

Treatment Protocols**Date: 07/01/2023****Poisoning/Intoxication/Envenomation - Adult****Policy #9160A****Adult BLS Standing Orders**

- Ensure EMS provider safety, consider HAZMAT activation. Recognize, Notify, Isolate
- Universal Patient Protocol
- Do not approach patient or location if scene safety is in question
- Obtain accurate history of incident:
 - Name of product or substance
 - Quantity ingested, and/or duration of exposure
 - Time elapsed since exposure
 - If safe and accessible, bring medications or bottles to hospital
- Move victim(s) to safe environment
- Externally decontaminate - PRN
- Continuously monitor blood pressure, pulse oximetry PRN
- Capnography
- Give oxygen and provide airway support per **Airway Policy**
- Contact Poison Control Center as needed **1 (800) 222-1222**

Suspected Opioid Overdose with Respirations <12 RPM

- If possible, avoid the use of a supraglottic device prior to the administration of naloxone
- Naloxone 0.1 mg/kg, to a max of 4 mg IN. MR x3
- May assist family/friends on-scene with administration of patient's own naloxone

NOTE - Use with caution in opioid dependent pain management patients

- Assess vitals, with specific attention to respiratory rate and respiratory drive
- Note pupil exam
- Note drug paraphernalia or medication bottles near patient

Suspected Stimulant Overdose with Sudden Hypoventilation, Oxygen Desaturation, or Apnea

- High flow O2
- Ventilate PRN

Skin/Eye Contact (Isolated Incident)

- Remove contaminate clothing, brush off powder, rinse with water for at least 20 minutes
- Remove contacts, brush off powder, irrigate eyes with sterile for 20 minutes
- NOTE – Ensure product or substance does not react violently with water prior to beginning of irrigation

Envenomation**Snake Bite/Scorpion Sting**

- Keep involved extremity immobile, at or slightly below heart level
- Mark proximal extent of swelling
- Remove jewelry on the same limb, and/or around the neck if the trunk, neck or head bitten
- Keep patient calm, do not allow to walk
- Do not attempt to bring the animal in to the hospital

Bee Stings

- Remove stinger by flicking or scraping with a card

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- Apply cold compress to site

Insect Bites

- Apply cold compress to site

Toxic Inhalation (Suspected CO or Cyanide Exposure, Smoke, Gas, etc.)

- Give high flow oxygen via NRB mask at 15 LPM

Follow **Cyanide Toxicity Treatment Protocol****Hyperthermia Secondary to Stimulant**

- Initiate cooling measures per **Hyperthermia Protocol**
- Obtain baseline temperature

Adult LALS Standing Orders

- Establish IV PRN
- Capnography

Hypotension

- NS 500-1,000 mL IV MR x 1 to a max of 2,000 mL to maintain a SBP of ≥ 90 mmHg
- For persistent hypotension, refer to Shock Protocol

Hyperthermia Secondary to Stimulant

- NS 500-1,000 mL IV MR x 1 to a max of 2,000 mL to maintain a SBP of ≥ 90 mmHg

Toxic Inhalation (CO Exposure, Smoke, Gas, etc.)

- Albuterol 2.5 mg via nebulizer (may administer 5 mg for severe distress.) MR x 1

Suspected Opioid Overdose with Respirations < 12 RPM

- Naloxone 0.1 mg/kg, to a max of 4 mg IN/IV. MR x3. Titrate IV dose to effect, to drive the respiratory effort

Ingested Poisons

- Activated Charcoal 1-2 g/kg PO to a max of 100 g if within 60 minutes of ingestion or recommended by Poison Control Center
- Ensure patient has gag reflex and is cooperative

NOTE – Activated Charcoal is contraindicated with ingestion of any of the following:

- Acids, alcohol, alkalines, petroleum distillates, caustic substances, iron or drugs that cause rapid onset of seizures (e.g. camphor, tricyclics)

Adult ALS Standing Orders

- Monitor EKG
- Establish IV/IO PRN
- Capnography
- Obtain 12 Lead ECG

Hypotension

- NS 500-1,000 mL IV/IO MR x 1 to a max of 2,000 mL to maintain a SBP of ≥ 90 mmHg

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- For persistent hypotension, refer to Shock Protocol

Hyperthermia Secondary to Stimulant

- NS 500-1,000 mL IV/IO MR x 1 to a max of 2,000 mL to maintain a SBP of ≥ 90 mmHg

Suspected Opioid Overdose with Respirations < 12 RPM

- Naloxone 0.1 mg/kg, max of 4 mg IN/IM/IV/IO, MR x 3

Ingested Poisons

- Activated Charcoal 1-2 g/kg PO to a max of 100 g if within 60 minutes of ingestion or recommended by Poison Control Center
- Ensure patient has gag reflex and is cooperative

