

Antidote Availability for GHNHSFT Emergency Departments

- This list is based on the Royal College of Emergency Medicine (RCEM) and National Poisons Information Service (NPIS) guideline on [antidote availability for emergency departments](#) and [stocking guidance](#) (August 2021)
- [TOXBASE](#), Departmental guidelines and/or the [BNF/BNFc](#) must be consulted for advice on doses and indications for antidote administration.
- If necessary the National Poisons Information Service (NPIS) should be telephoned for more patient-specific advice on [0844 892 0111](#).
- Additional drugs that are used in the poisoned patient that are widely available in ED are not listed in the table.
- Medicines Information can be reached on ext. 3030 (CGH) or 6108 (GRH), Mondays - Fridays 9am-5:30pm. Outside of normal working hours the on call pharmacist can be reached through switchboard.

Drugs are split into 3 categories by RCEM:

- **Category A: immediately available within the ED department**
 - For **CGH ED** stock holdings, see page 2
 - For **GRH ED** stock holdings, see page 3
- **Category B: available within 1 hour (i.e. within the hospital/pharmacy department)**
 - For **CGH** stock holdings, see page 4
 - For **GRH** stock holdings, see page 5
- **Category C: drugs held supra-regionally**, see page 6

Category A (Immediately Available in ED): CGH

Drug	Indication	Min Stock	Location (in ED stock room)
Acetylcysteine 200mg/mL, 10mL amp	Paracetamol	20	Tall Glass Cupboard 2 Drawer 1
Activated charcoal 50g pack	Many oral poisons	7	Bottom Drawer
Atropine 600mcg/mL, 1mL amp	Bradycardia, Organophosphorus or carbamate insecticides	10	Tall Glass Cupboard 2 Drawer 1
Calcium chloride 10mmol in 10mL ampoule	Calcium channel blockers Systemic effects of hydrofluoric acid	6	Tall Glass Cupboard 2 Drawer 2
Calcium gluconate 10mL 10% ampoule	Local infiltration for hydrofluoric acid	10	Tall Glass Cupboard 2 Drawer 2
Calcium gluconate gel 25g tube	Hydrofluoric acid	12	Cupboard 2 Drawer 5
Hydroxocobalamin (Cyanokit®) 5g pack	Cyanide: choice depends on multiple factors, see Toxbase for more information.	5	Tall Glass Cupboard 2 Drawer 2
Flumazenil 100mcg/mL, 5mL amp	Reversal of iatrogenic over- sedation with Benzodiazepines	5	Main Fridge
Glucagon 1mg vial	Beta-adrenoreceptor blockers Other indications e.g. calcium channel blockers, seek NPIS advice.	50	Main Drug Cupboard (Cyanide draw)
Intralipid 20% Available as 100ml, 250ml and 500ml bags	Severe systemic local anaesthetic toxicity. Always seek NPIS advice before giving intralipid for other poisonings.	3 x 500ml	Tall Cupboard 2 Drawer 3
Methylthioninium chloride (methylene blue) 0.5% (5mg/mL), 2ml or 10mL amp 1% (10mg/ml) 5ml amp	Methaemoglobinaemia	5 x 0.5%	Tall Cupboard 2 Drawer 3
Naloxone 400mcg/1mL, 1mL amp	Opioids	30	Tall Cupboard 2 Drawer 3
Procyclidine injection 5mg/mL, 2mL amp	Dystonic reactions	5	Tall Glass Cupboard 2 Drawer 4
Sodium bicarbonate 8.4% 10ml amps, 100ml or 250ml bottle or 200ml polyfusor	TCA's & class Ia & Ic antiarrhythmic drugs. Urinary alkalinisation.	5 x 100ml	Tall Glass Cupboard 2 Drawer 4
Sodium bicarbonate isotonic 1.26% or 1.4% 500ml polyfusor	Urinary alkalinisation.	12	Tall Cupboard 2 Drawer 3
Sodium thiosulfate 50% 500mg/mL 10ml amp or 25% (250mg/ml) 50ml amp	Cyanide: choice depends on multiple factors, see Toxbase for more information.	2 x 25%	Main Drug Cupboard (Cyanide draw)
Viper venom antiserum Pack 1x4ml or 2x4ml vials	European European adder (<i>Vipera berus</i>)	4	Main Fridge

