TITLE: HRMC Antidote Reference		
EFFECTIVE DATE: 7/09	POLICY#: PN.09b	Page 1 of 3
REVIEW: 7/10 REVISION:	Created by: J. Coleman, PharmD Revised by: R. Thelin, PharmD	DISTRIBUTION: Nursing; Pharmacy

Hackettstown Regional Medical Center

INFLICTION	ANTIDOTE	DOSING	NOTES
Acetaminophen overdose (see graph at end of table)	**Acetylcysteine IV (Acetadote®)**	150mg/kg IVPB load over 1 hour followed by 50mg/kg IVPB over 4 hours then 100mg/kg IVPB over 16 hours.	Consult PI for fluid volume reduction in patients weighing < 40kg.
	Acetylcysteine PO Dilute in diet soda.	140mg/kg PO load, followed by 70mg/kg Q4H PO for 17 doses. IF patient vomits within 1 hour of administration- repeat dose.	ADE: nausea, vomiting Check LFT's and APAP level after 6 doses. IF APAP level is undetectable and LFT's are WNL, may stop treatment.
Acetylcholinesterase inhibitor exposure (organophosphates, carbamate pesticides, nerve agents)	**Atropine**	2-5 mg IV Q 5-60 minutes until effect	
	Pralidoxime (2-PAM, protopam)	**Adult**: 1-2 g, repeat in 1 hour if muscle weakness is not relieved, then Q8-12H if symptoms recur. **Child**: 20-50 mg/kg, repeat in 1-2 hours if muscle weakness is not relieved, then Q8-12H is symptoms recur.	Most effective if given immediately after exposure. Infuse over 15-30 minutes up to a max rate of 200 mg/min. Must administer in conjuction with atropine.
Allergic reaction / Anaphylaxis	**Diphenhydramine PO/IM/IV**	**Child**: 5 mg/kg/d divided Q8H; Max 300 mg/day. **Adult**: 25-50 mg PO or 10-50 mg IM/IV; Max 400 mg/day.	
	Epinephrine	**Child:** 0.15 mg IM every 15-20 minutes **Adult:** 0.3-0.5 mg IM/SC every 15-20 minutes if necessary.	EpiPen Jr: 0.15mg/0.3mL Use 1:1000 (1mg/mL) epinephrine.
	Methylprednisolone	Child: 2mg/kg/dose IM/IV Adult: 125mg IM/IV	
Arsenic poisoning	**Dimercaprol (BAL)**	**Mild**: 2.5 mg/kg deep IM Q6H for 2 days, then Q12H for 1 day, then Q daily for 10 days. **Severe**: 3 mg/kg Q4H for 2 days, then Q6H for 1 day, then Q12H for 10 days.	
Benzodiazepine	**Flumazenil**	0.2 mg IV- wait 3 minutes for a response. 0.3 mg IV- wait 3 minutes for a response. 0.5 mg IV- at 60 second intervals up to a cumulative dose of 3 mg.	**Black Box Warning**: May induce seizures for chronic benzodiazepine users. ADE: Nausea, vomiting
Beta-blocker toxicity	**Glucagon**	5-10 mg IV over 1 minute followed by 1-10 mg/hour infusion.	Cardiac stimulant for myocardial depression.
Black Widow Spider envenomation	**Antivenin® (Lactrodectus mactans)**	1 vial (2.5 mL) IV or IM, may repeat if necessary.	Administer test dose (IntraDermal or conjunctival) to assess patients sensitivity. If reaction occurs, must desensitize to administer dose. ADE: hypersensitivity (anaphylaxis/serum sickness

