

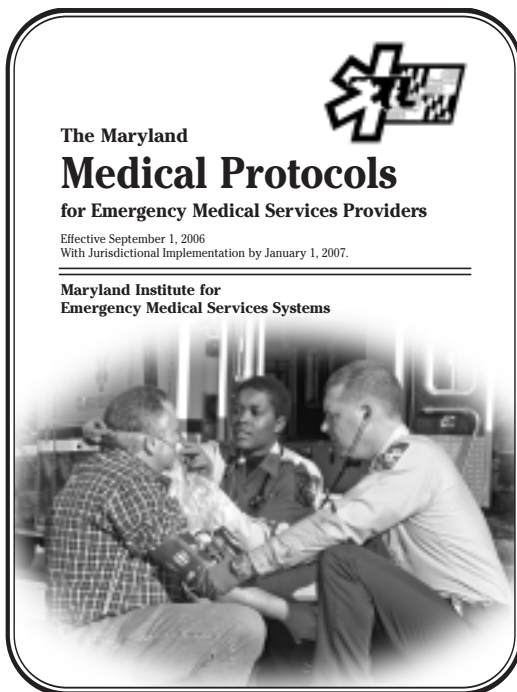
# Maryland EMS News

For All Emergency Medical Care Providers

Vol. 33, No. 1

October 2006

## 2007 Protocols for EMS Providers Now Available



The *Maryland Medical Protocols for EMS Providers* with the 2007 updates and revisions is now available as a printed manual and is also on the MIEMSS web page at [www.MIEMSS.org](http://www.MIEMSS.org). Jurisdictions have been afforded latitude to implement the 2007 protocol updates on a jurisdictional basis beginning September 1; however, all jurisdictions must have completed the update by January 1, 2007.

Normally the *Maryland Medical Protocols for EMS Providers* manual is updated every

year. However, the 2006 protocol update was delayed a year in order to incorporate the new American Heart Association (AHA) material that was released in the fall of 2005. At that time, the AHA released the 2005 "Guidelines for CPR and Emergency Cardiovascular Care," which included new guidelines for administering CPR and using automated external defibrillators (AEDs), as well as recommendations for key elements of public access AED programs.

The January 1, 2007 update contains many revisions, as well as a few new protocols that have direct impact on all levels of EMS providers. The following protocols have either been added or undergone major revisions:

- All cardiac protocols that include the delivery of CPR or use of an Automated Electronic Defibrillator (AED)
- ST Elevation Myocardial Infarction [STEMI] Protocol (including 12-lead ECG which is required by July 1, 2008)
- Burn Protocol/Carbon Monoxide or Toxic Fume Inhalation

- Accessing Central Venous Catheters and Devices Protocol
- Pulmonary Edema/Congestive Heart Failure Protocol (including CPAP which is required by July 1, 2008)
- Captopril (Capoten), Etomidate, Nitroglycerin Paste
- Specialty Care Transport (Optional Supplemental)
- Trauma Arrest Protocol (Bilateral Needle Chest Decompression)
- Chronic Ventilated Patients Protocol (Optional Supplemental)
- Transport to a Freestanding Medical Facility Protocol (Optional Supplemental)
- Tactical Emergency Services Protocol (Optional Supplemental)

A more detailed Protocol Update Summary spreadsheet that lists each individual protocol revision by page and line numbers and protocol title is available in PDF format on the MIEMSS web page. Also available on the MIEMSS web page is a PowerPoint presentation explaining the 2007 updates.

If you have any questions regarding the additions or revisions contained in the update, please contact State EMS Medical Director Richard Alcorta, MD, at 410-706-0880.

# Pediatric Medication Administration

Regardless of a provider's experience, the administration of medication to pediatric patients in the pre-hospital setting remains one of the most challenging components in the delivery of emergency care. While there are many tools available to improve the speed and accuracy of medication administration in the pediatric population, the EMS provider must ensure that the pediatric reference used to calculate medication doses is consistent with the *Maryland Medical Protocols for EMS Providers*.

One of the most common tools used by Maryland EMS providers to identify the dose of a medication to be delivered is the length-based resuscitation tape (for example, the Broselow-Luten™ tape). The advantages of using a length-based resuscitation tape include an estimation of weight when a patient's weight is unavailable and an equipment and medication resource guide. The disadvantages of using a length-based resuscitation tape include underestimation of the patient's weight, inaccurate calculation of weight if the

correct end of the tape is not placed at the top of the patient's head, and medication or fluid doses that are not consistent with state EMS and hospital institutional protocols.