Category A (Immediately Available in ED): GRH

Drug	Indication	Min Stock	Location
Acetylcysteine 200mg/mL, 10mL amp	Paracetamol	20	Overdose Drawer, Tall White Cupboard Majors 1
Activated charcoal 50g pack	Many oral poisons	7	Overdose Drawer, Tall White Cupboard Majors 1
Atropine 600mcg/mL, 1mL amp	Bradycardia, Organophosphorus or carbamate insecticides	10	Injections A-Z White Tall Cupboard Majors 1 (20) Resus – Big White Metal Cupboard (30)
Calcium chloride 10mmol in 10mL ampoule	Calcium channel blockers Systemic effects of hydrofluoric acid	6	Resus – Big White Metal Cupboard
Calcium gluconate 10mL 10% ampoule	Local infiltration for hydrofluoric acid	10	Resus – Big White Metal Cupboard
Calcium gluconate gel 25g tube	Hydrofluoric acid	12	Overdose Drawer, Tall White Cupboard Majors 1
Hydroxocobalamin (Cyanokit®) 5g pack	Cyanide: choice depends on multiple factors, see Toxbase for more information.	5	Resus – Wall Cupboard Anaesthetic Drugs
Flumazenil 100mcg/mL, 5mL amp	Reversal of iatrogenic over-sedation with Benzodiazepines	5	Resus Fridge 2 (36)
Glucagon 1mg vial	Beta-adrenoreceptor blockers Other indications e.g. calcium channel blockers, seek NPIS advice.	50	Overdose Drawer, Tall White Cupboard Majors 1
Intralipid 20% Available as 100ml, 250ml and 500ml bags	Severe systemic local anaesthetic toxicity. Always seek NPIS advice before giving intralipid for other poisonings.	3 x 500ml	Resus - Big White Metal Cupboard
Methylthioninium chloride (methylene blue) 0.5% (5mg/mL), 2ml or 10mL amp 1% (10mg/ml) 5ml amp	Methaemoglobinaemia	5 x 0.5%	Overdose Drawer, Tall White Cupboard Majors 1
Naloxone 400mcg/1mL, 1mL amp	Opioids	30	Injections A-Z White Tall Cupboard Majors 1 (40) Resus – Big White Metal Cupboard (40)
Procyclidine injection 5mg/mL, 2mL amp	Dystonic reactions	5	Overdose Drawer, Tall White Cupboard Majors 1
Sodium bicarbonate 8.4% 10ml amps, 100ml or 250ml bottle or 200ml polyfusor	TCAs & class Ia & Ic antiarrhythmic drugs. Urinary alkalinisation.	5 x 100ml	Resus Small White Wall Cupboard
Sodium bicarbonate isotonic 1.26% or 1.4% 500ml polyfusor	Urinary alkalinisation.	12	Resus IV Fluids
Sodium thiosulfate 50% 500mg/mL 10ml amp or 25% (250mg/ml) 50ml amp	Cyanide: choice depends on multiple factors, see Toxbase for more information.	2 x 25%	Overdose Drawer, Tall White Cupboard Majors 1
Viper venom antiserum Pack 1x4ml or 2x4ml vials	European European adder (<i>Vipera berus</i>)	4	Resus – Fridge 2

Category B (Available within 1 hr): CGH

<i>Drug</i>	<i>Indication</i>	<i>Min Stock</i>	<i>Location</i>
Andexanet Alpha (200mg vial)	Apixaban/Rivaroxaban (as per local protocol)	12	Pharmacy Stock ED Fridge (12)
Cyproheptadine (4mg tablet)	Serotonin syndrome	30	Pharmacy stock
Dantrolene (20mg vial)	Neuroleptic malignant syndrome (NMS)and other drug-related hyperpyrexia	48	Pharmacy stock Eye theatre (3)
Desferrioxamine (500mg vial)	Iron	40	Pharmacy stock Rendcombe (10)
Digoxin specific antibody fragments (Digifab) (40mg vial)	Digoxin	5	Pharmacy stock
Ethanol (ONLY to be used if Fomepizole not available) (100% 5ml amp)	Ethylene glycol, diethylene glycol, methanol	60	Pharmacy Stock
Folinic Acid - Calcium Folate (preferred stock GHNHSFT)	Methotrexate, Methanol, Formic Acid	6000mg	Pharmacy Stock
Folinic Acid-Disodium Folate* (alternative to Calcium Folate)		6000mg	Pharmacy Manufacturing
Fomepizole (1.5g/1.5ml)	Ethylene glycol, diethylene glycol, methanol	4	Pharmacy Stock
Idarucizumab (2.5g/50ml vial)	Dabigatran (as per local protocol)	2	Pharmacy Stock ED Fridge (2)
L-Carnitine Injection (5ml (1g) amp)	Severe sodium valproate toxicity	14	Pharmacy Stock
Macrogol '3350' (polyethylene glycol) Klean-Prep®	Gut decontamination for agents not bound by activated charcoal e.g. iron, lithium, bodypackers	12	Pharmacy stock Endoscopy stock
Mesna (400mg tablet; 1g/10ml amp)	Cyclophosphamide	No min	Pharmacy stock Manufacturing/ CTOPD pharmacy stock
Octreotide (50mg/ml 1ml amp)	Sulphonylureas	5	Pharmacy stock
Phytomenadione (Vitamin K1) (10mg/ml 1ml ampoule)	Vitamin K dependent anticoagulants	10	Pharmacy stock ED Stock (20)
Protamine sulphate (10mg/ml 5ml amp)	Heparin	10	Pharmacy stock
Pyridoxine (high dose injection) (50mg/ml 1ml ampoule)	Isoniazid	100	Pharmacy stock

