Pediatric BLS Standing Orders

- Universal Patient Protocol
- Ensure EMS provider safety, consider HAZMAT activation. Recognize, Notify, Isolate
- 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 Depressed Respirations <12 RPM or Low for Age

- May assist family/friends on-scene with administration of patient's own naloxone
- Administer naloxone 0.1 mg/kg, max of 4 mg IN. May repeat up to three (3) times
- 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
- Apply cold compress to site

Insect Bites

Treatment Protocols <u>Poisoning/Intoxication/Envenomation</u>

• 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

Pediatric LALS Standing Orders

- Establish IV PRN
- Capnography

Hypotension

- 10-20 mL/kg NS IV bolus; titrated to age-appropriate systolic BP MR x1
- For persistent hypotension, refer to Shock Protocol

Hyperthermia Secondary to Stimulant

• 10-20 mL/kg NS IV bolus; titrated to age-appropriate systolic BP MR x1

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

• Albuterol via nebulizer per dosing chart. MR x 1

Suspected Opioid Overdose with Depressed Respirations < 12 RPM or Low for Age

• Naloxone 0.4-4.0 max of 4 mg IN/IV, MR x 3. Titrate IV dose to effect, to drive the respiratory effort

Ingested Poisons

- Activated Charcoal per dosing chart PO 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)

Pediatric ALS Standing Orders

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

<u>Hypotension</u>

- 10-20 mL/kg NS IV bolus; titrated to age-appropriate systolic BP MR x1
- For persistent hypotension, refer to Shock Protocol

Hyperthermia Secondary to Stimulant

• 10-20 mL/kg NS IV bolus; titrated to age-appropriate systolic BP MR x1

Ingested Poisons

- Activated Charcoal per dosing chart PO 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 0.2 mg/kg IN to max dose 10 mg, MR x1 in 10 min Or
- Midazolam 0.2 mg/kg IM to max dose 10 mg, MR x1 in 10 min Or
- Midazolam 0.1 mg/kg IV to max dose 4 mg, MR x1 in 10 min **NOTES:**

- For severely agitated patient, IN/IM Midazolam 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, Age > 6 years old

• Diphenhydramine per dosing chart IV/IM

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

- Consider administration of hydroxocobalamin, sodium nitrate or sodium thiosulfate. See **Cyanide Toxicity Policy**
- 10-20 mL/kg NS IV bolus; titrated to age-appropriate systolic BP MR x1

Suspected Opioid Overdose with Depressed Respirations <12 RPM or Low for Age

• Naloxone 0.4-4.0 max of 4 mg IM/IV/IN/IO, MR x 3. Titrate IV dose to effect, to drive the respiratory effort

Organophosphate Poisoning

For respiratory secretions and/or distress:

• Atropine 0.02 mg/kg IV/IM, max 2 mg. Repeat q 3-5 minutes until airway relieved (decreased secretions, easier to ventilate)

For seizures:

• Midazolam - 0.2 mg/kg IM/IN max 10 mg, see dosing chart MR BH

Treatment Protocols <u>Poisoning/Intoxication/Envenomation</u>

Or

• Midazolam 0.1 mg/kg IV/IO to max dose 4 mg, see dosing chart MR BH

Tricyclic Overdose (Altered LOC, Tachycardia, Prolonged QRS)

• Sodium Bicarbonate – per pediatric dosing chart to max of 1 amp or 50 mEq, q3-5min until QRS narrows to < 100 ms and hypotension improves. See dosing chart

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

- <u>Glucagon IV per pediatric dosing chart BH</u>
- <u>Patients often require dextrose as well. Perform frequent (minimum q5min) glucose checks, and more</u> frequently with clinical status changes.

Suspected calcium channel blocker OD (SBP <90 mmHg) •

• <u>CaCl2 IV/IO per pediatric dosing chart BH, MR x1 BH</u>

Pediatric ALS Base Hospital Orders

Organophosphate Poisoning

- BH Repeat Midazolam 0.2 mg/kg IM to max dose 10 mg, see dosing chart Or
- BH –Repeat Midazolam 0.1 mg/kg IV/IO to max dose 4 mg, see dosing chart

Toxic Inhalation (Suspected Cyanide exposure)

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

If hydroxocobalamin is not available, and <u>there is no clinical suspicion for carbon monoxide poisoning</u>, 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 Katherine Staats, M.D. FACEP EMS Medical Director