



Minnesota Poison Control System
Healthcare Facility Antidote Stocking Recommendations
 Contact the Poison Center for treatment recommendations 1-800-222-1222

Antidote	Substance	Minimum Stocking Suggestion	Comments
Activated Charcoal (Aqueous)	Miscellaneous	4 bottles	If using multiple dose activated charcoal, advise only first dose with sorbitol
N-Acetylcysteine (Mucomyst®) PO AND N-Acetylcysteine (Acetadote®) IV	-Acetaminophen - <i>Amanita sp.</i> mushroom -Other hepatotoxins	Oral Product: 700ml of 20% (70 X 10ml vials) IV Product: 1 carton of four 30ml vials of 20% solution	700mL (20% N-Acetylcysteine) provides enough NAC to treat one 100kg patient for 72 hours Max dosing weight IV = 100kg
Antivenin, Crotalidae Polyvalent Immune Fab-Ovine (Crofab®)	US pit vipers (i.e. rattlesnakes, cottonmouths, copperheads)	6 vials for critical access hospitals 12 vials immediately available at receiving centers	4-6 vials for initial control; may repeat 3 maintenance doses of 2 vials Q6H (total of 10-12 vials over 18 hours)
Atropine sulfate	-Drug-induced symptomatic bradycardia -Cholinergic Toxidrome (Organophosphate & carbamate insecticides, nerve agents)	Critical Access: 45mg Receiving Centers: 165mg	If additional doses are needed consider obtaining from local EMS services
Botulinim antitoxin (A, B)-Equine	Botulism	N/A	Contact Health Department to obtain from CDC: Minnesota: 651-201-5000 or 1-888-345-0823 (Toll Free) South Dakota: 605-773-3737 or 1-800-592-1861 North Dakota: 701-328-2378 or 1-800-472-2180
Botulism Immune Globulin (BIG)	Infant Botulism	N/A	Contact CDC at 510-231-7600 (24/7 number)



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Calcium Chloride & Calcium Gluconate	-Beta blockers -Calcium channel blockers -Hydrofluoric acid, fluoride salts	Calcium Chloride: 10 grams (10 X 10% 10ml vials) Calcium Gluconate: 30grams (30X 10% 10ml vials)	Calcium Chloride should be administered via central line except in extreme circumstances The chloride salt provides 3 x more calcium than the gluconate salt.
Calcium disodium EDTA (Versenate®)	Lead encephalopathy	As of 2016 the WAC is \$26,927 per vial- institutions should make the decision of whether or not to stock individually	DO NOT confuse with sodium EDTA (edetate disodium) Max Dose for severe/encephalopathic patients: 1500 mg/m ² /d or 50-75 mg/kg/day
Dantrolene	Neuroleptic malignant syndrome	2016 data: approximately \$100 for a 20mg vial To determine stocking levels consider consulting institutional anesthesia, who are more likely to use dantrolene for malignant hyperthermia	Dosing IV: 1 to 2.5 mg/kg, may repeat dose up to maximum cumulative dose of 10 mg/kg/day, then switch to oral dosage
Deferoxamine mesylate (Desferal®)	Acute Iron	6 grams (12 X 500mg vials)	15mg/kg/hr; per package insert max of 6g/24 hours; consult Poison Center if more required
Digoxin Immune Fab (Digifab®)	-Digitoxin/digoxin -Cardiac glycoside plants	Critical access hospital: 1-2 vials Receiving center: 5 vials	
Dimercaprol (BAL in oil)	Heavy metals	600mg (2 X 3ml ampule 100 mg/ml)	As of 2016: currently in shortage DO NOT USE in patients with peanut allergy
Flumazenil (Romazicon®)	-Benzodiazepines	4mg – 4 X 5ml vials (0.1 mg/ml)	Should be used with caution in benzodiazepine dependent patients to avoid induction of withdrawal
Folic Acid & Leucovorin	-Methanol	Folic acid: three 50 mg vials	



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	-Methotrexate, trimetrexate -Pyrimethamine -Formaldehyde/Formic acid	Folinic acid: Six 50 mg vials for critical access 1 gram or 20 X 50mg vials for receiving centers	
Fomepizole (Antizol®)	-Ethylene glycol -Methanol	Critical access hospitals: one to two vial(s) (1.5 grams/vials) Receiving centers should consider stocking 4 or more vials	One vial provides at least a loading dose, more doses may be necessary Ethanol recommendation in setting of fomepizole shortage—contact Poison Control for ethanol dosing
Glucagon	-Beta blocker	10mg (10 - 1mg vials)	
Hydroxocobalamin (Cyanokit®)	-Cyanide -Smoke Inhalation (combustion of synthetic materials)	1-2 kits 1 kit = 5 grams (two 2.5 gram vials)	Serious cyanide poisoning may require up to 10g
Idarucizumab (Praxbind)	Dabigatran	5 grams	
Insulin and dextrose	Calcium channel blockers Beta blockers	Stock in ED and pharmacy 1. 5,000 units regular insulin (five 1,000 unit bottles) 2. 10-20 amps (25g/amp) D50	IV Bolus: Recommended starting dose of 1 unit/kg regular insulin with 1 ampule dextrose 50%. Lowest maintenance dose is 1 unit/kg/hr. Higher doses may be considered under consultation with the poison center and a medical toxicologist.
Intravenous Fat Emulsion (Intralipid®)	Local anesthetics Cardiac toxins (eg, bupropion, calcium channel blockers, cocaine, beta blockers, tricyclic antidepressants) <i>when the patient is</i>	1 L (20%) 150 mL (bolus) + 750 mL (infusion) = 900 mL rounded to 1L for 100kg patient	Initial dose: 1.5mL/kg over 1 minute Followed by Infusion: 0.25mL/kg/min over 30 minutes Loading dose may be repeated once



