Guidelines for Stocking Emergency Antidotes

The following is a guideline for the stocking of recommended antidotes in acute care settings. The initial dose listed is the amount needed to treat an average 70 kg patient in the first four hours. The amount of antidote stocked in any setting needs to be determined using variables reflecting your patient population and number of exposures frequently treated. The anticipation of further dosing after the initial dose must also be considered.

It is important to remember that toxicology is a practice based largely on retrospective case studies. The use of antidotes will change as medical practice evolves and the knowledge around toxicology and antidotes expands. Contact the poison centre for specific patient treatment recommendations.

ANTIDOTE	POISONING INDICATIONS	INITIAL DOSE 70 kg patient x first 4 hours	SPECIAL ACCESS* (via Health Canada)
N-Acetylcysteine (Mucomyst®)	Acetaminophen & Other Hepatotoxins	16 g	
Atropine sulfate	Carbamate & Organophosphate Insecticides	75 mg	
Calcium chloride Calcium gluconate *both should be available	Calcium Channel Blockers, Hydrofluoric Acid burn	Calcium chloride 5 g (central venous IV preferred) Calcium gluconate 15 g (IV/SC)	
Deferoxamine mesylate (Desferal)	Iron	4.2 g	
Digoxin Immune Fab (DigiFab)	Digoxin & Other Cardiac Glycosides	20 vials	
Dimercaprol (BAL)	Acute Arsenic, Inorganic Mercury, Lead (with encephalopathy)	280 mg (each 3 mL ampule contains 300 mg)	
Fomepizole (Antizol) or Ethanol (Dehydrated Alcohol 100%) *Fomepizole preferred over Ethanol	Methanol, Ethylene Glycol	Fomepizole 1.05 g (each 1.5 mL vial contains 1.5 g) Ethanol 98 g (given as a 10% solution)	
Hydroxocobalamin (Cyanokit)	Cyanide	10 g	
Insulin/Dextrose	Beta Blockers, Calcium Channel Blockers	350 units (Regular insulin) Dextrose (D10 and D50) to maintain euglycemia	
Intralipid 20%	Lipid soluble toxin www.lipidrescue.org/	700 mL	
Methylene blue	Methemoglobinemia	140 mg	
Naloxone (Narcan)	Opioids	15 mg	
Octreotide (Sandostatin)	Sulfonylureas, Repaglinide & related drugs	70 micrograms	
Physostigmine salicylate	Anticholinergic syndrome	4 mg	Yes
Potassium Iodide	Prophylaxis for radioactive I ¹³¹	130 mg (select hospitals only)	Yes
Pralidoxime (2PAM)	Organophosphate Insecticides	4.3 g	Yes
Pyridoxine (Vitamin B6)	Isoniazid (INH), Ethylene Glycol (cofactor)	10 g	
Sodium Bicarbonate	Tricyclic Antidepressants (bolus), Cocaine (bolus), Salicylates (infusion)	500 mEq	

^{*} Special Access Antidotes may be ordered from Health Canada for future use

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ADJUNCTIVE AGENTS

In addition to stocking emergency antidotes the following adjunctive agents may be recommended in the management of the poisoned patient. It is important to remember that toxicology is a practice based largely on retrospective case studies.

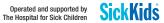
The use of antidotes and adjunctive agents will change as medical practice evolves and the knowledge around toxicology and antidotes expands. Contact the poison centre for specific patient treatment recommendations.

ADJUNCTIVE AGENTS	POISONING INDICATIONS	SPECIAL ACCESS* (via Health Canada)
Benzodiazepines (diazepam, lorazepam, midazolam)	Chloroquine and related drugs, Seizures, Neuroleptic Malignant Syndrome, Serotonin Syndrome, Sympathomimetics	
Bromocriptine	Neuroleptic Malignant Syndrome	
Crotalid snake antivenom (Antivipmyn)	Crotalid Snake envenomation	Only available through Provincial Anti-Venom Depot (PADAC) or OPC
Cyproheptadine (Periactin)	Serotonin Syndrome	
Dantrolene	Malignant Hyperthermia, Neuroleptic Malignant Syndrome (controversial)	
Diphenhydramine	Dystonic reactions	
DMSA Succimer (Chemet)	Arsenic, Lead, Mercury	Yes**
Flumazenil	Benzodiazepines (iatrogenic only)	
Folinic Acid (leucovorin), Folic Acid	Formaldehyde (formic acid), Methanol (cofactor), Methotrexate, Trimethoprim	
Glucagon	Beta Blockers (controversial)	
L-Carnitine	Hyperammonemia or coma from Valproic acid toxicity	
Phytonadione (Vitamin K)	Coumarin derivatives, Rodenticides, Warfarin	
Protamine Sulfate	Heparin, Low Molecular Weight Heparin	
Sodium Thiosulfate	Cyanide	
Thiamine	Ethanol, Ethylene Glycol (cofactor)	

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^{**} Special Access Adjunctive Agent may only be ordered for a specific patient