



## MINUTES

### EMERGENCY MEDICAL SERVICES & TRAUMA SYSTEM

#### DRUG/DEVICE/PROTOCOL COMMITTEE

April 4, 2012 – 09:00 A.M.

#### MEMBERS PRESENT

Jarrod Johnson, DO, Chairman, MFR  
Richard Henderson, MD, Henderson Fire Department  
K. Alexander Malone, MD, North Las Vegas Fire  
Chief Troy Tuke, Clark County Fire Department  
Larry Johnson, EMT-P, MWA (Alt)  
Steve Johnson, EMT-P, AMR (Alt)

David Slattery, MD, Las Vegas Fire & Rescue  
Bryan Bledsoe, DO, MedicWest Ambulance  
Chief Scott Vivier, Henderson Fire Department  
August Corrales, EMT-P, CSN  
Gina Schuster, EMT-P, Community Ambulance

#### MEMBERS ABSENT

Eric Dievendorf, EMT-P, AMR  
Scott Scherr, MD, Sunrise Hospital  
Tony Greenway, EMT-P, AMR/MW

Mary Levy, RN, UMC  
Michele McKee, MD, UMC

#### SNHD STAFF PRESENT

Rory Chetelat, EMSTS Manager  
John Hammond, EMS Field Representative  
Judy Tabat, Recording Secretary

Mary Ellen Britt, Regional Trauma Coordinator  
Kelly Buchanan, MD, EMS Fellow

#### PUBLIC ATTENDANCE

Jo Ellen Hannom, RN, CCFD  
Michelle Dimoff, Nellis AFB  
Scott Morris, EMT-I, NLVFD  
Sam Scheller, EMT-P, Guardian Elite  
Tricia Klein, EMT-P, NCTI  
Steve Patraw, Boundtree  
Josh Wrucke, AMR  
Joseph Truman, NCTI/AMR  
Elad Bicer, MD, Summerlin Hospital

Richard Main, EMT-P, NCTI  
Gerry Julian, EMT-P, Mercy Air  
Jeff Buchanan, EMT-P, NLVFD  
Jessy Rogers, EMT-P, HFD  
Chris Baker, TriState CareFlight  
Rick Resnick, EMT-P, MFR  
Stephanie Laymon, MWA  
Pamela Arriaga, NCTI/AMR

#### CALL TO ORDER - NOTICE OF POSTING OF AGENDA

The Drug/Device/Protocol Committee convened in the Clemens Room of the Ravenholt Public Health Center on Wednesday, April 4, 2012. Acting Chairman Kelly Buchanan, M.D., called the meeting to order at 9:04 a.m. The Affidavit of Posting was noted in accordance with the Nevada Open Meeting Law. Dr. Buchanan noted that a quorum was present.

## **I. PUBLIC COMMENT**

None

## **II. CONSENT AGENDA**

Acting Chairman Buchanan stated the Consent Agenda consisted of matters to be considered by the Drug/Device/Protocol Committee that can be enacted by one motion. Any item may be discussed separately per Committee member request. Any exceptions to the Consent Agenda must be stated prior to approval.

Minutes Drug/Device/Protocol Committee Meeting, March 7, 2012

Dr. Buchanan asked for a motion to approve the minutes of the March 7, 2012 Drug/Device/Protocol Committee meeting. A motion to accept the minutes was made, seconded and passed unanimously.

## **III. REPORT/DISCUSSION/POSSIBLE ACTION**

### **A. Appointment of Drug/Device/Protocol Committee Vice Chairman**

A motion was made to nominate Dr. Bryan Bledsoe as Vice Chairman of the Drug/Device/Protocol Committee. The motion was seconded and passed unanimously.

