

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



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

**Wednesday, November 10, 2010**

# **Executive Management, Administration & Finance**

**Office of Emergency Medical Services  
Report to The  
State EMS Advisory Board  
November 10, 2010**

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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) Nominating Committee Report**

The State EMS Advisory Board approved the revisions to the Bylaws at its August 13, 2010 meeting. As reflected in the minutes, Ms. Collins said that since the Bylaws have been approved, she will asked Anthony Wilson, Chair of the Nominating Committee, to start putting together a slate of officers for the November elections. The Nominating Committee members are:

Anthony Wilson  
Jason Campbell  
William Quarles  
Allen Yee  
Gary Dalton

Irene Hamilton sent out a Committee Interest form to all Board members. Board members were instructed to send their completed back to Irene who then forwarded them to Anthony Wilson. The Nominating Committee met on Tuesday, October 12, 2010. The Nominating Committee presents the following slate of officers. The form starting on the next page of this report will be provided to all members of the Board on November 10, 2010 at the next quarterly meeting scheduled for 1:00 p.m. at the Norfolk Waterside Marriott in the Marriott IV room on the 4<sup>th</sup> floor of the convention center.

**STATE EMERGENCY MEDICAL SERVICES ADVISORY BOARD**

**Committee(s) Interest Form**

**Member's Name (Print):** \_\_\_\_\_

**Name of Organization you represent on the Board:** \_\_\_\_\_

**Contact Information:** Phone: \_\_\_\_\_

Email: \_\_\_\_\_

**Please indicate your first (1<sup>st</sup>), second (2<sup>nd</sup>), and third (3<sup>rd</sup>) choice and put an "X" in the appropriate box indicating if you would like to be considered for a Committee Member or Committee Chair**

	<b>Committee Member</b>	<b>Committee Chair</b>
Communications Committee		Pokey Harris
Emergency Management Committee		Buddy Bish
Emergency Medical Services for Children		Dr Robin Foster
Financial Assistance Review Committee (F.A.R.C.)		
Legislative and Planning Committee		Gary Dalton
Medevac Committee		Dr. Allen Yee
Medical Direction Committee		Dr Scott Weir
Provider Health and Safety Committee		Jason Campbell
Rules and Regulation Committee		Gary Samuels
Training and Certification Committee		Larry Oliver
Transportation Committee		David Barrick
Trauma System Oversight & Management Committee		Dr. Malhotra
Workforce Development Committee		William Quarles

**Please indicate your first (1<sup>st</sup>), second (2<sup>nd</sup>) and third (3<sup>rd</sup>) choice and put an "X" in the box indicating if you would like to be considered for a Committee Coordinator**

<b>Committee Coordinators</b>		
Administrative Coordinator <i>(Coordinator for the Rules &amp; Regulation and the Legislative &amp; Planning Committees)</i>		Gary Dalton
Infrastructure Coordinator <i>(Coordinator for the Transportation, Communications and Emergency Management Committees)</i>		Matt Tatum
Patient Care Coordinator <i>(Coordinator for the Medical Direction, Medevac, Trauma System Oversight and Management, and EMS for Children Committees)</i>		Dr. Allen Yee

Professional Development Coordinator (Coordinator for the Training & Certification, Workforce Development, and Provider Health & Safety Committees)	Jason Campbell
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**Please indicate your first (1<sup>st</sup>) and second (2<sup>nd</sup>) choice and put an “X” in the box indicating if you would like to hold one of the following positions**

<b>EMS Advisory Board Officers</b>	
I would like to serve as the EMS Advisory Board Chair	Jennie Collins
I would like to serve as the EMS Advisory Board Vice-Chair	Pokey Harris

**b) Virginia Office of EMS Hosts the 2010 National Association of State EMS Officials Annual Meeting**

The Office of Emergency Medical Services, Virginia Department of Health was the host state for the 2010 National Association of State EMS Officials (NASEMSO) annual meeting held at the Norfolk Waterside Marriott Convention Center on October 10 – 15, 2010. The National Association of State Emergency Medical Services Officials is the federally recognized professional association of the top-level administrators of EMS systems in each of the U.S. states, territories, and the District of Columbia.

During it’s annual meeting in Norfolk, NASEMSO adopted landmark resolutions supporting implementation of the EMS Education Agenda for the Future: A Systems Approach (*Education Agenda*). Results from the 2009-2010 NASEMSO Annual Education Agenda Statewide Implementation Surveys were used to estimate a timeframe when the majority of states projected readiness for implementation of the scope of practice levels described as part of the *Education Agenda*.

**Resolution 2010-03 “Transition Plan for EMS Testing and Certification**

This resolution supports a proposed calendar to be used by the National Registry of Emergency Medical Technicians (NREMT) to sunset existing exams and implement examinations based on the National EMS Education Standards. The resolution also calls for the NREMT to provide access to the EMT Intermediate-99 exam to states that are using the exam for state licensure after the national certification exam retires in 2013. If adopted by the NREMT, Emergency Medical Responder (EMR) and Emergency Medical Technician (EMT) exams could launch January 1, 2012, Advanced EMT (AEMT) exams could launch June 1, 2011, and revised paramedic exams would become available on January 1, 2013.

**Resolution 2010-04 “National EMS Certification and Program Accreditation”**

In related action, following a two-year period of study and evaluation, Resolution 2010-04 “National EMS Certification and Program Accreditation” recognizes the Commission on Accreditation of Allied Health Education Programs (CAAHEP)

Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP) for significant progress in assisting paramedic education programs to achieve accreditation and supports January 1, 2013 as the beginning date for the NREMT to require graduation from a nationally accredited paramedic education program for personnel to gain access to national EMS certification.

“It is a great day in EMS history,” said NASEMSO President Randy Kuykendall. “A decade ago, EMS stakeholders described a visionary plan to enable a closer alignment with other allied health professions and we are finally on the threshold of making this dream a reality. NASEMSO remains committed to assisting states implement the *Education Agenda*, a plan that we believe will not only strengthen EMS as a profession but improve emergency care across the Nation.” The resolutions will be posted later today on the NASEMSO web site, [www.nasemso.org](http://www.nasemso.org), under the Advocacy section.

The groundwork for this move was set in 1978 when the CAAHEP *Standards and Guidelines* were initially adopted. Then in 1993 the NREMT released *The National Emergency Medical Services Education and Practice Blueprint* that defined an EMS educational and training system to guide the development of national standard training curricula.

The move to accreditation of Paramedic education programs has long been supported by the EMS community. NASEMSO initiated the consensus document *EMS Agenda for the Future* that was released by NHTSA in 1996, that states "EMS education programs should seek accreditation by a nationally recognized accrediting agency." In addition, the *EMS Education Agenda for the Future: A Systems Approach*, released by the U.S. Department of Transportation in 2000, calls for "a single, nationally recognized accreditation agency." And in 2006, the Institute of Medicine (IoM) report *Emergency Medical Services at the Crossroads* recommends that "States should require national accreditation for paramedic education programs."

Accreditation of Paramedic education programs is also backed by research that shows an increased success rate on national certification exams from graduates of nationally accredited Paramedic programs.

Anticipating the requirement for accreditation, the CoAEMSP has been readying itself to handle the increase in requests for accreditation by developing resource and support materials to assist in the accreditation process; communication of timely and pertinent accreditation information via regular email newsletters; and additional site visitors being added.

## **FEMA Deputy Administrator and DHS Assistant Secretary Address NASEMSO Annual Meeting**

The Federal Emergency Management Agency (FEMA) Deputy Administrator Rich Serino and the Department of Homeland Security (DHS) Assistant Secretary for Health Affairs and Chief Medical Officer Dr. Alexander Garza each addressed the 2010 Annual Meeting of the National Association of State EMS Officials (NASEMSO). Deputy Administrator Serino spoke about the importance of public preparedness, planning for the entire community, and working together as a team to respond to and recover from emergencies. Assistant Secretary Garza discussed how the Office of Health Affairs interfaces with EMS officials as part of their efforts to protect the American people from threat of terrorism and disasters. NASEMSO sincerely appreciates the efforts and participation of these individuals with our annual meeting.

## **NASEMSO Elects New Officers at 2010 Annual Meeting**

The National Association of State EMS Officials is pleased to announce the election of new officers:

- **President**-- D. Randy Kuykenall (CO)
- **President Elect**-- Jim DeTienne (MT)
- **Secretary**-- Robin Shively (MI)
- **Treasurer**-- Paul Patrick (UT)

In related action, the following Regional Representatives were elected:

- • **East** – Joe Schmider (PA)
- • **South Central** – Dennis Blair (AL)
- • **North Central** – Kirk Schmitt (IA)
- • **West** – Terry Mullins (AZ)

New Council Chairs include:

- **Data**— Stephanie Daugherty (FL)
- **Education and Professional Standards**— Marilyn Bourn (CO)
- **Medical Directors**— Carol Cunningham, MD (OH)
- **Pediatric Emergency Care**— Katrina Altenhofen (IA)
- **Trauma Managers**— Tim Held (MN)

Steve Blessing (DE) will continue to serve as NASEMSO's Immediate Past President.

Another resolution addresses affiliated health care facilities seeking trauma center designation in a state trauma system and the need to achieve verification of trauma capabilities on its own merit.

NASEMSO also calls upon the Department of Health and Human Services Centers for Medicare and Medicaid Services (CMS) to convene an ad hoc committee recommended in the Institute of Medicine report “Emergency Medical Services at the Crossroad” to evaluate the reimbursement of EMS and make recommendations regarding inclusion of readiness cost and permitting payment without transport.

All resolutions can be found on the NASEMSO web site at: [www.nasemso.org](http://www.nasemso.org).

**c) Trauma Center Care Cost-Effective**

Greatest effect seen in younger patients and those with severe injuries Trauma center care not only saves lives, it is a cost-effective way of treating major trauma, according to a new report from the Johns Hopkins Bloomberg School of Public Health's Center for Injury Research and Policy. Although treatment at a trauma center is more expensive, the benefits of this approach in terms of lives saved and quality of life-years gained outweigh the costs.

The study finds that the added cost of treatment at a trauma center versus nontrauma center is only \$36,319 for every life-year gained or \$790,931 per life saved. This is despite the fact that initial care in trauma centers is 71 percent higher than in nontrauma centers. While previous studies have found trauma center care decreases one's likelihood of dying following injury, this is the most comprehensive study to date to also measure cost-effectiveness.

The results are published in the July issue of The Journal of Trauma Injury, Infection and Critical Care at: <https://lists.jhsph.edu/t/132765/141435/281/0/>

**d) Virginia Beach Department of Emergency Medical Services Receives Governor’s Technology Award**

The Virginia Beach Department of Emergency Medical Services (VBEMS) has been chosen as a recipient of the Governor’s Technology Award for “Innovative Use of Technology in Local government” for its advanced electronic medical records (EMR) initiative. More than two years of planning to develop the hand-held mobile data terminals and digitally secure wireless network was necessary to implement the system. The project required tremendous efforts from EMS members, ComIT Department, Sentara Health Systems and software vendor ImageTrend.

The EMR project is innovative in several areas. Patient care reports are now transmitted directly to the receiving hospital Emergency Department (ED), from the patient’s side, which allows staff to better prepare resource assignments for the patient arrival. That reduces patient waiting time and improves ambulance turn-around. Additionally, a

patient's previous medical records become easily accessible to the ED staff, saving valuable time. A key innovation results from the unique partnership with Sentara Health Systems. With that partnership, VBEMS is the first in the country to be allowed access to hospital medical records to track patient outcomes in an effort to evaluate and improve emergency medical care.

Prior to EMR, the more than 65,000 annual 3-part 22-inch long forms required data entry staff to decipher handwritten information and enter that into a special database for upload to the Virginia Department of Health. Additionally, each paper form had to be stored in locked cabinets for future use during State Department of Health mandated quality assurance audits. Now, Virginia Beach EMS has gone paperless, significantly improved patient information confidentiality, dramatically improved efficiency, and can have solid data to use in its quality improvement program.

**e) The Center for Public Safety Excellence - Data on the Influence of Crew Configuration on Emergency Medical Response**

A new EMS deployment study issued by a broad coalition in the scientific, firefighting, EMS, and public-safety communities. The study shows that the size and configuration of an EMS first responder crew and an advanced life support (ALS) crew have a substantial effect on a fire department's ability to respond to calls for emergency medical service.

The new study is the first attempt to investigate the effects of varying crew configurations for first responders, the apparatus assignment of ALS personnel, and the number of ALS personnel on scene on the task completion times for ALS level incidents.

The increasing number of EMS responses point to the need for scientifically based studies to measure the operational efficiency and effectiveness of fire departments responding to medical calls. Fire departments typically deliver first-on-scene, out-of-hospital care services, regardless of whether or not they provide transport. The design of fire-based EMS systems varies across communities. Some departments deploy only Basic Life Support (BLS) units and personnel, some deploy a mix of BLS and Advanced Life Support (ALS) units and personnel, and a few departments operate solely at an ALS level. This study emphasizes that each of those system design decisions affects emergency medical response and care when each second counts.

The study's principal investigators were NIST's Jason Averill, Lori Moore-Merrell of the International Association of Fire Fighters and Kathy Notarianni of Worcester Polytechnic Institute. The study and report was funded by a grant awarded to the Commission on Fire Accreditation International – Risk (CFAI-Risk) by the U.S. Department of Homeland Security, Federal Emergency Management Agency's (FEMA) Assistance to Firefighters Grant Program. CFAI-Risk has received and managed three grants to fund the overarching Fire Fighter Safety and Deployment Study. Other organizations participating in this research include the International Association of Fire Chiefs, the Urban Institute and the University of North Carolina.

The EMS study can be downloaded from the CFAI-Risk webpage or may be requested from any of the study partner organizations. More information about the Fire Fighter Safety and Deployment project is available at [www.firereporting.org](http://www.firereporting.org).

**f) State Board of Health approves Policy for Vaccine Administration by EMS Providers in Virginia**

During the 2010 General Assembly, House Bill 173 (Del. Pogge) and Senate Bill 328 (Sen. Stuart) were merged resulting in legislation authorizing emergency medical technicians (EMTs) certified at the Intermediate and Paramedic levels that are operating under the direction of their EMS agency 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 are 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 29, 2010 with the Governor's signature.

The policy was presented and approved by the state EMS Advisory Board on August 13, 2010. Prior to the approval by the state EMS Advisory board, the policy was reviewed and approved by the Medical Direction Committee of the Board and Mr. Eric Gregory, JD, Liaison to the Health Department, Office of the Attorney General. In addition, prior to the approval of the policy by the Board of Health at their October 15 meeting, the state Board of Nursing reviewed and approved the policy.

With the approval of legislation and this policy, the emergency preparedness capabilities of the commonwealth are increased. The expanded scope of practice of certain EMS providers to administer vaccinations will assist public health officials if a pandemic flu or other outbreak were to occur. EMS personnel can also volunteer to join the Virginia Medical Reserve Corps. And finally, immunization rates of healthcare workers may rise. Currently, only one-third of healthcare workers get vaccinations each year.

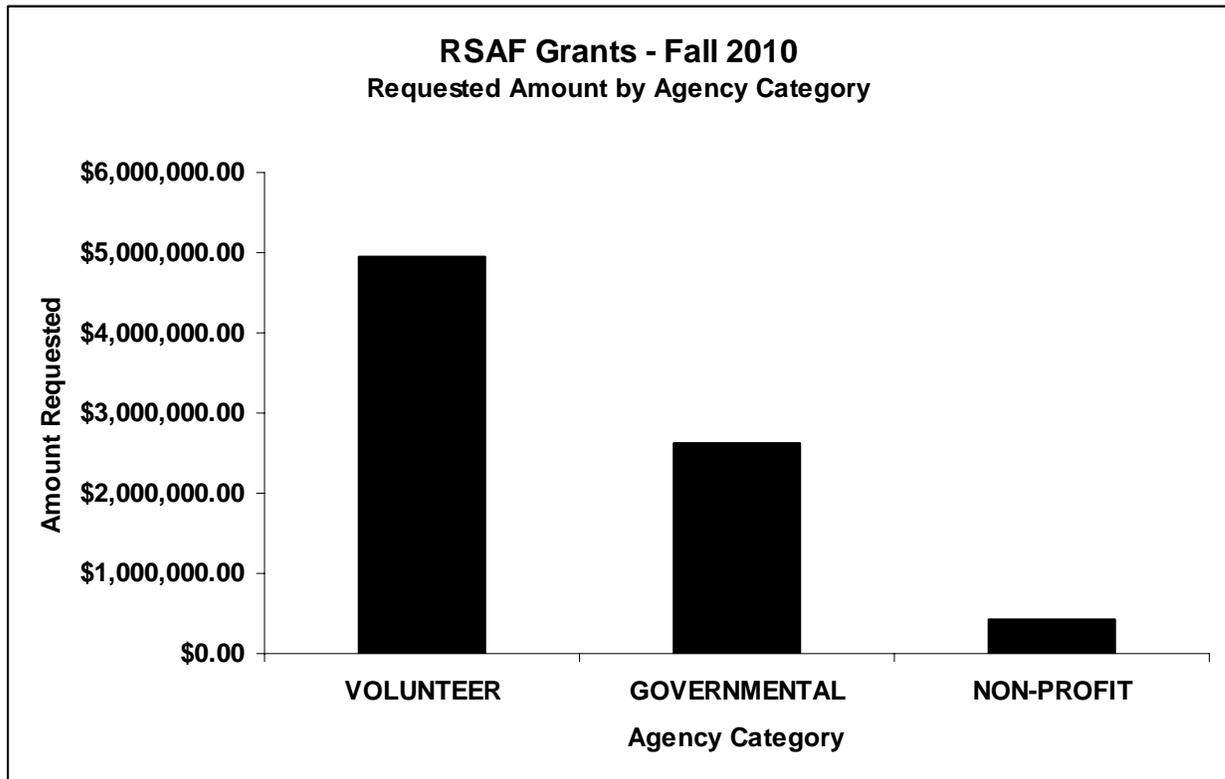
Visit the OEMS Web site at [http://www.vdh.virginia.gov/OEMS/Files\\_page/Agency/PolicyProtocols-EMSVaccineAdministration.pdf](http://www.vdh.virginia.gov/OEMS/Files_page/Agency/PolicyProtocols-EMSVaccineAdministration.pdf) to view the approved policy. At the moment, the link to the EMS Vaccinator Policy can be found in the Alert Box on the Home page of the OEMS web site.

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

The RSAF grant deadline for the Fall 2010 cycle was September 15, 2010, OEMS received 119 grant applications requesting \$7,984,724.00 in funding. The following agency categories are requesting funding for the Fall 2010 grant cycle:

- 83 Volunteer Agencies requesting \$4,949,438.00
- 29 Government Agencies requesting \$2,614,202.00
- 7 Non-Profit Agencies requesting \$421,084.00

Figure 1: Requested Amount by Agency Category

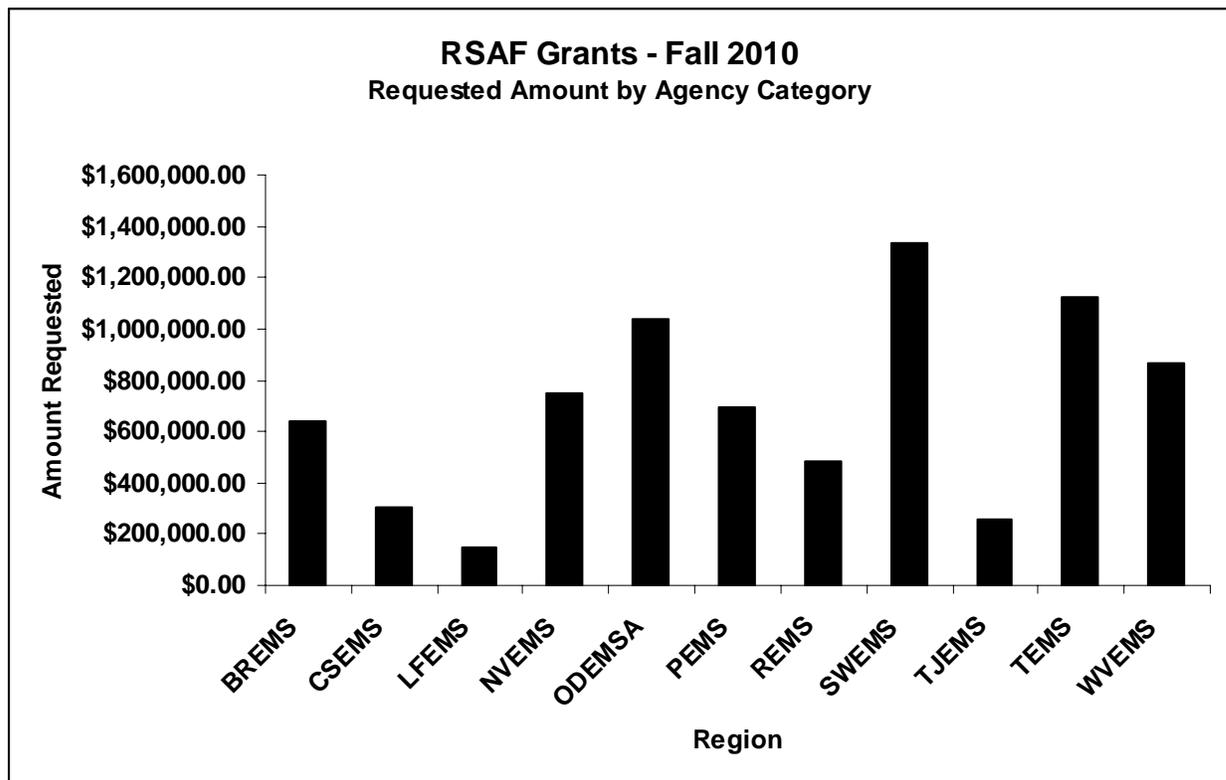


The following regional areas were awarded funding in the following amounts:

- Blue Ridge EMS Council – 7 agencies requesting funding of \$641,030.00
- Central Shenandoah EMS Council – 10 agencies requesting funding of \$306,133.00
- Lord Fairfax EMS Council – 5 agencies requesting funding of \$150,573.00
- Northern Virginia EMS Council – 6 agencies requesting funding of \$750,554.00

- Old Dominion EMS Alliance – 18 agencies requesting funding of \$1,040,559.00
- Peninsulas EMS Council – 9 agencies requesting funding of \$691,608.00
- Rappahannock EMS Council – 8 agencies requesting funding of \$486,639.00
- Southwestern Virginia EMS Council – 15 agencies requesting funding of \$1,336,953.00
- Thomas Jefferson EMS Council – 4 agencies requesting funding of \$253,968.00
- Tidewater EMS Council – 17 agencies requesting funding of \$1,124,709.00
- Western Virginia EMS Council – 19 agencies requesting funding of \$863,940.00
- Non-Affiliated Agencies – 1 agency requesting funding of \$38,058.00

