



ACMT

Antidote Card

*This 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-ACETYL-CYSTEINE (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

(kg)	(lb)	Acetadote (mL)	5% Dextrose (mL)	Acetadote (mL)	5% Dextrose (mL)	Acetadote (mL)	5% Dextrose (mL)
30	66	22.5	100	7.5	250	15	500
25	55	18.75	100	6.25	250	12.5	500
20	44	15	60	5	140	10	280
15	33	11.25	45	3.75	105	7.5	210
10	22	7.5	30	2.5	70	5	140

CALCIUM

Indication: Calcium Channel Blocker or Beta Blocker Poisoning

Adult: CaCl₂ 10% 10 mL IV (1 gm) over 10-15min

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

Peds: CaCl₂ 10% 0.1-0.2 mL/kg IV (20 mg/kg) over 10-15 min

CaGluconate 10% 0.2-0.5 mL/kg IV (20-50mg/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 CaCl₂ (10%), or 0.6 - 1.2 mL/kg/hr of CaGluconate (10%)

Indication: Hydrofluoric Acid

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

- 1 g CaCl₂ = 13.4 mEq elemental Ca
- 1 g CaGluconate = 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 D₂O Peds: 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/h 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

Titrate to 10 U/kg/hr

- Check capillary glucose q 30 min initially

DIGOXIN-SPECIFIC FAB (DIGIBIND AND DIGIFAB)

Indication: Digoxin and Cardiotonic 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)

Peds: 1-2 vials

CYANIDE ANTIDOTE KIT [HYPO NITHIODOLE 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

Peds: ~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

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

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

HYDROXOCOBALAMIN (CYANOKIT™)

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

METHYLENE 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

Peds: D₂₅ (0.25 grams/mL) IV

Neonates: D₁₀ (0.1 grams/mL) IV

Consider administering thiamine if deficient

OCTREOTIDE (SANDOSTATIN)

Indication: Sulfonyleurea Poisoning

Adult: 50 µg SQ every 6 h

Peds: 1.25 µg/kg (max adult) SQ every 6 h
Continue therapy x 24h, then FSBG x 24 hours

FOMEPIZOLE (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 hours since last dose

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)

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

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

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, Intraosseous, 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 resp depression consider infusion:

2/3 of reversal dose infused hourly

FLUMAZENIL (ROMAZICON™)

Indication: Benzodiazepine Poisoning

Initial: 0.2 mg IV @ 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 D5W)

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 > 5 min

May repeat in 5 – 10 minutes PRN

Peds: 20 µg/kg (max 0.5 mg) as above

FOLATE (FOLIC ACID)

Indication: Methanol Poisoning

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

Extra dose at completion of hemodialysis

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

SODIUM BICARBONATE (NAHCO₃)

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

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

Bolus: 1-2 mEq/kg IVP over 1-2 min

Infusion: 2-3 amps in 1 L D₅W @ 150-200 mL/h (2x maintenance in peds)

Indication: Tricyclic Antidepressant and other Sodium Channel Blocker Poisoning

• Goal is QRS narrowing

Indication: Salicylate Poisoning 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

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

VITAMIN K1 (PHYTONADIONE)

Indication: Brodifacoum Poisoning

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

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 4 h over 10-30 min

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

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

INTRAVENOUS 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 30-60 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.