a routine, single patient advanced life support emergency call.</p>	<p>Function as the team leader of a routine, single patient advanced life support emergency call.</p>

Virginia EMS Education Standards (VEMSES)

C10	Scene Safety	Ensure the safety of the rescuer and others during an emergency.	Ensure the safety of the rescuer and others during an emergency.	Ensure the safety of the rescuer and others during an emergency.	Ensure the safety of the rescuer and others during an emergency.	Ensure the safety of the rescuer and others during an emergency.
	Educational Infrastructure					
	E1 Educational Facilities	<ul style="list-style-type: none"> <li>• Facility sponsored or approved by sponsoring agency</li> <li>• ADA compliant facility</li> <li>• Sufficient space for class size</li> <li>• Controlled environment</li> </ul>	Same as Previous Level	Same as Previous Level	Same as Previous Level	<ul style="list-style-type: none"> <li>• Reference Committee on Accreditation for EMS Professions (CoAEMSP) Standards and Guidelines (<a href="http://www.coaemsp.org">www.coaemsp.org</a>)</li> </ul>
	E2 Student Space	<ul style="list-style-type: none"> <li>• Provide space sufficient for students to attend classroom sessions, take notes and participate in classroom activities</li> <li>• Provide space for students to participate in kinematic learning and practice activities</li> </ul>	Same as Previous Level	Same as Previous Level	Same as Previous Level	
	E3 Instructional Resources	<ul style="list-style-type: none"> <li>• Provide basic instructional support material</li> <li>• Provide audio, visual, and kinematic aids to support and supplement didactic instruction</li> </ul>	Same as Previous Level	Same as Previous Level	Same as Previous Level	
	E4 Instructor Preparation Resources	<ul style="list-style-type: none"> <li>• Provide space for instructor preparation</li> <li>• Provide support equipment for instructor preparation</li> </ul>	Same as Previous Level	Same as Previous Level	Same as Previous Level	
	E5 Storage Space	<ul style="list-style-type: none"> <li>• Provide adequate and secure storage space for instructional materials</li> </ul>	Same as Previous Level	Same as Previous Level	Same as Previous Level	
	E6 Sponsorship	<ul style="list-style-type: none"> <li>• Sponsoring organizations shall be one of the following:</li> <li>• Accredited educational institution, or</li> <li>• Public safety organization, or</li> <li>• Accredited hospital, clinic, or medical center, or</li> <li>• Other State approved institution or organization</li> </ul>	Same as Previous Level	Same as Previous Level	Same as Previous Level	

Virginia EMS Education Standards (VEMSES)

E7	Programmatic Approval	<ul style="list-style-type: none"> <li>• Sponsoring organization shall have programmatic approval by authority having jurisdiction for program approval (State)</li> </ul>	Same as Previous Level	Same as Previous Level	Same as Previous Level
E8	Faculty	<p>The course primary instructor should</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• Have successfully completed an approved instructor training program or equivalent</li> </ul>	Same as Previous Level	Same as Previous Level	Same as Previous Level
E9	Medical Director Oversight	<ul style="list-style-type: none"> <li>• Provide medical oversight for all medical aspects of instruction</li> </ul>	Same as Previous Level	Same as Previous Level	Same as Previous Level
E10		<ul style="list-style-type: none"> <li>• None required at this level</li> </ul>	<ul style="list-style-type: none"> <li>• Students should observe emergency department operations for a period of time sufficient to gain an appreciation for the continuum of care.</li> <li>• Students must perform 10 patient assessments</li> <li>• A minimum <u>five</u> of these patient assessments must be performed on live patients. These should be performed on an ambulance or in an emergency department or may be completed in a clinic, nursing home, doctor's office, etc.</li> <li>• No more than <u>five</u> of the required 10 patient assessments may be performed on standardized programmed patients or advanced simulation mannequins.</li> </ul>	<b>See State Requirements</b>	<b>See State Requirements</b>

Virginia EMS Education Standards (VEMSES)

