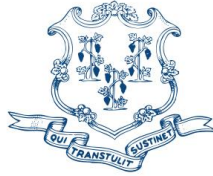


STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

Raul Pino, M.D., M.P.H.
Commissioner



Dannel P. Malloy
Governor
Nancy Wyman
Lt. Governor

OFFICE OF EMERGENCY MEDICAL SERVICES *OEMS COMMUNICATIONS STATEMENT 17-06*

Date: July 12, 2017

To: All Connecticut certified & licensed EMS Organizations
All Connecticut Sponsor Hospitals

From: Raffaella Coler, RN, MEd, Paramedic ^R
Director, Office of Emergency Medical Services
Richard Kamin, MD, FACEP ^{RK}
Medical director, Office of Emergency Medical Services

Re: UPDATED dosing for intranasal Naloxone Administration

Effective immediately, through the approval of the Connecticut EMS Medical Advisory Committee (CEMSMAC) and the Commissioner of the Department of Public Health, the following Connecticut Statewide EMS Protocols have been updated to reflect an increase in Naloxone dosing *to 4mg per administration*:

- **2.17A Poisoning/Substance Abuse/Overdose – Adult**
- **2.17P Poisoning/Substance Abuse/Overdose - Pediatric**
- **2016 CT Adult Medication Reference**

Attached you will find the updated affected pages for replacement. Additionally, the full updated Statewide EMS Protocols document, version 2017.1, is posted on the Statewide EMS Protocols page of the OEMS website. EMS organizations should contact their sponsor hospital clinical coordinator regarding authorization and implementation of this change.

The Connecticut Office of Emergency Medical Services appreciates the continuing hard work by the many stakeholders of the EMS community in developing these initiatives to enhance prehospital patient care across the state.



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2.17A

Poisoning/Substance Abuse/Overdose - Adult



EMR/EMT/AEMT STANDING ORDERS



- Routine Patient Care.
- Consider contacting Poison Control at (800) 222-1222 as soon as practical.
- Prior to calling Poison Control attempt to identify substance, quantity, time/route of exposure and patient information (weight, medications, history, intentional, accidental).
- For suspected opiate overdose with severe respiratory depression if available and equipped consider:
 - Naloxone 2 - 4 mg IN, or by use of an auto-injector as described by sponsor hospital.
 - If inadequate response, repeat in 3 – 5 minutes.
 - For additional doses call Direct Medical Oversight.
- For suspected isolated cyanide poisoning, see [Smoke Inhalation Protocol 2.21A](#).
- For decontamination/hazardous materials exposure, see [Hazardous Materials 7.0](#).
- For hypoglycemia, see [Hypoglycemia Emergencies Protocol 2.9A](#).
- For seizures, see [Seizure Protocol 2.18A](#).

PARAMEDIC STANDING ORDERS

- For suspected opiate overdose with severe respiratory depression consider:
- Naloxone 0.4 – 2.0 mg IV/IM or 2-4 mg IN.
 - If no response, may repeat every 3 – 5 minutes to a total of 10 mg.

Suggested Treatments

- Beta Blocker and Calcium Channel Blocker refer to [Bradycardia Protocol 3.1A](#).
- Dystonic Reaction:
 - Diphenhydramine 25 – 50 mg IV/IM
- Organophosphates, see [Nerve Agent/Organophosphate Protocol 2.12A](#).
- Suspected Sympathomimetic/Stimulant:
 - Midazolam 2.5 mg IV/IN, may repeat once in 5 minutes; or 5 mg IM, may repeat once in 20 minutes, **OR**
 - Lorazepam 1 mg IV, may repeat once in 5 minutes; or 2 mg IM may repeat once in 20 minutes, **OR**
 - Diazepam 2mg IV, may repeat once in 5 minutes; or 5 mg IM, may repeat once in 20 minutes,
- Tricyclic, Benadryl, or Cocaine with symptomatic dysrhythmias, (e.g., tachycardia and wide QRS):
 - Sodium bicarbonate 2 mEq/kg IV.



