



Poisoning in Children and Young People

This guideline is for use by healthcare staff, at CoMET undertaking critical care retrieval, transport and stabilization of children, and young adults.

CoMET is a Paediatric Critical Care Transport service and is hosted by the University Hospitals of Leicester NHS trust working in partnership with the Nottingham University Hospitals NHS Trust.

The guidance supports decision making by individual healthcare professionals and to make decisions in the best interest of the individual patient.

This guideline represents the view of CoMET, and is produced to be used mainly by healthcare staff working for CoMET, although, professionals, working in similar field will find it useful for easy reference at the bedside.

We are grateful to the many existing paediatric critical care transport services, whose advice and current guidelines have been referred to for preparing this document. Thank You.

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Education and Training

1. Annual Transport team update training days
2. Workshops delivered in Regional Transport Study days/ Outreach

Monitoring Compliance

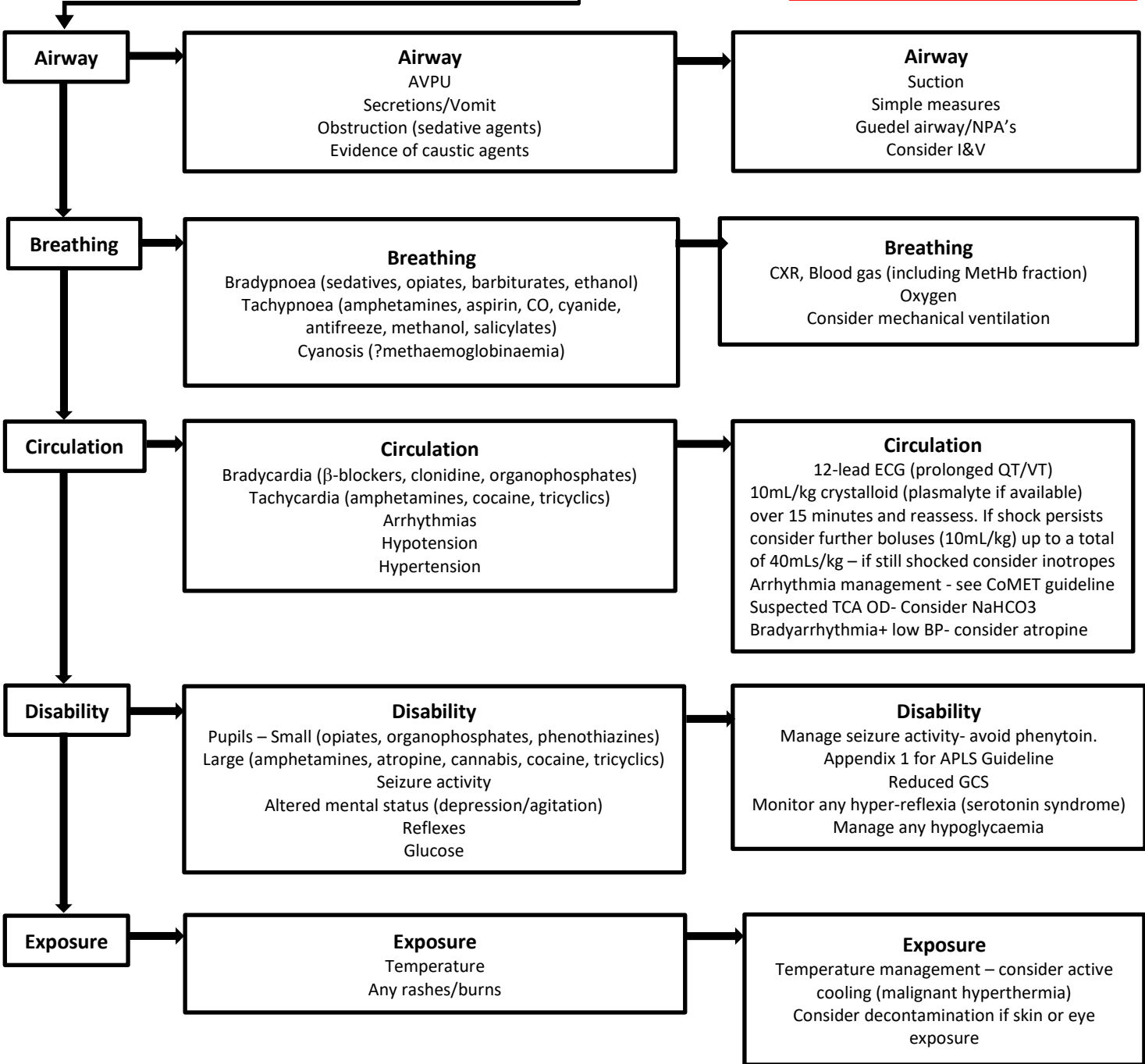
What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
Incident reporting	Review related Datix	Abi Hill – Lead Transport Nurse abi.hill@uhl-tr.nhs.uk	Monthly	CoMET Lead Governance Meeting
Documentation Compliance	Documentation Audit	Abi Hill – Lead Transport Nurse abi.hill@uhl-tr.nhs.uk	3 Monthly	CoMET Lead Governance Meeting



