

BLS – FAQ Link

Assess **Vital Signs**, ABC's and responsiveness, NPO, **Oxygen**, **Spinal Motion Restriction** as indicated, bandage wounds, stabilize suspected fractures

**DRAFT  
VERSION**

**ALS**

Advanced airway as indicated. Assess for substance type. Check blood glucose.  
 May consult California Poison Control (800) 222-1222.

**Normal Saline**  
 IV/IO of Normal Saline TKO.

Pediatric hypovolemic shock: IV/IO bolus of 20 mL/Kg.  
 Repeat up to 60 mL/Kg if indicated.

Neonatal hypovolemic shock: 10 mL/Kg.  
 Repeat up to 30 mL/Kg.

**Blood Glucose <60mg/dl?**


**Dextrose**  
 Neonates < 1 month:  
 D10W, 2 ml/kg IV/IO (0.2 g/kg)  
 Children > 1 month:  
 D10W, 5 ml/kg IV/IO (0.5 g/kg, max 25 grams)  
 -- OR --  
**Glucagon**  
 Less than 20kg: 0.5 mg IM/IV  
 Greater than 20kg: 1 mg IM/IV

**Treatment Options Based on Type of Substance**


UNKNOWN SUBSTANCE	OPIATES (KNOWN OR SUSPECTED)	TRICYCLIC ANTIDEPRESSANTS	ANTIPSYCHOTICS WITH EXTRAPYRAMIDAL EFFECTS	
<p><b>Activated Charcoal</b>                      1 G/kg mixed in water to form slurry.</p> <p>Administer <b>Ondansetron</b> and be prepared for vomiting</p> <p><b>Contraindications:</b>                      Hydrocarbons, Gasoline and Caustics</p> <p>Do not administer to infants &lt; 12 mo</p> <p>-- AND --</p> <p><b>Naloxone</b>                      Less than 20 kg: 0.1 mg/kg IV/IM/IO.</p> <p>Greater than 20 kg: 2 mg IN via MAD or IVP/IM/ IO</p> <p>Do not administer to neonates</p>	<p><b>Naloxone</b>                      Less than 20 kg: 0.1 mg/kg IV/IM/IO/IN</p> <p>Greater than 20 kg: 2 mg IN via MAD or IVP/IM/IO</p> <p>Do not administer to neonates</p>	<p><b>Sodium Bicarbonate</b>                      Less than 2 years:                      1mEq/kg IV/IO diluted 1:1 with sterile water.</p> <p><input checked="" type="checkbox"/> May repeat 0.5mEq/kg q 10 min to total of 2mEq/kg.</p> <p>More than 2 years:                      1mEq/kg IV/IO.</p> <p><input checked="" type="checkbox"/> May repeat 0.5mEq/kg q 10 min to total of 2mEq/kg.</p> <p>If hypotensive, seizing and/or wide QRS &gt;0.10 sec</p>	<p><b>Diphenhydramine</b>                      1 mg/kg IVP, IO or IM (up to max. 25 mg)</p> <p><b>ORGANOPHOSPHATES</b></p> <p><b>Atropine</b>                      0.02 mg/kg IVP or IO (min dose 0.1mg, no max dose)</p> <p><b>Organophosphate:</b>                      Consult Protocol 11.03</p> <p><b>Special Circumstances:</b>                      Chemical and Radiologic Agents for further treatment</p> <p><b>BETA BLOCKER OR CALCIUM CHANNEL BLOCKER</b></p> <p><b>Activated Charcoal</b>                      1 G/kg mixed in water to form slurry.</p> <p><b>Contraindications:</b>                      Hydrocarbons, Gasoline and Caustics</p> <p>Do not administer to infants &lt; 12 mo</p>	
	<p><b>CARBON MONOXIDE (CO) / HYDROGEN SULFIDE</b></p>	<p><b>Oxygen</b>                      Give 100% NRB or via BVM regardless of pulse oximeter reading</p>		

Neonate BGL treatment trigger is < 40mg/dL

**Calcium Chloride 10%**  
 20 mg/kg IVP or IO over 5 min



Ensure that you have patent IV line as calcium extravasation will cause tissue necrosis

  
**NEVER induce vomiting.**

**Make Base Hospital Contact**  
 For approval of **Glucagon** for Beta Blocker treatment and **Calcium Chloride 10%** for Calcium Channel Blocker treatment AND/OR if Poison Control recommends treatment outside of current protocols. If PCC requests off-protocol treatments, providers should contact Base Hospital MD for approval.

