



## Central Shenandoah Emergency Medical Services Council

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# CSEMS Field Guide Update Document

Use this document to update five (5) pages and add one (1) page in the field guide. The following pages have been modified.

|            |  |
|------------|--|
| Page 18    | Added "Notify [MC] if STEMI." to line 4.   |
| Page 30    | Added "(COPD only)" to line 7.   |
| Page 53    | Added "(May mix with Versed)" in dosing section.   |
| Page 56    | Added "6. Sedation for shivering secondary to induced hypothermia" in Rx section.          |
| Page 57    | Changed dosing from "Give 2.5 mg" to "Give 2.5–5 mg, based on protocol" in dosing section. |
| Final Page | New Post-ROSC Induced hypothermia protocol to be added to the field guide.                 |

1. Print the following pages on white card stock.
2. Cut out individual pages.
3. Punch ring binder holes in appropriate location.
4. Either add to book and make through old page being updated or affix over top of old page being update.

June 19, 2009

**CHEST PAIN (NON-TRAUMATIC) (Ref. 4.4)**

1. ABCs and oxygen as needed.
2. Obtain patient history. Reassure the patient.
3. Transport as soon as feasible.
4. Obtain a 12 Lead ECG. Follow the STEMI TRIAGE guidelines as needed. Notify **[MC]** if STEMI.
5. Give ASPIRIN 162 mg PO.
6. Establish an INT or IV of normal saline at KVO.
7. Give NITROGLYCERIN 0.4 mg SL. Repeat in 3 to 5 minutes as needed (up to total of three SL doses).
8. If pain persists following nitroglycerin SL, apply 1 inch of nitroglycerin paste.
9. If pain persists following administration of a minimum of two (2) nitroglycerin, consider MORPHINE 5 mg IV at 1mg/min, titrated to effect. **[MC]** for re-dosing.
10. For a 12-lead indicated STEMI, give METOPROLOL 5 mg IV over 2 minutes. Repeat every 5 minutes if needed to a total dose of 15 mg. **[MC]**

**COMBATIVE PATIENT (Ref. 4.5)**

1. Assure scene safety.
2. ABCs and oxygen as needed.
3. For altered mental status, check blood glucose.
4. Attempt de-escalation.
5. Law enforcement performs physical restraint ensuring patient safety.
6. Perform chemical restraint as needed.
  - a. Chemical agitation or alcohol withdrawal → see TOXICOLOGY protocol.
  - b. Behavioral or alcohol related agitation → give HALOPERIDAL 5 mg IM, MIDAZOLAM 2.5 mg IM and DIPHENHYDRAMINE 25 mg IM. **[MC]** for re-dosing.
7. Transport as soon as possible.

**RESPIRATORY – ASTHMA/COPD (Ref. 4.17)**

1. ABCs and oxygen as needed.
2. Monitor pulse oximetry, capnography, if available.
3. Assist with **METERED DOSE INHALER (EMTI)**.
4. Give **ALBUTEROL** 2.5 mg and **IPRATROPIUM** 500 mcg via small volume nebulizer. Repeat albuterol every 10 minutes up to 4 treatments if needed.
5. Start an IV of normal saline.
6. Give **METHYLPREDNISOLONE** 2 mg/kg up to 125 mg IV over 1 to 2 minutes or IM. **[LE]**
7. Administer CPAP with 5-10 cmH<sub>2</sub>O PEEP (COPD only).
8. Consider EPINEPHRINE 1:1,000 0.01 mg/kg up to 0.3 mg IM for status asthmaticus **[MC]**.
9. Place on cardiac monitor.

**RESPIRATORY – GROUP /EPIGLOTTITIS (Ref. 4.18)**

1. ABCs and humidified oxygen as needed.
2. Do not attempt to visualize the airway or place anything in the patient's mouth.
3. Keep the child as calm and comfortable as possible. If the patient is experiencing moderate to severe respiratory distress, contact **[MC]** and consider an epinephrine nebulizer treatment.
  - Assemble nebulizer and place 2 to 3 mg (2 to 3 mL) of **EPINEPHRINE 1:1,000** in the nebulizer.Connect to oxygen set to the appropriate flow rate.
5. Place on cardiac monitor.

