College of Emergency Medicine and National Poisons Information Service Guideline on Antidote Availability for Emergency Departments December 2013

TOXBASE and/or the BNF should be consulted for further advice on doses and indications for antidote administration and, if necessary, the National Poisons Information Service (NPIS) should be telephoned for more patient-specific advice. Contact details for NPIS are available on TOXBASE.

The decision on the quantity of these drugs to hold will depend on the local epidemiology of poisoning

Additional drugs that are used in the poisoned patient that are widely available in ED are not listed in the table – in particular it is important to ensure that insulin, benzodiazepines (diazepam and/or lorazepam) and magnesium are immediately available in the ED.

The following drugs should be immediately available in the ED or any area where poisoned patients are initially treated. These drugs should be held in a designated storage facility The stock held there should be sufficient to initiate treatment (stocking guidance is in Appendix 1). Drug Indication

Acetylcysteine	Paracetamol	
Activated charcoal	Many oral poisons	
Atropine	Organophosphorus or carbamate insecticides	
	Bradycardia	
Calcium chloride	Calcium channel blockers	
	Systemic effects of hydrofluoric acid	
Calcium gluconate	Local infiltration for hydrofluoric acid	
Calcium gluconate gel	Hydrofluoric acid	
Cyanide antidotes	Cyanide	
Dicobalt edetate	The choice of antidote depends on the severity of poisoning, certainty of diagnosis and cause of	
Hydroxocobalamin (Cyanokit®)	poisoning/source of cyanide.	
Sodium nitrite	- Oxygen should be administered in all cases.	
Sodium thiosulphate	- Dicobalt edetate is the antidote of choice in severe cases when there is a high clinical suspicion of cyanide poisoning e.g. after cyanide salt exposure.	
	- Hydroxocobalamin (Cyanokit®) should be considered in smoke inhalation victims who have	
	a severe lactic acidosis, are comatose, in cardiac arrest or have significant cardiovascular	
	compromise	
	- Sodium nitrite may be used if dicobalt edetate is not available.	
	- Sodium thiosulphate is used generally as an adjuvant to other antidotes.	
Flumazenil	Reversal of iatrogenic over-sedation with benzodiazepines.	
	Use with caution in patients with benzodiazepine poisoning, particularly in mixed drug overdoses.	
	Should not be used as a "diagnostic" agent and is contraindicated in mixed tricyclic antidepressant	
	(TCA)/ benzodiazepine overdoses and in those with a history of epilepsy.	
Glucagon	Beta-adrenoceptor blocking drugs. Other indications e.g. calcium channel blocker (CCB) / TCA	
Glyceryl trinitrate	Hypertension	
OR isosorbide dinitrate		
Methylthioninium chloride	Methaemoglobinaemia	
(methylene blue)		
Naloxone	Opioids	
Procyclidine injection	Dystonic reactions	
Sodium bicarbonate 8.4% and	TCAs & class Ia & Ic antiarrhythmic drugs	
1.26% or 1.4%	Urinary alkalinisation	
Viper venom antiserum,	European adder, Vipera berus	
European**		

The following drugs should be available within 1 hour (i.e. within the hospital)			
Drug	Indication		
Calcium folinate	Methotrexate (MTX)		
	Methanol, formic acid		
Cyproheptadine	Serotonin syndrome		
Dantrolene	Neuroleptic malignant syndrome (NMS)		
	Other drug-related hyperpyrexia (consult TOXBASE)		
Desferrioxamine	Iron		
Digoxin specific antibody fragments (Digibind or Digifab)	Digoxin and related glycosides		
Fomepizole (or Ethanol (IV or oral))	Ethylene glycol, methanol Fomepizole is the antidote of choice in view of the difficulty in maintaining and monitoring ethanol infusions.		
Macrogol '3350' (polyethylene glycol) <i>Klean-Prep</i> ®	Whole bowel irrigation for agents not bound by activated charcoal e.g. iron, lithium, also for bodypackers and for slow release preparations		
Mesna (in hospitals commonly using cyclophosphamide)	Cyclophosphamide		
Octreotide	Sulphonylureas		
Phentolamine	Digital ischaemia related to injection of epinephrine		
	Resistant hypertension caused by sympathomimetic drugs of abuse, monoamine-oxidase inhibitors		
	(MAOIs), clonidine		
Phytomenadione (Vitamin K1)	Vitamin K dependent anticoagulants		
Protamine sulphate	Heparin		
Pyridoxine, high dose injection	Isoniazid		

The following drugs are rarely used and can be held supra-regionally. Use should be discussed with NPIS and/or clinical			
toxicologist			
Antivenoms for non-indigenous	Significant envenomation		
venomous animals**			
Berlin Blue soluble (Prussian	Thallium		
Blue)			
Botulinum antitoxin	Botulism		
Dimercaprol (BAL)	Arsenic		
Glucarpidase	Methotrexate		
Penicillamine	Copper, Wilson's disease (NOT recommended for lead poisoning)		
Pralidoxime chloride	Organophosphorus insecticides		
Sodium calcium edetate	Heavy metals (particularly lead)		
Succimer (DMSA)	Heavy metals (particularly lead and arsenic)		
Unithiol (DMPS)	Heavy metals (particularly mercury)		

It is not considered essential to hold the following drugs		
Benzatropine		
Methionine		
Physostigmine		

^{**} European viper venom antiserum does not need to be held in hospitals in Northern Ireland ***held by the pharmacy, Royal Liverpool Hospital and Guy's & St Thomas' NHS Foundation Trust