Pediatric Poisoning/Overdose

Pre-Medical Control

GENERAL MANAGEMENT OF TOXIC EXPOSURE (INCLUDING INGESTION)

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow **Pediatric Assessment and Treatment Protocol.**
2. Use proper protective equipment and prepare for decontamination if necessary.
3. Remove clothing exposed to chemical (dry decon).
4. Identification of the substance (patient has been exposed to).

EMT/SPECIALIST/PARAMEDIC

5. Alert receiving hospital if patient may present HAZMAT risk.
6. Sample of drug or substance and any medication or poison containers should be brought in with patient if it does NOT pose a risk to rescuers.

PARAMEDIC

7. Refer to **Pain Management Procedure**

INHALATION EXPOSURES:

MFR/EMT/SPECIALIST/PARAMEDIC

1. Dilute noxious gas inhaled (including carbon monoxide & smoke), ensure high concentration of oxygen is provided.
2. If suspected cyanide gas exposure, refer to **Cyanide Exposure Protocol** and contact medical control immediately.

EYE CONTAMINATION:

MFR/EMT/SPECIALIST/PARAMEDIC

1. Irrigate continuously with Normal Saline or tap water for 15 minutes (attempt to continue enroute) or as directed by Medical Control.
2. For alkali exposure, maintain continuous irrigation.

PARAMEDIC

3. If available, administer Tetracaine, 1-2 drops per eye to facilitate irrigation. Ensure patient does not rub eye.

Tetracaine:
☐ Included
☐ Not Included

SKIN ABSORPTION:

MFR/EMT/SPECIALIST/PARAMEDIC

1. Brush off dry chemicals before irrigation.
2. Irrigate continuously with Normal Saline, or tap water for 15 minutes or as directed by Medical Control.

INGESTION:

MFR/EMT/SPECIALIST/PARAMEDIC

1. If altered mental status, refer to **Pediatric Altered Mental Status Protocol**.
2. If respiratory distress, refer to **Pediatric Respiratory Distress, Failure or Arrest Protocol**.
3. If the patient is seizing, refer to **Pediatric Seizure Protocol**.

PARAMEDIC

4. If cardiac dysrhythmia, refer to appropriate pediatric dysrhythmia protocol.

ORGANOPHOSPHATE EXPOSURE (MALATHION, PARATHION)

MFR/EMT/SPECIALIST/PARAMEDIC

1. Administer Mark I Kit/Duo Dote auto injector per **Nerve Agent/Organophosphate Pesticide Exposure Treatment Protocol.**
2. Mild or moderate symptoms (e.g., nausea, vomiting, sweating, weakness and mild to moderate shortness of breath)
   A. 14 years old or greater – 1 Mark I Kit/Duo Dote auto injector.
   B. Between 2-14 years old: one 1 mg Atropen if available, otherwise 1 Mark 1Kit /Duo Dote auto injector. Contact Medical Control if time permits.
   C. If less than 2 years old, contact Medical Control.
3. Severe signs & symptoms (e.g. unconscious, seizing, severe respiratory distress)
   A. 14 years old or greater – 2-3 Mark I Kits/Duo Dote auto injectors.
   B. Less than 14 years old: 1-2 Mark 1 Kits/Duo Dote auto injectors.

PARAMEDIC

4. For severe symptoms administer 1 dose of benzodiazepine at appropriate weight-based dose per **Seizure Protocol** regardless of seizure activity.
5. If Mark I Kit/Duo Dote auto injector is not available, administer Atropine 2 mg IV/IM (if available) per each Mark I Kit/Duo Dote auto injector indicated (each Mark I Kit contains 2 mg of Atropine) repeated every 5 minutes until "SLUDGEM" symptoms improve or as directed.(Salivation, Lacrimation, Urination, Defecation, Gastrointestinal hypermotility, Emesis, Muscle twitching or spasm).

MANAGEMENT OF BITES AND STINGS

SPIDERS, SNAKES AND SCORPIONS:

MFR/EMT/SPECIALIST/PARAMEDIC

1. Protect rescuers. Bring in spider, snake or scorpion if captured and contained or if dead for accurate identification.
2. Ice for comfort on spider or scorpion bite; DO NOT apply ice to snake bites.

BEES AND WASPS:

MFR/EMT/SPECIALIST/PARAMEDIC

1. Remove sting mechanism from honey bees only by scraping out. Do not squeeze venom sac if this remains on stinger.
2. Provide wound care.
3. Observe patient for signs of systemic allergic reaction. Treat anaphylaxis per **Pediatric Anaphylaxis/Allergic Reaction Protocol.**

DRUG, CHEMICAL, PLANT, MUSHROOM INGESTION:

MFR/EMT/SPECIALIST/PARAMEDIC

1. Use protective eye equipment.
2. In situations of potential ingestion or inhalation of petroleum distillates, DO NOT induce vomiting.

3. Monitor the patient's respiratory and mental status very closely.
4. If patient is alert and oriented, prepare for emesis; recover and save emesis. Use appropriate barriers according to universal precautions guidelines.

SPECIALIST/PARAMEDIC

5. In suspected narcotic overdose with respiratory compromise or hemodynamic instability, consider Naloxone 0.1 mg/kg IV/IM (maximum 2 mg), repeat as indicated.

Post-Medical Control

SPECIALIST/PARAMEDIC

6. If Beta Blocker overdose is suspected AND the patient is bradycardic and hypotensive;
   A. Per MCA selection administer Glucagon 1 mg IV/IM/IO. May be repeated after contact with Medical Control and if additional Glucagon is available.
   B. Consider calcium chloride 20 mg/kg IV, **(**maximum dose 1 gm). NOTE: IV Calcium Chloride should be pushed slowly through a patent IV, avoiding hand and foot IV sites.

