

**REGION I EMERGENCY MEDICAL SERVICES  
STANDING MEDICAL ORDERS  
EMT – Basic**

**SMO: Pediatric Toxic Exposure**

**Overview:** Poisoning and Overdose can take several forms and patients may range from mildly ill to very critical. This protocol is intended to guide EMS Responders in providing care for these patients. Variances in condition occur due to amount of substance involved, time of incident, type of substance involved, and whether it is an overdose or actual poison.

**INFORMATION NEEDED**

- \_\_\_ Surroundings and safety: check for syringes, containers, flammables, gas cylinders, etc. Note odors in house or surroundings.
- \_\_\_ For drug ingestions: note drug(s), dosage(s), number remaining and date of prescription(s) and bring container(s) with patient
- \_\_\_ For other poisoning and exposures: if possible, note identifying information, warning labels or numbers on packaging
- \_\_\_ Duration of illness: onset and progression of present state, antecedent symptoms such as headache, seizures, confusion, etc.
- \_\_\_ History of event: ingested substances, drugs, alcohol, toxic exposures, suicidal intention, and the work environment
- \_\_\_ Past medical history, psychiatric problems
- \_\_\_ If possible, corroborate information with family member or responsible bystander

**OBJECTIVE FINDINGS**

- \_\_\_ Breath odor
- \_\_\_ Needle tracks
- \_\_\_ Medic alert tags/ bracelets/medallions
- \_\_\_ Cardiac rhythm
- \_\_\_ Blood glucose level
- \_\_\_ Pulse oximetry
- \_\_\_ Vital signs
- \_\_\_ Pupil size
- \_\_\_ Skin appearance, color temperature
- \_\_\_ Lung sounds and airway secretions

**TREATMENT**

**GENERAL TREATMENTS**

- \_\_\_ Assess need for C-Spine precautions
- \_\_\_ Ensure ABC's, oxygenation, ventilation, and suction prn
- \_\_\_ Oxygen high flow as needed; if indicated, assist ventilations with BVM
- \_\_\_ RMC

7/04

Reviewed:

Revised:

EMS/ Region1 SMOs

## TREATMENT (cont)

### ANTIPSYCHOTICS WITH EXTRAPYRAMIDAL REACTION

- Collect information
- Airway management
- RMC

### NARCOTICS

- Ensure ABC's, oxygenation, ventilation, and suction prn
- Oxygen high flow as needed; if indicated assist ventilations with BVM

### TRICYCLIC ANTIDEPRESSANTS (TCA)

- Collect information
- Airway management
- RMC

### CALCIUM CHANNEL BLOCKER OR BETA BLOCKER TOXICITY

- Collect information
- Airway management
- RMS

### ORGANOPHOSPHATES

**SLUDGE** (Salivation, lacrimation, urination, diaphoresis/diarrhea, gastric hypermotility, and emesis/eye[small pupils, blurry vision] characteristically seen.

- Collect information
- Airway Management
- RMC
- Consider HazMat precautions

### UNKNOWN SUBSTANCE

- Collect information
- Airway management
- RMC
- If rapid blood glucose test shows glucose less than 60 mg/dl for child ; less than 40 mg/dl for newborn treat with:
  - **Glucose paste** or other **oral glucose** administration if patient is able to maintain their airway and follow commands
  - **Glucagon** 0.1 mg/kg IM (max dose 1 mg) if patient is *unable* to maintain their airway and follow commands

**Documentation of adherence to protocol:**

- \_\_\_ Airway management procedures as needed
- \_\_\_ Oxygen provided as needed
- \_\_\_ Information regarding substances involved e.g. ingested, toxic exposure to suicidal thoughts, etc.

**PRECAUTIONS AND COMMENTS**

- Patients with TCA overdoses may experience rapid depression of mental status, sudden seizures, or worsening of vital signs.
- Caustic ingestions are usually caused by alkali (e.g. lye or Drano) or acids.
- Hydrocarbons include gasoline, kerosene, turpentine, Pine Sol, etc.
- Contact Poison Control if substance is unknown.