Figure 2: Requested Amount by Region

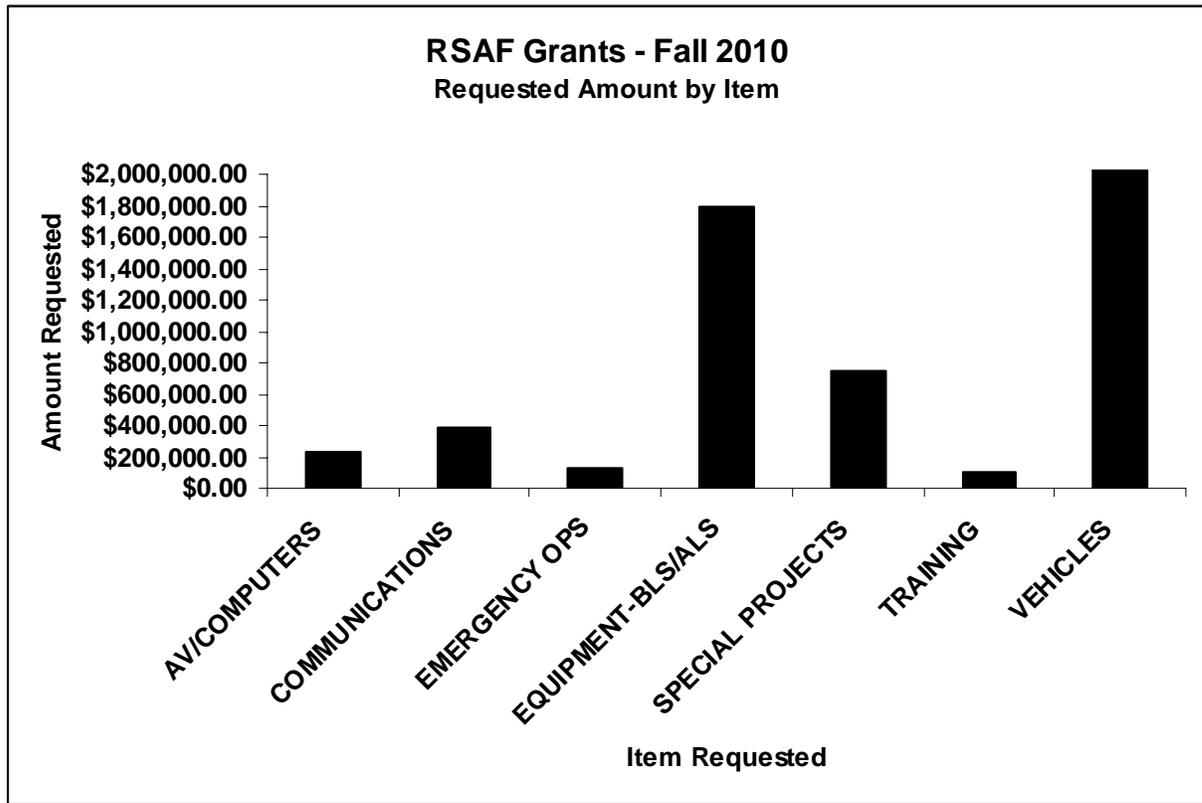


RSAF Grants by item categories:

- Audio Visual and Computers - \$237,764.00

- Includes projectors, computers, toughbooks, and other audio visual equipment.
- Communications - \$382,707.00
  - Includes items for mobile/portable radios, pagers, repeaters and other communications system technology.
- Emergency Operations - \$123,821.00
  - Includes items such as Mass Casualty Incident (MCI) trailers and 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.
- Equipment - Basic and Advanced Life Support Equipment - \$1,793,696.00
  - Includes any medical care equipment for sustaining life, including defibrillation, airway management, and supplies.
- Special Projects - \$750,488.00
  - Includes projects such as Recruitment and Retention, Management and Leadership, Medication Kits, Special Events Material, Emergency Medical Dispatch (EMD) and other innovative programs.
- Training - \$104,608.00
  - 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 - \$4,591,641.00
  - Includes ambulances, quick response vehicles, all-terrain vehicles, crash/rescue trucks and tow vehicles.

Figure 3: Requested vs. Awarded Amount by Item



NOTE: The VEHICLES category request amount was \$4,591,641.00, the graph only represents items requested up to \$2,000,000.00 to visually display other items requested.

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

**Other Grant Programs**

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 would 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. OEMS was not approved for the 2010 DHS grant submission, however the 2011 DHS application process will begin in January 2011, OEMS will submit a grant application during the 2011 submission cycle.

# **EMS on the National Scene**

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

### **a) NASEMSO Partners with CLIR on Voluntary Reporting System for EMS**

The Center for Leadership, Innovation and Research in EMS (CLIR), along with its sponsoring organizations – the EMS Chiefs of Canada, the National EMS Management Association and the North Central EMS Institute – announces a new patient safety initiative. The EMS Voluntary Event Notification Tool (EVENT) provides an anonymous tool for EMS providers and others to report adverse events that occur in the EMS setting. CLIR is a non-regulatory, not-for-profit group that is promoting and advancing the practice and profession of EMS internationally. NASEMSO is a partner organization for EVENT and CLIR has begun seeking additional partner organizations. The EVENT system can be used to anonymously report any patient-safety related issue such as:

- “Sentinel Events” where unexpected or unintended occurrences result in serious physical injury, psychological trauma or death
- Unexpected or unintended occurrences that result in any physical injury or psychological injury of a patient, including adverse drug reactions
- “Near Misses” which are close calls that could have resulted in accident, injury or illness but did not either by chance or through timely intervention
- Equipment or device failures, malfunctions or provider errors of omission (not using when called for) or misuse (using it in the incorrect way); that cause or could cause harm to a patient.
- Lessons learned, safety ideas and/or concerns or any topic that has been vetted through local authority either without resolution or the reporting person feels that it cannot be brought up with local authority without the risk of repercussion

The EVENT system is only applicable to patient safety events that are related to care given by components of the pre-hospital or out-of-hospital EMS system including but not limited to: ambulance attendants, first responders, all levels of EMTs and paramedics, Critical Care Transport service personnel, quick response services, ambulance services, air ambulance services, dispatch centers and medical command facilities. EMS agencies that operate their own internal event reporting system are encouraged to also report their events anonymously through EVENT.

### **b) HRSA Reports HIPDB/NPDB Compliance Status of Government Agencies**

The Healthcare Integrity and Protection Data Bank (HIPDB) and National Practitioner Data Bank NPDB statutes require State licensing authorities to submit, generally within 30 days, adverse licensing and certification actions, as well as negative actions and findings, taken against health care entities, providers, suppliers, and practitioners. These

reportable actions or findings include both final actions and those taken as a result of formal proceedings. HRSA developed a list of current State Agencies and Licensing Boards responsible for licensing or certifying health care professionals. In March the listing was compared to data reported to the HIPDB and NPDB to determine if these Government agencies (i.e., State Licensing Boards) had reported any actions to the Data Banks. Through this analysis HRSA determined that certain Government agencies may not have reported any adverse actions on specific professions. The Secretary of HHS is now exercising her legal authority as defined under Section 1128E(b)(6)(B) of the Social Security Act to publish a report listing Government agencies that have *failed* to meet their HIPDB reporting requirements. *NOTE: The Office of EMS has submitted data to the NPDB for years and is in full compliance with reporting requirements.*

### **c) NEMSIS Version 3 Data Dictionary Now Available**

The National EMS Information System Version 3.0 represents a revision from the existing version 2.1.1 released in 2005 as well as the initial movement of this standard into Health Level 7 (HL7). This document represents the final and complete list of EMS data elements for version 3. Please go to the NEMSIS web site (<http://www.nemsis.org/>) to download the following documents:

- NEMSIS v3 Data Dictionary
- NEMSIS v3 Data Dictionary Overview
- NEMSIS v2 to v3 Element Mapping Spreadsheet
- NEMSIS v3 to v2 Element Mapping Spreadsheet

The 1st NEMSIS Version 3 Software Developers Meeting was held on August 16 - 17, 2010 in Dallas, Texas.

### **d) NEMSIS TAC Provides Public-Release Research Dataset**

Staff at the NEMSIS Technical Assistance Center (TAC) are pleased to announce the release of the 2009 NEMSIS Public-Release Research Dataset! This dataset includes more than six million EMS events reported to the NEMSIS TAC by 26 states during the 2009 calendar year. The Dataset may be used for informational and research purposes with approval from The National Highway Traffic Safety Administration. The NEMSIS Public-Release Research Dataset does not contain information that identifies patients, EMS agencies, receiving hospitals, or reporting states. To obtain a DVD containing the 2009 NEMSIS Public-Release Research Dataset, visit the NEMSIS web site at: <http://www.nemsis.org/dataCenter/requestNEMSISData.html> and complete a request form. A Data Users Manual associated with the NEMSIS Public-Release Research Dataset is also available at the same link.

### **e) CDC Seeks Opinions on National Trauma Triage Protocol**

The Centers for Disease Control and Prevention (CDC) extends an invitation to participate in a survey with EMS professionals to better understand the impact and

implementation of the Field Triage Decision Scheme: The National Trauma Triage Protocol. Responses to this survey will help guide future updates to the Field Triage Decision Scheme and related educational programs over the next few years. As a thank you, participants will have the opportunity to order free copies of the field triage materials and orange or green field triage bracelets once the survey is completed. Visit [www.CDCSurvey.com](http://www.CDCSurvey.com) and enter the survey ID: 8qocpys6.

#### **f) CMS Comments on Ambulance Reimbursement Rates**

The Centers for Medicare and Medicaid Services (CMS) has issued proposed rules that would have a substantial effect on air and ground ambulance providers participating in the Medicare and Medicaid programs. The proposed rulemaking calls for some changes in ambulance reimbursement rates, including:

- Reporting mileage to the nearest one-tenth of a mile beginning on January 1, 2001. Currently, mileage is rounded up to the nearest whole dollar. Trips over 100 loaded miles would continue to be rounded up the nearest whole dollar.
- Decreasing the annual ambulance reimbursement updates by the “Multi-Factor Productivity” (MFP) adjustment. CMS is mandated to implement this adjustment by the recently enacted healthcare reform law. The MFP adjustment could, and most likely would, result in a lower reimbursement from the previous year.
- Requiring air medical providers to present certifications indicating they meet the FAA aviation requirements under Part 135 and the medical requirements outlined by the relevant state authority.
- Implementing the Medicare ambulance add-on payment extensions and air ambulance zip code hold harmless as outlined in the healthcare reform legislation. These extension are retroactive to January 1, 2010 and will expire on December 31, 2010.

To view the Proposed Rule visit <http://edocket.access.gpo.gov/2010/pdf/2010-15900.pdf>

#### **g) CoAEMSP Offers Time Extension to Program Directors Needing Degree for Accreditation**

One of the requirements for accreditation of Paramedic educational programs is that the program director must possess a Bachelors degree. Because some programs may find it difficult to meet this requirement by the 2013 date, the CoAEMSP Board of Directors has approved a Bachelors Degree Plan for Program Directors. This 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. Submission of a completed ISSR by January 1, 2011, will make the program director eligible for the extended period of time to complete

a Bachelors degree. For additional information or assistance, contact Bill Goding at bill@coaemsp.org or 817.330.0080, x113.

#### **h) HHS Unveils New ESAR-VHP Web Site**

The Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) is a federal program created to support states and territories in establishing standardized volunteer registration programs for disasters and public health and medical emergencies. The program, administered on the state level, verifies health professionals' identification and credentials so individuals can respond more quickly when disaster strikes. Formerly under the Health Resources and Services Administration (HRSA), ESAR-VHP is now administered by the Office of the Assistant Secretary for Preparedness and Response (ASPR) at the U.S. Department of Health and Human Services (HHS). The program encourages healthcare personnel (including EMS) to register in advance so that credentials and qualifications can be verified, enabling practitioners to serve on a moment's notice — within state and across state lines. The new web site, with FAQs and state-by-state registration assistance is now available at <http://www.phe.gov/esarvhp/Pages/default.aspx>.

#### **i) Free Emergency Planning Exercises Available from FEMA**

FEMA is now providing, free for your download and use, a series of Tabletop Exercise presentations as a tool to advance your organization's continuity, preparedness and resiliency. Each exercise takes your team through a realistic disaster scenario and facilitates a discussion of how your organization would plan, protect, respond and recover. Each includes full instructor's notes so you can gather a facilitator and a team of participants, and self-facilitate the exercise internally. **The first two exercises, for a major Hurricane and rail Chemical Accident, also feature simulated TV news videos suggesting exercise-focused local reporting of the disasters.** This feature adds a sense of realism and helps to motivate interactive discussion. The exercises typically take 2-4 hours from start to finish and can be customized where noted in the facilitator's notes to meet your needs.

#### **j) AEMS Highlights Veteran to EMS Transition Bill**

Advocates for EMS (AEMS) has advised its members that the U.S. House of Representatives Committee on Energy & Commerce has passed H.R. 3199, the Emergency Medic Transition (EMT) Act, out of Committee and onto the full House for its consideration. This bill would require the Secretary of Health and Human Services to establish a grant program for states to assist veterans who are trained in military emergency medicine to become state-licensed or certified emergency medical technicians. States that demonstrate that they have a shortage of emergency medical technicians can use grant funds to provide training, cover associated costs, and expedite the licensing or certification process. The grant program would be authorized at \$5 million per year for fiscal years 2011-2015. Similar legislation, S. 1154, has also been

introduced in the Senate. While House Committee passage marks a positive first step, it is unclear when/if the full House and Senate will take further action.

#### **k) Legislation Addresses Loss of Emergency Personnel to Military Call Ups**

Senator Blanche Lincoln (AR) has introduced legislation that would create a grant program through the Department of Homeland Security to reimburse state and local first responder agencies for any extraordinary financial burden that resulted from the deployment of one or more of their employees. Eligible reimbursable expenses include: the salary of an individual hired to replace an employee and overtime expenses for an employee performing tasks that would have been performed by the deployed employee. The grant program would reimburse public safety agencies for additional expenses incurred when a police officer, firefighter, paramedic or EMT who is in the National Guard or Reserves is deployed for active military duty.

To review the legislation go to: <http://thomas.loc.gov/cgi-bin/bdquery/z?d111:s.03719>.

#### **l) NASEMSO Supports S.3756: Public Safety Spectrum and Wireless Innovation Act of 2010**

Ten national EMS organization, including NASEMSO, recently sent a letter to Senator John D. Rockefeller, Chairman, Committee on Commerce, Science and Transportation, U.S. Senate, in support of his work in the area of public safety communications. The group strongly endorses S.3756: Public Safety Spectrum and Wireless Innovation Act of 2010, stating: "The universal availability of secure, reliable, priority access and public safety grade broadband communications is critical to the advancement of emergency medical care for patients in the United States. View the letter at [www.nasemso.org](http://www.nasemso.org).

#### **m) FAA Publishes Proposed Rulemaking for Medical Helicopters**

The U.S. Department of Transportation's Federal Aviation Administration (FAA) has proposed broad new rules for helicopter operators, including air ambulances, which, if finalized, would require stricter flight rules and procedures, improved communications and training, and additional on-board safety equipment. The proposed rules would require air ambulance operators to:

- Equip with Helicopter Terrain Awareness and Warning Systems (HTAWS).
- The proposal seeks comments on requirements for light-weight aircraft recording systems (LARS).
- Conduct operations under Part 135, including flight crew time limitation and rest requirements, when medical personnel are on board.
- Establish operations control centers if they are certificate holders with 10 or more helicopter air ambulances.
- Institute pre-flight risk-analysis programs.
- Conduct safety briefings for medical personnel.

- Amend their operational requirements to include Visual Flight Rules (VFR) weather minimums, Instrument Flight Rules (IFR) operations at airports/heliports without weather reporting, procedures for VFR approaches, and VFR flight planning.
- Ensure their pilots in command hold an instrument rating.
- Under the proposal, all commercial helicopter operators would be required to:

Revise IFR alternate airport weather minimums.

Demonstrate competency in recovery from inadvertent instrument meteorological conditions.

Equip their helicopters with radio altimeters.

Change the definition of “extended over-water operation” and require additional equipment for these operations.

The proposed rules would also require all Part 135 aircraft, i.e. helicopter and fixed wing on-demand operators, to:

- Prepare a load manifest.
- Transmit a copy of load manifest documentation to their base of operations, in lieu of preparing a duplicate copy.
- Specify requirements for retaining a copy of the load manifest in the event that the documentation is destroyed in an aircraft accident.

In addition, the proposal would require Part 91 general aviation helicopter operators to revise the VFR weather minimums.

The Notice for Proposed Rule Making (NPRM) was published in the Federal Register on October 12th and the 90-day public comment period closes on Jan. 10, 2011. The NPRM follows recommendations issued by the National Transportation Board (NTSB) after its three-day hearing last year.

#### **n) New GAO Report Reflects Status of Air Medical Industry**

Changes in the air ambulance industry’s size and structure have led to differences of opinion about the implications for air ambulance use, safety, and services. Some industry stakeholders believe that greater state regulation would be good for consumers. While states can regulate the medical aspects of air ambulances, the Airline Deregulation Act (ADA) preempts states from economic regulation—i.e., regulating rates, routes, and services—of air ambulances. Other stakeholders view the industry changes as having been beneficial to consumers and see no need for a regulatory change. Asked to review the U.S. air ambulance industry, GAO examined (1) changes in the industry in the last decade and the implications of these changes on the availability of air ambulances and patient services and (2) the relationship between federal and state oversight and regulation of the industry. GAO analyzed available data about the industry; synthesized empirically based literature on the industry; visited four air ambulance providers with differing views on the industry changes; and interviewed federal and industry officials.

Read “*Air Ambulance: Effects of Industry Changes on Services Are Unclear*”, GAO-10-907, September 30 at: <http://www.gao.gov/products/GAO-10-907>.

**o) NHTSA Awards EMS Safety Grant to ACEP**

Following a competitive award process, the National Highway Traffic Safety Administration’s (NHTSA) has entered into a Cooperative Agreement with the American College of Emergency Physicians (ACEP) to develop and promote a National EMS “Culture of Safety” Strategy. The goal of this three-year project is to create an agenda document that identifies both opportunities and challenges in developing and promoting a culture of safety for EMS personnel and the patients they care for every day. More specific information about this project will soon be found at [www.EMS.gov](http://www.EMS.gov). You can also contact Dave Bryson of NHTSA at [dave.bryson@dot.gov](mailto:dave.bryson@dot.gov) or 202-366-4302 or Rick Murray of ACEP at [rmurray@acep.org](mailto:rmurray@acep.org) or 800-798-1822 x3260.

**p) AHA Announces New CPR & ECC Guidelines**

For more than 40 years, we’ve learned the ABCs of CPR – Airway, Breathing and Compressions. Now, in new *2010 AHA Guidelines for CPR & ECC*, AHA recommends C-A-B, Compressions, Airway and Breathing. The new C-A-B sequence allows rescuers to start with the simplest step, chest compressions, and helps to remove barriers to starting CPR immediately. The AHA Guidelines for CPR & ECC continue to emphasize high-quality CPR, focusing on delivering effective chest compressions with minimal interruptions. Many of the changes and recommendations included in the new CPR and ECC guidelines are designed to simplify CPR and increase bystander response, ultimately saving more lives. Some additional key changes include:

- A new recommended compression depth of at least 2 inches
- A new recommended compression rate of at least 100 beats per minute
- The elimination of “look, listen and feel for breathing”
- The continued recommendation that untrained rescuers provide Hands-Only CPR
- A universal sequence (algorithm) for adult CPR
- New protocols for EMS activation and training
- And much more

Visit [www.Heart.org/CPR](http://www.Heart.org/CPR) to access the full *2010 AHA Guidelines for CPR & ECC* in the journal *Circulation*, Guidelines Highlights (summary of changes), news coverage, media materials, charts, graphics and more. AHA Instructors, please make sure you are registered and confirmed with the AHA Instructor Network in order to access your Official Guidelines Instructor Update – coming late-November.

In related news, the American Red Cross has conducted an initial review of the recent changes to the ECCU 2010 guidelines for CPR and Emergency Cardiovascular Care and has announced it does not plan to make any substantial changes to ARC courses as a result of the new guidelines. The ARC has posted a Press Release-- Revised American Red Cross Statement on 2010 CPR guidelines.

**q) EMS Approved as an Emergency Medicine Subspecialty**

The American Board of Emergency Medicine has approved EMS as a recognized emergency medicine subspecialty. This is an important step recognizing the importance and uniqueness of prehospital care and its management. ABEM has formed an EMS Examination Task Force composed of 12 EMS physicians to develop the EMS subspecialty examination and maintenance of certification program, which may start as early as the fall of 2013. EMS becomes the sixth subspecialty available to ABEM diplomates along with Medical Toxicology, Pediatric Emergency Medicine, Sports Medicine, Undersea and Hyperbaric Medicine, and Hospice and Palliative Medicine. NASEMSO congratulates Dr. Carol Cunningham (Ohio), Chair of NASEMSO's Medical Directors Council, on her appointment to the Examination Task Force!

# **Educational Development**

### **III. Educational Development**

#### **Committees**

A. **The Professional Development Committee (PDC):** The committee met on October 6, 2010.

1. One (1) action item was sent to Medical Direction Committee (MDC) for their endorsement and it will eventually be forwarded to the EMS Advisory Board for approval.
  - a. *Education and Certification Examination Content Timeline* (see **APPENDIX A**)

Copies of past meeting minutes from PDC 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 October 7, 2010.

1. There was a motion passed to add Magnesium Sulfate to the VASoP Formulary under the electrolytes section.
2. There was a lot of discussion on the Virginia Trauma Triage Plan with further recommendations to be discussed with the Trauma System Oversight and Management Committee.
3. Allen Yee, M.D. authored a whitepaper on *Post Return of Spontaneous Circulation Care* which the committee approved after modifications.
4. Committee discussion on tourniquets use and hemorrhage control continue with a white paper to be authored very soon.
5. Discussion on the Medical Direction Committee make-up with a recommendation to have physician representation by each of the eleven (11) regional EMS councils, a physician representative chosen by EMS for Children Committee and two physician representatives to serve as Members-At-Large.

Copies of past meeting minutes from PDC are available from the Office of EMS web page at:

<http://www.vdh.virginia.gov/OEMS/Training/Committees.asp>

## **Advanced Life Support Program**

It was noted that there are a number of rumors circulating that the Office of EMS will no longer be supporting the Enhanced and Intermediate EMS certification levels. These rumors are not true and EMS providers are encouraged to contact the Division of Educational Development directly to discuss those rumors. The office is very interested in determining where the rumors are originating so that the office can attempt to dispel the rumors.