### **B. Review of Selected Protocols with Drug Shortage Considerations**

1. Zofran, Atropine, Adenosine, Magnesium Sulfate, Morphine, Versed, Etomidate, Dopamine
2. Discussion of Trigger for Initiating the Alternative Drug

Dr. Buchanan referred to the protocol handout stating that they were the current protocols already in place with reference to the drugs that are in shortage. The Abdominal Pain, Acute Coronary Syndrome, Advanced Airway Management and Endotracheal Intubation protocols have been changed and approved with regards to Zofran, Morphine and Etomidate. She felt that the discussion now needs to move towards deciding on the alternative drugs and how to approach initiating the trigger for that alternative drug.

Dr. Slattery felt that in terms of keeping it clean he would like this Committee to vote to accept all changes as written before they move forward.

A motion was made to approve the protocols and accept the changes as written. The motion was seconded and passed unanimously.

Dr. Buchanan stated that Dr. Bledsoe has put together a list of proposed alternative medications for drug shortage emergencies and referred to the handout that lists the current choice drug with alternative solutions including pros and cons of each.

#### Induction Agents

Dr. Buchanan stated that the current usage for an induction agent is Etomidate 0.15-0.3mg/kg with 0.15 being a sedation dose and 0.3 being the induction dose for intubation.

Dr. Slattery stated that from a prehospital medication standpoint his preference would be Ketamine because it has about the best safety profile compared to Propofol but keeping Etomidate for head injury patients. Dr. Bledsoe agreed stating the other benefit with the Ketamine is you get analgesia.

Dr. Bledsoe questioned the process to be used when an agency runs out of a drug. He added that Clark County Fire and Henderson Fire have adequate supplies for a year so you can't ask them to ration a drug, there needs to be a protocol in place that states whoever arrives on scene first that's the formulary they will follow based on their availability. Mr. Chetelat stated that the first step should be to identify the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> line drugs then look at the triggers and then interactions. Dr. Slattery added that they can procedurally have guidelines for the medic administering the first dose, which will be the medication they stay with until the hospital.

Dr. Buchanan asked the Committee if they agree with 1<sup>st</sup> choice Etomidate 0.15-0.3mg/kg, 2<sup>nd</sup> choice Ketamine 1-2mg/kg, and 3<sup>rd</sup> choice Propofol 1-2mg/kg with the plan to stay with the same drug that was first administered on scene throughout the entire transport. Dr. Slattery stated that the Ketamine dose for IM is closer to 4mg and would make that caveat.

Mr. Chetelat wanted clarification on the decision that the first drug used on scene needs to be continued. If the Fire Department arrives on scene and administers a drug that the transport agency doesn't have, that medic from the fire department will need to ride in to continue that drug. Dr. Bledsoe commented that he doesn't want anybody who is not familiar with the drug being responsible. Mr. Chetelat agreed and added that is another reason to identify all 3 drugs and get the training done. Dr. Bledsoe stated that you only give Ketamine once; generally you're not going to re-dose it. Mr. Chetelat stated that if the drug doesn't have to be a repeat dose then it wouldn't be necessary.

Dr. Slattery stated that the intent of this is we wouldn't be giving a different type of medication for the same indication because the responding unit is giving a different medication than the transporting agent. I think the Health District's vision would be to make sure that all EMS providers are trained on all 3 of these medications.

Dr. Slattery added that the other question has to do with training and how that is going to be developed.

Chief Vivier stated that he would ask that whatever the protocol would be, it would be sent to Education Committee and then the Education Committee would issue out standard education for the district. He added that they should focus on the induction agents right away because they are going to require the most in-depth training because they are the newest.

A motion was made to accept Etomidate (current choice), Ketamine (alternative 1) and Propofol (alternative 2) as the induction agents only with the Ketamine 4mg/kl IM with a separate contraindications of Ketamine to be held in head injuries. The motion was seconded and passed unanimously.