E11	Hospital/Clinical Experience			<p>The student must demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with chest pain.</p> <ul style="list-style-type: none"> <li>• The student must demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with respiratory distress.</li> <li>• The student must demonstrate the ability to perform an adequate assessment and formulate and implement a treatment plan for patients with altered mental status.</li> <li>• The student must demonstrate the ability to perform an adequate assessment on pediatric, adult and geriatric patients.</li> </ul>	
E12	Field Experience	<ul style="list-style-type: none"> <li>• None required at this level</li> </ul>	<ul style="list-style-type: none"> <li>• The student must participate in and document patient contacts in a field experience approved by the medical director and program director.</li> </ul>	<ul style="list-style-type: none"> <li>• The student must participate in and document team leadership in a field experience approved by the medical director and program director.</li> </ul>	<b>See State Requirements</b>

Virginia EMS Education Standards (VEMSES)

<p><b>E13</b> Course Length</p>	<ul style="list-style-type: none"> <li>• Course length is based on competency, not hours</li> <li>• Course material can be delivered in multiple formats including but not limited to:                             <ul style="list-style-type: none"> <li>• Independent student preparation</li> <li>• Synchronous/Asynchronous distributive education</li> <li>• Face-to-face instruction</li> <li>• Pre- or co-requisites</li> </ul> </li> <li>• Course length is estimated to take approximately 48-60 didactic and laboratory clock hours</li> </ul>	<ul style="list-style-type: none"> <li>• Course length is based on competency, not hours</li> <li>• Course material can be delivered in multiple formats including but not limited to:                             <ul style="list-style-type: none"> <li>• Independent student preparation</li> <li>• Synchronous/Asynchronous distributive education</li> <li>• Face-to-face instruction</li> <li>• Pre- or co-requisites</li> </ul> </li> <li>• Course length is estimated to take approximately 150-190 clock hours including the four integrated phases of education (didactic, laboratory, clinical and field) to cover material</li> </ul>	<ul style="list-style-type: none"> <li>• Course length is based on competency, not hours</li> <li>• Course material can be delivered in multiple formats including but not limited to:                             <ul style="list-style-type: none"> <li>• Independent student preparation</li> <li>• Synchronous/Asynchronous distributive education</li> <li>• Face-to-face instruction</li> <li>• Pre- or co-requisites</li> </ul> </li> <li>• Course length is estimated to take approximately 150-250 clock hours beyond EMT requirements including the four integrated phases of education (didactic, laboratory, clinical and field) to cover material</li> </ul>	<p><b>See State Requirements</b></p>
<p><b>E14</b> Course Design</p>	<ul style="list-style-type: none"> <li>• Provide the following components of instruction:                             <ul style="list-style-type: none"> <li>• Didactic instruction</li> <li>• Skills laboratories</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Provide the following components of instruction:                             <ul style="list-style-type: none"> <li>• Didactic instruction</li> <li>• Skills laboratories</li> <li>• Hospital/Clinical experience</li> <li>• Field experience</li> </ul> </li> </ul>	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>
<p><b>E15</b> Student Assessment</p>	<ul style="list-style-type: none"> <li>• Perform knowledge, skill, and professional behavior evaluation based on educational standards and program objectives</li> <li>• Provide several methods of assessing achievement</li> <li>• Provide assessment that measures, as a minimum, entry level competency in all domains</li> </ul>	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>
<p><b>E16</b> Program Evaluation</p>	<ul style="list-style-type: none"> <li>• Provide evaluation of program instructional effectiveness</li> <li>• Provide evaluation of organizational and administrative effectiveness of program</li> </ul>	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>	<p>Same as Previous Level</p>