## **Basic Life Support Program**

### A. EMT Instructor Institutes

1. The EMT Instructor Practical and Institute scheduled for Fall 2010 was canceled because there were not a sufficient number of candidates.
2. EMS Providers interested in becoming an Instructor or the process to become an EMS Education Coordinator should contact Mr. 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 several in-person updates for 2010. The last in-person update was held in conjunction with the VAVRS Convention in Virginia Beach on Saturday, September 25, 2010. Forty-four (42) Instructors/ALS Coordinators attended. The next in-person update is scheduled on Saturday, November 13, 2010 in conjunction with the Virginia EMS Symposium in Norfolk. EMS Symposium Registration is not required to attend.
3. The schedule of future updates can be found on the OEMS 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**

The EMS Training Funds Program for FY11 was opened to the instructor community on September 17, 2010. The Office began receiving funding contracts on October 4, 2010.

From October 4 through October 20, 2010 the Office processed over 470 EMS Training Funds contracts. This was a monumental undertaking which was made easier by the dedication of several OEMS staff members.

Of the 470+ contracts processed by the Office, a significant majority of the contracts (98%) have been approved, released and posted to the EMS Instructor Portal.

Beginning this fiscal year, the Office will electronically notify instructors of their approved EMS Training Funds contracts through the EMS Instructor Portal—an all encompassing electronic dossier which provides unrivaled, 24/7/365 access to Virginia EMS personnel.

### Financial Update on FY09, FY10 and FY11

FY09 as of October 21, 2010

	<i>Commit \$</i>	<i>Payment \$</i>	<i>Balance \$</i>
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	\$648,828.62	\$380,032.88
<b>Totals</b>	<b>\$3,177,418.50</b>	<b>\$1,569,444.96</b>	<b>\$1,607,973.54</b>

FY10 as of October 21, 2010

	<i>Commit \$</i>	<i>Payment \$</i>	<i>Balance \$</i>
BLS Initial Course Funding	\$442,119.00	\$273,519.77	\$168,599.23
BLS CE Course Funding	\$66,360.00	\$36,793.00	\$29,567.00
ALS CE Course Funding	\$194,880.00	\$80,742.50	\$114,137.50
BLS Auxiliary Program	\$136,000.00	\$12,320.00	\$123,680.00
ALS Auxiliary Program	\$468,000.00	\$91,800.00	\$376,200.00
ALS Initial Course Funding	\$869,295.00	\$337,401.72	\$531,893.28
<b>Totals</b>	<b>\$2,176,654.00</b>	<b>\$832,576.99</b>	<b>\$1,344,077.01</b>

FY11 as of October 21, 2010

	<i>Commit \$</i>	<i>Payment \$</i>	<i>Balance \$</i>
BLS Initial Course Funding	\$431,760.00	\$0.00	\$431,760.00
BLS CE Course Funding	\$49,560.00	\$0.00	\$49,560.00
ALS CE Course Funding	\$168,000.00	\$0.00	\$168,000.00
BLS Auxiliary Program	\$74,000.00	\$0.00	\$74,000.00
ALS Auxiliary Program	\$247,680.00	\$0.00	\$247,680.00
ALS Initial Course Funding	\$795,600.00	\$0.00	\$795,600.00
<b>Totals</b>	<b>\$1,766,600.00</b>	<b>\$0.00</b>	<b>\$1,766,600.00</b>

## **EMS Education Program Accreditation**

- A. The Office is gearing up to implement the new optional EMT accreditation and the required Advanced EMT accreditation program.
  - 1. Presently, there are no applications for reaccreditation of state EMT-Intermediate in queue.
  - 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. OEMS is still working with Ft. Lee Fire and Emergency Services.
  - 3. Presently, there are no initial applications for paramedic programs in queue.
- 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 EMS Continuing Education**

OEMS continues to work with third party continuing education vendors seeking to offer web-based continuing education to participate. To date, the Office has approved five (5) third party vendors: 24-7 EMS, CentreLearn, HealthStreams, Medic-CE and TargetSafety.

There are more than 475 OEMS approved online CE courses currently offered through these vendors. A vigorous screening process assures quality educational programs and vendors must be able to submit continuing education electronically 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. As EMSAT enters its 21<sup>st</sup> year of providing free CE training across the Commonwealth, we are offering all Category 1 ALS and Category 1 BLS Classes in the first six months of 2011.
- B. EMSAT programs for the next three months include:
  - 1. Nov. 17, Mock Trial: Patient Confidentiality
  - 2. Dec. 15, Oxygen Delivery Components
  - 3. Jan. 19, Weather-Related Emergencies

## **The EMS Provider Portal**

In light of continued fiscal pressures and with an eye toward becoming more environmentally friendly, the Office of EMS sought ideas to reduce costs, eliminate mailings and leverage its use of technology to enhance interaction with our 35,000 + EMS provider base.

For this project, the Office has spent the past 18 months working closely with its EMS educators and select groups of EMS providers to gain feedback on system components and functionality and accessibility. Key methods of engaging these various constituencies included surveying, focus groups, personal interviews and real-time customer feedback.

The EMS Provider Portal is an all encompassing electronic dossier which provides unrivaled, 24/7/365 access to Virginia EMS personnel. Some of the features of the EMS Provider Portal include access to:

- EMS agency affiliation data
- Continuing Education (CE) reports
- Enrolled course data
- Certification Test Eligibility letters
- Certification Test Results
- E-mail notifications of EMS certification expiration dates
- Access to update/change address, phone number and e-mail address
- E-mail opt-in/opt-out functionality allowing for updates from various Divisions within the Office of EMS.

In addition, the approximately 600 EMS educators have the following additional access:

- Online course management tools
- Course Approval documents and notifications
- EMS Training Funds Contracts
- Various instructor reports
- Pass/Fail course statistics, etc.

A significant module of the EMS Provider Portal—the EMS Continuing Education handheld scanner program—was developed utilizing the collaborative efforts of the system stakeholders, EMS Educators, Regional EMS Councils, VDH Office of Information Management and private industry to design, pilot, produce and train EMS educators to implement the initial phase to electronically capture and submit EMS provider continuing education to the Office of EMS.

The Office of EMS continuing education database tracks all continuing education for the system's 35,000 + EMS providers. The EMS Continuing Education scanners are intended to significantly reduce mailing costs for both, the Office,

EMS educators and agencies. The scanners also drastically reduce the number of errors in continuing education submissions, significantly improving the efficiency in reporting. This innovative application of technology also reduces the time it takes to record continuing education to less than 24 hours. The long term payoff in scanner use is realized by:

- Reducing the need to hand deliver continuing education to the Office of EMS.
- Reducing the number of errors which result in additional mailings and staff time to process,
- Reducing the number of errors resulting in less recertification issues.
- Reducing the cost of printing and mailing by the office of continuing education cards (approximately savings of \$4000 a year)
- An improved customer service environment.

The EMS Provider Portal has been in development for the past two years and was fully implemented on December 14, 2009. Additional updates and modules are being developed to expand access and enhance access to EMS providers, instructors and licensed EMS agencies.

### **Other Activities**

- A. The EMS Advisory Board's Formulary Workgroup met on August 17<sup>th</sup> 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/Files\\_page/Training/Minutes/FWC08-17-2010.pdf](http://www.vdh.virginia.gov/OEMS/Files_page/Training/Minutes/FWC08-17-2010.pdf)
- B. The EMS Advisory Board's Patient Care Guidelines Workgroup met on September 30<sup>th</sup> 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/Files\\_page/Training/Minutes/PCW09-30-10.pdf](http://www.vdh.virginia.gov/OEMS/Files_page/Training/Minutes/PCW09-30-10.pdf)
- C. Warren Short and Greg Neiman attended and participated in the National Association of State EMS Officials (NASEMSO) annual meeting held in Norfolk October 11<sup>th</sup> through the 15<sup>th</sup>.
- D. Chad Blosser continues to coordinate and present training with the new barcode scanners purchased by the Regional EMS Council through a RSAF grant. Since the last report, additional scheduled sessions have been arranged in the following regions:
  - 1. ODEMSA (2 session)
  - 2. TJEMS (1 session)

# **Emergency Operations**

## **IV. Emergency Operations**

### **Operations**

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

The Division of Emergency Operations took part in the annual NASEMSO conference hosted by Virginia and held in Norfolk this year. The conference, which was held October 10-15, 2010 provides an opportunity for EMS officials from around the country to participate in meetings and trainings and share ideas with each other. Frank Cheatham, HMERT Coordinator assisted in coordinating transportation, AV, and other needs to support the conference. The Emergency Operations Assistant Manager, Karen Owens, attended the Domestic Preparedness Committee, and Winnie Pennington, Emergency Planner, participated in sessions that day including NIMS Resource Typing for EMS and Pan Flu After Action: EMS Best Practices.

- **Virginia 1 DMAT**

The HMERT Coordinator, Frank Cheatham, has been attending meetings of the Virginia 1 DMAT. The Office of EMS has continued working with the Virginia 1 DMAT to secure and maintain trailers to support deployment equipment.

### **Planning**

- **VDH COOP Update**

The Emergency Planner used the OEMS COOP and additional information collected from managers to collect and update elements including essential positions, back-up positions, essential records needed, equipment needed for essential tasks, systems needed for essential tasks, essential vendors and contact data and recovery times for essential tasks in support of the VDH COOP updates

- **OEMS Pandemic Influenza Attachment to VDH Plan**

The Emergency Planner reviewed and suggested changes to annex to be included in next VDH update.

- **EMS Surge Capacity Workbooks for Regional Councils**

The Emergency Planner developed EMS Surge Capacity Planning Workbooks for Regional Councils to use when assisting in planning for local or regional EMS surge planning for EMS surge. Planner discussed these handbooks and other questions about Surge and COOP at Regional Council meeting on October 27, 2010 and took questions.

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

Winnie Pennington continues to participate with Department of Social Services (DSS), Department of Emergency Management (DEM), Office of the Chief Medical Examiner (OCME), Emergency Preparedness and Response (EP&R), and other state agencies in updating the State FAC plan to reflect additional roles for VDH and others to make plan more scalable, mobile, proactive, and multi functional. Meetings for this quarter were September 27, and October 12 and 26. Meetings will continue until a plan is completed.

<b>Committees/Meetings</b>
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- **EMS Emergency Management Meeting**

The Emergency Management Committee hosted a work session on September 1, 2010 to work on finalizing the update of the Mass Casualty Incident Management Module I and II program. The Committee also met on October 28, 2010 to review and approve the first draft of the 2011 version and also discuss future activities of the committee.

- **Hurricane Evacuation Committee**

Frank Cheatham, HMERT Coordinator, continued to participate in the Hampton Roads Hurricane Evacuation Committee meetings.

- **EP&R Team Meetings**

The Emergency Planner continues to participate in the monthly EP&R meetings.

- **EMS Communications Committee**

The EMS Communications Committee last met on Friday, August 13, 2010. Chair Pokey Harris suggested the committee focus on core issues such as EMD, interoperability and grants. Discussions were held regarding the ability to mandate EMD for PSAPs (Public Safety Answering Points). Ken Crumpler explained that the Office of EMS has no authority to mandate any PSAP to have EMD. The PSAPs are under the authority of their local jurisdictions. The Office of EMS encourages EMD and will continue to do so. Mr. Campbell wants to have the Chair of this committee talk with the Finance, Legislative

and Planning Committee and put this on the legislative agenda for the Board of Health. Mrs. Harris stated that 53% of the localities are EMD accredited. There are two grant programs that help with this; one is through VITA and the other through 911. EMD is a priority at OEMS. Mr. Campbell stated that the Dept. of Justice also has a grant program for dispatchers. Discussion was held regarding the development of a white paper regarding EMD. A workgroup will be formed consisting of Connie Purvis and Richard Rubino to work with Mr. Campbell on the EMD legislative initiative. Mr. Crumpler suggested that Randy Krantz be included in the initiative also.

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

The CISM committee met twice during this quarter. The meetings focused on the finalization of Accreditation standards for CISM Teams within the Commonwealth. Accreditation would provide a priority for grant funding and also support a deployment process for out of state CISM requests. The meetings also provided an opportunity to review the training standards that were previously developed and finalize documentation explaining each set of standards.

<b>Training</b>
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- **VERT Refresher Training**

Winnie Pennington, Emergency Planner, continues to develop refresher training for OEMS employees who are assigned to the VERT and has worked with VDEM to set up a training account for developing exercises for these employees to help them become proficient in Web-EOC and other VERT activities. Training will be held in the next quarter.

- **Fusion Center Workshop**

On September 21, 2010, the Emergency Operations manager participated in a workshop at the Virginia Fusion Center, located at the Virginia State Emergency Operations Center. The workshop provided information on the purpose and function of the Fusion Center.

- **Richmond Regional Fire School**

On October 25-26, 2010 the Division of Emergency Operations supported a Mass Casualty Incident Management class at the Richmond Regional School held at the Richmond Convention Center. The class, which was attended by 15 students, provided an opportunity for students to gain knowledge in methods of management for a mass casualty incident.

- **Southside Virginia Regional School**

The Division of Emergency Operations provided logistical and instructional support to the 2<sup>nd</sup> Annual Southside Virginia Regional School on August 28-29, 2010. Frank

Cheatham, HMERT Coordinator, and two OEMS Extrication instructors assisted in the Vehicle Technician course that was held. The OEMS Command Trailer was also utilized to provide support for the field exercises during the program.

## **Communications**

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

There is one pending applications at this time from the City Of Newport News. Mr. Crumpler traveled for a reaccreditation visits to Richmond Ambulance Authority on August 27, 2010 and to Chesterfield Emergency Communications on September 20, 2010. All sites met reaccreditation requirements.

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

Emergency Operations Communications Coordinator, Ken Crumpler continues 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. He will assist OEMS Grants manager Amanda Davis on EMS Communications grants presentation. The conference is scheduled for November 2-5, 2010 in Roanoke.

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

OEMS was not represented at the SIEC meeting on Tuesday Sept 28th, 2010 as Mr. Crumpler was on leave. NOTE – There is a vacancy in the Coordinators position at the Commonwealth Interoperability Office. No date has been published to when the vacancy will be filled.

## **Critical Incident Stress Management**

- **Learning Standards**

The CISM Committee worked to create a set of learning standards which will be used to approve CISM training courses that are provided to the Office of EMS for review. These courses can then be used to meet the requirements set forth in the Team Accreditation standards. The learning standards are as follows:

- Define terminology and key concepts related to the training topic
- Develop an understanding of the training topic and key concepts
- Learn techniques related to the training topic
- Develop a plan to implement or apply techniques related to the training topic

- Practice the plan, skills, and techniques related to the training topic
- Review the skills and discuss problem areas identified through practice (Problem solve)
- Identify resources and referral options for people in crises, as well as interveners
- Evaluation of the course

- **CISM Team Accreditation Standards**

The CISM Committee developed a list of standards for CISM Team Accreditation across the Commonwealth. Teams will apply for accreditation showing evidence that they meet the requirements. Teams that are accredited will receive priority in grant funding and their members will be placed on a list for statewide and out of state deployment consideration. The accreditation requirements cover the following topics:

- Membership
- Leadership
- Training
- Alerting
- Meetings
- Standard Operating Procedures
- Peer Outreach
- Documentation

# **Planning and Regional Coordination**

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

### **Regional EMS Councils**

#### **Regional EMS Councils**

OEMS has received signed copies of the FY2011 contract from all of the Regional EMS Councils; these contracts have also been signed by Dr. Remley, state Health Commissioner.

The Regional EMS Councils submitted their First Quarter contract reports at the end of October; and their submitted deliverable items are under review by OEMS.

VDH and OEMS continue to work with the Southwest Virginia EMS Council concerning 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.

As a result of this event, the Regional EMS Council Directors Group (RDG) was tasked by the VDH Commissioner and Director of Internal Audit to develop an accounting and financial best practices document. This document was submitted to OEMS in September, and the RDG received feedback and recommendations from Internal Audit. A copy of the RDG accounting and financial best practices document is included in this report. See **Appendix B**.

### **Medevac Program**

The state Medevac Committee met on October 28, 2010. The minutes were not available at the time of the submission of the state EMS Advisory Board quarterly report. Dr. Remley has tasked the State Medevac committee to develop a vision for the future of helicopter EMS in Virginia. Dr. Remley's directive also tasks the committee to partner with other stakeholders to propose a comprehensive voluntary statewide network committed to safety, access and quality.

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. There is also discussion on incorporating the next version of the State Medevac Landing Zone (LZ) Directory into the WeatherSafe program.

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 at <http://www.vdh.virginia.gov/OEMS/Medevac/Index.htm>

## **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 state EMS 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 EMS system component that committee is responsible for reviewing.

A draft of the State EMS Plan was presented at the February 2010 meeting of the FLAP committee, and to the state EMS 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 was approved by the state EMS Advisory Board at their meeting on August 13. OEMS presented the final approved Plan to the Board of Health (BoH) at their meeting on October 15. Several questions raised by BoH members have made additional changes to the Plan necessary.

These changes are to include additional information on the Mission and Vision of the Office of EMS, a brief overview of the EMS system in Virginia, as well as identification of objectives for each strategic initiative, responsible parties, and division of responsibility. OEMS anticipates submission of the revised plan to the Commissioner before the end of the calendar year. The Commissioner has the ability to act on behalf of the Board of Health to approve or reject the revised plan, before the next meeting of the Board in March of 2011.

# **Public Information & Education**

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

### **Symposium**

There are 1,600 registrants for the 31<sup>st</sup> Annual Virginia EMS Symposium. We allowed registration to continue past the original deadline by a week since registration numbers were slightly lower than last year.

PI&E designed and produced the on-sight pocket guide and managed the assembly of the registration packets and the bags for registrants. We coordinated with sponsors to get the bags, lanyards and pens. We are already working on securing sponsorships for promotional items for the 2011 Symposium.

This year there is new signage for events, directions and news for the Symposium. PI&E worked with the logistics coordinator and color coordinated the signage that will allow for participants to find information and directions more easily.

This year the VDH Office of Emergency Preparedness has coordinated to have flu vaccines available for all participants, their families and others. We coordinated with the TEMS Regional EMS Council to promote this event as well and offer vaccines for providers who are in the area, but may not be participating with the Symposium. We will be coordinating the vaccine clinic with the Norfolk Health Department on Thursday, Nov. 11, from 7 a.m. – noon.

We are already underway for preparations for the 2011 Symposium and have promoted the request for presentations for next year's event and have created a new form to solicit sponsorships.

### **Governors Awards**

The Governor's EMS Awards Committee met on August 20<sup>th</sup>, 2010 to review and select the winners for the 2010 awards.

There were many good nominees, and several exceptional scholarship nominees, and AEMER and the Committee concluded that AEMER's purpose is to promote and support EMS education and therefore will provide scholarships to two very qualified candidates this year.

There were some changes to the awards program which will include the elimination of the Outstanding Contribution to EMS Category, but will add a new category for Outstanding Contribution to EMS Health and Safety.

It was discussed that the awards program needs to evolve to support initiatives that are important to EMS as the system grows and right now there needs to be a focus on health and safety in the EMS field. This category will recognize safety in EMS and help showcase the need for better health and safety programs and initiatives. This category was discussed as a priority for the system as we are trying to prevent the loss of EMS professionals to injuries or line of duty deaths. All members of the committee voted in favor of these changes.

PI&E coordinated the production of the pyramids and worked with the governor's office to print the certificates. The program this year will be shorter and not feature a key note speaker. Once the program concludes we invite all participants to enjoy the appetizers.

We will submit a press release to the local media for each winner and will coordinate with the Regional Councils on new efforts to promote the awards program. These efforts include a speakers bureau of previous award winners, Also, PI&E will send out monthly e-mails to the EMS list serv promoting each award winner for the year. We will also promote the winners on a presentation that will run on the TVs in the lobbies of the OEMS offices.

We will also work with the councils to create search committees spread sheets for nominee ideas and check lists for supporting documents and information.

## **Marketing & Promotion**

### *NASMESO 2010 Meeting*

The 2010 NASEMSO Meeting that was hosted by the Office of EMS was a great success. The registration packets were produced and compiled by PI&E, and were a great hit. The USB drives, the hotel room keys and all the items that PI&E designed and produced were well received.

### *Provider Portal*

In an effort to promote the provider portal and get all certified EMS providers to log in, PI&E launched a promotional campaign to reach providers and educate them on the many facets of the provider portal and request that they log in to establish their accounts.

We created ads that ran in the Virginia Fire Chief's Magazine, VAVRS and the Virginia State Firefighters Magazine. An ad ran in the OEMS News Bulletin and a feature was created for the OEMS home page and e-mail list serv. We also submitted information on this to our social media outlets. We are promoting the use of computers to log in to the portal while at Symposium as well.

### *Training Catalog Update*

We are updating the Division of Educational Development Training Catalog to reflect new policies and information. This will be available on the OEMS Web site at [www.vdh.virginia.gov](http://www.vdh.virginia.gov).

### *EMS Providers as Vaccinators*

PI&E created a plan for promotion of the new policy for EMS providers to provide vaccines. PI&E completed all tasks in the plan to include providing information to OMDs, an article in the OEMS News Bulletin, sharing the article with other publications and the Regional EMS Councils. We also used the social media outlets to direct providers to the OEMS Web page to review the new policy.

## **OEMS Media**

We received media inquires about a complaint filed against Louisa County Volunteer EMS Agencies for failure to meet Virginia EMS Regulations by not responding to 100% of their calls. This complaint is currently under investigation by OEMS program representatives.

## **VDH Communications**

*Office of Licensure and Certification* –The OEMS PI&E Coordinator provides media coverage and guidance for the Office of Licensure and Certification. This quarter some media inquiries included topics like the closure of a geriatric center, proposed abortion clinic licensure, COPN requests and more.

*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.

*VDH Web Site Policy, Procedures and Design Committee* – As a member of the Office of Risk Communication and Education for VDH, the PI&E Coordinator was appointed as the chair of the committee task force that was created to complete an item of the ORCE strategic plan that includes creating policies and procedures for the VDH Web site (OEMS Web site falls under this). This committee will also be working on a major design overhaul of the Web site, which is slated to be completed by spring 2011.

