



STATE OF WEST VIRGINIA
DEPARTMENT OF HEALTH AND HUMAN RESOURCES

Joe Manchin III
Governor

Martha Yeager Walker
Secretary

MEMORANDUM

TO: West Virginia EMS Agencies
West Virginia EMS Providers
Regional Medical Command Centers

FROM: Deron Wilkes
Chief of Operations
Office of EMS

A handwritten signature in blue ink that reads "Deron Wilkes".

DATE: August 10, 2009

RE: Protocol Updates and Revisions

At the April 2009 WV State Medical Policy and Care Committee (MPCC) meeting, several proposed changes to the WV EMS System Protocols for prehospital care were reviewed and subsequently adopted. Regular review of protocols, and when necessary changes in protocol, are required to ensure the prehospital care being delivered across the State is current with the accepted standard of care. These most recent changes include the addition of several medications (most significantly *fentanyl* and *lorazepam*), as well as the intranasal route of medication administration. It was decided to use this opportunity to also review each of the protocols and make needed corrections and formatting changes. As a result of these additions and changes, new versions of the 3000, 4000, and 5000 series of the WV EMS System protocols have been prepared.

Each agency will receive a CD with a copy of each of the updated protocol series as well as a document titled "2009 Protocol Changes". This document outlines each of the changes made to the protocols. Also included on the CD is an updated "Medication Classification Chart." This chart shows the classifications of the various medications – especially with regard to interfacility transports. Copies of these documents are also available from the *Medical Direction* section of the WV Office of EMS website (www.wvoems.org).

BUREAU FOR PUBLIC HEALTH
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Protocol Updates and Revisions

Page Two

August 10, 2009

The revisions to the protocols will take effect at 12:01 AM on 01 September 2009.

A phase-in period of approximately one-year was included to allow for the replacement of *diazepam* with *lorazepam* and the replacement of *moripine sulfate* with *fentanyl* and permit agencies to utilize supplies currently on-hand. Agencies desiring to make the transition more rapidly are permitted to do so after the protocols' effective dates.

I have received a few questions about the addition of *lorazepam* to the protocol due to the suggested refrigerated storage of the medication. This topic was discussed during the MPCC's review and multiple published articles were reviewed. Of those articles, one study published in *The American Journal of Emergency Medicine*, (1999, vol. 17, no. 4 pp. 333-33) examined the storage of both *diazepam* and *lorazepam* at on-ambulance ambient temperatures for 210 days. Chromatographic analyses found *diazepam* experienced a 15% reduction in concentration while *lorazepam* reduction was found to be 10%. Based on this study the *lorazepam* retains more of its concentration than the *diazepam* currently utilized.

Agencies should develop and conduct the necessary training to ensure their personnel are familiar with the changes to the protocols and the additional medications and procedures. Please feel free to contact me if I can be of any assistance in this process.

If you have any questions, please feel free to contact me. I can be reached in the Office at 304.558.3956 or by email at deron.e.wilkes@wv.gov. Thank you for your assistance in this implementation of these protocols.

cc: Regional Medical Directors

3000 Series Protocol Changes:

3000 Series Cover Page: Added STECS

3000 Series Contents: Added “8000 Procedure Protocols” heading that was previously “Open” and then referenced “8301 CPAP Protocol.”

3604 Electrolyte: Under “B. Magnesium sulfate”, added reference to 3903 Reversal Agent Protocol for reversal of magnesium toxicity.

3605 Nausea/Vomiting: Changed ordering of medications to reflect ondansetron (*Zofran*) to be initial antiemetic agent.

3901 Analgesic: Added fentanyl as available drug.

3903 Reversal Agent Protocol: Added calcium gluconate as a reversal agent for magnesium sulfate toxicity.

4000 Series Protocol Changes:

4000 Series Cover Page: Added STECS

4000 Series Contents: Corrected title of 4902 to “Patient Comfort” protocol, not “Pain Management.” Removed protocols 4206/4207 that were replaced by 4205; removed protocol 4209 that was replaced by 4208. Added “8000 Procedure Protocols” heading that was previously “Open” and then referenced “8301 CPAP Protocol.”

4000 Series How to Use: Changed “Classification of Levels of Care” 8000 series heading to “Procedure Protocols” rather than “Open.” Under “General Assessment and Management Procedures” changed title of CAT (4204) to “Cardiac ALS Treatment.”

4106 Musculoskeletal Trauma: Corrected reference to 6000 series protocol 6106.

4201 MAMP: Minor wording corrections.

4202 Chest Pain: Added fentanyl (*Sublimaze*) as pain medication, with morphine to be phased out over one year. Minor wording corrections.

4203 Severe Hypertension: Minor wording changes.

4204 Cardiac ALS Treatment (CAT): Correction of typo on Page 2, Reminder box.

4205 Cardiac Arrest – Pulseless Arrest: Minor change in Footer only.

4206 and 4207: Deleted and combined into new 4205.