**REGION I EMERGENCY MEDICAL SERVICES  
STANDING MEDICAL ORDERS  
EMT – Paramedic**

**SMO: Pediatric Toxic Exposure**

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- For other poisoning and exposures: if possible, note identifying information, warning labels or numbers on packaging
- Duration of illness: onset and progression of present state, antecedent symptoms such as headache, seizures, confusion, etc.
- History of event: ingested substances, drugs, alcohol, toxic exposures, suicidal intention, and the work environment
- Past medical history, psychiatric problems
- If possible, corroborate information with family member or responsible bystander

**OBJECTIVE FINDINGS**

- Breath odor
- Needle tracks
- Medic alert tags/ bracelets/medallions
- Cardiac rhythm
- Blood glucose level
- Pulse oximetry
- Vital signs
- Pupil size
- Skin appearance, color temperature
- Lung sounds and airway secretions

**TREATMENT**

**GENERAL TREATMENTS**

- Assess need for C-Spine precautions
- Ensure ABC's, oxygenation, ventilation, and suction prn
- Oxygen high flow as needed; if indicated, assist ventilations with BVM
- RMC
- Advanced airway if indicated
- IV access

7/04

Reviewed:

Revised:

EMS/ Region1 SMOs

### ANTIPSYCHOTICS WITH EXTRAPYRAMIDAL REACTION

- Collect information
- Airway management
- RMC
- Diphenhydramine 1mg/kg IV or IM**, repeat prn to max of 50 mg

### NARCOTICS

- Ensure ABC's, oxygenation, ventilation, and suction prn
- Oxygen high flow as needed; if indicated assist ventilations with BVM
- RMC
- Naloxone:**
  - Infant or Child up to 5 years old (less than 20 kg): **0.1 mg/kg IV, IM, or IO** (avoid Naloxone in the neonate).

### TRICYCLIC ANTIDEPRESSANTS (TCA)

- Collect information
- Airway management
- RMC
- IV access
- Hyperventilate with 100% oxygen, airway management as needed
- Consult Medical Control for administration of **Sodium Bicarbonate 1mEq/kg**, for hypotension, seizure, and/or QRS widening > 0.10 seconds, repeat in 10 minutes with 0.5mEq/kg, prn to total of 2mEq/kg
- After total of 2mEq/kg Sodium Bicarbonate, Consult Medical Control for use of **Lidocaine 1.5mg/kg** for ventricular dysrhythmias. Medical Control may request to repeat as needed **0.5 to 0.75mg/kg IV Lidocaine in 5-10 min.** to a max total dose of 3mg/kg
- Treat seizures according to Pediatric Seizure Protocol

### **CALCIUM CHANNEL BLOCKER OR BETA BLOCKER TOXICITY**

- Collect information
- Airway management
- RMC
- IV access
- In the setting of Bradycardia and/or hypotension caused by a BetaBlocker overdose,  
**Glucagon 1 unit IM or slow IVP**

### **ORGANOPHOSPHATES**

**SLUDGE** (Salivation, lacrimation, urination, diaphoresis/diarrhea, gastric hypermotility, and emesis/eye[small pupils, blurry vision] characteristically seen.

- Collect information
- Airway Management
- RMC
- Consider HazMat precautions
- Atropine 0.02 mg/kg IV/ IO; repeat every 2-5 min** until SLUDGE symptoms subside

### **UNKNOWN SUBSTANCE**

- Collect information
- Airway management
- RMC
- IV access
- Naloxone:**
  - Infant or Child up to 5 years old (less than 20 kg): **0.1 mg/kg IV, IM, or IO** (avoid Naloxone in the neonate).
- If rapid blood glucose test shows glucose less than 60 mg/dl for child ; less than 40 mg/dl for newborn treat with:
  - **Glucose paste** or other **oral glucose** administration if patient is able to maintain their airway and follow commands
  - **Glucagon 0.1 mg/kg IM** (max dose 1 mg) if patient is *unable* to maintain their airway and follow commands
- Advanced Air management as indicated
- If hypotensive, administer fluid bolus of NS 500cc, reassess and repeat as indicated.
- Continuously monitor vital signs and cardiac rhythm during transport

**Documentation of adherence to protocol:**

- Airway management procedures as needed
- Oxygen provided as needed
- Information regarding substances involved e.g. ingested, toxic exposure to suicidal thoughts, etc.
- Response to interventions
- If extrapyramidal reaction occurs, Benadryl given
- If Nalaxone given: AMS, respiratory depression documented

<b>Medical Control Contact Criteria</b>
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- |  |
|--|
| <input type="checkbox"/> Consult Medical Control for administration of Sodium Bicarb or Lidocaine. |
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**PRECAUTIONS AND COMMENTS**

- In suspected opiate overdoses, withhold advanced airway management until after the patient has received **Naloxone**.
- Significantly higher doses of **Naloxone** may be needed for treatment of overdoses with synthetic opioid compounds such as Demerol, Fentanyl, etc.
- Consider titrating **Naloxone** to achieve adequate respiratory effort and avoid a withdrawal reaction or combativeness.
- Caustic ingestions are usually caused by alkali (e.g. lye or Draino) or acids.
- Hydrocarbons include gasoline, kerosene, turpentine, Pine Sol, etc.
- Contact Poison Control if substance is unknown.