National Poison Information Service
0344 892 0111

Suspicion of poisoning?
Manage symptoms and supportive care

If known toxin:
Consult specific guidance on **ToxBase**
User name: H5107
Password: ME88WA



Activated Charcoal
More effective the sooner it is given, ideally within 1 hour and needs protected airway.
See BNFC for contra-indications
Consider giving anti-emesis

Refer to Comet if:
Respiratory compromise
Hypotension not responding to fluid
Ongoing seizure activity
Arrhythmia management
Ongoing electrolyte disturbance

Methaemoglobinaemia.
Apparent cyanosis persistent despite oxygenation
Causes fatigue, dizziness, headaches, reduced consciousness, seizures, black/brown urine
Can be treated by methythionium chloride (methylene blue)



Table 1: Common Poisoning syndromes (toxidromes)

Toxidrome	Mental status	Vital signs	Skin	Pupils	Other manifestations	Examples of causative agents
Excitatory						
Sympathomimetic	Hypervigilance Agitated delirium (can be violent) Hallucinations Paranoia	T: Increased HR: Increased RR: Increased BP: Increased	Wet	Dilated	Seizures Widened pulse pressure	Amphetamines Cocaine Ephedrine Phenylpropanolamine Pseudoephedrine
Anticholinergic	Hypervigilance Agitated delirium (usually easily controlled) Hallucinations (picking at objects in air) Mumbling speech (described as "mouth full of marbles")	T: Increased HR: Increased (but may be normal in early poisoning) RR: Increased BP: Increased or normal	Dry and flushed	Dilated	Dry mucous membranes Decreased bowel sounds Urinary retention Choreoathetosis Seizures (rare)	Diphenhydramine (and other antihistamines) Atropine and similar agents (hyoscyamine, dicyclomine, scopolamine, and naturally occurring belladonna alkaloids [eg, jimson weed]) Tricyclic antidepressants Cyclobenzaprine Orphenadrine Phenothiazines
Hallucinogenic	Hallucinations Perceptual distortions (typically visual) Depersonalization Synaesthesia Agitation (can sometimes occur and without delirium)	T: Increased or normal HR: Increased or normal RR: Increased or normal BP: Increased or normal	Variable	Dilated (usually)	Nystagmus (phencyclidine, ketamine) Tachycardia, hypertension, agitated delirium (designer phenethylamines)	Designer phenethylamines and tryptamines (eg, MDMA ["ecstasy"], MDEA) Ketamine and methoxetamine LSD and psilocybin Phencyclidine Mescaline
Serotonin syndrome (serotonin toxicity)	Agitated delirium Confusion Awake and unresponsive hyperreflexia	T: Increased HR: Increased RR: Increased BP: Increased	Wet, flushed, or normal	Dilated	Tremor, hyperreflexia, clonus (typically in lower extremities) Roving eye movements (ocular clonus) Diarrhoea	MAOIs Tricyclic antidepressants SSRIs and SNRIs Dextromethorphan Pethidine
Inhibitory						