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 third 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:	6
Providers:	2
Agencies:	4

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

New Cases: 22      Cases closed: 9

Suspensions: 2

Revocations: 1

Reinstatements: 2

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

Licensed EMS agencies: 680 Active

Permitted EMS Vehicles: 4,228 (Active, Reserve, Temporary)

Recertification:

Agencies:	85
Vehicles:	701

New EMS agencies: 1

Spot Inspections: 50

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

July 9, 2010 – Overstreet  
August 20, 2010 – Pool, Peirce  
September 2, 2010 – Felts, Praither, Elliott, Beaman  
September 13, 2010 - Goulla

***VariANCES***

Approved: 15 Disapproved: 1

***Consolidated Test Sites***

Scheduled: 33 Canceled: 8

***OMD/PCD Endorsements***

As of July 28, 2010: 208 Endorsed

<b>EMS Regulations</b>
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1. The Durable Do Not Resuscitate Regulations 12VAC5-66 remains in the Governor’s Office awaiting his signature (no required time frame).
2. The finale draft of the Virginia Emergency Medical Services Regulations 12VAC5-31 remain in the Attorney General’s Office for review and as such did not make the October Board of Health meeting for approval. The next Board of Health meeting is not until March of 2011.

<b>Noteworthy Matters</b>
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December 31, 2010 will mark the end of Mr. Ken Pullen’s tenure with the Office of EMS as he retires from state service to the Commonwealth after 25 years. Ken has been a valued and trusted member for the Office and his institutional knowledge (history as well) will be an attribute not easily duplicated by the remaining staff. We wish him well in his new adventures in retirement land!

## Division Work Activity

1. The Division of Educational Development and the Regulation and Compliance staff continue to monitor the process of the new practical format for the Consolidated Test Sites.
2. Regulation and Compliance staff represented the Office of EMS in Fire/EMS studies as requested of the Virginia Fire Service Board for Spotsylvania County. A formal report is still being formulated. In addition, staff is participating in new studies to include the City of Manassas and Middlesex County. Individual EMS studies have been requested by several jurisdictions and the Office has provided several self-study materials for those entities to initiate their internal review.
3. OEMS staff is serving as subject matter experts at regularly scheduled meetings in collaboration with the Virginia Association of Volunteer Rescue Squads and the Virginia Department of Fire Programs to assist in the revision of the current Emergency Vehicle Operator's Curriculum (EVOC) utilized by both entities. Changes will address administrative guidelines, highway incident management practices, as well as changes in Virginia Motor Vehicle laws.
4. Staff continues to offer technical assistance to the various agencies, entities and local governments as requested. Most recently staff attended the Appomattox Board of Supervisor's meeting regarding an EMS agency application for service. Staff along with Director Brown met with the Fire Rescue Association for the City of Manassas to discuss potential consolidation of services.

# **Technical Assistance**

## **VIII. Technical Assistance**

### **EMS Career Fair**

The first annual EMS Career Fair is being held on November 11, 2010 from 6-9 PM at the Marriott Norfolk Waterside. The event is being held in conjunction with the 2010 EMS Symposium.

Representatives from 24 EMS agencies and related companies will be available to provide career information and opportunities to attendees at Symposium.

### **EMS Workforce Development Committee**

The Workforce Development Committee (WDC) has met twice since the last state EMS Advisory Board meeting. The next meeting will be held on November 10, 2010 starting at 10:00 AM in the Elizabeth Board room on the 4<sup>th</sup> floor of the Marriott Norfolk Waterside Hotel.

#### **Standards of Excellence**

A presentation on the Standards of Excellence (SoE) project will be presented at the first 2011 State EMS Advisory Board meeting. The Workforce Development Committee will request the Board to comment on the program and support the program in concept.

The Standards of Excellence project was started in 2006 following recommendations from a 2004 Legislative Audit and Review Commission (JLARC) report which stated a program to identify and promote best practices for EMS agency management was needed. The SoE project is a voluntary program that provides a recognition/accreditation path that promotes the use of best EMS practices in specific areas – those areas are called “Areas of Excellence”:

The proposed EMS Areas of Excellence are:

- Leadership and Management
- Life Safety
- Clinical Care Standards/Measures
- Performance Improvement
- Recruitment and Retention
- EMS Medical Direction
- Community Involvement

There are identified performance measures for each “Area of Excellence.”

It has been proposed to have representatives from the regional EMS councils and the Office of Emergency Medical Service Program Representatives involved in the SoE process.

The program outlines a process of working through three Tiers:

**Tier One** – Preparing for Excellence  
Complete a self-evaluation survey to establish a baseline

**Tier Two** – Designing for Excellence  
Develop benchmarks and implement program to address improvement opportunities

**Tier Three** – Leading for Excellence  
Demonstrate benchmarks have been met and assist other agencies with process.

### **Virginia EMS Officer Standards**

As discussed at the last state EMS Advisory Board meeting, the Virginia EMS Officer Standards program was developed by a workgroup of the Workforce Development Committee. This program was developed to provide assistance in improving EMS leadership in Virginia.

The committee started this project following recommendations in the 2004 JLARC Report, “Review of EMS in Virginia.” The report indicated that most rescue squad captains are elected to office based on popularity or their availability to run calls and not always because they have management experience or would make a good leader. In fact, currently, there are no specific qualifications that EMS squad captains/leaders must possess.

The current program was written based on the NFPA 1021 – Standard for Fire Officer Professional Qualifications. The program provides information (guidelines) for:

Officer I	- EMS Crew Leader
Officer II	- EMS Company/Station/Program Manger
Officer III	- EMS Administrative/Division Officer
Officer IV	- EMS Executive Officer

While this program is still in the “infancy” stage (will require additional review, modification and updating) – a discussion was begun regarding the best way to present this program to Virginia EMS providers. A meeting was held on July 15, 2010 with Jake

Mazulewicz, Ph.D., (Director JM&A, LLC). Jake is an expert in the development of EMS educational material and presentation processes. Jake believes an effective method to present information is utilizing an interactive experience and not just lecture and book learning.

Jake worked with three members of the WDC and developed a sample "product" (small part of EMS Officer I) which was demonstrated to OEMS administrative staff on October 8, 2010. The demonstration was a 20 minute "interactive learning experience" dealing with confronting an EMS staff member whose behavior threatens the standard of care.

The demonstration was well received and OEMS is currently making plans to hold a demonstration of the process at the 2010 Symposium. More details about this demonstration will be provided through Email to the individuals registered to attend Symposium or by flyer at the registration desk at Symposium.

# Trauma and Critical Care

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

### **Emergency Medical Informatics**

#### **NASEMSO's State Data Managers Council**

VDH/OEMS staff routinely participates as a member of the State Data Managers Council (DMC). The DMC includes the primary contact for EMS data collection from each state EMS office, a NEMSIS Technical Assistance staff person, and others as needed. The group meets on a minimum of once monthly for two to three hours via web-conference. The DMC had their annual in-person meeting during the week of 10/21 in Norfolk. The main agenda items discussed over the two day period included:

- NEMSIS Version 3 Update by Dr. Greg Mears
- Patient Tracking Project Update (standardization of patient tracking data)
- State EMS Data System Funding
- NEMSIS Technical Center Update – Dr. Clay Mann/Karen Jacobsen
- Development of an Improved List of Provider Impression for NEMSIS v3
- EMS Data Linkage – Getting Started Dr. Larry Cook
- NHSTA EMS Office Update (NHTSA funding supports NEMSIS)
- Mini –presentations
  - Data Quality & NEMSIS – ImageTrend staffs
  - Zoll Data Systems Update – Rene' Nelson
  - Managing Legacy Data
  - Hospital Dashboard – linking hospital & EMS data – Joe Moreland
  - Council business

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

The most significant issue that occurred this quarter with VPHIB was its involvement with the failure of the State's centralized computer system managed by the Virginia Information Technology Agency (VITA) and Northrop Grumman (NG) partnership. 26 State agencies suffered computer systems outages and loss of data. The affect on VPHIB was an initial outage of 12 hours and several days later NG noted an error message with our server and autonomously took it upon themselves to restore the database back to the onset time of the original statewide failure.

Performing a restoration caused the loss of approximately one week's worth of data. The affect of this data loss included losing 54,000 EMS records, a disruption to the XSD (import tool for 3<sup>rd</sup> party vendors, disruption of user name and passwords, and many other administrative changes made on the State and individual Agency level. ImageTrend responded swiftly to assist VDH/OEMS with successfully merging lost data

back into the system. The lost records were restored in approximately two weeks and other administrative items continue to be discovered and corrected as found. The cost of the VITA/NG system failure to VPHIB is greater than \$8,000.

State Bridge has successfully been updated to version 4.4.3. This version update is significant because it has multiple fixes to the program noted by VDH/OEMS, Virginia users, and other state users. Most notable for VDH/OEMS with this update is that we now have the ability to design our own on-line run form for State Bridge users like we do for our Field Bridge users. This update also provides VDH/OEMS with the new Report Writer tool.

What's next? Beginning at symposium VDH/OEMS will begin rolling out the new Report Writer 2 tool in VPHIB. Report Writer classes will be taught at symposium and followed by webinars after symposium to allow statewide access to training.



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

Data output; the Division of Trauma/Critical Care (TCC) is hoping to begin publishing data from the new VPHIB system at the beginning of the new year. OEMS utilizes statistical software (SPSS) to access the raw data directly from the database. After 10 months of persistence, VITA/NG has now successfully linked us to our data. It will take us some time to learn the new database schema. TCC staffs are also actively training on a newly acquired data reporting tool. TCC secured ArcGIS software which will allow OEMS to report out EMS and Trauma data using a geographical information system or GIS mapping.

Other barriers to data output are that there are some agencies currently not submitting as they continue to work with their third party EMS software vendors to submit from their system to the state system. There are an additional 40 agencies that have not moved forward with establishing their agency in the new system. VDH/OEMS has only just gotten its access to the raw data in our new system within the last couple weeks. We will begin looking at the quality of data that is being submitted. As poor data is noted in the system changes will be made to the system to increase the quality and feedback shared with the sources of poor data.

TCC has had a few requests to accept past due data in the old PPDR format. We are no longer capable to receiving PPDR data. The PPDR system has been decommissioned and is no longer functional and therefore there is no way to accept PPDR data. Multiple notices were sent out advising of the closing of PPDR.

**NEMSIS Version 3:** The current version of NEMSIS used by VPHIB and other vendors is version 2.2.1. Nationally, NEMSIS has discontinued certifying EMS software at the v2.2.1 level and will not be certifying any software until NEMSIS 3 is released. Currently, NEMSIS is stating version 3 will be released in early 2011. There is no definitive date stating when states must be moved to NEMSIS 3; VDH/OEMS' best estimate is 2012 – 2014.

NEMSIS 3 is a critically important issue for Virginia EMS agencies that utilize third party software vendors. NEMSIS 3 will cause a major change in the structure and technical format of the data and this will require your vendor to recreate the ability to submit to OEMS. It is highly recommended that agencies begin communicating now with their vendors and ensure that they are preparing for this move. Be sure to consider NEMSIS 3 conversion and state submission when updating or entering into a contract with you vendor.

In addition to structure and format changes, NEMSIS v3 will increase the number of national data elements from 84 to approximately 138. The proposed list of national and recommended state elements is attached as **Appendix C**. National data elements are those that VDH/OEMS will need to submit to NEMSIS as a state. The total number of available NEMSIS data elements is increasing by 110; see below.

<b>NEMIS NHTSA Uniform PreHospital Dataset</b>	<b>Version 2.2.1</b>	<b>Version 3.0</b>
<b>Demographic Data Elements</b>	<b>110</b>	<b>133 (25%)</b>
Existing (Version 2)	86 (78%)	86 (65%)
New		47 (35%)
Retired	23 (22%)	
<b>EMS Data Elements</b>	<b>318</b>	<b>405 (75%)</b>
Existing (Version 2)	257 (81%)	257 (63%)
New		148 (37%)
Retired	57 (19%)	
<b>Overall Total</b>	<b>428</b>	<b>538</b>
Existing (Version 2)	348 (81%)	343 (64%)
New		195 (36%)
Retired	80 (19%)	

### **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.

<b>Trauma System</b>
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### **NASEMSO’s State Trauma Managers Council**

The National Association of State EMS Officials (NASEMSO) structure includes a State Trauma Managers Council (TMC). The TMC composition is made up each states trauma coordinator. The TMC had its in person annual meeting in Norfolk during the week of 10/21. The main agenda items discussed over the two day period included:

- Host state presentation on the Virginia Trauma System
- Federal and State Trauma System Funding
- State Challenges

- American College of Surgeons
  - New COT structure and leadership – Dr. Rotondo
  - State Monographs – Dr. Winchell
  - Patient Safety PI Model – Dr. Tinkoff
  - ACS State Assessment Findings – Nels Sanddal
  - NASEMSO/ACS Task Force Meeting – At this meeting a official vote was mad by NASEMSO and ACS to collaborate to the following top five projects:
    - Trauma System Benchmarking/Patient Safety
    - Model Trauma System Guidelines
    - Transportation (Trauma Triage/Transfers/Medevac Utilization)
    - Revision of the “Green Book” goal to release in 2012
    - State ACS/COT Committee (improved communication, unified list serve, educational offerings, leadership orientation)
- Round table discussions
  - Implementing Level IV centers
  - Experience of State’s undergoing ACS State Assessments

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

The TSO&MC last met on September 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: discussion of the trauma program managers recommendations for the revision of designation criteria related to nursing and trauma registrars. There was an update from the Trauma Performance Improvement Committee describing its progress reviewing registry data. The TPI Committee composition will be formalized prior to the next meeting to allow the meetings to be closed to the public when discussing PI cases.

The burn workgroup has been reviewing statewide burn data and will be presenting burn criteria improvements for the designation manual. There was also discussion about adding a burn center representative to the committee. The Chair of the TSO&MC will brief the Commissioner on the potential criteria changes.

Other items from the last meeting included a discussion on the pending approval of the Trauma Center Fund Disbursement policy and a presentation of the C4T project by John Corrigan the Executive Director of the Northern Virginia Hospital Alliance. The C4T project’s goal is to increase the ability to manage large volumes of critically ill/injured patients.

**b) Trauma Center Fund**

Below are the most recent distributions to designated Trauma Centers from the Trauma Center Fund. Each year VDH/OEMS is required to report on the use of the Trauma Center Fund to the House and Senate Finance Committees. The draft version for this years report is attached as **Appendix D**.

Trauma Center & Level	Percent Distribution	Previous Quarterly Distribution	August 2010 FY11	Total Funds Received Since FY06
<b>I</b>				
Roanoke Memorial Hospital	14.67%	\$215,235.25	\$325,621.74	\$4,625,603.01
Inova Fairfax Hospital	13.65%	\$349,508.79	\$302,981.37	\$9,363,200.74
Norfolk General Hospital	12.69%	\$238,728.60	\$281,672.79	\$5,316,345.02
UVA Health System	13.91%	\$268,366.36	\$308,752.44	\$5,440,856.89
VCU Health Systems	25.96%	\$464,445.49	\$576,219.51	\$8,988,766.34
<b>II</b>				
Lynchburg General Hospital	3.28%	\$63,070.61	\$72,804.31	\$1,036,881.36
Mary Washington Hospital	4.33%	\$33,613.56	\$96,110.57	\$151,668.77
Riverside Regional Medical Ctr.	2.96%	\$50,781.78	\$65,701.45	\$971,852.97
Winchester Medical Ctr.	3.61%	\$57,829.79	\$80,129.14	\$1,378,095.25
<b>III</b>				
New River Valley Medical Ctr.	0.15%	\$3,795.08	\$3,418.25	\$104,602.01
CJW Medical Ctr.	1.03%	\$11,565.96	\$22,862.33	\$402,426.75
Montgomery Regional Hospital	0.25%	\$1,626.46	\$5,637.90	\$123,661.19
Southside Regional Medical Ctr.	0.62%	\$3,252.93	\$13,806.18	\$205,360.92
Virginia Beach Gen'l Hospital	2.88%	\$45,360.24	\$63,925.74	\$1,486,021.93
<b>Total</b>				\$39,595,343.15

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) State Trauma Triage Plan

A meeting was held on September 28<sup>th</sup> to address Dr. Brand's concerns with the State Trauma Triage Plan. In attendance were Dr. Marissa Levine, Dr. Asher Brand, Dr. George Lindbeck, Dr. Ajai Malhotra, Jenny Collins, Eric Gregory (Office of the Attorneys General), Gary Brown, Scott Winston, and Paul Sharpe. Minutes to this meeting are available upon request. Attached is a revised copy of the State Trauma Triage Plan (**Appendix E**). At the time of this writing, there is still discussion on the language of the plan.

## Emergency Medical Services for Children (EMSC)

### CAH Hospitals Visits Underway

Informal pediatric assessments of Virginia's Critical Access Hospitals (CAH) are now underway. The EMSC program is assisting these hospitals in exploring pediatric care readiness in relation to the national guidelines release by the American Academy of

Pediatrics in October of last year. The assessments will help guide the Department of Health in establishing a voluntary recognition program for hospitals relating to pediatric emergency care readiness, and may also assist EMSC in finding grant funding to assist small rural hospitals in improving their pediatric capabilities.

### **EMSC Program Sponsors Pediatric Resuscitation Demonstrations for Small Hospitals**

Resident physicians with pediatric expertise from Virginia Commonwealth University (VCU) will soon be demonstrating pediatric resuscitation techniques at selected small hospital emergency departments in Virginia. For more information contact David Edwards at 804-888-7527 or [david.edwards@vdh.virginia.gov](mailto:david.edwards@vdh.virginia.gov).

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

Surveying required by the federal EMS for Children program (previously delayed) for both hospital and EMS agency surveys is beginning in November. For hospitals, the performance measures being assessed relate 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.

### **EMSC Committee**

The EMSC Committee participated in the HRSA Office of Performance Review Update of Virginia's EMS for Children program October 7, 2010, where members also refined the plan mentioned above to provide educational demonstrations at small hospitals. Special presentations for the next EMSC Committee meeting January 6, 2011 will include "Safe Sleep" and "The Choking Game".

### **PEC Council Meets in Norfolk, Tours CHKD**

The Pediatric Emergency Care Council, a standing council of the National Association of EMS Officials (NASEMSO), met in Norfolk October 11-13 and was successfully hosted by the *Virginia Office of EMS*. While in session the PEC addressed a variety of national pediatric emergency care issues, and will be also be working closely with the Trauma Council to assure that pediatric concerns will be part of curriculum revisions of national level courses (PALS, ACLS, PHTLS, BTLS, PEPP, etc.) utilized by EMS personnel. While in Norfolk, members of the PEC were able to tour the Children's Hospital of the King's Daughters (CHKD), courtesy of Dr. Terry Guins, and were very impressed with the hospital and staff.

### **EMSC Booth at Symposium**

Stop by the EMSC Booth at the November EMS Symposium for information about pediatric education, training and equipment resources, and help identify EMS folks in

every EMS region who are willing to be pediatric contacts for the EMSC program (a sign-up sheet will be present).

## **Stroke System**

The Virginia Stroke Systems Task Force (VSSTF) last met on 10/20/2010. With the completion of the State Stroke Triage Plan, the committee has identified other key components of EMS care related to stroke that need consideration including:

- Stroke specific EMS Patient Care Guidelines
- Medevac Utilization for acute stroke patients
- Establish link between the regional EMS PI committees and the VSSTF
- The VSSTF will be briefed on the progress of the Regional Stroke Triage Plans
- The medical direction committee will be asked to provide a position on the utilization of the Advanced Stroke Life Support course developed by the University of Miami. BREMS is seeking grant funding to bring this course to Virginia.

With each of the above, the EMS project team of the VSSTF recognizes that these are all likely active projects already in the EMS community and sees providing a link between these projects and the VSSTF as its goal.

During this quarter OEMS has met with the Stroke Coordinators Consortium and provided guidance on working within the Regional EMS systems to participate in the regional Stroke Triage Plan development (presentation attached as **Appendix F**). Information was sent to both the stroke coordinators and regional councils providing contact information for both groups to foster establishing these new stakeholders into the EMS and stroke systems.

## **STEMI System**

OEMS continues to participate as an active member of the Virginia Heart Attack Coalition (VHAC) which functions in concert with the American Heart Association's (AHA) Mission Life Line (ML). VHAC last met on September 16<sup>th</sup>. A couple of important items that affect the EMS system are 1) AHA is actively recruiting for a Mission Lifeline Director. This position will be responsible for the coordination, development, and implementation of regional systems for treating STEMI patients. The funding of this position is being supported by the AHA, Virginia Chapter of the American College of Cardiology and private donors.

Another challenge for VHAC has been the acquisition and analysis of hospital level cardiac data to not only establish a baseline picture of STEMI system care in Virginia, but to also look at any progress that has been made since the establishment of VHAC and regional systems. The cost of data and its analysis has been prohibitive to date. VDH/OEMS has tentatively (official funding approval is pending) agreed to funding the

procurement of NCDR data and performing the analysis within house. The use of a third party to perform the analysis is desired and VDH/OEMS is pleased to provide this role.