Glucagon

☐ Included

☐ Not Included

PARAMEDIC

7. For symptomatic tricyclic antidepressant ingestions (tachycardia or arrythmia, wide complex QRS, seizures or hemodynamic instability), administer sodium bicarbonate 1 mEq/kg IV, repeat as needed.
8. For extrapyramidal dystonic reactions, administer diphenhydramine 1 mg/kg IV, (maximum dose 50 mg).
9. For symptomatic calcium channel blocker overdose, per MCA selection administer Glucagon 1 mg IV/IM/IO. Consider calcium chloride 20 mg/kg IV, **(**maximum dose 1 gm). NOTE: IV Calcium Chloride should be pushed slowly through a patent IV, avoiding hand and foot IV sites.

Follow **Pediatric Assessment & Treatment Protocol**

General Management Toxic Exposure (including ingestion)

- Use proper equipment & prepare for decontamination if necessary
- Remove clothing exposed to chemical (dry decon)
- Identify substance (patient exposed to)
- Alert receiving hospital if patient may present HAZMAT risk
- Sample of drug or substance & any medication or poison containers should be brought in with patient if it does NOT pose a risk to rescuers
- Refer to **Pain Management Procedure**

Inhalation exposures

- Dilute noxious gas inhaled including carbon dioxide & smoke
- Ensure high concentration of oxygen is provided
- For suspected cyanide gas exposure – refer to **Cyanide Exposure Protocol** and contact Medical Control immediately

Eye contamination

- Irrigate continuously with Normal Saline or tap water 15 min (attempt to continue enroute) or as directed by Medical Control
- Alkali exposure, maintain continuous irrigation
- If available, administer Tetracaine 1-2 drops per eye, to facilitate irrigation. Ensure patient does not rub eyes.

Tetracaine:
☐ Included
☐ Not Included

Skin absorption

- Brush of dry chemicals before irrigation.
- Irrigate continuously with Normal Saline or tap water 15 minutes or as directed by Medical Control

Ingestion

- Altered Mental Status **– refer to Pediatric Altered Mental Status Protocol**
- Respiratory distress **– refer to Pediatric Respiratory Distress, Failure or Arrest Protocol**
- Seizure **– refer to Pediatric Seizure Protocol**
- Cardiac dysrhythmia – refer to appropriate pediatric dysrhythmia protocol

Organophosphate exposure (Malathion, Parathion)

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  - 14 years old or greater: 1 Mark 1 Kit/Duo Dote auto injector
  - Between 2-14 years: one 1 mg Atropen if available, otherwise 1 Mark 1 Kit/Duo Dote auto injector. Contact Medical Control if time permits.
  - If less than 2 years old: contact Medical Control.
- **Severe signs & symptom**s (e.g., unconscious, seizing, severe respiratory distress)
  - 14 years old or greater: 2-3 Mark I Kits/Duo Dote auto injectors
  - Less than 14 years old: 1-2 Mark 1 Kit/Duo Dote auto injectors
- For severe symptoms administer 1 dose of benzodiazepine at appropriate weight-based dose per **Seizure Protocol** regardless of seizure activity.
- If Mark I Kit/Duo Dote auto injector is unavailable, administer Atropine 2 mg IV/IM, if available, per each Mark I Kit/Duo Dote auto injector indicated, (each Mark I Kit contains 2 mg of Atropine) repeated every 5 min. until SLUDGEM symptoms improve or as directed. (Salivation, Lacrimation, Urination, Defecation, Gastrointestinal hypermobility, Emesis, Muscle twitching or spasm)

Management of Bites and Stings

Spiders, snakes & scorpions

- Protect rescuers
- Bring in if captured & contained or dead for accurate I.D.
- Ice for comfort on spider or scorpion bite
- **DO NOT** apply ice to snake bites.

Bees & wasps

- Remove sting mechanism (honeybees only) – scrape out
- Do not squeeze venom sac if this remains on stinger
- Provide wound care
- Observe patient for systematic allergic reaction
- Treat Anaphylaxis per **Pediatric Anaphylaxis/ Allergic Reaction Protocol**

Drug, chemical, plant, mushroom ingestion

- Use protective eye equipment
- In situations for potential ingestion or inhalation of petroleum distillates: DO NOT induce vomiting
- Monitor respiratory & mental status very closely
- If patient is alert & oriented: prepare for emesis, recover & save emesis
- Use appropriate barriers according to universal precautions guidelines

In suspected narcotic overdose with respiratory compromise or hemodynamic instability, consider Naloxone 0.1 mg/kg IV/IM (maximum 2 mg), repeat as indicated.

Contact Medical Control

If Beta Blocker overdose is suspected AND patient is bradycardic & hypotensive; per MCA selection, administer Glucagon 1 mg IV/IM/IO. May be repeated after MCA contact & if additional Glucagon available. Consider calcium chloride 20 mg/kg IV, (maximum dose 1 gm). **NOTE:** IV Calcium Chloride should be pushed slowly through a patent IV, avoiding hand & foot IV sites.

Glucagon
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Symptomatic tricyclic antidepressant ingestion (tachycardia, or arrythmia, wide complex, QRS), administer sodium bicarbonate 1 mEq/kg IV repeat as needed.

Extrapyramidal dystonic reactions, administer diphenhydramine 1 mg/kg IV, (maximum dose 50 mg).

Symptomatic calcium channel blocker overdose, per MCA selection administer Glucagon 1 mg IV/IM/IO. Consider calcium chloride 20 mg/kg IV, (maximum dose 1 gm).
NOTE: IV Calcium Chloride should be pushed slowly through a patent IV, avoiding hand & foot IV sites.