This protocol is designed to provide general guidelines for treatment. Specific treatments or antidotes may be appropriate as directed by direct medical oversight or in consultation with poison control in direct conjunction with direct medical oversight

Protocol Continues

2.17P

Poisoning/Substance Abuse/Overdose - Pediatric



EMT STANDING ORDERS

E

- Routine Patient Care.
- Consider contacting Poison Control at (800) 222-1222 as soon as practical. Prior to calling Poison Control attempt to identify substance, quantity, time/route of exposure and patient information (weight, medications, history, intentional, accidental).
- For suspected isolated cyanide poisoning, see [Smoke Inhalation 2.21P](#).
- For decontamination/hazardous materials exposure: refer to [Hazardous Materials 7.0](#).
- For hypoglycemia, see [Diabetic Emergencies 2.9P](#).
- For seizures, see [Seizures 2.18P](#).
- For suspected opiate overdose with severe respiratory depression consider:
 - Naloxone 2 - 4 mg IN, or by use of an auto-injector as described by sponsor hospital.
 - If inadequate response, repeat in 3-5 minutes.

ADVANCED EMT STANDING ORDERS

****IF PRACTICING UNDER 2007 SCOPE OF PRACTICE****

A

- For suspected opiate overdose with severe respiratory depression consider:
- Naloxone IV/IM refer to [Pediatric Color Coded Appendix 2](#), repeat every 5 minutes as needed to a total of 10 mg.

PARAMEDIC STANDING ORDERS

Suggested Treatments

P

- Beta Blocker and Calcium Channel Blocker, see [Bradycardia Protocol 3.1P](#).
- Dystonic Reaction:
 - Diphenhydramine 1 mg/kg IV/IM up to 50 mg
- Organophosphates, see [Nerve Agent/Organophosphate Protocol 2.12P](#).
- Tricyclic with symptomatic dysrhythmias, (e.g., tachycardia and wide QRS > 100 milliseconds):
 - Sodium bicarbonate 2 mEq/kg IV.



This protocol is designed to provide general guidelines for treatment. Specific treatments or antidotes may be appropriate as directed by direct medical oversight or in consultation with Poison Control in direct conjunction with direct medical oversight.

PEARLS:

- If possible, bring container/bottles, and/or contents.
- Airway management should remain paramount.
- Consider alternative treatments when multiple doses are administered, including airway management.
- Pulse oximetry may NOT be accurate for toxic inhalational patients.
- Capnography may be helpful for monitoring respiratory status and titrating to lowest effective naloxone dose. See [Quantitative Waveform Capnography Procedure 5.7](#).

Protocol Continues 



Protocol Continued

Signs & Symptoms, which may or may not be present:

- **Acetaminophen:** initially no signs/symptoms or nausea/vomiting. If not detected and treated, may cause irreversible liver failure.
- **Akathisia:** May consist of feelings of anxiety, agitation, and jitteriness, as well as inability to sit still / pacing. This may be induced by antipsychotics, such as haloperidol, or anti-emetics such as prochlorperazine or metoclopramide.
- **Anticholinergic:** tachycardia, fever, dilated pupils, mental status changes. Blind as a bat (blurred vision). Dry as a bone (dry mouth). Red as a beet (flushing). Mad as a hatter (confusion). Hot as a hare (hyperthermia).
- **Aspirin:** Tinnitus, abdominal pain, vomiting, tachypnea, fever and/or altered mental status. Renal dysfunction, liver failure, and or cerebral edema among other things can take place later.
- **Cardiac Medications:** dysrhythmias, altered mental status, hypotension, hypoglycemia.
- **Depressants:** bradycardia, hypotension, decreased temperature, decreased respirations, non-specific pupils.
- **Dystonic Reaction:** Neurological movement disorder, in which sustained muscle contractions cause twisting and repetitive movements or abnormal postures. This may be induced by antipsychotics, such as haloperidol, or anti-emetics such as prochlorperazine or metoclopramide.
- **Opiate:** Respiratory depression or arrest, pinpoint pupils, decreased mental states. Prolonged overdoses may result in compartment syndrome and/or hypothermia.
- **Organophosphates:** bradycardia, increased secretions, nausea, vomiting, diarrhea, pinpoint pupils.
- **Solvents:** nausea, coughing, vomiting, mental status change and arrhythmias. Patient with significant solvent exposure, must be handled gently to reduce the incident of arrhythmia and/or subsequent cardiac arrest.
- **Sympathomimetic/Stimulants:** tachycardia, hypertension, seizures, agitation, increased temperature, dilated pupils, anxiety, paranoia, diaphoresis. Examples are bath salts, cocaine, methamphetamine, ecstasy, ADHD drugs, thyroid meds (rarely), salbutamol.
- **Tricyclic:** seizures, dysrhythmias, hypotension, decreased mental status or coma.