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	<i>in cardiac arrest or has failed HDI + 3 vasopressors.</i>		
L-Carnitine (Carnitor®)	Valproic Acid	Critical access hospitals: not recommended Receiving centers: 15 X 5 ml vials	Dosing: 100 mg/kg over 30 minutes (Max: 6g) then 15mg/kg q4h
Methylene Blue	Methemoglobinemia-inducing agents: -Aniline dyes -Dapsone -Local anesthetics -Naphthalene -Nitrates and nitrites -Phenazopyridine (Pyridium®)	Critical access hospitals: 1 vial (1 vial = 50mg/10ml) Receiving centers: 6 X 10 mL vials	May also be used for refractory vasodilatory shock. Call Poison Center for dosing.
Naloxone (Narcan®)	Opioids Unknown poisoning w/ mental status depression	20-40 mg (available in 0.4 or 2 mg vials)	
Octreotide acetate (Sandostatin®)	Sulfonylureas	Critical access hospitals: 4 vials (1 vial = 1 ml of 50 mcg/ml solution) Receiving centers: standard stocking for GI bleeds should be adequate.	Dosing: 50 mcg subcutaneous every 6 hours (1.25 mcg/kg in children)
Physostigmine salicylate (Antilirium®)	Anticholinergic agents Antihistamines Atropine Clozapine Olanzapine Quetiapine	Critical access hospitals: 2 vials (1 vial = 2 ml of 1 mg/ml solution) Receiving centers: 2 vials	Usual adult dose 1-2 mg SLOW IV push. Duration of effect 30-60 minutes.



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	Plants (e.g. “deadly nightshade”, “jimson weed”) with anticholinergic compounds		
Phytonadione (Vitamin K ₁)	Warfarin Long-acting anticoagulant rodenticides (e.g. brodifacoum)	Critical Access Facilities: 50mg Receiving Centers: 100mg	Note: Rodenticides may require large Vitamin K doses daily for long term (ex. 50 mg daily). For these patients consider oral dosing.
Pralidoxime (2-PAM®)	Organophosphate insecticides, nerve gases	Critical access hospitals: 7 g Receiving centers: 18 g Pralidoxime is available in vials (1 vial = 1 g/ml) for IV use or auto-injectors (600 mg/2 ml) for IM use	Dosing: 30 mg/kg (max 2 g) over 15-30 min followed by maintenance infusion of 8-10 mg/kg/hr (max 650 mg/hr) Children may receive infusions up to 20 mg/kg/hr (max 650 mg/hr)
Protamine sulfate	Heparin Low molecular weight heparins (eg, enoxaparin, dalteparin, etc.)	Critical access hospitals: 8vials (1 vial = 5 ml of 10 mg/ml solution) Receiving centers: 24 vials	
Prussian Blue (Radiogardase®)	-Thallium/radio cesium	No standard stocking recommended.	Available through Heyl Pharmaceuticals, Distributed via McGuff Compounding Pharmacy Services in Santa Ana, CA. Phone: (1-877) 444-1133 After-hours and on weekends use option #3
Pyridoxine (Vit B6)	Acrylamide Ethylene glycol Isoniazid	Critical access hospitals: 5 g Receiving centers: 10 g	



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	False morel mushrooms (<i>Gyromitra sp.</i>) Hydrazine derivatives (including hydrazine MAOIs)	Pyridoxine is available in solution for IV administration (1 vial = 1 ml of 100 mg/ml solution) or in tablets (25, 50 or 100 mg)	
Sodium bicarbonate	-Urine/serum alkalinization -Sodium channel blockade on ECG (e.g. TCAs, class I antidysrhythmics, cocaine)	Critical Access Facilities: 15 vials of 8.4% solution. Receiving Centers: 20 vials 1 vial of 8.4% = 50 mL which equals 50 mEq of sodium bicarbonate	Dosing for TCA poisoning is 1-2 mEq/kg every 3-5 minutes until the QRS duration is < 120 ms.
Sodium Thiosulfate Sodium Nitrite	-Cyanide -Smoke Inhalation (combustion of synthetic materials)	1-2 Nithiodote® kits Sodium Thiosulfate 25% (12.5 g / vial; 50mL vials) Sodium Nitrite 3% (300mg / vial; 10 mL vials)	Available as Nithiodote®: 11 kit = 1 vial each of sodium thiosulfate / sodium nitrite Hospitals do not need to stock both hydroxocobalamin and Nithiodote®. If choosing between the two, we recommend hydroxocobalamin.
Succimer (Chemet)	-Lead -Arsenic -Mercury	We do not recommend stocking for inpatient use.	We recommend having a procedure in place to obtain succimer within 24 hours. Patients with lead encephalopathy should be treated with dimercaprol.
Thiamine	Ethylene Glycol	Critical Access Facilities: 500mg Receiving Centers: 1.5g (1 vial = 2 ml of 100mg/ml solution)	
4-Factor Prothrombin Complex Concentrate (Kcentra)	Vitamin K antagonist reversal	Critical Access Facilities: 1500 units Receiving Centers: 5000 units	

Original 2009, Revised 7/2016, 2/2017, 11/2017



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References

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3. Illinois Poison Center Antidote List August 2015
4. Maryland Poison Center Antidote List February 2016
5. Klein L, Peters J, Miner J, Gorlin J. Evaluation of fixed dose 4-factor prothrombin complex concentrate for emergent warfarin reversal. *Am J Emerg Med.* 2015 Sep; 33 (9); 1213-8.