Effective: xx/xx/xx  
 Supersedes: 03/01/15

## 8.08 PEDIATRIC POISONING AND OVERDOSE - EMSAC November 2023

<b>BLS Treatment – ALL Pediatric Poisoning and Overdoses</b>
<ul style="list-style-type: none"> <li>• Assess vital signs</li> <li>• Assess circulation, airway, breathing, and responsiveness</li> <li>• NPO</li> <li>• <b>Oxygen</b> as indicated.</li> <li>• Provide <b>Spinal Motion Restriction</b> as indicated.</li> <li>• Bandage wounds, stabilize suspected fractures</li> </ul>
<b>ALS Treatment - ALL Pediatric Poisoning and Overdoses</b> <b>Current American Heart Association Guidelines concerning Emergency Cardiac Care assessments and interventions shall always take precedence over local protocols when there is a conflict concerning techniques of resuscitation.</b>
<ul style="list-style-type: none"> <li>• Advanced airway as indicated.</li> <li>• Assess for substance type.</li> <li>• Check blood glucose. If blood glucose &lt;60 mg/dl: <b>Dextrose</b>. If no IV or IO access: administer <b>Glucagon</b> <ul style="list-style-type: none"> <li>• Dextrose                             <ul style="list-style-type: none"> <li>• Neonates &lt; 1 month: D10W 2ml/kg IV/IO (0.2g/kg)</li> <li>• Children &gt; 1 month: D10W 5ml/kg (0.5g/kg, max 25 gram)</li> </ul> </li> <li>• Glucagon                             <ul style="list-style-type: none"> <li>• Less than 20kg: 0.5mg IM/IV</li> <li>• Greater than 20kg: 1mg IM/IV</li> </ul> </li> </ul> </li> <li>• IV/ IO of <b>Normal Saline</b> TKO.                             <ul style="list-style-type: none"> <li>• Pediatric hypovolemic shock: IV/IO bolus of 20ml/kg. Repeat up to 60ml/kg if indicated.</li> <li>• Neonatal hypovolemic shock: 10 ml/kg. Repeat up to 30ml/kg.</li> </ul> </li> <li>• May consult California Poison Control (800) 222-1222.</li> </ul>
<b>Base Hospital Contact Criteria</b>
<ul style="list-style-type: none"> <li>• If Poison Control recommends treatment outside of current protocols.</li> </ul>
<b>Comments</b>
NEVER induce vomiting for hydrocarbons (gasoline, kerosene, turpentine, Pine Sol) or caustic substances (alkali (e.g. lye or Drano) or acid substances).

<b>Treatment Options Based on Type of Substance</b>
<b>UNKNOWN SUBSTANCE</b>
<ul style="list-style-type: none"> <li>• <b>Naloxone:</b></li> </ul>

## 8.08 PEDIATRIC POISONING AND OVERDOSE - EMSAC November 2023

- Less than 20 kg: 0.1mg/kg IV/IM/IO
- Greater than 20kg: 2mg IN via MAD or IVP/IM/IO
- Neonate = AVOID use in neonate
- **Activated Charcoal** mixed in water to form a slurry IF patient is alert; able to maintain airway; non-acid, non-caustic, non-petroleum ingestion; it is within 1-hour of ingestion AND >1 year old.

### KNOWN OR SUSPECTED OPIATES

Pinpoint pupils, respiratory depression, decreased level of consciousness, hypotension and decreased muscle tone:

- **Naloxone:**
  - Less than 20 kg: 0.1mg/kg IV/IM/IO
  - Greater than 20kg: 2mg IN via MAD or IVP/IM/IO
  - Neonate = AVOID use in neonate

### ANTIPSYCHOTICS WITH EXTRAPYRAMIDAL EFFECTS (Haldol, Haloperidol)

Fixed, deviated gaze to one side of body, painful spasm of trunk or extremity muscles and difficulty speaking:

- **Diphenhydramine**
  - 1mg/kg IVP/IO/IM (up to 25mg max)

### ORGANOPHOSPHATES

SLUDGE Symptoms: Salivation, lacrimation, urination, diaphoresis/diarrhea, gastric hypermotility, and emesis/eye (small pupils, blurry vision):

- **Atropine**
  - 0.02mg/kg IV/IO (min dose 0.1mg, no max dose)
  -

**Organophosphate: Consult Protocol 11.03 Special Circumstances: Chemical and Radiologic Agents for further treatment**

### TRICYCLIC ANTIDEPRESSANTS

May experience rapid depression of mental status, sudden seizures, or worsening of vital signs:

- If hypotensive, seizing and / or wide QRS > 0.10 sec
- **Sodium Bicarbonate**
  - Less than 2 years: 1mEq/kg IV/IO diluted 1:1 with sterile water. May repeat 0.5 mEq/kg q10min to total 2mEq/kg
  - More than 2 years: 1 mEq/kg IV/IO. May repeat 0.5mEq/kg q10min to total 2 mEq/kg.

## 8.08 PEDIATRIC POISONING AND OVERDOSE - EMSAC November 2023

<p style="text-align: center;"><b>BETA BLOCKER OR CALCIUM CHANNEL BLOCKER (e.g. Metoprolol)</b></p> <p>Bradycardia, hypotension and / or shock:</p> <ul style="list-style-type: none"><li>• <b>Activated Charcoal</b> mixed in water to form a slurry IF patient is alert; able to maintain airway; non-acid, non-caustic, non-petroleum ingestion; it is within 1-hour of ingestion AND &gt;1 year old.</li></ul>
<b>Base Hospital Contact Criteria</b>
Contact Base Physician for approval of: <ul style="list-style-type: none"><li>• <b>Glucagon</b> for Beta Blockers.</li><li>• <b>Calcium Chloride</b> 10% solution for Calcium Channel Blockers.<ul style="list-style-type: none"><li>○ <b>20 mg/kg IV/IO over 5 min</b></li></ul></li></ul>
<b>Comments</b>
<b>Ensure that you have patent IV line as Calcium Chloride extravasation will cause tissue necrosis</b>

<p style="text-align: center;"><b>CARBON MONOXIDE (CO) / HYDROGEN SULFIDE</b></p> <p>Consider CO poisoning if found unconscious, or has AMS, or non-specific complaints AND patient situation includes:</p> <ul style="list-style-type: none"><li>• Found down in enclosed space with CO source (running motors, indoor use of charcoal/ gas grill/ generator or heater malfunction)</li><li>• Multiple persons sharing the vicinity have similar symptoms.</li><li>• Environmental CO detectors are alarming.</li></ul> <p>Give 100% NRB or via BVM regardless of pulse oximeter reading.</p>
<b>Comments</b>
<b>Patients with CO and hydrogen sulfide may have normal oxygen saturation readings, but cellular hypoxia due to displacement of the oxygen molecule from the hemoglobin in red blood cells.</b>