CT Adult Medication Reference

This document is to serve as a reference for the 2016 CT Patient Care Protocols.

See the Pediatric Color Coded Appendix for pediatric dosages

Medication	Adult Protocol/Dosing
<p><u>Morphine Sulfate</u></p> <p>Indications:</p> <ul style="list-style-type: none"> Narcotic analgesic <p>Contraindications</p> <ul style="list-style-type: none"> Use caution if BP < 100 mmHg. 	<p>Pain</p> <ul style="list-style-type: none"> 0.1 mg/kg IV/IM (single max dose of 10 mg) <ul style="list-style-type: none"> May repeat every 5 minutes to a total of 20 mg titrated to pain relief and if systolic BP is >100 mmHg. <p>Acute Coronary Syndrome</p> <ul style="list-style-type: none"> 0.1 mg/kg IV/IM (up to 5 mg) <ul style="list-style-type: none"> May repeat every 5 minutes to a maximum of 15 mg titrated to pain as long as systolic BP remains >100 mmHg.
<p><u>Naloxone</u> Narcotic Antagonist</p> <p>Indications:</p> <ul style="list-style-type: none"> Narcotic overdose. 	<p>Antidote: For hypoventilation from opiate administration by EMS personnel, assist ventilations and administer naloxone 0.4mg IV/IM or 2 mg IN. If no response, may repeat initial dose every 5 minutes to a total of 10 mg.</p> <p>Poisoning/Substance Abuse/OD Narcotic OD</p> <ul style="list-style-type: none"> 2-4 mg IN OR through the use of auto-injector. 0.4-2 mg IV/IM <ul style="list-style-type: none"> If no response, may repeat every 3 - 5 minutes to a total of 10 mg.
<p><u>Nitroglycerin</u></p> <p>Indications:</p> <ul style="list-style-type: none"> Vasodilator used in the treatment of chest pain secondary to acute coronary syndrome and CHF 	<p>Acute Coronary Syndrome</p> <ul style="list-style-type: none"> Facilitate administration of the patient's own nitroglycerin every 3-5 minutes while symptoms persist and systolic BP remains >100mmHg, to a total of 3 doses 0.4 mg SL every 3 – 5 minutes while symptoms persist and if systolic BP remains >100 mmHg. 10 micrograms/minute if symptoms persist after 3rd SL nitroglycerin <ul style="list-style-type: none"> Increase IV nitroglycerin by 10 micrograms/minute every 5 minutes while symptoms persist and systolic remains >100 mmHg. If IV nitroglycerin is not available, consider the application of nitroglycerin paste 1 – 2 inches transdermally. <p>Congestive Heart Failure</p> <ul style="list-style-type: none"> Consider nitroglycerin 0.4 mg SL every 5 minutes while symptoms persist and if the systolic BP is >100 mmHg. IV nitroglycerin 20 micrograms/minute, increase by 10 - 20 micrograms/minute every 3 – 5 minutes (it is recommended two (2) IV lines should be in place). (Generally, accepted maximum dose: 400 micrograms/minute.)OR <ul style="list-style-type: none"> Nitroglycerin paste 1” – 2” transdermally.

Connecticut OEMS in conjunction with CEMSMAC has taken caution to ensure all information is accurate and in accordance with professional standards in effect at the time of publication. These protocols, policies, or procedures MAY NOT BE altered or modified without prior approval.