**ACMT Antidote Card**

*T his antidote card is for information only and is not meant to substitute for medical judgment or toxicology consultation. For patient care issues please contact your local toxicologist or poison center at 1-800-222-1222.

**GI DECONTAMINATION**

**Lavage (Orogastric Lavage with Large Bore Tube)**

**Adult:** 36-40 Fr

**Child:** no less than 22 Fr

- Consider airway protection
- Rarely indicated
- Contraindications: Caustics, large or sharp foreign body, can’t protect airway, toxin not in stomach

**Activated Charcoal**

- Dose: 1 g/kg PO, ideally 10:1 charcoal:drug
  - Consider in recent (1-2 hr) ingestion of toxic substance that adsorbs to charcoal and lack of contraindications (caustics, AMs, vomiting, decreased GI motility)

**Multidose Activated Charcoal (MDAC)**

- Consider for ingestions with enterohepatic or enteroenteric circulation (phenytoin, phenobarbital, carbamazepine, dapsone, theophylline, caffeine)

**Whole Bowel Irrigation**

Mechanical bulk cleansing of GI tract with polyethylene glycol solution (i.e. GoLytely™)

- Consider for ingestions with delayed/prolonged absorption, or body packers
  - **Adult:** 2 liters/hr PO (+/- NGT, antiemetic)
  - **Child:** 25 mL/kg/hr PO
  - Continue until rectal effluent is clear

**N-Acetylcysteine (NAC, Acetadote™)**

**Indication:** Acetaminophen Poisoning

**Oral dosing:**

140 mg/kg load then 70 mg/kg q 4 h x 17 doses

**IV dosing:**

- **Load:** 150 mg/kg x 60 min
  - Then: 50 mg/kg x 4 h
  - Then: 100 mg/kg x 16 h

<table>
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<th>(µg)</th>
<th>(% of pediatric dose)</th>
<th>Acidulate (mL)</th>
<th>5% Dextrose (mL)</th>
<th>Acidulate (mL)</th>
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<th>Acidulate (mL)</th>
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**Calcium**

**Indication:** Calcium Channel Blocker or Beta Blocker Poisoning

**Adult:** CaCl 10% 10 mL IV (1 gm) over 10-15 min

**CaGlucenate 10% 30 mL/dose IV (3 gms) over 5-10 min**

**Ped:** CaCl 10% 0.1-0.2 mg/kg IV (20-50 mg/kg) over 10-15 min

**CaGlucenate 10% 0.2-0.5 mg/kg IV (20-50 mg/kg) up to 10 mL/dose over 5-10 min, not to exceed adult dose**

**Infusion:** 0.5 mEq/kg/hr IV = 0.2 - 0.4 mL/Kg/hr of CaCl 2 (10%), or 0.6 - 1.2 mL/kg/hr of CaGlucenate (10%)

**Indication:** Hydrofluoric Acid

Dermal: 3.5 grams CaGlucenate plus 5 oz water-soluble lubricant (KY jelly)

- 1 g CaCl 2 = 13.4 mEq elemental Ca
- 1 g CaGlucenate = 4.3 mEq elemental Ca

**Glucagon**

**Indication:** Calcium Channel Blocker or Beta Blocker Poisoning

**Adult:** 50 µg/kg (max 10 mg) IV over 1-2 min, repeat q 10-15 min 1-2 times PRN

- Then: 1.5 mg/h (max 10 mg/h) IV in D5W

**Ped:** 50 µg/kg IV load then 70 µg/kg/hr

**High Dose Insulin Euglycemia (HIE)**

**Indication:** Calcium Channel Blocker or Beta Blocker Poisoning

**Dextrose:** 25-50 g (0.5-1 g/kg) IV bolus

- Then: 0.25-0.5 g/kg/hr IV drip

**Insulin:** 1 U/kg IV bolus

- Then: 0.5-1.0 U/kg/hour IV drip [mix as 500 U insulin in 50 mL NS (10 U/mL)]

- Increase if no effect in 15 minutes

- Titrated to 10 U/kg/hr

- Check capillary glucose q 30 min initially

**Digoxin-Specific Fab (Digibind and Digifab)**

**Indication:** Digoxin and Cardiotoxic Steroid

- Reconstitute with 4 mL sterile H2O
- IV over 30 min (IVP if critical)