When using a length-based resuscitation tape, it is important to make sure that the reference tool you are using has the most current dosing information and is consistent with the protocols in your area of practice. Since pediatric medication references calculate doses based on the patient's weight in kilograms, it is essential to ensure that the patient's calculated weight is in kilograms and not pounds. For pediatric medication references that list doses in milliliters (mLs), be sure to verify that the concentration of the medication you are using matches the concentration used on the reference guide.

Recently there have been several cases where a pediatric patient has received a larger dose of diazepam (Valium™) than is referenced in the *Maryland Medical Protocols for EMS Providers*, resulting in respiratory depression. In addition to Valium™, the Broselow-Luten™ tape has doses

for crystalloid resuscitation and three medications that are different from the *Maryland Medical Protocols for EMS Providers*. See the table below for the differences.

Two pediatric reference tools that are consistent with the *Maryland Medical Protocols for EMS Providers* include its pocket version and the Maryland Emergency Medical Services for Children (EMSC) pediatric reference card. The pocket version of the *Maryland Medical Protocols for EMS Providers* contains two pediatric drug volume charts, one for general protocol medications and one for resuscitation medications. The chart lists the amount of medication to draw up depending on the patient's age or estimated weight based on the concentration and appropriate dose. The pediatric reference card lists the pediatric doses for every medication listed in the *Maryland Medical Protocols for EMS Providers* for BLS and ALS Pharmacology.

Pocket guides for the *Maryland Medical Protocols for EMS Providers* are available from the MIEMSS Department of Licensure and Certification at 410-706-3666 or toll free at 1-800-762-7157. The pediatric reference card will be updated for the 2007 protocols and posted online on the Maryland EMSC website. Go to [www.miemss.org](http://www.miemss.org) and click on EMSC; then click on the Pediatric Continuing Education page.

♦ Elizabeth U. Berg, RN, BSN and Mary Ellen Wilson, RN, BSN  
Members of Pediatric Emergency Medical Advisory Committee

Fluid/Medication	Broselow-Luten™ Tape	Maryland Medical Protocols
Crystalloid	All doses: 20 mL/kg	LR: 20 mL/kg, 20 mL/kg, 10 mL/kg Fluid sensitive: 10 mL/kg, 10 mL/kg, 10 mL/kg
Dextrose	All doses for 25% only: 0.5 gm/kg/dose	< 2 months: 10% 0.5-1 gm/kg/dose 2 months – 2 yrs: 25% 0.5-1 gm/kg/dose > 2 years: 50% 0.5-1 gm/kg/dose
Diazepam (Valium™)	IV: 0.2 mg/kg/dose PR: 0.5 mg/kg/dose	IV: 0.1 mg/kg/dose PR: 0.2 mg/kg/dose
Glucagon for Overdose	0.1 mg/kg/dose	IV: 1 mg IVP (25-40 kg); max total dose 3 mg 0.5 mg IVP (< 25 kg); max total dose 3 mg

# Freestate 2006 Drill

More than 200 students from the University of Maryland School of Nursing learned about emergency preparedness and response by participating in the Freestate 2006 Drill. Nursing students acted as injured victims or distraught family members; in addition, some students conducted emergency mental health interventions while others assisted with on-site assessments and triage. The drill also helped the University of Maryland Medical Center and the Baltimore Veterans Administration Medical Center prepare for an event that creates a sudden surge of patients with a variety of injuries. The drill began with loud explosions on October 3, in the courtyard in front of the University of Maryland School of Nursing.

Drill participants included the University of Maryland Medical Center (including the Emergency Department and R Adams Cowley Shock Trauma Center); the University of Maryland School of Nursing and other University of Maryland at Baltimore agencies; MIEMSS; the Baltimore VA Medical Center; the Baltimore City Fire Department; and the Baltimore City Police Department.



## Dr. Reece Appointed to EMS Board



*E. Albert Reece, MD is sworn in as the newest EMS Board member by Charles Mackey, Jr., of the Circuit Court for Baltimore City Clerk's Office, as Chairman of the EMS Board Donald L. DeVries, Jr., and MIEMSS Executive Director Robert R. Bass, MD look on.*

E. Albert Reece, MD, PhD, MBA, was sworn in as the newest Maryland EMS Board member on October 10. In September, he assumed the responsibilities of Vice President for Medical Affairs, at the University of Maryland (UM), and of Dean of its School of Medicine. He replaced Dean Donald

E. Wilson who recently retired from UM's School of Medicine.

Dean Wilson had been a member of the EMS Board since it was first formed in 1993. After serving as dean of the School of Medicine for 15 years, Dr. Wilson now directs the Program in Minority Health and

Health Disparities Education and Research.