*Pharmacist note: search on EMIS for "folinic acid" for disodium folinate

Category B (Available within 1 hr): GRH

Drug	Indication	Min Stock* (recommended)	Location
Andexanet Alpha (200mg vial)	Apixaban/Rivaroxaban (as per local protocol)	12	Pharmacy Stock ED Resus Fridge 2 (12)
Cyproheptadine (4mg tablet)	Serotonin syndrome	30	Pharmacy stock ED Majors 1 Stock (30)
Dantrolene (20mg vial)	Neuroleptic malignant syndrome (NMS)and other drug-related hyperpyrexia	48	Pharmacy stock
Desferrioxamine (500mg vial)	Iron	40	Pharmacy stock ED Majors 1 Stock (20)
Digoxin specific antibody fragments (Digifab) (40mg vial)	Digoxin	5	Pharmacy stock
Ethanol (ONLY to be used if Fomepizole not available) (100% 5ml amp)	Ethylene glycol, diethylene glycol, methanol	60	Pharmacy stock ED Majors 1 Stock (20)
Folinic Acid - Calcium Folate (preferred stock GHNHSFT)	Methotrexate, Methanol, Formic Acid	6000mg	Pharmacy Stock
Folinic Acid-Disodium Folate* (alternative to Calcium Folate)		6000mg	See CGH table
Fomepizole (1.5g/1.5ml)	Ethylene glycol, diethylene glycol, methanol	4	Pharmacy Stock
Idarucizumab (2.5g/50ml vial)	Dabigatran (as per local protocol)	2	Pharmacy Stock ED Resus Fridge 2 (2)
L-Carnitine Injection (5ml (1g) amp)	Severe sodium valproate toxicity	14	Pharmacy stock
Macrogol '3350' (polyethylene glycol) Klean-Prep®	Gut decontamination for agents not bound by activated charcoal e.g. iron, lithium, bodypackers	12	Pharmacy stock Endoscopy stock
Mesna (400mg tablet; 1g/10ml amp)	Cyclophosphamide	No min	Pharmacy stock
Octreotide (50mg/ml 1ml amp)	Sulphonylureas	5	Pharmacy stock ED Resus Fridge 1 (5)
Phytomenadione (Vitamin K1) (10mg/ml 1ml ampoule)	Vitamin K dependent anticoagulants	10	Pharmacy stock ED Resus Stock (10) Majors 1 Stock (10)
Protamine sulphate (10mg/ml 5ml amp)	Heparin	10	Pharmacy stock ED Resus Stock (10)
Pyridoxine (high dose injection) (50mg/ml 1ml ampoule)	Isoniazid	100	Pharmacy stock

*Pharmacist note: search on EMIS for "folinic acid" for disodium folinate

Category C: Rarely Used Drugs Held Supra-Regionally

Dosing is variable & depends on the patient's clinical condition; discuss use and location of these antidotes with NPIS on 0844 892 0111

The eight Supra-Regional Antidote Holding Centres are: Addenbrooke's Hospital, Cambridge; St Thomas' Hospital, London; Derriford Hospital, Plymouth; Salford Royal Hospital, Salford; St James's University Hospital, Leeds; The Royal Victoria Infirmary, Newcastle; The Royal Sussex County Hospital, Brighton; Sandwell General Hospital, West Bromwich.

<i>Antidote</i>	<i>Indication</i>
Berlin Blue soluble (Prussian Blue)	Thallium
Botulinum antitoxin	Botulism
Glucarpidase	Methotrexate
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)
Uridine Triacetate	5-Fluorouracil or Capecitabine

Antivenoms for non-indigenous venomous animals – seek advice from NPIS. If indicated, antivenom can be ordered with Movianto by either NPIS or a national antivenom expert for both in and out of hours delivery.

The RCEM & Toxbase advise that it is not considered essential to hold the following drugs (for the purpose as antidotes): Benzatropine, Dicobalt Edetate, Dimercaprol, Methionine, Penicillamine, Phentolamine, Physostigmine, Sodium Nitrite.