**Amount ingested known:**

- # vials = [amount (mg)] x 0.8 / 0.5 mg

**Level known:**

- # vials = [level (ng/mL)] x [weight (kg)] / 100

**Unknown ingestion/level (empiric therapy):**

- Adult: 10 vials (acute); 3-6 vials (chronic)

**Ped:** 1-2 vials

**Cyanide Antidote Kit [Hope Nithiodote Kit]**

**Indication:** Cyanide Poisoning

- Consider in Smoke Inhalation with Hypotension and Lactic Acidosis

**Sodium Nitrite (NaNO2) 3% (30 mg/ml)**

**Adult:** 10 mL (300 mg) IV over 2-4 min

**Ped:** 0.2 mL/kg IV over 2-4 min

**Sodium Thiosulfate 25% (250 mg/ml)**

**Adult:** 50 mL (12.5 g) IV over 10-30 min

**Ped:** 0.5 g/kg (2 mL/kg) IV as adult

**Warning:** no nitrite if smoke/fire victim/CO exposure.

**Hydroxocobalamin (Cyankit™)**

**Indication:** Cyanide Poisoning

**Dose:** 70 mg/kg (max 5 g) IV over 30 min

**Repeat prn (max total 15 g) IV over 6-8 h**

**Methylen Blue**

**Indication:** Methemoglobinemia

**IV:** 1-2 mg/kg (0.1-0.2 mL/kg) of 1% over 5 min with 30 ml flush q 4 h (max 7 mg/kg)

**Neonate:** 0.3-1 mg/kg IV

**Dextrose (Glucose)**

**Indication:** Hypoglycemic agents

**Dose:** 0.5-1.0 gram/kg, adjust based on size

**Adult:** D50 (0.5 grams/ml) IV

**Ped:** D25 (0.25 grams/ml) IV

**Neonate:** D50 (0.1 grams/ml) IV

**Consider administering thiamine if deficient**
**OCTREOTIDE (SANDOSTATIN)**

**Indication:** Sulfonylurea Poisoning

**Adult:** 50 µg SQ every 6 h

**Peds:** 1.25 µg/kg (max adult) SQ every 6 h

Continue therapy x 24 h, then FSBG x 24 hours

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**FOMEPIZONE (ANTIZOL™)**

**Indication:** Methanol, Ethylene Glycol

**Load:** 15 mg/kg IV in 100 ml NS x 30 min

**Maint:** 10 mg/kg IV q12 hours until level <20 mg/dL

**Hemodialysis:** Give load if > 6 h since last dose

- Maint: q 4 h during HD
- At end, give scheduled dose if > 3 h
- Or, ½ dose if 1-3 h since last dose

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**ETHANOL (ETOH)**

**Indication:** Methanol, Ethylene Glycol

**IV:** 10% ETOH (100 mg/ml) (may use 5%)

- Load: 0.8 g/kg (8 ml/kg) over 1 h
- Maint: 80-130 mg/kg/h (0.8-1.3 ml/kg/h)
- Chronic: 150 mg/kg/h (1.5 ml/kg/h)
- HD: 250-350 mg/kg/h (2.5-3.5 ml/kg/h)

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**2-PAM (PRALIDOXIME CHLORIDE)**

**Indication:** Organophosphate poisoning

**Adult:** 1-2 g (20-40 mg/kg) in 100 ml NS IV over 15-30 min

- Maint: 8 to 10 mg/kg/h or 500 mg/h IV

**Peds:** 20-40 mg/kg (max 2 gm) in 100 ml NS IV x 30-60min

- Maint: 10-20 mg/kg/h IV

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**ATROPINE**

**Indication:** Organophosphate/Carbamate Poisoning

**Adult:** 1-2 mg (mild) or 3-5 mg (severe) IV

- Double q 3-5 min until dry
- Maint: 10-20% of load IV qh, titrate prn

**Peds:** 20-50 µg/kg (min 0.1 mg/max 0.5 mg) IV

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**NALOXONE (NARCAN™)**

**Indication:** Opioid Poisoning

**Adult:** Start at 0.04 -0.4 mg

**IV/IM/ SQ/ Intranasally/Intratracheal.** Repeat dose if initial response not adequate, up to 10 mg total. Titrate to RR ≥12 and sufficient tidal volume. If opioid naive, can start with 0.4 mg.

