



MEDICAL CONTROL POLICY STATEMENT/ADVISORY

No. 2021-03
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Office of the Medical Director

Noel Wagner, MD, NRP
1000 Houghton Ave
Saginaw, MI 48602
(989) 746-7760
Fax (989) 746-7767
SaginawTuscolaMCA.org

EMS MEDICATION RECERTIFICATION

All EMS Providers:

EMS medication recertification is on June 25, 2021. Unless your agency has made other arrangements, please take the boxes and kits to a participating pharmacy beginning around 7:00AM on Friday. BLS kits will be recertified on the same day.

Medication Boxes:

- We will be adding 2 vials of 5mg/2ml of Verapamil. This medication will be utilized post radio for patients with persistent tachycardia. The protocol to reference for use of this medication is 5-3.

ALS Kits (Blue Bags):

- No changes

BLS Kits (Orange Bags):

- No changes

While we have your attention, please help us reduce the number of pharmacy incident reports by doing the following:

1. NEVER put a used or empty vial back into the drug box or kit. When used vials are put back, the pharmacist doesn't always know that the medication needs to be replenished.
2. ALWAYS ensure that you clean your trash out of the boxes and kits before sending them to pharmacy. This includes removing glucometers, laryngoscope handles and blades, and patient belongings. Most importantly, used needles and catheters belong in the appropriate waste receptacle. Please don't test the pharmacist's immune response by leaving a sharp or contaminated item in the box or kit.
3. When a controlled substances kit is opened, the paramedic is responsible for conducting an inventory of the kit. If there is a discrepancy, you should contact your supervisor and advise the pharmacy. When things come up missing, there is paperwork that must be filed with the DEA and drug swabs that will need to be done. Avoid the mess, just inventory the kit before sealing the box.
4. If administering anything from the controlled substances kit, you MUST document the total dose, number of vials and have the waste witnessed by someone licensed to administer the medication.

Attachments:

1. Box and Kit Inventories – June 2021
2. 5-3 Tachycardia Protocol

Greater Bay Area EMS Medication System

| EMS DRUG BOX | | | | | KITS | | | |
|---|---------------------------|---------------------|------------------------|-------------------------|-----------------------------|----------------|---------------------------|------------------|
| SUPPLIES AND MICELLANEOUS | | | MEDICATIONS AND FLUIDS | | ALS MINI-KIT | | | |
| 1 | Atomizer | | 2 | atropine sulfate | 1 mg/10 ml | 1 | Atomizer | |
| 2 | Clave Adapter | | 2 | acetaminophen (Tylenol) | 160 mg/5 ml | 2 | Clave Adapter | |
| 3 | IV Start Kit | | 5 | adenosine (Adenocard) | 6 mg/2 ml | 2 | IV Start Kit | |
| 1 | Paper Bag | | 2 | albuterol (Proventil) | 2.5 mg/3 ml | 2 | Saline Flush Syr | 10 ml |
| 2 | Primary Macro Drip Tubing | | 3 | amiodarone (Cordarone) | 150 mg/3 ml | 2 | Safety IV Catheter | 18 GA x 1.16" |
| 1 | Red plastic reseal lock | | 4 | aspirin | 81 mg chew tab | 2 | Safety IV Catheter | 20 GA x 1.16" |
| 1 | Illinois Illiac Needle | 15 ga. | 1 | bacteriostatic NACL | 30 ml | 2 | Safety IV Catheter | 22 GA x 1" |
| 2 | Safety IV Catheter | 14 GA x 1.88" or 2" | 1 | calcium chloride 10% | 1 Gram /10 ml | 2 | Syringe | 3 ml |
| 2 | Safety IV Catheter | 14 GA x 5.25" | 1 | dextrose 10% | 25 grams in 250 ml | 2 | Safety Needle | 21 GA x 1 1/2" |
| 3 | Safety IV Catheter | 16 GA x 1.16" | 1 | dextrose 5% in Water | 50 ml | 1 | Primary Macro Drip Tubing | |
| 3 | Safety IV Catheter | 18 GA x 1.16" | 2 | diphenhydramine | 50 mg/1 ml | 1 | Red plastic reseal lock | |
| 3 | Safety IV Catheter | 20 GA x 1.16" | 5 | epinephrine | 1 mg/10 ml | 1 | Paper Bag | |
| 3 | Safety IV Catheter | 22 GA x 1" | 2 | epinephrine vial | 1 mg/1 ml | 2 | acetaminophen | 500 mg tab |
| 3 | Safety IV Catheter | 24 GA x 1" | 1 | glucagon injection | 1 mg | 2 | albuterol (Proventil) | 2.5 mg/3 ml |
| 3 | Safety Needle | 19 GA x 1 1/2" | 2 | ipratropium (Atrovent) | 0.5 mg/2.5 ml | 4 | aspirin | 81 mg chew tab |
| 3 | Safety Needle | 21 GA x 1 1/2" | 2 | lidocaine | 100 mg/5ml | 1 | dextrose 10% | 250 ml |
| 2 | Filter Needles | | 2 | magnesium sulfate | 1 Gram/2 ml | 4 | ibuprofen | 200 mg tab |
| 2 | Saline Flush | 10 ml | 1 | methylprednisolone | 125 mg/2 ml | 2 | ipratropium (Atrovent) | 0.5 mg/2.5 ml |
| 2 | Syringe | 1 ml | 2 | naloxone | 2 mg/2 ml | 1 | methylprednisolone | 125 mg/2 ml |
| 2 | Syringe | 3 ml | 1 | nitroglycerin | 0.4 mg tab (#25) | 2 | naloxone | 2 mg/2 ml |
| 2 | Syringe | 10 ml | 1 | normal saline | 500 ml | 1 | nitroglycerin | 0.4 mg tab (#25) |
| 1 | Syringe | 20 ml | 1 | normal saline w/label | 100 ml | 2 | ondansetron (Zofran) ODT | 4 mg tab |
| 1 | Syringe | 30 or 35 ml | 2 | ondansetron (Zofran) | 4 mg/2 ml | 1 | ondansetron (Zofran) | 4 mg/2 ml |
| 1 | Syringe (Oral) | 5 ml | 1 | racepinephrine 2.25% | 0.5 ml | 5 | prednisone | 10 mg tab |
| 1 | 4-way Stopcock Extension | | 2 | sodium bicarbonate 8.4% | 50 MEq/50 ml | BLS KIT | | |
| Epinephrine Kit (bottom of box) | | | 1 | tranexamic acid | 1 gram (packed w/NS 100 ml) | 1 | Epinephrine Kit | |
| 1 | epinephrine vial | 1 mg/1 ml | 2 | verapamil | 5mg/2ml | 1 | Nebulizer | |
| 2 | EpiRite Syringe | 1 ml | | | | 4 | aspirin | 81 mg chew tab |
| 2 | Safety Needle | 21 GA x 1 1/2" | | | | 2 | albuterol (Proventil) | 2.5 mg/3 ml |
| 4 | Alcohol wipes | | | | | 1 | naloxone | 2 mg/2 ml |
| 2 | Adhesive Bandages | | | | | 1 | atomizer | |
| CONTROLLED SUBSTANCES (SEALED WITH RED LOCK) | | | | | MFR KIT | | | |
| 1 | diazepam (Valium) | 10 mg/2 ml | 4 | midazolam (Versed) | 5 mg/ 1 ml | 1 | Epinephrine Kit | |
| 2 | fentanyl | 100 mcg/2 ml | 2 | morphine sulfate | 10 mg/1 ml | 1 | naloxone | 2 mg/2 ml |
| 1 | ketamine | 500 mg/10 ml | 1 | Carpusject Injector | | 1 | atomizer | |



Tachycardia

This protocol is for paramedic use only

Aliases: SVT, V-tach, Supraventricular tachycardia, Ventricular Tachycardia, Uncontrolled Atrial Fibrillation, A-fib