# Appendix D

Proposal to Professional Development Committee of the  
State EMS Advisory Board

**Education Coordinator (EC) Testing Requirement**

- Proposal:** To evaluate the knowledge base of current EMT Instructors/ALS Coordinators
- Purpose:** With the implementation of the Virginia EMS Education Standards (VEMSES), the material includes didactic knowledge and concepts to which current EMT-Instructors/ALS Coordinators may not have been exposed. EMT-Instructors and/or ALS Coordinators (ALS-C's) must demonstrate their knowledge of new educational content prior to teaching VEMSES based courses.
- Plan:** Transition to the Education Coordinator Certification will require current EMT Instructors and ALS-C's to pass a knowledge exam in order to continue coordinating EMS Courses shortly after implementation of the VEMSES.
- EMT-Instructors/ALS-C's will have 4 attempts to pass the knowledge exam.
- The testing window will mirror that of state certification testing:  
-1 year test eligibility period from the date of the first test  
-90-day retest window
- If the EMT-Instructor/ALS Coordinator is unsuccessful in all 4 attempts (or eligibility expires prior to passing), they will be required to complete the EMS Education Coordinator Certification process (written pre-test, practical exam and entire EC Institute) after waiting a period of 6 months from the date of the last failed test or loss of eligibility.
- Impact:** All current EMT Instructors will need to pass this exam in order to transition to the Education Coordinator Certification. ALS Coordinators who do not have dual certification as an EMT Instructor will be required to pass the exam to obtain Education Coordinator Certification.
- Structure:** The exam will be based on EMT level items identified within at least one of the following: the Phoenix Document (Virginia Gap Analysis), Practice Analysis and/or VEMSES.
- Timeline:** The Office will determine and publish a timeline regarding when testing can begin. This will depend on the estimated date for implementation of the EMS Regulations, Virginia EMS Educational Standards (VEMSES) and candidate testing of this material.

PDC Decision:

**Motion by Dave Cullen**

**PDC recommends that all Instructors/ ALS Coordinators must take the EMT-Instructor Pretest in order to gain eligibility for Education Coordinator Certification. If a person fails all 4 attempts they must wait 6 months before restarting the EC process (pretest, practical, Institute)**

**Second by Steve Rea**

**Vote: Unanimously Approved.**

# **APPENDIX**

## **E**

**VIRGINIA OFFICE OF  
EMERGENCY MEDICAL SERVICES  
STATE  
STRATEGIC AND OPERATIONAL  
PLAN**



**2010-2013**

## INTRODUCTION

§32.1-111.3 of the *Code of Virginia* requires the development of a comprehensive, coordinated, statewide emergency medical services plan by the Virginia Office of EMS (OEMS). The Board of Health must review, update, and publish the plan triennially, making such revisions as may be necessary to improve the effectiveness and efficiency of the Commonwealth's emergency care system. The objectives of the plan shall include, but not be limited to the eighteen objectives outlined in §32.1-111.3.

Over the past few years, much attention has been paid to the development of the plan. Some of this is due to review of reports, namely the Joint Legislative Audit and Review Commission (JLARC) Review of Emergency Medical Services in Virginia, the National Association of State EMS Officials "State Emergency Medical Services Systems: A Model" report, the Institute of Medicine (IOM) Report "EMS at the Crossroads", the Association & Society Management International (ASMI) report "Regional Emergency Medical Services Council Study", the planning session report of the Regional EMS Council Process Action Team, as well as planning sessions conducted by the standing committees of the state EMS Advisory Board. The recommendations made by these committees have assisted in driving the planning process forward.

As the *Code of Virginia* mandates, this plan must be reviewed, updated, and published triennially by the Board of Health. The Office of EMS appreciates the opportunity to present this document to the Board, and values any input that the Board provides, as well as the input of any other stakeholder, or interested party.

This operational plan identifies the specific initiatives required of the OEMS staff in executing the 2010 – 2013 Strategic Plan. Each objective and action step is intended to accomplish those items most critical to the Strategic Plan in the given fiscal year. The Strategic Plan is designed to improve priority areas of performance and initiate new programs. Therefore, much of the routine, but important work of the OEMS staff (i.e., EMS agency licensure, EMS vehicle permitting, EMS provider certification, grant awards, technical assistance, etc.), is not included in the Operational Plan.