Dr. Reece was previously vice chancellor of the University of Arkansas for Medical Sciences and dean of the University's College of Medicine. He held faculty appointments as professor in the departments of obstetrics and gynecology, internal medicine, and biochemistry and molecular biology. He has published 11 books, four monographs and 450 peer-reviewed articles, chapters, and abstracts.

Each of the 11 members of the Maryland EMS Board is appointed by the Governor, and each represents a different category of EMS provider or consumer as defined in legislation. Dr. Reece is the representative of the University of Maryland at Baltimore, nominated by the Board of Regents.

## Relocation of Pediatric Burn Patients to Johns Hopkins Hospital

Effective September 28, 2006, burn patients under 15 years of age who previously would have been transported to the Johns Hopkins Bayview Medical Center under the "Maryland Medical Protocols for Emergency Medical Services Providers" are to be transported to the Johns Hopkins Hospital Pediatric Burn Center located in the Johns Hopkins Hospital Children's Center at 600 Wolfe Street, Baltimore, Maryland 21287. EMS providers will be directed to the appropriate location by the pediatric base station.

The Johns Hopkins Health System has relocated its pediatric burn program to the Johns Hopkins Hospital Children's Center. The Maryland Health Commission has authorized the move under the current certificate of need covering the Johns Hopkins Burn Center.

The hospital code number for the Johns Hopkins Children's Center Pediatric Burn Center is 707.

Adults with burns will continue to be transported to the Johns Hopkins Burn Center at Bayview. If EMS prehospital providers have any questions regarding the appropriate destination for their patients, they should request a consult with a Pediatric Base Station.

For questions regarding this policy, please contact Mary Beachley, Chief, Health Facilities and Special Programs at 410-706-3932 or via email at [mbeachley@miemss.org](mailto:mbeachley@miemss.org).

## Save the Date!



**January 27-28, 2007**

**10th Annual Winterfest  
Tilghman Island,  
Maryland**

Contact:  
TCEMS-Winterfest EMS Line  
at 410-822-2030  
or email :  
[winterfest.ems@hotmail.com](mailto:winterfest.ems@hotmail.com)

*Schedule and registration in next  
Maryland EMS News!*

# Summit on ED Overcrowding

MIEMSS and the Maryland Hospital Association co-sponsored the Maryland Emergency Department Overcrowding Leadership Summit, on September 25, at the Maritime Institute of Technology Conference Center (MITAGS).

Two-hundred and fifty hospital executives, physician leaders, nurse directors, and emergency medical services leaders attended the meeting to identify strategies and develop solutions to this ongoing concern. National and local speakers discussed innovative solutions to the complex issues of emergency department (ED) overcrowding. Highlights of the program included an overview of Baltimore City's Task Force report on ED overcrowding, a panel of members from Maryland hospitals, and overviews of two national programs — the "Urgent Matters" initiative from the Robert Wood Johnson Foundation and the "Full Capacity Protocol" program from Stoney Brook University Hospital.



## 2006-2007 Flu Vaccine Information for Maryland EMS Providers

The 2006-2007 flu season is rapidly approaching. According to the Centers for Disease Control (CDC), no vaccine manufacturers have announced vaccine shortages. CDC has developed recommendations that indicate all health-care workers should be vaccinated against influenza annually. This includes EMS providers. MIEMSS encourages EMS personnel to seek vaccination through their regular sources of flu vaccine and if not available there, through other sources, including their local health departments.

For additional information on the flu and vaccination, see the CDC links below:

<http://www.cdc.gov/flu/protect/preventing.htm>

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5510a1.htm>

Further information can be found at the DHMH web site:

<http://edcp.org/influenza/>

A list of Maryland local health departments is available at:

<http://www.dhmh.state.md.us/mma/lhd/>

The Maryland Flu Preparedness web site may be found at:

<http://flu.maryland.gov/>

For further information or if you have difficulty gaining access to influenza vaccination, please contact Lisa Myers at MIEMSS 410-706-4740 or Jim Brown at 410-706-3994.

## Disciplinary Actions

The following final disciplinary actions were taken by the EMS Board on the dates indicated:

**B-2006-316** (EMT-P)—October 10, 2006. For transporting a relative to the hospital of the provider's choice instead of complying with applicable protocols, provider is placed on probation for 1 year with performance reports to be submitted by supervisor and is required to attend counseling session with the State EMS Medical Director and required to prepare scholarly paper addressing patient care issues, protocols, medical direction issues, and operational concerns involved in incident.