NOTE – Activated Charcoal is contraindicated with ingestion of any of the following:

- Acids, alcohol, alkalines, petroleum distillates, caustic substances, iron or drugs that cause rapid onset of seizures (e.g. camphor, tricyclics)

Stimulant Overdose**Severe Agitation**

- Midazolam -
 - IV – Can administer up to 5 mg IV/IN/IM. MR x 1 q2min to a max dose of 10 mg SO
 - For patients that are elderly, small statured, have other medications, intoxicants, or medical sources for their agitation, consider administering midazolam in 1 mg or smaller increments, waiting at least 2 minutes between doses.
 - **Do not exceed 1.0 mL per nostril per dose for adult patients**
 - IM is preferred route of administration due to risk of injury to patient or EMS personnel.

NOTE

- For severely agitated patient IM is preferred route to decrease risk of injury to patient and EMS personnel
- As soon as able, monitor ECG/Capnography/O₂ saturation and obtain blood glucose

Extrapyramidal Reactions

- Diphenhydramine - 25-50 mg IV/IM PRN symptom severity

Toxic Inhalation (CO or Cyanide Exposure, Smoke, Gas, etc.)

- Albuterol 2.5 mg via nebulizer (give 5 mg for severe distress.) MR x1
- Consider administration of hydroxocobalamin, sodium nitrate or sodium thiosulfate. See **Cyanide Toxicity Policy**

Hypotension

- NS 500-1,000 mL IV MR x 1 to a max of 2,000 mL to maintain a SBP of ≥ 90 mmHg

Suspected Opioid Overdose with Respirations <12 RPM

- Naloxone 0.4-4.0 max of 4 mg IM/IV/IN/IO, MR x 3 q5min. Titrate IV dose to effect, to drive the respiratory effort
- If patient unconscious and breathing ineffectively after naloxone, consider intubation per **Airway Policy**
- If patient refuses transport, give additional naloxone 2 mg IM SO
- If patient refuses transport, consider dispensing Leave Behind Naloxone 4 mg nasal spray preloaded device with education for patient and household members SO

Treatment Protocols**Date: 07/01/2023****Poisoning/Intoxication/Envenomation - Adult****Policy #9160A****Organophosphate Poisoning****For respiratory secretions and/or distress:**

- Atropine 2 mg IV/IM, q3-5 minutes until airway improved (decreased secretions, easier to ventilate)

For seizures:

- Midazolam 10 mg IM x1 or IN (5 mg each nostril) or 5 mg slow push IV/IO. MR IV/IO dose in 5 minutes. Maximum total dose 10 mg IV/IO
- Preferred volume of administration IN is 0.3 ml per nostril. Largest acceptable volume in adults is 1.0 ml. In pediatrics, 0.5 ml is maximum preferred volume of administration.

Tricyclic Overdose (Altered LOC, Tachycardia, Prolonged QRS)

- Sodium Bicarbonate – 1-2 mEq/kg (max 1 amp or 50 mEq) IV/IO q3-5min until QRS narrows to < 100 ms and hypotension improves

Suspected Beta Blocker OD with cardiac effects (e.g., bradycardia with hypotension)

- Glucagon 1-3 mg IV, MR 5-10 min, for a total of 10 mg
- Patients often require dextrose as well. Perform frequent (minimum q5min) glucose checks, and more frequently with clinical status changes.

Suspected Calcium Channel Blocker OD (SBP <90 mmHg)

- CaCl₂ IV/IO 20 mg/kg, MR x1 in 10 min BH

Adult Base Hospital Orders**Organophosphate Poisoning**

- BH - Repeat Midazolam Dosing

Toxic Inhalation (Suspected Cyanide Toxicity)

- BH - Administer hydroxocobalamin (0.7 mg/kg up to 5 grams) IV piggyback over 15 minutes
Or

If hydroxocobalamin is not available, and there is no clinical suspicion for carbon monoxide poisoning, administer sodium nitrite AND sodium thiosulfate

- BH - Administer sodium nitrite (6 mg/kg up to 300 mg) IV over 5 minutes AND sodium thiosulfate (400 mg/kg up to 12.5 grams) IV piggyback over 10 minutes

Notes:

- Use caution when considering midazolam use with ETOH intoxication or depressants. May result in apnea
- Notify receiving facilities and EMS Agency of HazMat incidents requiring mass decontamination of victims prior to arrival in ED
- Request CHEMPAK resources through EMS Agency/MHOAC program for incidents involving multiple victims with organophosphate poisoning

APPROVED:

Signature on File

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