**HALOPERIDOL CONTINUED**

**SE:**

*CNS:* extrapyramidal symptoms, drowsiness, headache, insomnia, restlessness, seizures, vertigo

*CV:* hypotension, hypotension, tachycardia

*EENT:* blurred vision

*GI:* nausea, vomiting, dry mouth, constipation

**Dosing:** **ADULT** Give 5 mg IM. Contact [MCJ] for repeat dosing (May mix with Versed).

**PED** Contact [MCJ].

**IPRATROPIUM**

**Rx:**

1. Bronchoconstriction in COPD, including chronic bronchitis and emphysema as an adjunct to albuterol.

2. Bronchial asthma as an adjunct to albuterol.

**Contra:**

1. Hypersensitivity to the drug, or to atropine and its derivatives.

2. History of hypersensitivity to soy lecithin or related food products such as soybean and peanut.

**SE:**

*CNS:* anxiety, dizziness, headache, nervousness; *CV:* palpitations; *EENT:* blurred vision, dry mouth; *GI:* nausea, vomiting; *RESP:* bronchospasm, cough

**Dosing:** Give 500 mcg in 2.5 mL with a mouthpiece, facemask or blow-by. Do not repeat.

**METOPROLOL CONTINUED**

**Contra:**

1. Bradycardia (HR less than 60).

2. Hypotension (SBP less than 100).

3. Bronchial asthma.

4. Cardiogenic shock, congestive heart failure.

5. Second- or third-degree AV block.

**SE:**

*CNS:* dizziness, lethargy  
*CV:* bradycardia, CHF, cold extremities, heart block, hypotension

*RESP:* bronchospasm (1%), dyspnea

**Dosing:** Give 5 mg IV over 2 minutes. Repeat every 5 minutes if needed to a total dose of 15 mg.

**MIDAZOLAM**

**Rx:**

1. Sedation for cardioversion and TCP.

2. Sedation for endotracheal intubation only after the ET tube is inserted.

3. Seizures not caused by hypoglycemia, secondary to diazepam.

4. Severe agitation, tachycardia, or hallucinations caused by alcohol withdrawal, secondary to diazepam.

5. Behavioral or alcohol related agitation as an adjunct to haloperidol.

6. Sedation for shivering secondary to induced hypothermia.

**Contra:**

1. Hypersensitivity to the drug.

2. Hypotension (SBP less than 100).

3. Acute angle closure glaucoma.

### MIDAZOLAM CONTINUED

**SE:** CNS: drowsiness, amnesia, altered mental status  
CV: hypotension, tachycardia, PVCs  
RESP: bronchospasm, coughing, laryngospasm, respiratory depression and arrest

**Dosing:** **ADULT** Give 2.5–5 mg, based on protocol, slow IV titrated to effect. May repeat dose every 5 minutes if needed. Midazolam may also be administered 5 mg IM if unable to readily establish IV access.

**PED** Give 0.1 mg/kg slow IV, titrated to effect. May repeat every 5 minutes as needed [MC].  
Midazolam may also be administered 0.1 mg/kg IM if unable to readily establish IV access [MC].

### MORPHINE

**Rx:**

1. Pain associated with acute myocardial infarction unresponsive to nitrates.
2. Acute pain, such as isolated extremity trauma.
3. Pain from burns (not involving respiratory tract).
4. Pulmonary edema [MC].
5. Acute abdominal pain [MC].

### POST-ROSC INDUCED HYPOTHERMIA (Ref. 4, 30)

**INDICATION:** Patients tolerating an advanced airway following ROSC from a medical cardiac arrest.

#### CONTRAINDICATIONS:

- A. Major trauma.
  - B. Preexisting hypothermia.
  - C. Hypotension (SBP less than 90 mmHg) unresponsive to vasopressors.
  - D. Known bleeding disorders or liver failure.
  - E. Transport time (ground + air, if utilized) to hospital >30 minutes. Initiate cooling when ETA is less than 30 minutes.
  - F. Age birth to adolescent.
1. ABCs and advanced airway (King or ETT).
  2. For hypotension (SBP less than 90 mmHg) associated with cardiogenic shock, give a DOPAMINE infusion at 5–20 mcg/kg/min IV. Titrate to SBP greater than 90 mmHg.
  3. Start an IV of cold normal saline.
    - a. Infuse a 30 mL/kg bolus (Maximum: 2 liters).
    - b. Monitor for fluid overload respiratory distress.
  4. Expose the patient and apply ice packs to groin, axillae and neck. Monitor for local cold injury to ice pack application sites.
  5. If patient begins shivering, sedate with MIDAZOLAM 5 mg slow IV push, titrated to effect. Repeat dose in 5 minutes if shivering persists.