No later than 3 months prior to the end of a particular fiscal year the OEMS staff will evaluate progress on the plan and begin the process of creating the Operational Plan for the next fiscal year.

## **Core Strategy 1: Develop Partnerships**

### Key Strategic Initiatives

#### **1.1 Promote collaborative approaches.**

- 1.1.1 Use technology to provide accurate and timely communication within the Virginia EMS System
- 1.1.2 Promote collaborative activities between local government, EMS agencies, hospitals, and community colleges to support more community based EMS programs which lead to increased recruitment and retention of certified EMS providers.
- 1.1.3 Provide a platform for clear, accurate, and concise information sharing and improved interagency communications between the Office of EMS, state agencies and EMS system stakeholders in Virginia.
- 1.1.4 Identify resources and/or opportunities to work collaboratively with other state agencies, organizations, and associations to improve processes and patient outcomes.

#### **1.2 Coordinate responses to emergencies both natural and man-made.**

- 1.2.1 Support, coordinate and maintain deployable emergency response resources.
- 1.2.2 Increase knowledge of Emergency Operations capabilities with Emergency Managers, leaders, and supervisors on a local, regional, and state level.
- 1.2.3 Assist EMS agencies to prepare and respond to natural and man-made emergencies by incorporating strategies to develop emergency response plans (the plan) that address the four phases of an emergency (preparedness, mitigation, response, and recovery) and to exercise the plan.

## **Core Strategy 2: Create Tools and Resources**

### Key Strategic Initiatives

#### **2.1 Sponsor EMS related research and education.**

- 2.1.1 Sponsor research and other projects that contribute to high quality EMS and improve patient outcomes utilizing data collected by the EMS Registries.
- 2.1.2 Determine quality of EMS service and conduct analysis of trauma triage effectiveness.
- 2.1.3 Establish scholarships for EMS provider education.
- 2.1.4 Evaluate the impact of an aging workforce on service provision around the State.

#### **2.2 Supply quality education and certification of EMS personnel.**

- 2.2.1 Ensure adequate, accessible, and quality EMS provider training and continuing education.
- 2.2.2 Enhance competency based EMS training programs.
- 2.2.3 Develop, implement and promote leadership and management standards for EMS agency leaders.
- 2.2.4 Align all initial EMS education programs to that of other allied health professions to promote professionalization of EMS.
- 2.2.5 Increase the amount and quality of pediatric training and educational resources for EMS providers, emergency department staff and primary care providers in Virginia.
- 2.2.6 Provide an increased number of training opportunities for EMS personnel in Emergency Operations methods and activities.

## **Core Strategy 3: Develop Infrastructure**

### Key Strategic Initiatives

#### **3.1 EMS Regulations, Protocols, Policies, and Standards**

- 3.1.1 Review and assess state and federal legislation related to the EMS system.
- 3.1.2 Establish standards for the utilization of Air Medical Services.
- 3.1.3 Establish statewide Air/Ground Safety Standards.
- 3.1.4 Develop criteria for a voluntary Virginia Standards of Excellence Accreditation Program for EMS Agencies.
- 3.1.5 Maintain and enhance the Trauma Center designation process.
- 3.1.6 Maintain and enhance the Regional EMS Council designation process.
- 3.1.7 Establish standardized methods and procedures for the inspection and licensing and/or permitting of all EMS agencies and vehicles, including equipment and supply requirements.
- 3.1.8 Through a consensus process, develop a standard set of evidence-based patient care guidelines and standard formulary.

#### **3.2 Focus recruitment and retention efforts**

- 3.2.1 Develop, implement, and promote a comprehensive recruitment and retention campaign for EMS personnel and physicians, supporting the needs of the EMS system.
- 3.2.2 Support and expand the Virginia Recruitment and Retention Network.
- 3.2.3 Develop, implement, and promote the EMS Leadership and Management standards program.