<b>Durable Do Not Resuscitate (DDNR)</b>
--

The draft DDNR regulations are awaiting the Governor's signature for approval. Once signed the draft regulations will be posted for public comment. Should little to no response occur during this public comment period the regulations will go into effect. OEMS will provide education on the changes. Key items with the revised regulations include:

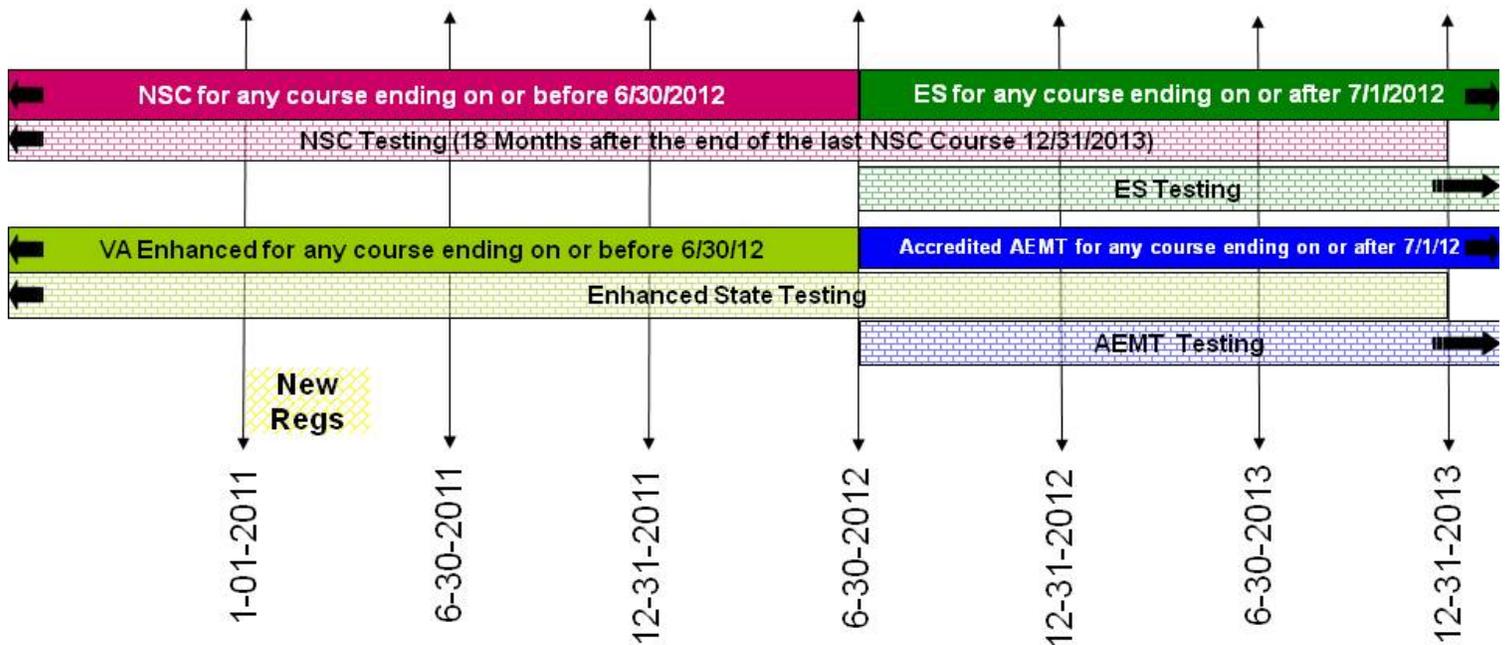
- Eliminate the need to print forms on unique distinctive paper (discontinuance of the yellow DDNR).
- The State will maintain a standardized form that can be downloaded by prescribing health care providers.
- Original copies of DDNR's will not be required; legible photo copies will be honored
- The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

**Respectfully Submitted**

**OEMS Staff**

# Appendix A

# Education and Certification Examination Content Timeline



Approved by PDC 10/6/10

Endorsed by MDC 10/7/10

# Appendix B



## **Accountability and Control Statement Virginia's Regional EMS Councils**

Each Regional EMS Council will have policies, procedures and practices that address its governing body and management, compensation, organizational control, conflict of interest, financial oversight, and document retention.

### **Governing Body and Management**

Each Regional EMS Council will develop and publish a mission statement and review it regularly to ensure that its current activities continue to reflect that mission. It is critical that the statement be reviewed and adopted by the Board. In addition, the Council must have organizational documents that provide a framework for its governance and management.

Each Regional EMS Council will establish procedures to ensure that these documents (as well as annual reports and financial statements) are complete and accurate, posted on their Web site, and physically available to the public upon request.

Each Regional EMS Council will ensure that it maintains compliance with all tax laws and reporting requirements, control over all assets and that it fulfills its exempt purpose by regularly evaluating and training Board members, program directors, and staff to improve its understanding of internal financial reports, budgeting and other financial management processes.

## **Compensation**

Each Regional EMS Council should not pay more than reasonable compensation to its officers, directors, trustees, key employees and other executives. Compensation of all individuals who are in a position to exercise substantial influence over the operation and management of the organization should be determined by competent individuals who have no financial interest in the organization.

## **Organizational Control**

The governing body should include independent members, and should not be overly influenced by employees or individuals who lack independence or might have a conflict of interest due to family or business relationships.

## **Conflicts of Interest**

The directors of the Board should always act in the best interest of the organization, rather than personal interest. Regional EMS Councils shall require their directors, trustees, officers, key employees and other individuals covered by the Virginia State and Local Government Conflicts of Interest Act (Code of Virginia 2.2-3100) to disclose any known financial interest that the individual or member of the individual's family has in any business entity that conducts business with the Regional Council.

## **Fiscal Oversight**

Regional EMS Council Board members must maintain a careful stewardship over the Council's resources. The board, either directly or through an appointed committee, should ensure that all financial resources are used to further the organization's exempt purpose and that there is appropriate accounting for all funds.

## **Document Retention**

Each Regional EMS Council shall have a written policy establishing standards for document retention and destruction. The policy should include backup procedures, archiving of documents, and regular maintenance of the reliability of the system.

## **Financial Internal Control/Best Practices**

Each Regional EMS Council will have adopted policies/guidelines that address the following financial management areas:

- Accounting Records
- Advances
- Audits
- Chart of Accounts
- Course and Test Fees
- Credit Card Usage by Council staff and Board members/Assignment/Controls
- Credit Card Transactions (if applicable)
- Employee dishonesty Insurance/Bonding
- Equipment Purchasing/Leasing
- Expense Allocation
- Expense Reports
- Fuel Expenditures (Vehicular)
- Funds
- General Financial Guidance
- Internal Controls
- Invoicing
- Payroll Administration
- Petty Cash (if applicable)
- Property Management (if applicable)
- Purchasing – Purchase Orders and other Purchases
- State Corporation Commission

## **Internal Control System**

Each Regional EMS Council shall demonstrate internal controls through policy and practice. Policies should address, as much as possible, a segregation of duties in multiple areas such as receiving mail, paying invoices, recording receivables, making deposits, approving and signing checks, reconciling bank statements, signing contracts, and reviewing and responding to corporate correspondence. Internal control systems shall also be monitored, and policies should address these processes that assess the quality of the system's performance over time. Ongoing monitoring occurs in the ordinary course of operations, and includes regular management and supervisory activities, and other actions personnel take in performing their duties that evaluate the quality of internal control system performance.

There is no such thing as a perfect control system. Staff size limitations may obstruct efforts to properly segregate duties, which requires the implementation of compensating controls to ensure that objectives are achieved. A limiting factor inherent in any system is the element of human error, misunderstandings, fatigue and stress. All Regional EMS Council employees should be encouraged to take earned vacation time in order to improve operations through cross training while enabling employees to overcome and avoid undue stress and fatigue.

Internal control systems change over time. The way controls are applied may evolve. Procedures that were previously effective can become less effective due to the arrival of new personnel, varying effectiveness of training and supervision, time and resources constraints, changing state or federal guidelines or laws, or additional pressures. Furthermore, circumstances for which the internal control system was originally designed also may change. Because of changing conditions, the Regional EMS council management needs to determine whether the internal control system continues to be relevant and able to address new risks, and to adopt policy and practice revisions as needed.

# Appendix C

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
DAgency.01	EMS Agency Unique State ID	Yes	Yes	X	X	X	X	X	X	X
DAgency.02	EMS Agency Number	Yes	Yes	X	X	X	X	X	X	X
DAgency.03	EMS Agency Name	No	Yes	X	X	X	X	X	X	X
DAgency.04	EMS Agency State	Yes	Yes	X	X	X	X	X	X	X
DAgency.05	EMS Agency Service Area States	Yes	Yes							
DAgency.06	EMS Agency Service Area County(s)	Yes	Yes	X	X	X	X	X	X	X
DAgency.07	EMS Agency Census Tracts	No	No							
DAgency.08	EMS Agency Service Area Zip Codes	Yes	Yes	X	X	X	X	X	X	X
DAgency.09	Primary Type of Service	Yes	Yes	X	X	X	X	X	X	X
DAgency.10	Other Types of Service	No	Yes	X	X	X	X	X	X	X
DAgency.11	Level of Service	Yes	Yes	X	X	X	X	X	X	X
DAgency.12	Organization Status	Yes	Yes	X	X	X	X	X	X	X
DAgency.13	Organizational Type	Yes	Yes	X	X	X	X	X	X	X
DAgency.14	EMS Agency Organizational Tax Status	Yes	Yes	X	X	X	X	X	X	X
DAgency.15	Statistical Calendar Year	Yes	Yes							
DAgency.16	Total Primary Service Size Area	Yes	Yes	X	X	X	X	X	X	X
DAgency.17	Total Service Area Population	Yes	Yes	X	X	X	X	X	X	X
DAgency.18	911 EMS Call Center Volume per Year	Yes	Yes	X	X	X	X	X	X	X
DAgency.19	EMS Dispatch Volume per Year	Yes	Yes	X	X	X	X	X	X	X
DAgency.20	EMS Patient Transport Volume per Year	Yes	Yes	X	X	X	X	X	X	X
DAgency.21	EMS Patient Contact Volume per Year	Yes	Yes	X	X	X	X	X	X	X
DAgency.22	EMS Billable Calls per Year	No	No							
DAgency.23	EMS Agency Time Zone	Yes	Yes							
DAgency.24	EMS Agency Daylight Savings Time Use	Yes	Yes							
DAgency.25	National Provider Identifier	Yes	Yes							
DAgency.26	Fire Department ID Number	Yes	Yes							
DContact.01	Agency Contact Type	No	Yes							
DContact.02	Agency Contact Last Name	No	Yes							
DContact.03	Agency Contact First Name	No	Yes							
DContact.04	Agency Contact Middle Name/Initial	No	No							
DContact.05	Agency Contact Address	No	Yes							
DContact.06	Agency Contact City	No	Yes							
DContact.07	Agency Contact State	No	Yes							
DContact.08	Agency Contact Zip Code	No	Yes							
DContact.09	Agency Contact Country	No	No							
DContact.10	Agency Contact Telephone Number	No	Yes							
DContact.11	Agency Contact Fax Number	No	No							
DContact.12	Agency Contact Email Address	No	Yes							
DContact.13	EMS Agency Contact Web Address	No	Yes							
DContact.14	Agency Medical Director Degree	No	Yes							
DContact.15	Agency Medical Director Board Certification Type	No	Yes							
DContact.16	Medical Director Compensation	No	No							
DContact.17	EMS Medical Director Fellowship Trained Status	No	No							
DConfiguration.01	State Associated with the Certification/Licensure Levels	Yes	Yes							

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
DConfiguration.02	State Certification Licensure Levels	Yes	Yes							
DConfiguration.03	Procedures Permitted by the State	Yes	Yes	X	X	X	X	X	X	X
DConfiguration.04	Medications Permitted by the State	Yes	Yes	X	X	X	X	X	X	X
DConfiguration.05	EMS Agency Procedures	Yes	Yes	X	X	X	X	X	X	X
DConfiguration.06	EMS Professional Level Permitted to Perform the Procedure	Yes	Yes	X	X	X	X	X	X	X
DConfiguration.07	EMS Agency Medications	Yes	Yes	X	X	X	X	X	X	X
DConfiguration.08	Personnel Level Permitted to Administer the Medication	Yes	Yes	X	X	X	X	X	X	X
DConfiguration.09	EMS Agency Protocols	Yes	Yes	X	X	X	X	X	X	X
DConfiguration.10	EMS Agency Specialty Service Capability	Yes	Yes							
DConfiguration.11	Billing Status	No	No							
DConfiguration.12	Emergency Medical Dispatch (EMD) Provided to EMS Agency Service Area	Yes	Yes	X	X	X	X	X	X	X
DConfiguration.13	EMD Vendor	No	Yes							
DConfiguration.14	Patient Monitoring Capability(s) available to every relevant patient scenario	Yes	Yes	X	X	X	X	X	X	X
DLocation.01	EMS Location Type	No	No							
DLocation.02	EMS Location Name	No	No							
DLocation.03	EMS Location Number	No	No							
DLocation.04	EMS Location GPS	No	No							
DLocation.05	EMS Location US National Grid Coordinates	No	No							
DLocation.06	EMS Location Address	No	No							
DLocation.07	EMS Location City	No	No							
DLocation.08	EMS Location State	No	No							
DLocation.09	EMS Station or Location Zip Code	No	No							
DLocation.10	EMS Location County	No	No							
DLocation.11	EMS Location Country	No	No							
DLocation.12	EMS Location Telephone Number	No	No							
DVehicle.01	Unit/Vehicle Number	No	Yes							
DVehicle.02	Vehicle Identification Number	No	No							
DVehicle.03	Vehicle Type	No	Yes							
DVehicle.04	Crew State Certification/Licensure Levels	No	No							
DVehicle.05	Number Of Each EMS Professional Level on Normal 911 Ambulance Response	No	No							
DVehicle.06	Number Of Each EMS Professional Level on Normal 911 Response (Non-Transport) Vehicle	No	No							
DVehicle.07	Number Of Each EMS Professional Level on Normal Medical (Non-911) Transport Ambulance	No	No							
DVehicle.08	Vehicle Initial Cost	No	No							
DVehicle.09	Vehicle Model Year	No	Yes							
DVehicle.10	Year Miles/Hours Accrued	No	No							
DVehicle.11	Annual Vehicle Hours	No	No							
DVehicle.12	Annual Vehicle Miles	No	No							
DStaff.01	Professional's Agency ID Number	No	No							
DStaff.02	State of Licensure	No	Yes							

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
DStaff.03	EMS Professional's State/Licensure ID Number	No	Yes							
DStaff.04	EMS Professional's Employment Status	No	Yes							
DStaff.05	Employment Status Date	No	Yes							
DStaff.06	Hire Date	No	No							
DStaff.07	Primary EMS Job Role	No	Yes							
DStaff.08	Other Job Responsibilities	No	Yes							
DStaff.09	EMS Professional's Practice Level	No	No							
DStaff.10	Date of Professional's Certification or Licensure for Agency	No	No							
DProfessional.01	EMS Professional's Last Name	No	No							
DProfessional.02	EMS Professional's First Name	No	No							
DProfessional.03	EMS Professional's Middle Name/Initial	No	No							
DProfessional.04	EMS Professional's Mailing Address	No	No							
DProfessional.05	EMS Professional's City of Residence	No	No							
DProfessional.06	EMS Professional's State	No	No							
DProfessional.07	EMS Professional's Zip Code	No	No							
DProfessional.08	EMS Professional's Country	No	No							
DProfessional.09	EMS Professional's Work Telephone	No	No							
DProfessional.10	EMS Professional's Home Telephone	No	No							
DProfessional.11	EMS Professional's Email Address	No	No							
DProfessional.12	EMS Professional's Date Of Birth	No	Yes							
DProfessional.13	EMS Professional's Gender	No	Yes							
DProfessional.14	EMS Professional's Race	No	Yes							
DProfessional.15	EMS Professional's Citizenship	No	No							
DProfessional.16	EMS Professional's Highest Educational Degree	No	No							
DProfessional.17	EMS Professional's Degree Subject/Field of Study	No	No							
DProfessional.18	EMS Professional's Motor Vehicle License Type	No	No							
DProfessional.19	EMS Professional's Immunization Status	No	No							
DProfessional.20	EMS Professional's Foreign Language Ability	No	No							
DProfessional.21	State EMS Certification Licensure Level	No	Yes							
DProfessional.22	State EMS Current Certification Date	No	No							
DProfessional.23	EMS Professional's Initial State/Licensure Issue Date	No	No							
DProfessional.24	EMS Professional's Current State/Licensure Expiration Date	No	No							
DProfessional.25	National Registry Credentialed	No	No							
DProfessional.26	National Registry Certification Level	No	No							
DProfessional.27	National Registry Certification Date	No	No							
DProfessional.28	Total Length of Service in years.	No	No							
DProfessional.29	Date Length of Service Documented	No	No							
DDevice.01	Medical Device Serial Number	No	No							
DDevice.02	Device Name or ID	No	No							
DDevice.03	Medical Device Type	No	No							
DDevice.04	Device Manufacturer	No	No							
DDevice.05	Model Number	No	No							
DDevice.06	Device Purchase Date	No	No							
DCustom.01	Demographic Custom Data Element Title	No	No							

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
DCustom.02	Demographic Custom Data Element Potential Values	No	No							
DCustom.03	Demographic Custom Data Element Multiplicity	No	No							
DCustom.04	Demographic Custom Data Element Usage	No	No							
DCustom.05	Demographic Custom Data Element Result	No	No							
ERecord.01	Patient Care Report Number	Yes	Yes	X	X	X	X	X	X	X
ERecord.02	Software Creator	Yes	Yes							
ERecord.03	Software Name	Yes	Yes							
ERecord.04	Software Version	Yes	Yes							
EResponse.01	EMS Agency Number	Yes	Yes	X	X	X	X	X	X	X
EResponse.02	EMS Agency Name	No	Yes							
EResponse.03	Incident Number	No	No							
EResponse.04	EMS Vehicle (Unit) Response Number	No	No							
EResponse.05	Type of Service Requested	Yes	Yes	X	X	X	X	X	X	X
EResponse.06	Standby Purpose	No	No							
EResponse.07	Primary Role of the Unit	Yes	Yes	X	X	X	X	X	X	X
EResponse.08	Type of Dispatch Delay	Yes	Yes	X	X	X	X	X	X	X
EResponse.09	Type of Response Delay	Yes	Yes	X	X	X	X	X	X	X
EResponse.10	Type of Scene Delay	Yes	Yes	X	X	X	X	X	X	X
EResponse.11	Type of Transport Delay	Yes	Yes	X	X	X	X	X	X	X
EResponse.12	Type of Turn-Around Delay	Yes	Yes				X			
EResponse.13	EMS Vehicle (Unit) Number	Yes	Yes							
EResponse.14	Vehicle Dispatch Location	No	No							
EResponse.15	Vehicle Dispatch GPS Location	No	No				X			
EResponse.16	Vehicle Dispatch US National Grid Location	No	No							
EResponse.17	Beginning Odometer Reading of Responding Vehicle	No	No							
EResponse.18	On-Scene Odometer Reading of Responding Vehicle	No	No							
EResponse.19	Patient Destination Odometer Reading of Responding Vehicle	No	No							
EResponse.20	Ending Odometer Reading of Responding Vehicle	No	No							
EResponse.21	Response Mode to Scene	Yes	Yes	X	X	X	X	X	X	X
EResponse.22	Additional Response Mode Descriptors	No	Yes	X	X	X	X	X	X	X
EDispatch.01	Complaint Reported by Dispatch	Yes	Yes	X	X	X	X	X	X	X
EDispatch.02	EMD Performed	Yes	Yes	X	X	X	X	X	X	X
EDispatch.03	EMD Card Number	No	No	X	X	X	X	X	X	X
ECrew.01	Crew Member ID	No	Yes	X	X	X	X	X	X	X
ECrew.02	Crew Member Level	No	Yes	X	X	X	X	X	X	X
ECrew.03	Crew Member Response Role	No	Yes	X	X	X	X	X	X	X
ETimes.01	PSAP Call Date/Time	Yes	Yes	X	X	X	X	X	X	X
ETimes.02	Dispatch Notified Date/Time	No	No							
ETimes.03	Unit Notified by Dispatch Date/Time	Yes	Yes	X	X	X	X	X	X	X
ETimes.04	Dispatch Acknowledged Date/Time	No	No							
ETimes.05	Unit En Route Date/Time	Yes	Yes	X	X	X	X	X	X	X
ETimes.06	Unit Arrived on Scene Date/Time	Yes	Yes	X	X	X	X	X	X	X
ETimes.07	Arrived at Patient Date/Time	Yes	Yes	X	X	X	X	X	X	X

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
ETimes.08	Transfer of EMS Patient Care Date/Time	No	Yes	X	X	X		X	X	X
ETimes.09	Unit Left Scene Date/Time	Yes	Yes	X	X	X	X	X	X	X
ETimes.10	Arrival at Destination Landing Area	No	No							
ETimes.11	Patient Arrived at Destination Date/Time	Yes	Yes	X	X	X	X	X	X	X
ETimes.12	Destination Patient Transfer of Care Date/Time	Yes	Yes	X	X	X	X	X	X	X
ETimes.13	Unit Back in Service Date/Time	Yes	Yes				X			
ETimes.14	Unit Cancelled Date/Time	No	No				X			
ETimes.15	Unit Back at Home Location Date/Time	No	No				X			
ETimes.16	EMS Call Completed Date/Time	Yes	Yes				X			
EPatient.01	EMS Patient ID	No	No							
EPatient.02	Last Name	No	No							
EPatient.03	First Name	No	No							
EPatient.04	Middle Initial/Name	No	No							
EPatient.05	Patient's Home Address	No	No							
EPatient.06	Patient's Home City	No	No							
EPatient.07	Patient's Home County	Yes	Yes	X	X	X	X	X	X	X
EPatient.08	Patient's Home State	Yes	Yes	X	X	X	X	X	X	X
EPatient.09	Patient's Home Zip Code	Yes	Yes	X	X	X	X	X	X	X
EPatient.10	Patient's Home Country	No	No							
EPatient.11	Patient Home Census Tract	No	No	X	X	X	X	X	X	X
EPatient.12	Social Security Number	No	No							
EPatient.13	Gender	Yes	Yes	X	X	X	X	X	X	X
EPatient.14	Race	Yes	Yes	X	X	X	X	X	X	X
EPatient.15	Age	Yes	Yes	X	X	X	X	X	X	X
EPatient.16	Age Units	Yes	Yes	X	X	X	X	X	X	X
EPatient.17	Date of Birth	No	No							
EPatient.18	Primary or Home Telephone Number	No	No							
EPatient.19	Patient's Email Address	No	No							
EPatient.20	State Issuing Driver's License	No	No							
EPatient.21	Driver's License Number	No	No							
EPayment.01	Primary Method of Payment	Yes	Yes	X	X	X	X	X	X	X
EPayment.02	Physician Certification Statement	No	No							
EPayment.03	Date Physician Certification Statement Signed	No	No							
EPayment.04	Reason for Physician Certification Statement	No	No							
EPayment.05	Healthcare Provider Type Signing Physician Certification Statement	No	No							
EPayment.06	First Name of Individual Signing Physician Certification Statement	No	No							
EPayment.07	Last Name of Individual Signing Physician Certification Statement	No	No							
EPayment.08	Residency Status of the Patient	No	No							
EPayment.09	Insurance Company ID/Name	No	No							
EPayment.10	Insurance Company Billing Priority	No	No							
EPayment.11	Insurance Company Address	No	No							