**Peds:** 0.01 mg/kg IV (IM, SQ, Intramuscular, Intratracheal can be used but not preferred) if opioid naive (0.001 mg/kg if opioid dependent)

- Titrate to 0.1 mg/kg IV if no effect
- Neonate: (asphyxia neonatorum) 0.01 mg/kg via umbilical vein (IM, SQ) q 2-3 min
- For recurrent respiration depression consider infusion: 2/3 of reversal dose infused hourly

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**FLUMazenIL (ROMAZICON™)**

**Indication:** Benzodiazepine Poisoning

**Initial:** 0.2 mg IM @ 0.1 mg/min

- May repeat with 0.3 mg, then 0.5 mg
- Infusion: 0.1-1.0 mg/h IV (in NS or DSW)

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**PHYSOSTIGMINE (ANTILIRIUM™)**

**Indication:** Antimuscarinic Toxicity

- For reversal of neurobehavioral effects
- NO ECG evidence of TCA toxicity (+t40 aVR)
- Atropine at bedside, cardiac monitor, oximetry

**Adult:** 1-2 mg IV over 30 min

- May repeat in 5 – 10 minutes PRN

**Peds:** 20 µg/kg (max 0.5 mg) as above

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**FOLATE (FOLIC ACID)**

**Indication:** Methanol Poisoning

- 1-2 mg/kg (50-75 mg) q 4 h x 24h

- Extra dose at completion of hemodialysis

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**LEUCOVORIN (FOLINIC ACID)**

**Indication:** Methotrexate Poisoning

- Dose: MTX plasma level or 100 mg/m² IV over 15-30 min

- (max 160 mg/min) q 3-6 h x several days or until serum MTX < 10 nmol/L or < 100 nmol (in cancer) and no bone marrow toxicity

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**SODIUM BICARBONATE (NAHCO₃)**

8.4% (1 M) 50 ml amule = 50 mEq

7.5% (0.892 M) 50 ml amule = 44.6 mEq

- Bolus: 1-2 mEq/kg IVP over 1-2 min
- Infusion: 2-3 amps in 1 L D₃W @ 150-200 mL/h (2x maintenance in peds)

**Indication:** Tricyclic Antidepressant and other Sodium Channel Blocker Poisoning

- Goal is QRS narrowing

**Indication:** SalicylatePoisoning or to alkalinize urine in specific toxins

- Goal is urine pH 8.0 (alkalinization)
- Must make sure serum K < 4.0

**Indication:** Chlorine/HCl Gas Inhalation

- Consider 4% nebulized solution

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**VITAMIN B6 (PYRIDOXINE)**

**Indication:** Ethylene Glycol Poisoning

**Adult:** 50 mg IV q6h

**Indication:** Isoniazid Poisoning

- Known amt: 1 g per g of INH (max 5 g)
- Unknown: 70 mg/kg IV at 0.5 g/min

- Max 5 g, or until seizure stops

- Remainder IV over 4-6 h

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**VITAMIN K1 (PHYTONADIONE)**

**Indication:** Brodifacoum Poisoning

**Adult:** 25-50 mg PO TID-QID x 1-2 d, then per INR

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**L-CARNITINE**

**Indication:** Valproic Acid Poisoning

Note: Optimal dosing for VPA toxicity not well established. Suggested dosing is below.

**Loading Dose:** 100 mg/kg IV (max 6 g) over 15-30 min

**Then:** 15 mg/kg (max 3g per dose) IV q 2 h over 10-30 min

**Prophylaxis:** 100 mg/kg/d PO q 4-6 h (maximum 3g/day in adults and 2g/day in children)

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**PROTAMINE SULFATE**

**Indication:** Heparin Poisoning

1 mg (max 50 mg) neutralizes 100 U heparin, or 100 anti-Xa U of dalteparin/tinzaparin, or 1 mg of enoxaparin

- Load: 1% solution IV over > 10 min
- Then: 0.5 mg/100 anti-Xa U if still bleeding

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**INTRAVERSEOUS LIPID EMULSION**

**Indication:** Local Anesthetic Toxicity (LAST)

**Loading Dose:** 1.5 ml/kg of 20% solution over 1 minute.

- Bolus may be repeated for persistent dysrhythmia

- Infusion: 0.25 ml/kg/min over 30 minutes. Infusion rate can be increased if blood pressure declines.

**Indication:** Non-LAST with cardiovascular collapse

Poorly studied. Consider for poisoning by drugs expected to be lipid soluble based on Log D, or Log P. See http://lipidrescue.org for further information.

Consider same dosing as above for LAST.