#### **3.3 Upgrade technology and communication systems**

- 3.3.1 Assist with, and promote, all emergency radio systems are compliant with state and federal regulations for narrow banding and interoperability.
- 3.3.2 Promote emergency medical dispatch standards and accreditation among 911 Public Safety Answering Points (PSAPs) in Virginia.
- 3.3.3 Provide technical assistance on wireless communication products available for use in the emergency medical community.
- 3.3.4 Establish statewide centralized dispatch system for air medical service.

### **Core Strategy 3 – Develop Infrastructure (Continued)**

#### **3.4 Stable support for EMS funding**

- 3.4.1 Standardize EMS grant review and grading process by graders at regional and state level.
- 3.4.2 Develop a “Best Practices” resource guide on the procurement of EMS and rescue vehicles to include the use of existing or “cooperative” contracts in conjunction with the Department of General Services – Division of Purchases and Supply.
- 3.4.3 Develop uniform pricing schedule for state funded items.
- 3.4.4 Develop standard specifications for state grant funded equipment awarded to eligible non-profit EMS agencies.
- 3.4.5 Assist EMS agencies to identify grant programs and funding sources for EMS equipment, training, and supplies.
- 3.4.6 Integrate state grant funding programs with other related grant funding programs.
- 3.4.7 Develop guidance documents to assist EMS agencies account for the use of state grant funds and develop internal audit processes.

#### **3.5 Enhance regional and local EMS efficiencies**

- 3.5.1 Standardize performance and outcomes based service contracts with designated Regional EMS Councils and other qualified entities.
- 3.5.2 Improve regulation and oversight of air medical services statewide.
- 3.5.3 Educate local government officials and communities about the value of a high quality EMS system to promote development in economically depressed communities and the importance of assuming a greater responsibility in the planning, development, implementation, and evaluation of it's emergency medical services system.

## **Core Strategy 4: Assure Quality and Evaluation**

### Key Strategic Initiatives

#### **4.1 Assess compliance with EMS performance driven standards**

- 4.1.1 Maintain statewide data-driven performance improvement process.
- 4.1.2 Maintain statewide pre-hospital and inter-hospital trauma triage plan.
- 4.1.3 Maintain statewide pre-hospital and inter-hospital stroke triage plan.
- 4.1.4 *Develop and maintain statewide pre-hospital and inter-hospital ST Elevation Myocardial Infarction (STEMI) triage plan.***
- 4.1.5 Review and evaluate data collection and submission efforts.
- 4.1.6 Review of EMS vehicles for functional adequacy and ensuring design features contribute to EMS provider safety, unit efficiency, and facilitation of quality patient care.
- 4.1.7 Measure EMS system compliance utilizing national EMS for Children (EMSC) performance measures.

#### **4.2 Assess and enhance quality of education for EMS providers**

- 4.2.1 Update the certification process to assure certification examinations continue to be valid, psychometrically sound, and legally defensible.
- 4.2.2 Update quality improvement process to promote a valid, psychometrically sound, and legally defensible certification process.
- 4.2.3 Explore substitution of practical examination with successful completion of a recognized competency based training program conducted by accredited training sites and using computer based technology for written examinations.

#### **4.3 Pursue new initiatives that support EMS**

- 4.3.1 Engage the EMS system in unintentional injury, illness, and violence prevention efforts.
- 4.3.2 Develop, implement, and promote programs that emphasize safety, wellness, and the physical health of fire and EMS personnel.

## Resources

In developing this plan several resources were used in addition to meetings and interviews with the Director and Assistant Director of OEMS.