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
EPayment.12	Insurance Company City	No	No							
EPayment.13	Insurance Company State	No	No							
EPayment.14	Insurance Company Zip Code	No	No							
EPayment.15	Insurance Company Country	No	No							
EPayment.16	Insurance Group ID/Name	No	No							
EPayment.17	Insurance Policy ID Number	No	No							
EPayment.18	Last Name of the Insured	No	No							
EPayment.19	First Name of the Insured	No	No							
EPayment.20	Middle Initial/Name of the Insured	No	No							
EPayment.21	Relationship to the Insured	No	No							
EPayment.22	Closest Relative/Guardian Last Name	No	No							
EPayment.23	Closest Relative/ Guardian First Name	No	No							
EPayment.24	Closest Relative/ Guardian Middle Initial/Name	No	No							
EPayment.25	Closest Relative/ Guardian Street Address	No	No							
EPayment.26	Closest Relative/ Guardian City	No	No							
EPayment.27	Closest Relative/ Guardian State	No	No							
EPayment.28	Closest Relative/ Guardian Zip Code	No	No							
EPayment.29	Closest Relative/ Guardian Country	No	No							
EPayment.30	Closest Relative/ Guardian Phone Number	No	No							
EPayment.31	Closest Relative/ Guardian Relationship	No	No							
EPayment.32	Patient's Employer	No	No							
EPayment.33	Patient's Employer's Address	No	No							
EPayment.34	Patient's Employer's City	No	No							
EPayment.35	Patient's Employer's State	No	No							
EPayment.36	Patient's Employer's Zip Code	No	No							
EPayment.37	Patient's Employer's Country	No	No							
EPayment.38	Patient's Work Telephone Number	No	No							
EPayment.39	Response Urgency	No	No							
EPayment.40	Patient Transport Assessment	No	No							
EPayment.41	Specialty Care Transport Care Provider	No	No							
EPayment.42	Ambulance Transport Code	No	No							
EPayment.43	Ambulance Transport Reason Code	No	No							
EPayment.44	Round Trip Purpose Description	No	No							
EPayment.45	Stretcher Purpose Description	No	No							
EPayment.46	Ambulance Conditions Indicator	No	No							
EPayment.47	Mileage to Closest Hospital Facility	No	No							
EPayment.48	ALS Assessment Performed and Warranted	No	No							
EPayment.49	CMS Service Level	Yes	Yes	X		X		X	X	X
EPayment.50	EMS Condition Code	Yes	Yes	X	X	X		X	X	X
EPayment.51	CMS Transportation Indicator	No	No							
EPayment.52	Transport Authorization Code	No	No							
EPayment.53	Prior Authorization Code Payor	No	No							
EPayment.54	Supply Item Used Name	No	No							
EPayment.55	Number of Supply Item(s) Used	No	No							

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
EScene.01	First EMS Unit on Scene	Yes	Yes							
EScene.02	Other EMS or Public Safety Agencies at Scene	No	No							
EScene.03	Other Public Safety or EMS Agency ID Number	No	No							
EScene.04	Type of Other Service at Scene	No	No							
EScene.05	Date/Time Initial Responder Arrived on Scene	No	No	X	X			X		X
EScene.06	Number of Patients at Scene	Yes	Yes							
EScene.07	Mass Casualty Incident	Yes	Yes							X
EScene.08	Incident Location Type	Yes	Yes	X	X	X	X	X	X	X
EScene.09	Incident Facility Code	No	Yes							
EScene.10	Scene GPS Location	No	No	X	X	X	X	X	X	X
EScene.11	Scene US National Grid Coordinates	No	No							
EScene.12	Incident Facility or Location Name	No	No							
EScene.13	Incident Address Type	No	Yes							
EScene.14	Address Number or Mile Post	No	No							
EScene.15	Scene Street Prefix	No	No							
EScene.16	Incident Street Address	No	No							
EScene.17	Street Type	No	No							
EScene.18	Scene Street Suffix	No	No							
EScene.19	Scene Apartment, Suite, or Room	No	No							
EScene.20	Incident City	No	Yes							
EScene.21	Incident State	Yes	Yes	X	X	X	X	X	X	X
EScene.22	Incident ZIP Code	Yes	Yes	X	X	X	X	X	X	X
EScene.23	Scene Cross Street or Directions	No	No							
EScene.24	Incident County	Yes	Yes	X	X	X	X	X	X	X
EScene.25	Incident Country	No	No							
EScene.26	Incident Census Tract	No	No	X	X	X	X	X	X	X
ESituation.01	Date/Time of Symptom Onset/Last Normal	Yes	Yes	X	X	X	X	X	X	X
ESituation.02	Possible Injury	Yes	Yes	X	X	X	X	X	X	X
ESituation.03	Complaint Type	No	Yes	X	X	X	X	X	X	X
ESituation.04	Complaint	No	Yes	X	X	X	X	X	X	X
ESituation.05	Duration of Complaint	No	Yes	X	X	X		X	X	X
ESituation.06	Time Units of Duration of Complaint	No	Yes	X	X	X		X	X	X
ESituation.07	Chief Complaint Anatomic Location	Yes	Yes	X	X	X		X	X	X
ESituation.08	Chief Complaint Organ System	Yes	Yes	X	X	X		X	X	X
ESituation.09	Primary Symptom	Yes	Yes	X	X	X		X	X	X
ESituation.10	Other Associated Symptoms	Yes	Yes	X	X	X		X	X	X
ESituation.11	Providers Primary Impression	Yes	Yes	X	X	X		X	X	X
ESituation.12	Provider's Secondary Impressions	Yes	Yes	X	X	X		X	X	X
ESituation.13	Patient's Initial Condition at Scene	Yes	Yes	X	X	X		X	X	X
ESituation.14	Work-Related Illness/Injury	No	Yes							
ESituation.15	Patient's Occupational Industry	No	No							
ESituation.16	Patient's Occupation	No	No							
EInjury.01	Cause of Injury	Yes	Yes							X
EInjury.02	Intent of the Injury	No	Yes							X

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
EInjury.03	Mechanism of Injury	No	Yes							X
EInjury.04	Trauma Center Criteria	Yes	Yes							X
EInjury.05	Vehicular, Pedestrian, or Other Injury Risk Factor	Yes	Yes							X
EInjury.06	Main Area of the Vehicle impacted by the collision	No	No							
EInjury.07	Location of Patient in Vehicle	No	No							
EInjury.08	Use of Occupant Safety Equipment	No	No							X
EInjury.09	Airbag Deployment	No	No							
EInjury.10	Height of Fall (feet)	No	No							
EInjury.11	OSHA Personal Protective Equipment Used	No	No							
EInjury.12	ACN System/Company Providing ACN Data	No	No							
EInjury.13	ACN Incident ID	No	No							
EInjury.14	ACN Call Back Phone Number	No	No							
EInjury.15	ACN Incident Date/Time	No	No							
EInjury.16	ACN Incident Location	No	No							
EInjury.17	ACN Incident Vehicle Body Type	No	No							
EInjury.18	ACN Incident Vehicle Manufacturer	No	No							
EInjury.19	ACN Incident Vehicle Make	No	No							
EInjury.20	ACN Incident Vehicle Model	No	No							
EInjury.21	ACN Incident Vehicle Model Year	No	No							
EInjury.22	ACN Incident Multiple Impacts	No	No							
EInjury.23	ACN Incident Delta Velocity	No	No							
EInjury.24	ACN High Probability of Injury	No	No							X
EInjury.25	ACN Incident PDOF	No	No							
EInjury.26	ACN Incident Rollover	No	No							
EInjury.27	ACN Vehicle Seat Location	No	No							
EInjury.28	Seat Occupied	No	No							
EInjury.29	ACN Incident Seatbelt Use	No	No							
EInjury.30	ACN Incident Airbag Deployed	No	No							
EArrest.01	Cardiac Arrest	Yes	Yes		X					
EArrest.02	Cardiac Arrest Etiology	Yes	Yes		X					
EArrest.03	Resuscitation Attempted By EMS	Yes	Yes		X					
EArrest.04	Arrest Witnessed by	No	Yes		X					
EArrest.05	CPR Care Provided Prior to EMS Arrival	No	Yes		X					
EArrest.06	Who Provided CPR Prior to EMS Arrival	No	No		X					
EArrest.07	AED Use Prior to EMS Arrival	No	Yes		X					
EArrest.08	Who Used AED Prior to EMS Arrival	No	No		X					
EArrest.09	Type of CPR Provided	No	Yes		X					
EArrest.10	Therapeutic Hypothermia Initiated	No	Yes		X					
EArrest.11	First Monitored Arrest Rhythm of the Patient	No	Yes		X					
EArrest.12	Any Return of Spontaneous Circulation	No	Yes		X					
EArrest.13	Neurological Outcome at Hospital Discharge	No	No		X					
EArrest.14	Time of Cardiac Arrest	No	Yes		X					
EArrest.15	Date/Time Resuscitation Discontinued	No	Yes		X					
EArrest.16	Reason CPR/Resuscitation Discontinued	No	Yes		X					

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
EArrest.17	Cardiac Rhythm on Arrival at Destination	No	Yes		X					
EArrest.18	End of EMS Cardiac Arrest Event	Yes	Yes		X					
EHistory.01	Barriers to Patient Care	Yes	Yes							
EHistory.02	Last Name of Patient's Primary Practitioner	No	No							
EHistory.03	First Name of Patient's Primary Practitioner	No	No							
EHistory.04	Middle Name of Patient's Primary Practitioner	No	No							
EHistory.05	Advance Directives	No	Yes	X	X	X		X	X	X
EHistory.08	Medication Allergies	No	No							
EHistory.09	Environmental/Food Allergies	No	No							
EHistory.10	Medical/Surgical History	No	No							
EHistory.11	Medical History Obtained From	No	No							
EHistory.12	Immunization History	No	No							
EHistory.13	Immunization Date	No	No							
EHistory.14	Current Medications	No	No							
EHistory.15	Current Medication Dose	No	No							
EHistory.16	Current Medication Dosage Unit	No	No							
EHistory.17	Current Medication Administration Route	No	No							
EHistory.18	Presence of Emergency Information Form	No	No							
EHistory.19	Alcohol/Drug Use Indicators	Yes	Yes							X
EHistory.20	Pregnancy	No	No							
EHistory.21	Last Oral Intake	No	No							
ENarrative.01	Patient Care Report Narrative	No	Yes							
EVitals.01	Date/Time Vital Signs Taken	Yes	Yes	X	X	X		X	X	X
EVitals.02	Obtained Prior to this Units EMS Care	Yes	Yes	X	X	X		X	X	X
EVitals.03	Cardiac Rhythm and Electrocardiography	Yes	Yes		X			X		
EVitals.04	ECG Type	No	Yes					X		
EVitals.05	Method of ECG Interpretation	Yes	Yes					X		
EVitals.06	SBP (Systolic Blood Pressure)	Yes	Yes	X	X	X		X	X	X
EVitals.07	DBP (Diastolic Blood Pressure)	No	Yes							
EVitals.08	Method of Blood Pressure Measurement	No	No							
EVitals.09	Mean Arterial Pressure	No	No							
EVitals.10	Heart Rate	Yes	Yes	X	X	X		X	X	X
EVitals.11	Method of Heart Rate Measurement	No	No							
EVitals.12	Pulse Oximetry	Yes	Yes	X	X	X		X	X	X
EVitals.13	Pulse Rhythm	No	No							
EVitals.14	Respiratory Rate	Yes	Yes	X	X	X		X	X	X
EVitals.15	Respiratory Effort	No	No							
EVitals.16	Carbon Dioxide (CO2)	Yes	Yes	X	X	X		X	X	X
EVitals.17	Carbon Monoxide (CO)	No	No							
EVitals.18	Blood Glucose Level	Yes	Yes			X			X	
EVitals.19	Glasgow Coma Score-Eye	No	Yes	X	X	X		X	X	X
EVitals.20	Glasgow Coma Score-Verbal	No	Yes	X	X	X		X	X	X
EVitals.21	Glasgow Coma Score-Motor	No	Yes	X	X	X		X	X	X
EVitals.22	Glasgow Coma Score-Qualifier	No	Yes	X	X	X		X	X	X

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
EVitals.23	Total Glasgow Coma Score	Yes	Yes	X	X	X		X	X	X
EVitals.24	Temperature	No	Yes			X				
EVitals.25	Temperature Method	No	No							
EVitals.26	Level of Responsiveness (APVU)	Yes	Yes	X	X	X		X	X	X
EVitals.27	Pain Score	Yes	Yes			X		X		X
EVitals.28	Pain Scale Type	No	No							
EVitals.29	Stroke Scale Score	Yes	Yes						X	
EVitals.30	Stroke Scale Type	No	Yes						X	
EVitals.31	Reperfusion Checklist	Yes	Yes					X	X	
EVitals.32	APGAR	No	No							
EVitals.33	Revised Trauma Score	No	No							X
ELab.01	Date/Time Laboratory or Imaging Result	No	No							
ELab.02	Study/Result Prior to this Units EMS Care	No	No							
ELab.03	Laboratory Result Type	No	No							
ELab.04	Laboratory Result	No	No							
ELab.05	Imaging Study Type	No	No							
ELab.06	Imaging Study Results	No	No							
EExam.01	Estimated Body Weight in Kilograms	No	No			X				
EExam.02	Length Based Tape Measure	No	Yes			X				
EExam.03	Date/Time of Assessment	No	Yes	X	X				X	
EExam.04	Skin Assessment	No	No							
EExam.05	Head Assessment	No	No							
EExam.06	Face Assessment	No	No							
EExam.07	Neck Assessment	No	No							
EExam.08	Chest/Lungs Assessment	No	No	X		X				
EExam.09	Heart Assessment	No	No							
EExam.10	Abdomen Assessment	No	No							
EExam.11	Abdominal Exam Finding Location	No	No							
EExam.12	Pelvis/Genitourinary Assessment	No	No							
EExam.13	Back and Spine Assessment	No	No							
EExam.14	Back and Spine Assessment Finding Location	No	No							
EExam.15	Extremities Assessment	No	No							
EExam.16	Extremity Assessment Finding Location	No	No							
EExam.17	Eye Assessment	No	No							
EExam.18	Eye Assessment Finding Location	No	No							
EExam.19	Mental Status Assessment	No	No		X				X	
EExam.20	Neurological Assessment	No	No		X				X	
EProtocols.01	Protocols Used	Yes	Yes	X	X	X	X	X	X	X
EProtocols.02	Protocol Age Category	Yes	Yes	X	X	X	X	X	X	X
EMedications.01	Date/Time Medication Administered	No	Yes	X	X	X		X	X	X
EMedications.02	Medication Administered Prior to this Units EMS Care	No	Yes	X	X	X		X	X	X
EMedications.03	Medication Given	Yes	Yes	X	X	X		X	X	X
EMedications.04	Medication Administered Route	No	No							
EMedications.05	Medication Dosage	No	No							

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
EMedications.06	Medication Dosage Units	No	No							
EMedications.07	Response to Medication	Yes	Yes							
EMedications.08	Medication Complication	Yes	Yes							
EMedications.09	Medication Crew (Healthcare Professionals) ID	No	Yes	X	X	X		X	X	X
EMedications.10	EMS or Healthcare Professional Type Administering Medication	Yes	Yes							
EMedications.11	Medication Authorization	No	No							
EMedications.12	Medication Authorizing Physician	No	No							
EProcedures.01	Date/Time Procedure Performed	No	Yes	X	X	X		X	X	X
EProcedures.02	Procedure Performed Prior to this Units EMS Care	Yes	Yes	X	X	X		X	X	X
EProcedures.03	Procedure	Yes	Yes	X	X	X		X	X	X
EProcedures.04	Size of Procedure Equipment	No	No							
EProcedures.05	Number of Procedure Attempts	Yes	Yes	X	X	X		X	X	X
EProcedures.06	Procedure Successful	Yes	Yes	X	X	X		X	X	X
EProcedures.07	Procedure Complication	Yes	Yes	X		X				X
EProcedures.08	Response to Procedure	Yes	Yes							
EProcedures.09	Procedure Crew Members ID	No	Yes	X	X	X		X	X	X
EProcedures.10	EMS or Healthcare Professional Type Performing the Procedure	Yes	Yes	X	X	X		X	X	X
EProcedures.11	Procedure Authorization	No	No							
EProcedures.12	Procedure Authorizing Physician	No	No							
EProcedures.13	IV Site Location	No	Yes							
EDisposition.01	Destination/Transferred To, Name	No	Yes	X	X	X		X	X	X
EDisposition.02	Destination/Transferred To, Code	No	Yes	X	X	X		X	X	X
EDisposition.03	Destination Street Address	No	No							
EDisposition.04	Destination City	No	No							
EDisposition.05	Destination State	Yes	Yes	X	X	X	X	X	X	X
EDisposition.06	Destination County	Yes	Yes	X	X	X	X	X	X	X
EDisposition.07	Destination Zip Code	Yes	Yes	X	X	X	X	X	X	X
EDisposition.08	Destination Country	No	No							
EDisposition.09	Destination GPS Location	No	No							
EDisposition.10	Disposition Location US National Grid Coordinates	No	No							
EDisposition.11	Number of Patients Transported in this EMS Unit	No	Yes							
EDisposition.12	Incident/Patient Disposition	Yes	Yes	X	X	X	X	X	X	X
EDisposition.13	How Patient Was Moved to Ambulance	No	No							
EDisposition.14	Position of Patient During Transport	No	No							
EDisposition.15	How Patient Was Transported From Ambulance	No	No							
EDisposition.16	EMS Transport Method	Yes	Yes	X	X	X	X	X	X	X
EDisposition.17	Transport Mode from Scene	Yes	Yes	X	X	X	X	X	X	X
EDisposition.18	Additional Transport Mode Descriptors	No	Yes							
EDisposition.19	Condition of Patient at Destination	Yes	Yes	X	X	X				X
EDisposition.20	Reason for Choosing Destination	Yes	Yes		X	X		X	X	X
EDisposition.21	Type of Destination	Yes	Yes	X	X	X	X	X	X	X
EDisposition.22	Destination Prearrival Activation	Yes	Yes		X			X	X	X

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
EDisposition.23	Destination Prearrival Activation Date/Time	No	Yes	X	X	X		X	X	X
EDisposition.24	Disposition Instructions Provided	No	No							
EDevice.01	Event Date/Time	No	No	X	X			X		
EDevice.02	Medical Device Event Name	No	No	X	X			X		
EDevice.03	Waveform Graphic Type	No	No	X	X			X		
EDevice.04	Waveform Graphic	No	No	X	X			X		
EDevice.05	ECG Lead	No	No	X	X			X		
EDevice.06	ECG Interpretation	No	No	X	X			X		
EDevice.07	Type of Shock	No	No		X					
EDevice.08	Shock or Pacing Energy	No	No		X					
EDevice.09	Total Number of Shocks Delivered	No	No		X					
EDevice.10	Pacing Rate	No	No							
EOutcome.01	Emergency Department Disposition	Yes	Yes	X	X	X		X	X	X
EOutcome.02	Hospital Disposition	Yes	Yes	X	X	X		X	X	X
EOutcome.03	External Report ID/Number Type	No	No							
EOutcome.04	External Report ID/Number	No	No							
EOutcome.05	Emergency Department Chief Complaint	No	No							
EOutcome.06	First ED Systolic Blood Pressure	No	No							
EOutcome.07	Emergency Department Recorded Cause of Injury	No	No							
EOutcome.08	Emergency Department Procedures	No	No							
EOutcome.09	Emergency Department Diagnosis	No	No							
EOutcome.10	Hospital Admission Date/Time	No	No							
EOutcome.11	Hospital Procedures	No	No							
EOutcome.12	Hospital Diagnosis	No	No							
EOutcome.13	Total ICU Length of Stay	No	No							
EOutcome.14	Total Ventilator Days	No	No							
EOutcome.15	Hospital Discharge Date/Time	No	No							
EOther.01	Review Requested	No	No							
EOther.02	Potential System of Care/Specialty/Registry Patient	No	Yes	X	X	X		X	X	X
EOther.03	Personal Protective Equipment Used	No	No							
EOther.04	EMS Professional (Crew Member) ID	No	No							
EOther.05	Suspected Intentional, or Unintentional Disaster	Yes	Yes							X
EOther.06	Suspected EMS Work Related Exposure, Injury, or Death	Yes	Yes							
EOther.07	Type of Suspected EMS Blood/Body Fluid Exposure, Injury, or Death	No	Yes							
EOther.08	Who Generated this Report?	No	Yes							
EOther.09	External Electronic Documents	No	No							
EOther.10	File Attachment Type	No	No							
EOther.11	File Attachment Image	No	No							
EOther.12	Signature Type	No	No							
EOther.13	Relationship to the Patient of the Patient Representative, caregiver, or administrator signature.	No	No							
EOther.14	Signature Status	No	No							
EOther.15	Signature Graphic	No	No							

Element Code	Data Element	National Element	State Element	Airway	Cardiac Arrest	Pediatric	Response Time	STEMI	Stroke	Trauma
EOther.16	Date/Time of Signature	No	No							
EOther.17	Signature Last Name	No	No							
EOther.18	Signature First Name	No	No							
EAirway.01	Indications for Invasive Airway	No	Yes	X						
EAirway.02	Date/Time Airway Device Placement Confirmation	No	Yes	X						
EAirway.03	Airway Device Being Confirmed	No	Yes	X						
EAirway.04	Airway Device Placement Confirmed Method(s)	No	Yes	X						
EAirway.05	Individual Determining Airway Device Placement	No	Yes	X						
EAirway.06	Airway Complications Encountered	No	Yes	X						
EAirway.07	Suspected Reasons for Failed Airway Procedure	No	No	X						
EAirway.08	Decision to Manage the Patient with an Invasive Airway Date/Time	No	No	X						
EAirway.09	Date/Time Successful Invasive Airway in Place	No	Yes	X						
EAirway.10	Date/Time Invasive Airway Placement Attempts Abandoned	No	No	X						
ECustom.01	EMS Custom Data Element Title	No	No							
ECustom.02	EMS Custom Data Element Potential Values	No	No							
ECustom.03	EMS Custom Data Element Multiplicity	No	No							
ECustom.04	EMS Custom Data Element Usage	No	No							
ECustom.05	EMS Custom Data Element Result	No	No							
	Demographic	<b>34</b>	<b>62</b>							
	EMS	<b>103</b>	<b>163</b>							
	<b>Grand Total</b>	<b>137</b>	<b>225</b>							

# Appendix D

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Virginia Department of Health  
Office of Emergency Medical Services

Trauma Fund Report on:

Use of Funds in  
Improving Virginia's Trauma System, and

Review of Feasible Long Term Financing  
Mechanisms and Potential  
Funding Sources for Virginia's Trauma Centers

Pursuant to Item 290-D of the Appropriation Act

October 1, 2010

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**Executive Summary:** In Virginia, 14 hospitals voluntarily undergo Trauma Center designation and commit to provide a higher level of care necessary to the seriously injured. Despite the value Trauma Centers provide to the community, Trauma Centers continue to face a variety of challenges that have led to a loss of Trauma Center designations or downgrades in coverage across the nation as well as in Virginia. These challenges are deterring additional hospitals from seeking Trauma Center designation.

The Centers for Disease Control and Injury Prevention (CDC) identify trauma as a “major global public health problem.” Trauma remains the leading cause of death for persons aged 1-44 years. The CDC estimates the lifetime medical costs associated with the morbidity of trauma patients for a given year is \$80 billion. The National Center for Health Statistics identified that trauma (unintentional injuries, suicide, and homicide) caused 1,702.2 years of potential life lost per 100,000 population in the year 2003 alone.