This protocol is used for the care of patients with persistent tachycardia (ventricular rate greater than or equal to 150/minute) where the tachycardia is believed to be the primary cause of the patient's symptoms. It is not intended to treat tachycardia that is secondary to underlying conditions (i.e., dehydration, trauma or toxins). Consultation with online medical control should be considered for complex patients in whom the cause of the arrhythmia is not obvious. **SYNCHRONIZED CARディオVERSION PRECEDES DRUG THERAPY FOR UNSTABLE PATIENTS.** Unstable patients may be defined as those suffering a tachycardia with: hypotension, acutely altered mental status, signs of shock, significant ischemic chest discomfort, shortness of breath, or pulmonary edema that is likely due to the arrhythmia. Adenosine is only used for regular monomorphic rhythm tachycardia.

1. Follow the **General Pre-Hospital Care Protocol**.
2. Identify and treat reversible causes.
3. Determine if patient is stable or unstable.

UNSTABLE

4. If time and condition allow prior to cardioversion, sedate per MCA selection. Refer to **Patient Sedation Procedure**.
5. For unstable patients with a **REGULAR NARROW OR WIDE** rhythm, perform synchronized cardioversion beginning at 100 J, increasing to 200 J, 300 J, 360 J. (Use manufacturers suggested biphasic energy dose, 100 J).
6. For unstable patients with an **IRREGULAR NARROW** rhythm, perform synchronized cardioversion beginning at 200 J, increasing to 300 J, 360 J. (Use manufacturers suggested biphasic energy dose, 120 – 200 J).
7. For patients that are unstable with an **IRREGULAR WIDE** rhythm, perform defibrillation beginning at 200 J, increasing to 300 J, 360 J. (Use manufacturers suggested biphasic energy dose 150 – 200 J).

STABLE

8. Attempt Vagal Maneuvers
 - a. Ensure the patient is on oxygen and on a cardiac monitor.
 - b. Run ECG strip during the procedure.
 - c. Instruct the patient to cough forcefully several times or
 - d. Have the patient take a deep breath and bear down.
 - e. **DO NOT USE CAROTID MASSAGE.**
9. Start an IV NS KVO. A large bore antecubital IV should be secured whenever possible.
10. Obtain 12 lead ECG, if immediately available.
11. *If the rhythm is **REGULAR**:*
 - a. *Consider Adenosine 6 mg rapid IV push through the most proximal injection site. This should be followed immediately with 20 ml NS flush.*

Saginaw-Tuscola Medical Control Authority

ADULT CARDIAC

TACHYCARDIA – STMCA Addendum

Initial Date: 09/01/2020
Revised Date: 04/07/2021

Section 5-3

b. If conversion does not occur, administer Adenosine 12 mg IV using the same technique as stated above.



12. If the rhythm is **IRREGULAR (likely atrial fibrillation)**:

a. Consider administration of verapamil (Isoptin) 0.1 mg/kg (up to 10 mg) IV over not less than 2 minutes.

13. If rhythm is stable with narrow QRS contact medical control for possible orders.

14. If rhythm is stable with wide QRS administer Amiodarone **OR** Lidocaine per MCA Selection.

Medication Options

(Choose One)

Amiodarone - 150 mg IV over 10 minutes

OR

Lidocaine - 1 mg/kg IV

15. If at any point a patient becomes unstable, perform synchronized cardioversion.

16. Administer Magnesium Sulfate 2 gm IV/IO for suspected torsades de pointes.



17. Per MCA selection, administer additional Amiodarone 150 mg IV over 10 minutes as needed to a maximum of 450 mg OR Lidocaine 0.5 -1.0 mg/kg IV push every 5 - 10 minutes to a maximum of 3 mg/kg.

NOTES:

1. Administration of Amiodarone is best accomplished by adding Amiodarone 150 mg to 100 or 250 ml of NS and infusing over approximately 10 minutes.
2. Administration of Magnesium Sulfate is best accomplished by adding Magnesium Sulfate 2gm to 100 or 250 ml of NS and infusing over approximately 10 minutes.