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Calcium-channel blocker overdose	**Calcium gluconate (10% solution), Calcium chloride**	Calcium gluconate: 0.02-0.05 mg/kg IV every 15-20 minutes for 4 doses Calcium chloride: 1 g IV, may repeat until clinical effect.	Calcium gluconate: max 2-3 g/dose Calcium chloride: via central line only (except in code situation)
	Glucagon	5-10 mg IV over 1 minute followed by 1-10 mg/hour infusion.	Cardiac stimulant for myocardial depression.
Coumadin® overdose	**Phytonadione (Vitamin K)**	2.5-10 mg PO; use IV in severe cases only.	**BLACK BOX WARNING**: severe or fatal anaphylaxis may occur with IV form
Cyanide poisoning (smoke inhalation, nitroprusside toxicity)	**Cyanide antidote kit**	Start **amyl nitrite** ampule: break open and have patient inhale for 30 seconds every minute. Use new ampule every 3 minutes. Then **sodium nitrite** 300mg injection at 2.5-5 mL/min. Then slow IV of 12.5g of 25% **sodium thiosulfate.**	Amyl nitrite may cause methemoglobinemia with excessive doses.
	Hydroxocobalamin (CyanoKit)	5 g IV over 15 minutes. May repeat if no response.	
Digoxin overdose	**Digibind® DigiFab®**	Dose according to digoxin level. IF level UNKNOWN- **20 vials**	Each vial binds ~ 0.5 mg of digoxin.
Extrapyramidal symptoms tremor, slurred speech, akathisia, dystonia. (anti-dopamanergic effects from neuroleptic [anti-psychotic] overdose)	**Benztropine (Cogentin®)**	**Child >3**: 0.02-0.05 mg/kg PO/IV per dose **Adult**: 1-4 mg PO/IV per dose.	Will not help tardive dyskinesia.
	Diphenhydramine IV/IM	50 mg; may repeat in 30 min if necessary.	
Ethylene glycol, methanol overdose (Antifreeze)	**Alcohol (ethanol) PO**	8 mL/kg load of 10% (20proof) solution followed by 1 mL/kg/hr. Titrate to ethanol blood level of 100-150 mg/dL	Add Sodium Bicarbonate: 50 – 100 mEq per L of IV fluid. Goal is maintenance of urine pH > 7.0. Consider dialysis.
	Fomepizole (Antizol®)	15 mg/kg load followed by 10 mg/kg Q12H for 4 doses, then 15 mg/kg Q12H until ethylene glycol level <20mg/dL and patient asymptomatic with normal pH.	Add Sodium Bicarbonate: 50 – 100 mEq per L of IV fluid. Goal is maintenance of urine pH > 7.0. Consider dialysis.
Iron toxicity	**Deferoxamine**	**Child > 3:** 90 mg/kg IM Q8H. 15 mg/kg/d IV **Adult**: 1000 mg IM/IV load followed by 500 mg Q4H for 2 doses	IV formulation reserved for severe intoxications. Max 6 g/day.

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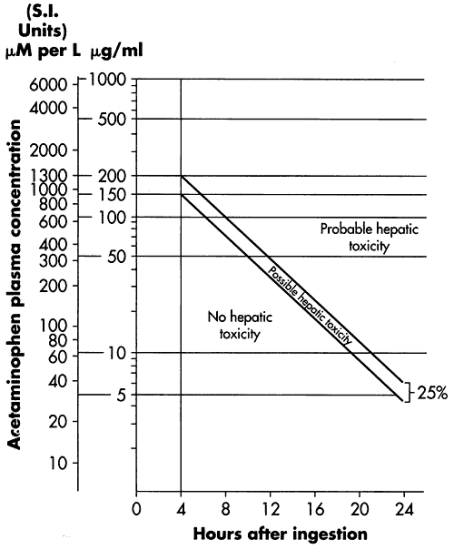
Lead poisoning	**Dimercaprol (BAL)**	**Symptomatic or blood level ≥70:** 4 mg/kg IM load, then 3 mg/kg Q4H for 2-7 days. **Lead encephalopathy:** 4 mg/kg IM load followed by 4 mg/kg Q4H for 2-7 days.	Administer at separate site if used with edetate CALCIUM disodium.
	Edetate CALCIUM Disodium	**Asymptomatic**: 25-50 mg/kg/d IM for 5 days **Symptomatic or blood level ≥70**: same as above + dimercaprol **Lead encephalopathy:** 50-75 mg/kg/d IM in addition to dimercaprol.	Administer 4 hours after first dimercaprol dose. **BLACK BOX WARNING**: IV associated with increased mortality in patients with lead encephalopathy and cerebral edema- IM preferred. ADE: nephrotoxicity Stop IV for 1 hour prior to blood draw for [lead].
Mercury poisoning	**Dimercaprol (BAL)**	5 mg/kg IM initial, then 2.5 mg/kg IM 1-2 times daily for 10 days.	
Methemoglobinemia (may be due to dapsone, benzocaine, and amyl nitrate)	**Methylene Blue**	1-2 mg/kg IV, may repeat after 1 hour if necessary.	
Opiate overdose with respiratory depression	**Naloxone**	Adult: 0.1-2mg IV; may repeat dose every 1-3 minutes Pediatric: 0.1 mg/kg IV (2mg MAX/dose)	If no response after 10 mg- reconsider cause of respiratory depression.
Snake envenomation (rattlesnake, copperhead)	**Crotalidae polyvalent immune fab (OVINE) CroFab**	4-6 vials to start, in250mL NS IVPB, repeat in 1 hour if not responding	Should start treatment within 6 hours of exposure. Up to 18 vials may be needed for severe bites.



A.
Plasma or Serum
Acetaminophen Concentration
vs. Time Post-Acetaminophen Ingestion

Estimate of the probability of acetaminophen concentration in relation to intervals post-ingestion that will result in hepatotoxicity.