- Code of Virginia: § 32.1-111.3. Statewide emergency medical care system. Requires a comprehensive, coordinated EMS system in the Commonwealth and identifies specific objectives that must be addressed.
- EMS Agenda for the Future: A document created by the National Highway Traffic and Safety Administration (NHTSA) that outlines a vision and objectives for the future of EMS. August 1996
- OEMS 5-Year Plan: July 1, 2007-June 30, 2010
- Service Area Strategic Plan State Office of Emergency Medical Services (601 402 04) which describes the statutory authority and expectations for OEMS and identifies the growing EMS needs of the citizens and visitors of Virginia.
- Service Area Strategic Plan Financial Assistance for Non Profit Emergency Medical Services Organizations and Localities (601 402 03) This service area includes Virginia Rescue Squads Assistance Fund grants program, Financial Assistance to Localities to support Non Profit Emergency Medical Service (EMS) agencies, and funding provided to support Virginia Association of Volunteer Rescue Squads (VAVRS).
- State Emergency Medical Services Systems: A Model: National Association of State EMS Officials – July 2008
- EMS at the Crossroads: Institute of Medicine - 2006
- Agency Planning Handbook: A Guide for Strategic Planning and Service Area Planning Linking to Performance-Based Budgeting: Department of Planning and Budget 2006-2008 Biennium, May 1, 2005
- Joint Legislative Action Review Commission (JLARC) Report – House Document 37, Review of Emergency Medical Services in Virginia. 2004.
- EMS Advisory Board Committee Planning Templates – Developed May-August 2009
- Regional EMS Council Process Action Team (PAT) Retreat Report - November 2008.

# Appendix F



# Virginia EMS Career Fair

## Vendor Registration

**November 11, 2010, 6-9 p.m.**

Your EMS Agency can recruit EMS providers from around the state by taking part in the 1st Annual EMS Career Fair! It is being held in conjunction with the 31st Annual Virginia EMS Symposium at the Norfolk Waterside Marriott.

**Cost:** There is no charge for booth space.

**Details:** Each space (8' x 10') will be provided with one skirted table, two chairs, name sign and name tags for up to four representatives of your organization. Please note that electrical connections and Internet access will NOT be provided. If you desire to use these services, please complete Exhibits, Inc. form and submit to the address provided on the form.  
SPACE IS LIMITED – REGISTER EARLY

### REGISTRATION :

Name of Firm/Agency: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Telephone: (     ) \_\_\_\_\_ Fax: (     ) \_\_\_\_\_

Contact Person: \_\_\_\_\_ E-mail: \_\_\_\_\_

### EXHIBIT DESCRIPTION & REQUIREMENTS

Exhibit Name for Sign: \_\_\_\_\_

### REPRESENTATIVES ON SITE (As you wish names to appear on the name tags)

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

(4) \_\_\_\_\_

### Authorized signature:

Signature \_\_\_\_\_ Date \_\_\_\_\_

Print Name \_\_\_\_\_ Title \_\_\_\_\_

Submit form to: Carol Morrow, Office of EMS  
Fax: (804) 371-3108  
Phone( (804) 612-3935

Mail: Office of Emergency Medical Services  
1041 Technology Park Drive  
Glen Allen, VA 23059

# Appendix G

Virginia State Trauma triage Plan

Performance Improvement Committee

Sample Report

Region 0001

June 2, 2010

	# of Trauma Pt's	Avg Age	Avg ISS	%Blunt Mechanism	Avg Response Time to Scene	Avg Overall Transport Time <sup>1</sup>	Avg Transport Time (Directly to Trauma Center) <sup>2</sup>	% Met Triage Criteria #1 <sup>3</sup>	Avg, Time to Trauma Center <sup>4</sup>	% Directly to Trauma Center <sup>5</sup>	Crude Mortality <sup>6</sup>	Risk-adjusted Overall Odds Ratio for Mortality <sup>7</sup>
Region 1												
Region 2												
Region 3												
Region 4												
Region 5												
Region 6												
Region 7												
Region 8												
Region 9												

<sup>1</sup> All patients with injury-related e-codes

<sup>2</sup> All patients with injury-related e-codes

<sup>3</sup> Proportion of all trauma patients that exceed state triage plan criteria #1 (Hypotension, Respiratory Failure, Altered GCS)

<sup>4</sup> for Pt's that Exceeded Criteria #1

<sup>5</sup> for Pt's that Exceeded Criteria #1

<sup>6</sup> for Pt's that Exceeded Criteria #1

<sup>7</sup> for Pt's that Exceeded Criteria #1