**Trauma Fund Summary:** In the 2004 General Assembly Session House Bill (HB) 1143 amended the *Code of Virginia* by adding section 18.2-270.01 which established the Trauma Center Fund for the Commonwealth of Virginia. This was the first step in addressing the challenges faced by Virginia’s Trauma Centers.

This bill required that persons convicted of criminal violations pursuant to §§ 18.2-36.1, 18.2-51.4, 18.2-266 or 46.2-341.24 (DUI), and who had also been previously convicted of one or more of these violations, pay a fine of \$50 into the Trauma Center Fund.

HB 2664, passed during the 2005 Legislative Session, required that before granting or restoring a license or registration to any person whose driver's license or other privilege to drive motor vehicles or privilege to register a motor vehicle has been revoked or suspended, the Commissioner of the Department of Motor Vehicles must collect from that person a fee of \$40 in addition to all other fees provided for in this section. The additional \$40 fee must be paid into the Trauma Center Fund.

In 2006, language was added to the Appropriations Act specifying and requiring that the Virginia Department of Health, Office of Emergency Medical Services (VDH/OEMS) report on the use of these funds in improving Virginia's Trauma System to the Governor and the Chairmen of the House Appropriations and Senate Finance Committees by October 1 of each year.

During the 2010 General Assembly Session the Appropriations Act included language requiring that a total of \$9,055,000 be transferred annually from the Trauma Center Fund to the General

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Fund. Accompanying language increased the fee collected for driver's license reinstatements to \$100. Utilizing historical data, the increased fee is forecasted to allow the Trauma Center Fund to continue providing needed funding to the Trauma Centers at approximately the same level they have been accustomed to.

**Trauma System Funding Challenges:** As originally identified in the December 18, 2004 Joint Legislative Audit and Review Commission (JLARC) study *The Use and Financing of Trauma Centers in Virginia*, JLARC stated the Virginia Trauma System faces financial burdens for two major reasons: uncompensated or undercompensated care and readiness costs. The JLARC study concluded that the 14 hospitals in Virginia were losing a combined \$44 million each year.

Higher clinical care costs and Trauma System readiness costs are not accounted for by public or private payers. Payment from these sources is limited to the provision of actual clinical care given to a patient with an isolated minor injury. Trauma patients are those patients with severe, multisystem injuries that require complex critical care. Reimbursement rates also do not account for the specialized resources that must be maintained in a high state of readiness that may or may not be utilized. The specialized training, extra staffing, surgical specialties that must be immediately available, and extra infrastructure required by trauma center designation must be absorbed by the facility and are usually either cross-subsidized by other initiatives or else abandoned.

**The Use of Trauma Center Funds for Maintaining and Improving Virginia's Trauma System:** The Trauma Fund directs funds to be used for defraying the costs of providing emergency medical care to victims of trauma and to recognize uncompensated care losses. The Appropriations Act describes uncompensated care losses as including readiness costs and clinical services incurred by providing care to uninsured trauma patients. The level of readiness required of a trauma designated hospital is unparalleled by other disciplines and is where the VDH/OEMS has focused the efforts of the Trauma Center Fund in supporting Virginia's Trauma System.

Table 1 below illustrates the fiscal year 2010 revenues for the Trauma Center Fund.

Table 1

DUI Funds	\$52,054.00
License Reinstatement Fee	\$10,042,588.00
Funds Collected Total	\$10,094,642.00
Transferred to General Fund	\$2,970,000.00
Total Distributed to Hospitals	\$7,124,642.00

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The VDH/OEMS administers the Trauma Center Fund and maintains a methodology for disbursing monies from the fund. The methodology is based on the number of patient admission days for trauma patients involved in motor vehicle crashes each designated hospital provided during a one year period versus the total number of admission days provided by all designated centers. A percentage is assigned based on the number of admission days and that is the percentage of funding the hospital receives as shown in Table 2. This methodology is reviewed annually by the VDH/OEMS, with stakeholder participation, and revised to meet the current needs of the system. For the calendar year 2009 the trauma fund supported 6,104 patient admissions for significant injuries due to motor vehicle crashes. The 2009 admissions represent a combined total of 31,723 admission days.

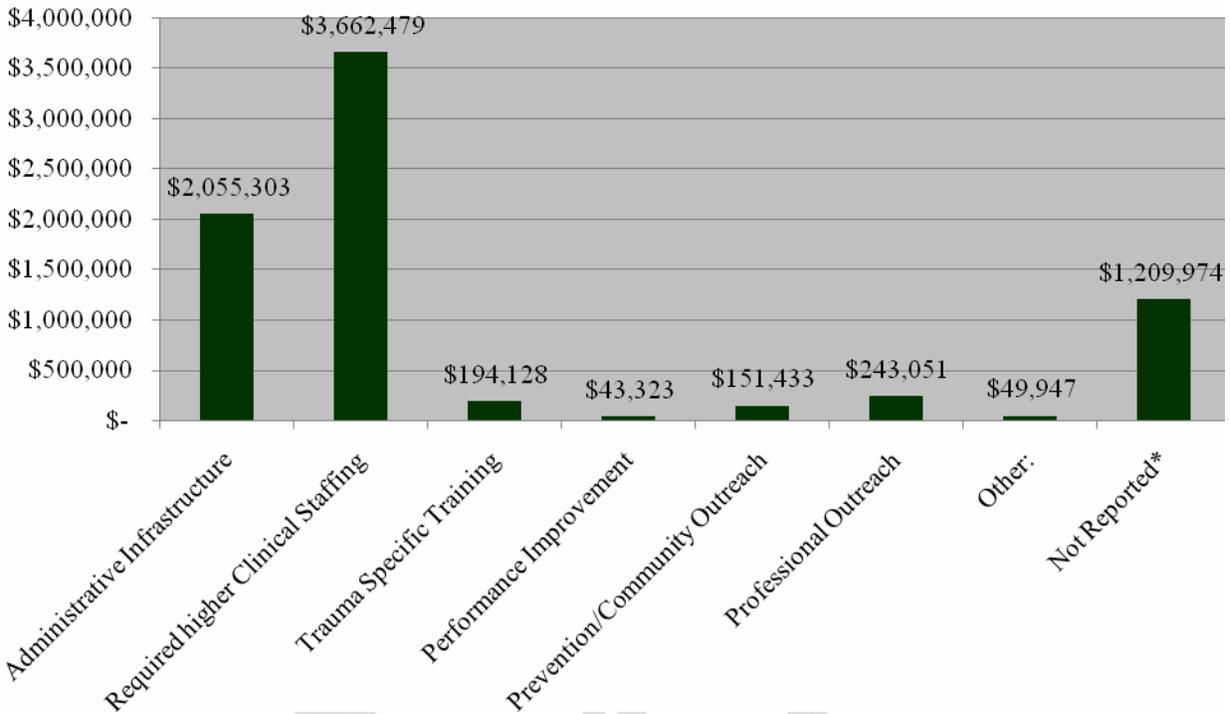
Table 2

Trauma Center Name & Level of Designation	Percentage of FY10 Funding Received	Total Funds Received for FY10	Total Funds Received Since FY06
<b>I</b>			
Roanoke Memorial Hospital	11.91%	\$802,640.76	\$4,299,981.27
Inova Fairfax Hospital	19.34%	\$1,541,890.25	\$9,060,219.37
Norfolk General Hospital	13.21%	\$940,753.30	\$5,034,672.23
UVA Health System	14.85%	\$1,087,078.40	\$5,132,104.45
VCU Health Systems	25.70%	\$1,821,485.78	\$8,412,546.83
<b>II</b>			
Lynchburg General Hospital	3.49%	\$275,788.13	\$964,077.05
Mary Washington Hospital	1.86%	\$55,558.20	\$55,558.20
Riverside Regional Medical Ctr.	2.81%	\$215,005.86	\$906,151.52
Winchester Medical Ctr.	3.20%	\$273,116.95	\$1,297,966.11
<b>III</b>			
New River Valley Medical Ctr.	0.21%	\$21,398.38	\$101,183.76
CJW Medical Ctr.	0.64%	\$39,090.30	\$379,564.42
Montgomery Regional Hospital	0.09%	\$4,630.03	\$118,023.29
Southside Regional Medical Ctr.	0.18%	\$25,795.35	\$191,554.74
Virginia Beach Gen'l Hospital	2.51%	\$195,163.03	\$1,422,096.19
<b>Total</b>	100.00%	\$7,299,394.73	\$37,375,699.43

The Trauma Center Fund Disbursement Policy focuses on the readiness cost incurred by hospitals specifically due to being designated as a Trauma Center as illustrated in Figure 1 below.

Figure 1

### Trauma Center Fund Usage FY10



\* Not reported includes: Sentara Norfolk General Hospital and Winchester Medical Center

**Feasible Long Term Financing Mechanisms, Examine, and Identify Potential Funding Sources for Virginia’s Trauma Centers:** Currently the only funding dedicated to Virginia’s Trauma System is the Trauma Center Fund. Trauma System advocates and stakeholders continue to attempt to bring attention to the financial needs of Trauma Centers and state trauma systems.

VDH/OEMS has updated its research on other state trauma fund programs and will request the next Trauma Fund Panel that is appointed review other state’s programs and consider adopting other best practices as appropriate for Virginia. In 2005, when the first Virginia Trauma Center Fund Disbursement Policy was developed there were seven other states that had trauma funds including Arizona, Colorado, Illinois, Maryland, Mississippi, Oklahoma, and Washington.

Like Virginia, four of these seven states had newly created their trauma funds in response to the closing of trauma centers occurring across the country. The JLARC study *The Use and*

*Financing of Trauma Centers in Virginia* stated that Virginia Trauma Centers were nearing a crisis situation if financial losses continued.

Since the creation of the Virginia Trauma Center Fund ten additional states have had enabling legislation establishing trauma center funds including Alaska, Arkansas, Georgia, Hawaii, Indiana, New Mexico, Ohio, Pennsylvania, Tennessee, and Wyoming. Table 3 illustrates states that currently have trauma center funds, the sources of revenue for those funds, the estimated annual funding for each (when available), and the year funding was initiated.

Table 3

<b>State</b>	<b>Source of Funding</b>	<b>Estimated Annual Revenue</b>	<b>Year Initiated</b>
Alaska	State appropriations, donations, and other program receipts from trauma activities	not available (new)	2010
Arizona	Indian Gaming Tax (28%)	\$19 million - \$23 million	2002
Arkansas	Cigarette tax (\$0.56/pack)	\$25 million maximum	2009
Colorado	EMS & Trauma State Fund	not available	1989
Georgia	"Superspeeder" fines	\$23 million/year plus a one time initial \$58 million in state funding	2009
Hawaii	Cigarette tax initially, general fund appropriations/traffic violations	\$4.7 million	2006
Illinois	Cigarette Tax (\$0.05/pack) and variety of traffic violations (\$10-\$500/occurrence)	not available	2007
Indiana	Gifts, grants, and donations	\$0	2010
Kansas	2.50% of district court fines, penalties, and forfeitures.	not available	1999
Maryland	Motor Vehicle Registration Fees (\$8)	\$14 million	2004
Mississippi	Motor vehicle moving violations (\$5/occurrence)	\$12.7 million	2008
New Mexico	State Appropriations	\$3.3 million	2006
Ohio	Seatbelt fines	\$750,000/biennium	
Oklahoma	Driver's license renewal & reinstatement fees, moving violations for driving w/o a license (2nd & subsequent offenses), DUI, speeding, uninsured vehicle, violating open container law, convictions for drug & alcohol offenses, & tobacco tax funding.	\$14million - \$20 million	1999

Pennsylvania	Subsection of the Disproportionate Care Fund	\$27.6 million (\$15.1 million federal funds and \$12.5 million State funds)	2004
Tennessee	Cigarette tax	\$12 million	2007
Texas	DUI offenses (\$250/occurrence) and interest from the Tobacco Settlement	\$23 million	
Virginia	Drivers license and motor vehicle registration reinstatement fee (\$100) and 2nd and subsequent DUI offenses (\$50)	\$7.1 million (FY10)	2004
Washington	Motor vehicle moving violations (\$5/occurrence) and Motor Vehicle Registration Fees (\$4)	\$16.3 million (\$9.2 million from State sources and \$7.1 million Federal match)	1997
Wyoming	Gasoline tax (\$0.25/gallon)	not available (new)	2010

The State of Washington and Commonwealth of Pennsylvania dedicate a portion of their trauma funding to uncompensated care therefore receiving matching federal funding. These state models could serve as examples of potential additional funding sources for the Virginia Trauma System. VDH/OEMS will also request the Trauma Fund Panel address the possibility of structuring the Virginia Trauma Center Fund so it to could receive matching federal funds.

# Appendix E



Virginia Office of Emergency Medical Services  
Division of Trauma/Critical Care  
Prehospital and Interhospital  
State Trauma Triage Plan



DRAFT

Virginia Department of Health  
Office of Emergency Medical Services  
P.O. Box 2448  
Richmond, Virginia 23218  
(804) 864-7600  
[www.vdh.virginia.gov/oems](http://www.vdh.virginia.gov/oems)

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## Executive Summary

Under the *Code of Virginia* § 32.1-111.3, The Office of Emergency Medical Services acting on behalf of the Virginia Department of Health has been charged with the responsibility of maintaining a Statewide Trauma Triage Plan. EMS Regulation 12 VAC 5-31-390 states that all Emergency Medical Services (EMS) agencies shall participate in trauma triage plans. This plan is to include prehospital and inter-hospital patient transfers. All trauma triage plans must be submitted to OEMS for approval.

The Statewide Trauma Triage Plan establishes minimum criteria for identifying trauma patients and the expectation that these patients shall enter the “trauma system” and receive rapid definitive trauma care at appropriate hospitals. Regional trauma triage plans may augment the Commonwealth’s minimum trauma triage standards by providing additional point of entry information such as hospital capabilities, air medical services and others. At no time shall a regional or local plan set standards lower than prescribed by the state trauma triage plan or trauma center criteria.

The Virginia Department of Health, Office of Emergency Medical Services (OEMS) and the Trauma System Oversight and Management Committee endorses the January 23, 2009 Centers for Disease Control (CDC) *Field Triage Decision Scheme: The National Trauma Triage Protocol* and its accompanying document the *Guidelines for Field Triage of Injured Patients* and utilized these documents to base this plan on. The CDC is now home to the national trauma program and has assumed responsibility for establishing the national standard for trauma triage in cooperation with the American College of Surgeons (ACS) who has traditionally developed these criteria. The 2009 CDC documents have been endorsed by the following organizations:

The Joint Commission (JCAHO)	American Medical Association (AMA)
National Association of State EMS Officials (NASEMSO)	The American Public Health Association (APHA)
American College of Surgeons (ACS)	American Pediatric Surgical Association
American Academy of Pediatrics (AAP)	American College of Emergency Physicians (ACEP)
National Association of EMS Physicians (NAEMSP)	National Association of EMT’s (NAEMT)
National Association of EMS Educators	International Association of Flight Paramedics (IAFP)
National Native American EMS Association	Air Medical Physician Association (AMPA)
Commission on Accreditation of Medical Transport Systems (CAMTS)	National Ski Patrol

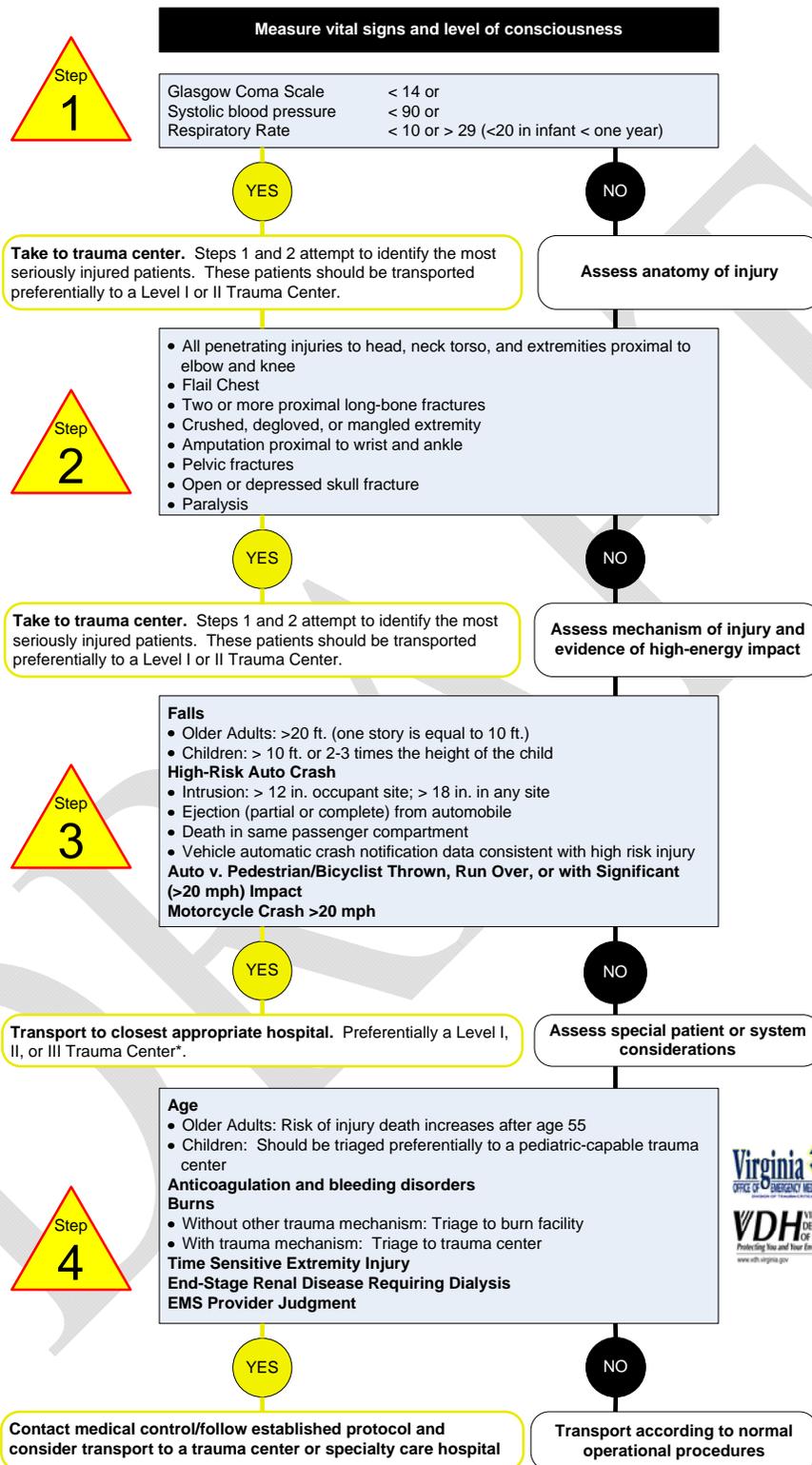
The Virginia Trauma System is an inclusive system and therefore all hospitals are required to participate in the Trauma Triage Plan. Establishing a comprehensive statewide emergency medical care system, incorporating healthcare facilities, transportation, human resources, communications, and other components as integral parts of a unified system serves to improve the delivery of emergency medical services and thereby decrease morbidity, hospitalization, disability, and mortality. This document will provide a uniform set of criteria for prehospital and inter hospital triage and transport of trauma patients.

The Virginia Trauma System defines a “trauma victim” as a person who has acquired serious injuries and or wounds brought on by either an outside force or an outside energy. These injuries and or wounds may affect one or more body systems by blunt, penetrating or burn injuries. These injuries may be life altering, life threatening or ultimately fatal wounds.

Trauma patient recognition and Triage is a Two-tiered System:

- Initial Field Triage in the prehospital environment (pre-hospital criteria) and;
- Secondary triage or trauma patient recognition and appropriate timely triage by all Virginia hospitals.

# Field Trauma Triage Decision Scheme



**Note:** Prehospital providers should transfer trauma patients with uncontrolled airway, uncontrolled hemorrhage, or if there is CPR in progress to the closest hospital for stabilization and transfer.

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**\* Transition from Step Three to Step Four:** The answer of "yes" at Step Three of the Decision Scheme mandates transport of the patient to the closest appropriate trauma center, not necessarily to a center offering the highest level of trauma care available, as is the case in Steps One and Two. Which center is the most appropriate at any given time will depend on multiple factors, including the level of trauma center readily available, the configuration of the local or regional trauma system, local EMS protocols, EMS system capacity and capability, transport distances and times, and hospital capability and capacity. Patients whose injuries meet mechanism-of-injury criteria but not physiologic or anatomic criteria do not necessarily require the highest level of care available. At the time of evaluation, these patients are hemodynamically stable, have a GCS of >14, and have no anatomic evidence of severe injury. Their risk lies only in the mechanism by which they were injured. Thus, they require evaluation but do not need immediate transport by EMS providers to a Level I or Level II facility. If a severe injury is identified at the initial hospital evaluation, these patients may be transferred subsequently to a higher level of trauma care. For patients who do not meet Step Three criteria, the EMS provider should proceed to Step Four of the Scheme."

To review the above information and other detailed information about the rationale for field trauma triage more information can be found in the document "*Guidelines for Field Triage of Injured Patients, Recommendations of the National Expert Panel of Field Triage.*" The document was released by the Centers for Disease Control and Injury Prevention via the Morbidity and Mortality Weekly Report (MMWR) on January 23, 2009 / Vol. 58 / No. RR-1. This report and other resources materials are available on-line at <http://www.cdc.gov/FieldTriage/>.

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## Trauma Patient Transport Considerations

EMS Patient Care Protocols must address transport considerations. Each jurisdiction is unique in its availability of trauma resources. Consideration should be given to the hospital(s) that is/are available in the region and the resources that they have available to trauma patients when developing a point of entry plan. Pre-planning for times when the primary hospital is not available to receive trauma patients because of multiple patients, diversion, loss of resources such as power need to be made in advance of being on scene with a critical trauma patient.

Consideration should also be given to prehospital resources including, the level of care available by the ground EMS crews, and the closest Medevac service available at the time of the incident, and other conditions such as transport time and weather conditions. Use of Medevac (Air ambulances) services can assist with trauma patients reaching definitive trauma care in a timely fashion.

Field transports by helicopter of trauma patients as defined in this plan should:

1. Lessen the time from on scene to a hospital compared to ground transport
2. Bypassing a non-trauma designated hospital to transport directly to a trauma center should not be greater than 30 minutes
3. Trauma patients transported by air must meet the clinical triage criteria for transport and be transported to the closest Level I Trauma Center, or when appropriate the closest Level II Trauma Center.
4. Patient requires a level of care greater than can be expected by the local ground provider if the Medevac unit can be on scene in a time shorter than the ground unit can transport to the closest hospital.
5. Extenuating circumstances such as safety, egress/access should be documented similar to other “extraordinary” care scenarios.