**B-2005-301** (EMT-B)—July 13, 2006. For unprofessional conduct, abandoning a patient, and filing a false report, provider's EMT-B certification is revoked.

**B-2006-308** (EMT-P)—July 13, 2006. For prohibited conduct involving use of controlled dangerous substance where provider took responsibility for actions, voluntarily entered rehabilitation program, and was negative for controlled substances in ensuing drug tests, provider's EMT-P license is suspended for 30 days and provider placed on probation for 5 years.

**B-2005-295** (Applicant) (by Disposition Agreement)—May 9, 2006. For applying for EMT-B certification following surrender of CRT license in 2005 in connection with a disciplinary proceeding involving failing to disclose 5 prior convictions on applications filed with MIEMSS, failure to render appropriate care, and submitting runsheets indicating individual was an EMT-P, EMT-B certification is allowed to be issued upon successful completion of EMT-B requirements, provided the provider does not engage in any prohibited acts or violations of criminal law, and provider is placed on probation for 2 years, with the requirement that quarterly written reports be filed with the MIEMSS compliance officer demonstrating proper performance of EMS duties.

**B-2005-299** (EMT-B)—June 26, 2006. For practicing as an EMT-B on a lapsed CRT license, provider's EMT-B certification is allowed to be issued and provider placed on probation for 1 year with quarterly reports on performance submitted to the MIEMSS compliance office.

**B-2003-256** (EMT-P)—June 26, 2006. For global amnesia, the provider's license is temporarily suspended with the provider's consent, pending disciplinary review by the EMS Board, and thereafter the provider is placed on probation for 2 years with a restriction prohibiting the provider from practicing while suffering with a headache.

**B-2005-302** (EMT-B)—June 13, 2006. For altering the provider's prescription for pain medication, the provider's EMT-B certification is suspended until the provider has been drug free for one year from September 5, 2005 and thereafter provider will be on probation for the current certification period with random drug testing at the provider's expense.

**B-2005-305** (EMT-B)—June 13, 2006. For pleading guilty to theft of goods valued over \$500, a fourth degree sex offense, and second degree assault, provider's EMT-B certification is revoked.

**B-2005-294** (EMT-P)—May 19, 2006. For practicing on an expired license, provider, who qualified for and was reinstated, was reprimanded.

**B-2005-292** (EMT-P)—May 19, 2006. For practicing on an expired license, provider, who qualified for and was reinstated, was reprimanded.

**B-2005-300** (EMT-B)—May 19, 2006. For testing positive for marijuana metabolites, provider's EMT-B certification is suspended until successful completion of rehabilitation program, and provider is thereafter placed on probation for 3 years with random drug testing.

**B-2005-293** (EMT-P)—May 19, 2006. For practicing on an expired license, provider, who qualified for and was reinstated, was reprimanded.

**B-2004-284** (EMT-B)—May 12, 2006. For allowing second EMT-B to ride in passenger seat instead of attending to patient in rear of ambulance during transport while provider was driver, EMT-B certification is suspended for 15 days and provider is placed on probation for one year.

# Kesner Heads Allegany County EMS Division

Steve Kesner, who is currently president/deputy chief of the Cresaptown Volunteer Fire Department, will now direct EMS providers in Allegany County. The new position was created as the result of a recommendation from the Strengths, Weaknesses, Opportunities, and Threats (SWOT) Task Force study released in May. The study recommended the hiring and supervision of paid EMS providers. A local fire department volunteer for 30 years, Steve Kesner has been appointed Chief of the Emergency Medical Services Division in Allegany County. The division is part of the new Allegany County Department of Public Safety and Homeland Security, headed by Gary Moore. The new department has three sections: the 911 Joint Communications Division headed by Bobby Dick, the Emergency Management Division headed by Dick DeVore, and the EMS Division headed by Mr. Kesner.

Steve Kesner has received numerous awards for his public service, including the Maryland State Firemen's Association Josiah Hunt



*(L-r) are Gary Moore, Director of the Allegany County Department of Public Safety and Homeland Security, Dr. Richard Alcorta, MIEMSS State EMS Medical Director; who assisted with the SWOT process, and Steve Kesner, new Chief of EMS in Allegany County.*

Emergency Medical Services Person of the Year Award and Hall of Fame honor, the MIEMSS Distinguished Service Award, and Firefighter and

Ambulance/Rescue Person of the Year from the Allegany-Garrett Volunteer Fire and Rescue Association.

**MIEMSS, Maryland EMS News**

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**Governor Robert L. Ehrlich, Jr.**

**Lt. Governor Michael S. Steele**

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