4208 Dysrhythmia with a Pulse – Tachycardia: Wording added to clarify that 4208 replaced old 4208 and 4209. Correction of typo on Page 2, Box 10.

4209: Deleted and combined into new 4208.

4211 Dysrhythmia with a Pulse – Symptomatic Bradycardia: Update of micrograms abbreviation to newer accepted version on Page 2, Box 7.

4303 Pulmonary Edema: Removed morphine sulfate for treatment of pulmonary edema and clarified the option for CPAP if available.

4403 Pediatric Emergencies – Seizures: Replaced diazepam (*Valium*) with lorazepam (*Ativan*) as primary anti-seizure medication, and added intranasal via atomizer and intramuscular route, if no IV access is available. Diazepam is to be phased out as current agency stock becomes outdated, over one year. All diazepam must be replaced by lorazepam before 4/17/2010.

4603 Seizures: Replaced diazepam (*Valium*) with lorazepam (*Ativan*) as primary anti-seizure medication, and added intranasal via atomizer and intramuscular route, if no IV access is available. Diazepam is to be phased out as current agency stock becomes outdated, over one year. All diazepam must be replaced by lorazepam before 4/17/2010.

4605 Unconscious Patient – Unknown Cause (Non-Trauma): Added intranasal via atomizer and intramuscular route as an option for naloxone (*Narcan*) if unable to establish an IV.

4901 Airway Management: Removed diazepam from protocol and replaced “esophageal-tracheal combitube” with more generic term “supra-glottic” airway.

4902 Patient Comfort: Added fentanyl (*Sublimaze*) as preferred pain medication, with morphine to be phased out over one year. Added ondansetron (*Zofran*) as preferred anti-nausea medication, with promethazine (*Phenergan*) to be phased out over one year.

5000 Series Protocol Changes:

5000 Series Cover Page: Added STECS

5000 Series Contents: Corrected title of 5902 to “Patient Comfort” protocol, not “Pain Management.” Removed protocols 5206/5207 that were replaced by 5205; removed protocol 5209 that was replaced by 5208. Added “8000 Procedure Protocols” heading that was previously “Open” and then referenced “8301 CPAP Protocol.”

5000 Series How to Use: Changed “Classification of Levels of Care” 8000 series heading to “Procedure Protocols” rather than “Open.” Under “General Assessment and Management Procedures” changed examples to reflect 5000 series, not 4000 series; changed title of CAT (5204) to “Cardiac ALS Treatment”

5201 MAMP: Minor wording corrections.

5202 Chest Pain: Added fentanyl (*Sublimaze*) as pain medication, with morphine to be phased out over one year. Minor wording corrections.

5203 Severe Hypertension: Minor wording changes.

5204 Cardiac ALS Treatment (CAT): New version to match 4204 and newer cardiac treatment guidelines.

5205 Cardiac Arrest - Pulseless Arrest: New version to match 4205 and newer cardiac treatment guidelines.

5206 and 5207: Deleted and combined into new 5205.

5208 Dysrhythmia with a Pulse – Tachycardia: New version to match 4208 and newer cardiac treatment guidelines. Wording added to clarify that 5208 replaced old 5208 and 5209.

5209: Deleted and combined into new 5208.

5211 Dysrhythmia with a Pulse – Symptomatic Bradycardia: New version to match 4211 and newer cardiac treatment guidelines. Changed to allow EMSA-I to consider atropine and initiate transcutaneous pacing prior to contacting Medical Command in patients with shock from bradycardia.

5403 Pediatric Emergencies – Seizures: Replaced diazepam (*Valium*) with lorazepam (*Ativan*) as primary anti-seizure medication, and added intranasal via atomizer and intramuscular route, if no IV access is available. Diazepam is to be phased out as current agency stock becomes outdated, over one year. All diazepam must be replaced by lorazepam before 4/17/2010.

5603 Seizures: Replaced diazepam (*Valium*) with lorazepam (*Ativan*) as primary anti-seizure medication, and added intranasal via atomizer and intramuscular route, if no IV access is available. Diazepam is to be phased out as current agency stock becomes outdated, over one year. All diazepam must be replaced by lorazepam before 4/17/2010.

5605 Unconscious Patient – Unknown Cause (Non-Trauma): Added intranasal via atomizer and intramuscular route as an option for naloxone (*Narcan*) if unable to establish an IV.

5901 Airway Management: Removed diazepam from protocol and replaced “esophageal-tracheal combitube” with more generic term “supra-glottic” airway.

5902 Patient Comfort: Added fentanyl (*Sublimaze*) as preferred pain medication, with morphine to be phased out over one year. Changed name of protocol from “Pain Management” to “Patient Comfort” to be consistent with 4902 nomenclature.