#### Anti-Emetics

Dr. Bledsoe stated that they are seeing across the country especially with the excited delirium phenomenon a move to Droperidol. He felt that Zofran ODT is the best secondary choice and the next alternative would be Droperidol because when you put it on the ambulances, you're covering your agitation, sedation as well as your antiemetic affect and there is adequate literature to support the safety of the drug. Promethazine has problems written all over it and Compazine is a good drug but not available. Dr. Buchanan requested consideration for Reglan. Dr. Bledsoe agreed and felt that clinically Reglan is a better drug than Promethazine or Prochlorperazine.

Chief Vivier suggested that because they are anti-emetics to possibly limit their use and restrict the indication like they did with magnesium. By restricting the use it wouldn't adversely affect patient care and it can be a consistent restriction that may help prolong supplies.

A motion was made to accept the Zofran IV/IO/IM and Zofran PO concurrent 1<sup>st</sup> line choices, Droperidol (alternative 1), Compazine (alternative 2), and Reglan (alternative 3). The motion was seconded and passed unanimously.

#### Benzodiazepines (Adult Usage)

Dr. Bledsoe stated that these drugs are all pharmacology equivalent, the only difference is their solubility and they all have similar side effects. Ativan if you keep it over a certain period of time needs to be refrigerated.

Dr. Henderson asked for details on the temperature issue with Ativan and if that is why he put it below Valium on his list of alternative drugs. Dr. Bledsoe stated that if Ativan was kept on an ambulance for longer than 60 days without it being refrigerated it needed to be replaced. If it was refrigerated its shelf life was extended out to a year and that is why he listed it under Valium.

A motion was made to accept Versed (current choice), Valium (alternative 1), Ativan (alternative 2) and use Droperidol (alternative 3). The motion was seconded and passed unanimously.

#### Benzodiazepines (Pediatric Usage)

Dr. Bledsoe stated that he went to the pediatric literature and it showed the same arguments and considerations as for adults. He added that he would like to present this to the pediatric colleagues to make sure they are comfortable with the alternative drugs. Dr. Slattery agreed. Dr. Henderson felt that the pediatric colleagues may not be aware of the temperature issues and logistics involved and insist on Ativan.

Dr. Slattery stated that the only other adjustment he would make on this and on the other protocols is to remove the ranges. Chief Vivier added that it would be the same caveat as not to exceed adult dose.

A motion was made to accept Versed (current choice), Valium (alternative 1), and Ativan (alternative 2) with the refrigeration and not to exceed the adult dose clause. The motion was seconded and passed unanimously.

#### Analgesics

Dr. Bledsoe stated that everyone is using Fentanyl but Hydromorphone is not as commonly used in EMS systems.

Dr. Henderson stated that he would like to see Fentanyl being a current choice. Dr. Bledsoe agreed. Dr. Buchanan stated that she is not opposed to making both Morphine and Fentanyl concurrent 1<sup>st</sup> line choices. Dr. Bledsoe agreed and stated that it's safer especially with the short transport times in Las Vegas.

A motion was made to accept Morphine and Fentanyl concurrent 1<sup>st</sup> line choices, Dilaudid (alternative 1). The motion was seconded and passed unanimously.

Dr. Buchanan stated that the plan will be to implement these changes into the current protocols pending MAB approval. Dr. Slattery stated that the agreement is that we have 2 or 3 tiers of drugs to get into and they all will be approved and an agency would make that decision once they are at a critical level. Dr. Buchanan stated that it's going to be agency dependant based on their usage.

Dr. Johnson questioned if the agency will be notifying the Health District when they decide to use an alternative drug.

Dr. Buchanan answered in the affirmative and added that the Health District will then notify everybody so that all the agencies will know where everybody is at.

Chief Tuke questioned whether he would need to go to the tier 2 drug before using the expired drugs. Chief Vivier stated that it is his understanding that we have not changed any of the expiration date requirements. If the drug is on the national backorder list we have the 6 month expiration extension to keep using that drug. Dr. Slattery answered in the affirmative.