## EMS Mass Casualty Incident (MCI) Plans and Disaster/Weapons of Mass Destruction (WMD) Plans

Both prehospital and hospital providers should become familiar with other related plans. These plans represent a tiered response to a growing numbers of patients:

- MCI Plan
- Disaster/WMD Plans
- Surge Capacity Plans

The plans build upon one another. The Trauma Triage Plan is intended to guide treatment for a smaller number of patients that can be managed by resources available during normal day to day operations. MCI Plans provide additional guidance to agencies, municipalities and medical facilities when their normal resources are being strained. Surge plans are developed to meet the need of large scale events that may require caring for hundreds even thousands of patients. The Trauma Triage Plan is intended for incidents that occur during normal EMS operations.

## INTER-HOSPITAL TRIAGE CRITERIA

Hospitals not designated by the Virginia Department of Health as a Trauma Center should expeditiously transfer injured patients that meet the below physiological and/or anatomic criteria to an appropriate trauma center.

Adult Patient	Pediatric Patient
	All pediatric patients with Pediatric Trauma Scores $\leq 6$ * See pediatric trauma score below
<b>Respiratory</b> <ul style="list-style-type: none"> <li>• Bilateral thoracic injuries</li> <li>• Significant unilateral injuries in pt's &gt;60 (e.g. pneumothorax, hemo- pneumothorax, pulmonary contusion, &gt;5 rib fractures)</li> <li>• Significant unilateral injuries in patients with pre-existing cardiac and/or respiratory disease</li> <li>• Respiratory compromise requiring intubation</li> <li>• Flail chest</li> </ul>	<b>Respiratory</b> <ul style="list-style-type: none"> <li>• Bilateral thoracic injuries</li> <li>• Significant unilateral injuries in patients with pre-existing cardiac and/or respiratory disease</li> <li>• Flail chest</li> </ul>
<b>CNS</b> <ul style="list-style-type: none"> <li>• Unable to follow commands</li> <li>• Open skull fracture</li> <li>• Extra-axial hemorrhage on CT, or any intracranial blood</li> <li>• Paralysis</li> <li>• Focal neurological deficits</li> <li>• GCS <math>\leq 12</math></li> </ul>	<b>CNS</b> <ul style="list-style-type: none"> <li>• Open skull fracture</li> <li>• Extra-axial hemorrhage on CT Scan</li> <li>• Focal neurological deficits</li> </ul>
<b>Cardiovascular</b> <ul style="list-style-type: none"> <li>• Hemodynamic instability as determined by the treating physician</li> <li>• Persistent hypotension</li> <li>• Systolic B/P (&lt;100) without immediate availability of surgical team</li> </ul>	
<b>Injuries</b> <ul style="list-style-type: none"> <li>• Any penetrating injury to the head, neck, torso or extremities proximal to the elbow or knee without a surgical team immediately available.</li> <li>• Serious burns/burns with trauma (see below)</li> <li>• Significant abdominal to thoracic injuries in patients where the physician in charge feels treatment of injuries would exceed capabilities of the medical center</li> </ul>	<b>Injuries</b> <ul style="list-style-type: none"> <li>• Any penetrating injury to the head, neck, chest abdomen or extremities proximal to the knee or elbows without a surgical team immediately available</li> <li>• Combination of trauma with burn injuries</li> <li>• Any injury or combination of injuries where the physician in charge feels treatment of the injuries would exceed the capabilities of the medical center</li> </ul>
<b>Special Considerations</b> <ul style="list-style-type: none"> <li>• Trauma in pregnancy (<math>\geq 24</math> weeks gestation)</li> <li>• Special needs individuals</li> </ul>	
<ul style="list-style-type: none"> <li>• Geriatric</li> <li>• Bariatric</li> </ul>	

\* Criteria based on the American College of Surgeons, Committee on Trauma's "Resources for the Optimal Care of the Injured Patient 2006".

### Pediatric Trauma Score

COMPONENT	+2	+1	-1
Size	Child/adolescent, >20 Kg.	Toddler, 11-20 Kg.	Infant, <10 Kg.
Airway	Normal	Assisted O2, mask, cannula	Intubated: ETT, EOA, Cric
Consciousness	Awake	Obtunded; loss of consciousness	Coma; unresponsiveness
Systolic B/P	>90 mm Hg; good peripheral pulses, perfusion	51-90 mm Hg; peripheral pulses, pulses palpable	<50 mm Hg.; weak pr no pulses
Fracture	None seen or suspected	Single closed fracture anywhere	Open, multiple fractures
Cutaneous	No visible injury	Contusion, abrasion; laceration <7 cm; not through fascia	Tissue loss; any GSW/Stabbing; through fascia

### BURN RELATED INJURIES

The American Burn Association has identified the following injuries that usually require referral to a burn center.

- Partial thickness and full thickness burns greater than 10% of the total body surface area (BSA) in patients under 10 or over 50 years of age.
- Partial thickness burns and full thickness burns greater than 20% BSA in other age groups.
- Partial thickness and full-thickness burns involving the face, eyes, ears, hands, feet, genitalia or perineum of those that involve skin overlying major joints.
- Full-thickness burns greater than 5% BSA in any age group.
- Electrical burns, including lightning injuries; (significant volumes of tissue beneath the surface may be injured and result in acute renal failure and other complications).
- Significant chemical burns.
- Inhalation injuries.
- Burn injury in patients with pre-existing illness that could complicate management, prolongs recovery, or affects mortality.
- Any burn patient in whom concomitant trauma poses an increased risk of morbidity or mortality may be treated initially in a trauma center until stable before transfer to a burn center.
- Children with burns seen in hospitals without qualified personnel or equipment for their care should be transferred to a burn center with these capabilities.
- Burn injury in patients who will require special social and emotional or long term rehabilitative support, including cases involving child abuse and neglect.

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## **Inter-hospital Transports by Helicopter**

1. All trauma patients meeting the inter-hospital triage criteria and being transported by helicopter must be transferred to the closest appropriate Level I or Level II trauma center or burn center.
2. Patient requires a level of care greater than can be provided by the local hospital.
3. Patient requires time critical intervention, out of hospital time needs to be minimal, or distance to definitive care is long.
4. Utilization of local ground ambulance leaves local community without ground ambulance coverage.

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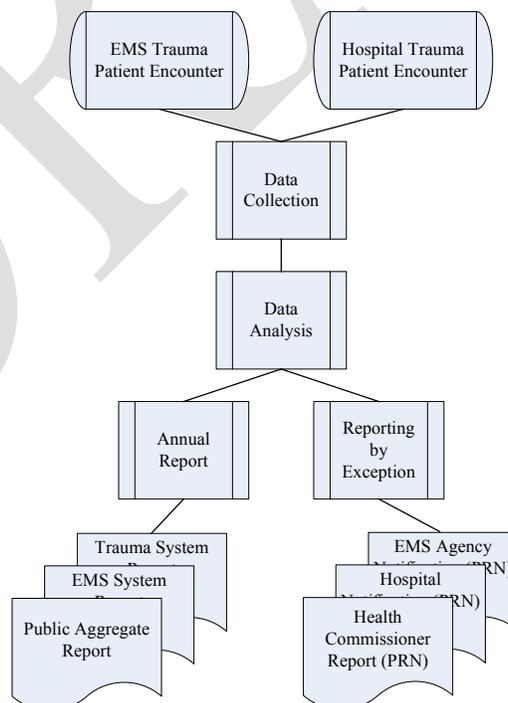
## Trauma Triage Quality Monitoring

The Office of EMS is responsible for monitoring and ensuring the quality of trauma care and trauma triage in the Commonwealth. Quality monitoring and assurance is accomplished through several means including, but not limited to, the trauma center designation process, analysis of data from the Emergency Medical Services Patient Care Information System (EMS and Trauma Registries) and from other existing validated sources, the trauma performance improvement committee, feedback mechanisms, and performance improvement groups throughout the Commonwealth.

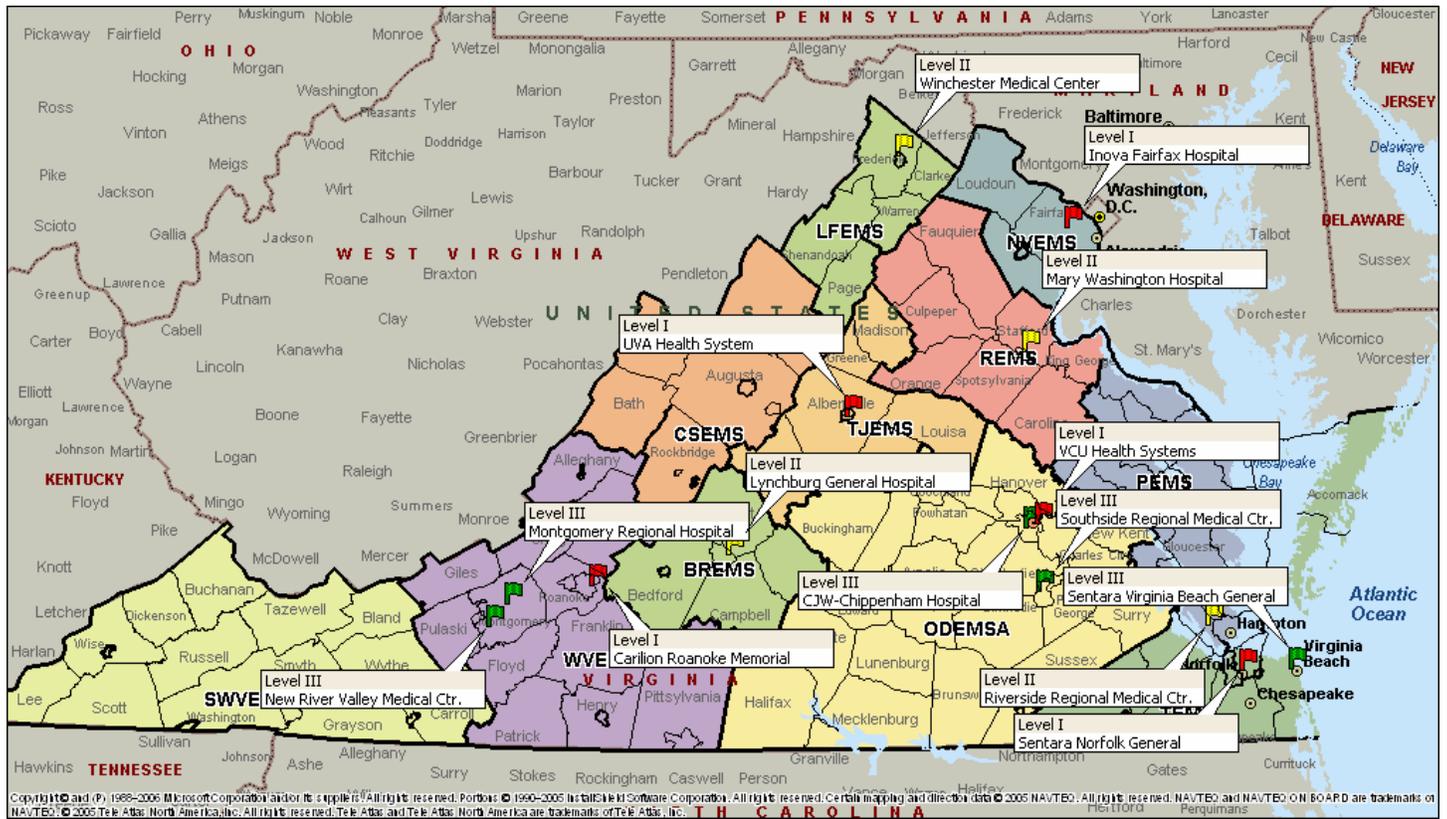
The Office of EMS, acting on behalf of the Commissioner of Health, will report aggregate trauma triage findings annually to assist the EMS and Trauma Systems to improve local, regional and statewide trauma triage programs. A de-identified version of the report will be available to the public and will include, minimally, as defined in the statewide plan, the frequency of (i) incorrect triage in comparison to the total number of trauma patients delivered to a hospital prior to pronouncement of death and (ii) incorrect interfacility transfer for each region.

The program will ensure that each emergency medical services director or hospital is informed of any patterns of incorrect prehospital or interfacility missed triage, delayed or missed interfacility transfer as defined in the statewide plan, specific to the provider and will give the entity an opportunity to correct any facts on which such a determination is based, if the entity or its providers assert that such facts are inaccurate.

The Commissioner shall ensure the confidentiality of patient information, in accordance with § [32.1-116.2](#). Such data or information in the possession of or transmitted to the Commissioner, the EMS Advisory Board, or any committee acting on behalf of the EMS Advisory Board, any hospital or prehospital care provider, or any other person shall be privileged and shall not be disclosed or obtained by legal discovery proceedings as is written in the *Code of Virginia*, unless a circuit court, after a hearing and for good cause shown arising from extraordinary circumstances, orders disclosure of such data.



## Virginia Designated Trauma Centers and Designation Level Description



## Trauma Center Designation Levels Defined

### Level I Trauma Centers

Level I trauma centers have an organized trauma response and are required to provide total care for every aspect of injury, from prevention through rehabilitation. These facilities must have adequate depth of resources and personnel with the capability of providing leadership, education, research, and system planning.

#### **Carilion Roanoke Memorial Hospital**

Bellevue @ Jefferson Streets, Roanoke

#### **Inova Fairfax Hospital**

3300 Gallows Road, Falls Church

#### **Sentara Norfolk General Hospital**

600 Gresham Drive, Norfolk

#### **UVA Medical Center**

1224 West Main Street, Charlottesville

#### **VCU Medical Center**

12<sup>th</sup> & Marshall Streets, Richmond

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## **Level II Trauma Centers**

Level II trauma centers have an organized trauma response and are also expected to provide initial definitive care, regardless of the severity of injury. The specialty requirements may be fulfilled by on call staff, that are promptly available to the patient. Due to some limited resources, Level II centers may have to transfer more complex injuries to a Level I center. Level II centers should also take on responsibility for education and system leadership within their region.

### **Lynchburg General Hospital**

1901 Tate Springs Road, Lynchburg

### **Mary Washington Hospital**

1001 Sam Perry Boulevard,  
Fredericksburg

### **Riverside Regional Medical Center**

500 J. Clyde Morris Boulevard,  
Newport News

### **Winchester Medical Center**

1840 Amherst Street, Winchester

## **Level III Trauma Centers**

Level III centers, through an organized trauma response, can provide prompt assessment, resuscitation, stabilization, emergency operations and also arrange for the transfer of the patient to a facility that can provide definitive trauma care. Level III centers should also take on responsibility for education and system leadership within their region.

### **Carilion New River Valley Medical Center**

2900 Lamb Circle, Christiansburg

### **CJW Medical Center, Chippenham**

7101 Jahnke Road, Richmond

### **Montgomery Regional Hospital**

3700 South Main Street, Blacksburg

### **Sentara Virginia Beach General Hospital**

1060 First Colonial Road, Virginia Beach

### **Southside Regional Medical Center**

200 Medical Park Blvd, Petersburg

## Minimum Surgical & Medical Specialties for Trauma Designation

Surgical Clinical Capabilities: (On call and promptly available)	Level of Designation		
	I	II	III
Trauma/General Surgery	X	X	X
Anesthesiology	X	X	X
Orthopedic Surgery	X	X	X
Thoracic Surgery	X	X	
Cardiac Surgery	X		
Pediatric Surgery	X		
Hand Surgery	X		
Microvascular/Replant Surgery	X		
Neurological Surgery	X	X	
Plastic Surgery	X	X	
Maxillofacial Surgery	X	X	
Ear, Nose & Throat Surgery	X	X	
Oral Surgery	X		
Ophthalmic Surgery	X	X	
Gynecological Surgery/Obstetrical Surgery	X	X	

Medical Clinical Capabilities: (On call and promptly available)	Level of Designation		
	I	II	III
Cardiology	X	X	
Pulmonology	X		
Gastroenterology	X		
Hematology	X		
Infectious Disease	X		
Internal Medicine	X	X	X
Nephrology	X		
Pathology	X	X	X
Pediatrics	X		
Radiology	X	X	X
Interventional Radiology.	X		

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## Trauma Triage Related Resources

Virginia Office of EMS Trauma Web page: <http://www.vdh.virginia.gov/OEMS/Trauma/index.htm>

### Centers for disease Control and Injury Prevention

CDC Field Triage Main page: <http://www.cdc.gov/fieldtriage/>

CDC National Trauma Triage Protocol Podcast: <http://www2a.cdc.gov/podcasts/player.asp?f=10649>

CDC Field Triage PowerPoint:

<http://search.msn.com/results.aspx?q=CDC+Trauma+triage&FORM=CBPW&first=1>

### American College of Surgeons – Committee on Trauma

<http://www.facs.org/trauma/index.html>

# Appendix F

# Regional *EMS* Stroke Triage Plans

- *Code of Virginia* (COV) and Stroke Triage Plans
- The Role of the Virginia Department of Health's (VDH), Office of Emergency Medical Services (OEMS)
- What is a Regional EMS Council
- EMS Stroke Triage Development

# *Code of Virginia (COV) and Stroke Triage Plans*

- In 2007 § 32.1-111.3 was amended to include VDH/OEMS maintaining a statewide prehospital and interhospital Stroke Triage Plan.
- The plan should promote rapid access for stroke patients to appropriate organized stroke care.

# *Code of Virginia* (COV) and Stroke Triage Plans

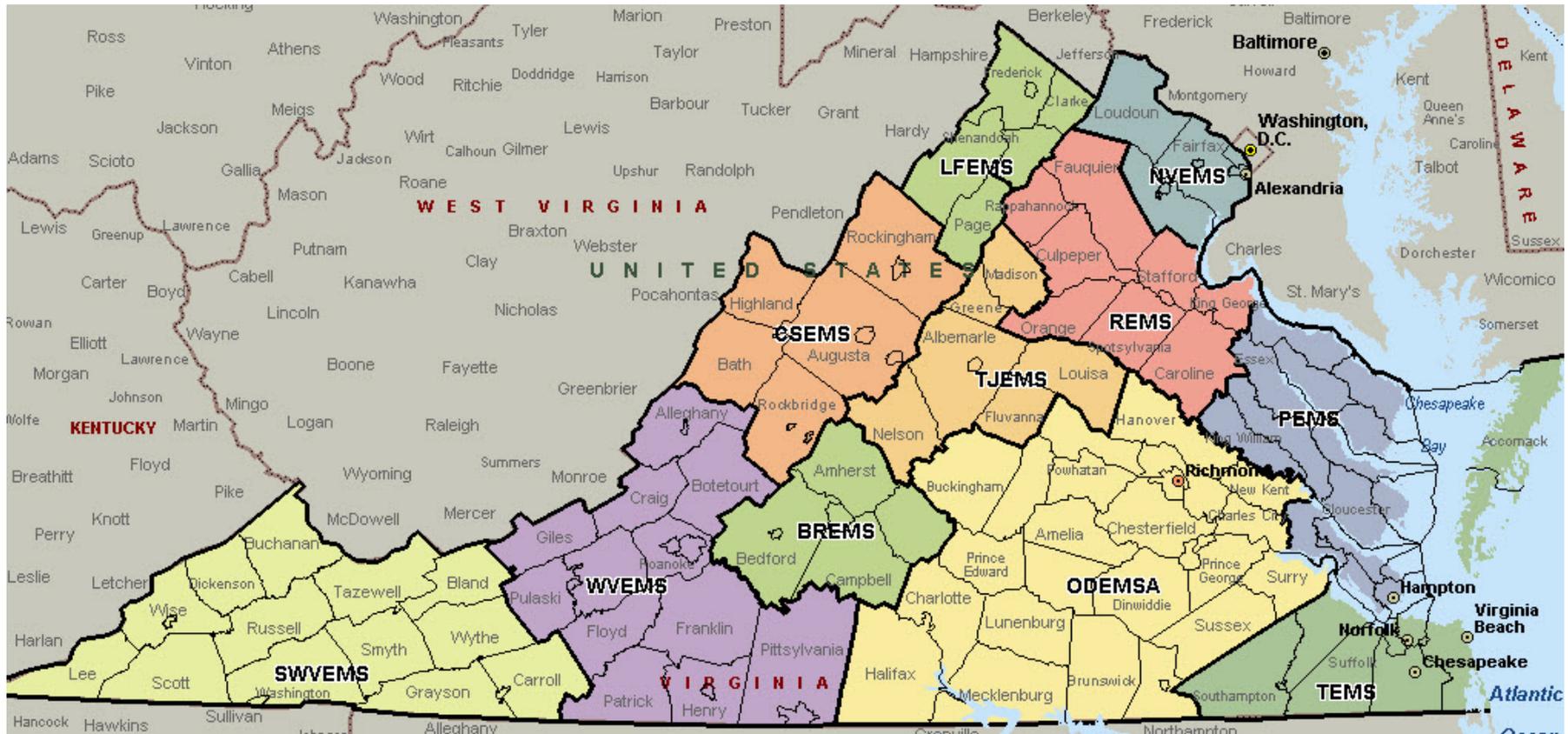
The Code requires the plan:

- Recognizes designated hospitals as those certified as primary stroke centers by the Joint Commission
- Establishes a “uniform set of criteria” for prehospital and interhospital triage (state plan)
- Include formal regional plans that incorporate each regions geographic variations stroke care capabilities and resources

# Uniform Set of Criteria (State Plan)

- Drafted and approved through the Virginia Stroke System Task Force
- Presented and Approved through the EMS Advisory Board
- Approved by the State Board of Health

# Regional Stroke Triage Plan Development



# Regional Stroke Triage Plan Development

## Components of the Regional Stroke Triage Plans

- Be based on the State's Stroke Triage Plan
- Include an
  - executive summary
  - Field decision scheme
  - Define an "acute stroke"
  - Define prehospital signs and symptoms of an acute stroke
  - Provide transport considerations including Medevac
  - Place decision scheme in regional patient care protocols

# Regional Stroke Triage Committee

- To include:
  - A member of each designated stroke center's stroke program
  - Non-stroke center representative(s) from the region
  - EMS Operational Medical Director
  - EMS representatives from:
    - Medevac agency
    - Volunteer EMS
    - Fire based EMS
    - Career EMS

# Questions?

Paul Sharpe, Trauma/Critical Care Coordinator

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State Stroke Triage Plan:

[http://www.vdh.virginia.gov/OEMS/Files\\_page/trauma/StatewideStrokeTriagePlan.pdf](http://www.vdh.virginia.gov/OEMS/Files_page/trauma/StatewideStrokeTriagePlan.pdf)

EMS Council Contact Information provided in advance