Mr. Chetelat referred to NRS 639.282 which clearly states that it is unlawful to dispense any pharmaceutical preparation, drug or chemical which is no longer safe or effective for use, as indicated by the expiration date appearing on its label. Steve Patraw stated that Pat Irwin from the State EMS Office sent that information to the Governor's office this week for removal of this in a crisis. He added that the FDA has a competing clause under their rules that basically says it's OK in a crisis situation to use it. Dr. Slattery stated that he will go on record to say that these medications are very good and I would challenge anybody to detect any difference in efficacy after 6 months or 2 years unless you are looking at nitroglycerin or some of the pressors.

Dr. Malone stated that he would like to extend certain key drugs that they have in supply that have been expired more than 6 months and asked if there is anything or anyone on this Committee that would find that a sanctionable action on my part if I approved the use by my department. The Committee answered in the negative.

Dr. Johnson made the proposal to extend the expiration dates to 1 year and added that the military extends theirs out 2 years. Dr. Henderson made a formal request to follow the military's precedent.

Dr. Bledsoe stated that the question has come up before that does the heat and light here in Las Vegas become clinically problematic for the medications. He felt we need to look at the data just to have it on the records and make it cleaner and agreed to do that research.

A motion to extend any medication that is on our formulary and on the National Drug Shortage list for a period of 1 year was made, seconded and passed unanimously.

#### C. Protocol Algorithm Workshop

Dr. Buchanan stated that she did not get all of protocols done as they were extremely time consuming. She referred to the green packet in their handouts and asked the Committee to review the revisions in the algorithm format and if there were any other changes needed.

General Assessment:

- Transport to closest facility for: cardiac arrest  
Change to: Persistent Cardiac Arrest or W/O ROSC
- Telemetry for all Trauma Center patients, Code 3 returns  
Change to: Radio contact
- Blood Glucose Testing  
Add: as indicated

General Pediatric Assessment:

- Same changes as adult General Assessment

Burns:

- Reference the Smoke Inhalation Protocol
- Cover burn area with sterile dressing  
Change to: Cover burn area with dry sterile dressing
- DO NOT USE any lotion, ointment  
Add “ice”
- Transport to UMC Trauma Center
- Protect from Hypothermia

Pediatric Burns:

- Transport to UMC Pediatric ED
- Protect from Hypothermia - Put it down the middle
- Change General Adult Assessment to General Pediatric Assessment
- Use ML instead of CC

Chest Pain

- Change title from Chest Pain to Suspected ACS
- QI Metric box added
- Nitro contraindications  
change to ED Drugs  
SBP <100 – change to 120 mmHg  
Swap #1 and #4
- Aspirin Contraindications:  
Change #2 to High Clinical Suspicion of Aortic dissection
- Consider Anti-emetic  
Anti-emetic drugs will be put in proper (tiered) order
- Change Cardiac Monitor/12 Lead EKG to Perform 12 Lead EKG

Pain Management:

- For Severe Pain Consider:  
Analgesic drugs will be put in proper (tiered) order
- Change Cardiac Monitor/12 Lead EKG to Perform 12 Lead EKG
- Remove Contact Medical Control for additional doses
- Remove Pulse Oximetry  
Add Cardiac Monitoring / consider capnography  
Change legend to “P”

There was considerable discussion regarding re-dosing Dilaudid and Fentanyl. Dr. Malone volunteered to compare and contrast using pertinent literature between Dilaudid, Fentanyl and Morphine for the next meeting. Dr. Johnson suggested holding off on the Pain Management protocol and the others that have not been covered until the next meeting.

Dr. Slattery made a motion to accept the Suspected ACS, Burns and General Assessment Protocols with the changes discussed. The motion was seconded and passed unanimously.

**IV. INFORMATIONAL ITEMS/ DISCUSSION ONLY**

None

**V. PUBLIC COMMENT**

None

**VI. ADJOURNMENT**

As there was no further business, Dr. Johnson called for a motion to adjourn. The motion was seconded and passed unanimously to adjourn at 11:00 a.m.