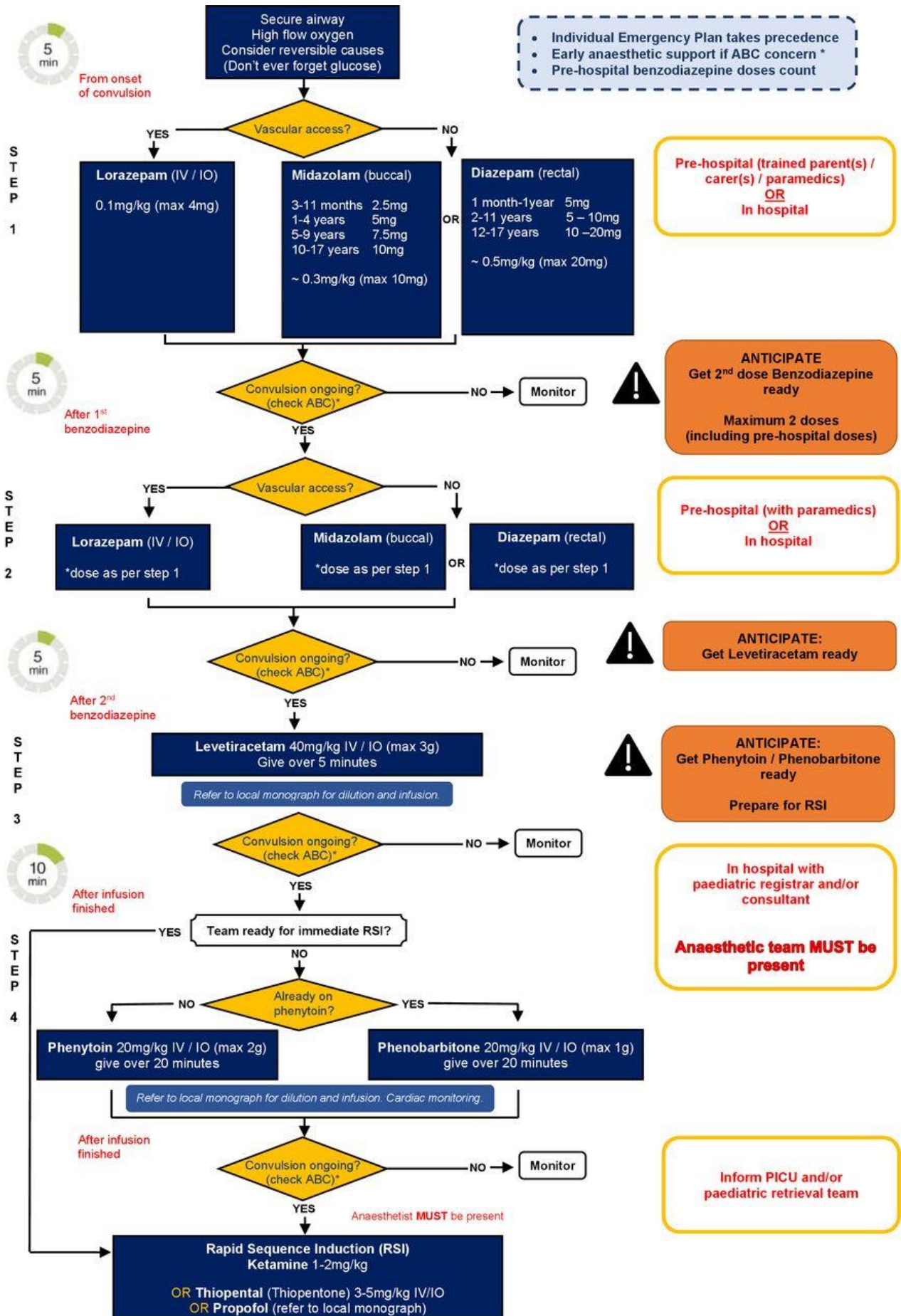


Opioid	Sedation Coma	T: Decreased or normal HR: Decreased or normal RR: Decreased or apnoeic BP: Decreased or normal	Variable	Constricted (may be pinpoint)	Non-cardiogenic pulmonary oedema Can develop hypotension	Opioids (eg, fentanyl and analogues, heroin, morphine, methadone, oxycodone, hydromorphone) Anti motility drugs: Diphenoxylate (lomotil) Loperamide
Sedative-hypnotic	Sedation Confusion Stupor Coma	T: Decreased or normal HR: Decreased or normal RR: Decreased, apnoeic, or normal BP: Decreased or normal	Variable	Variable	Nystagmus Barbiturates can cause respiratory depression or apnoea	Benzodiazepines Barbiturates Ethanol and other alcohols Gabapentin and pregabalin Zolpidem
Cholinergic	Sedation Confusion Stupor Coma	T: Normal HR: Low (may be increased in early poisoning) RR: Decreased or increased BP: Decreased or normal	Wet	Constricted	Seizures (typically occur early) Salivation Urinary and faecal incontinence Vomiting, diarrhoea, abdominal cramps Bronchorrhea and bronchoconstriction Muscle fasciculations and paralysis Weakness	Organophosphate and carbamate insecticides Nerve agents Nicotine Physostigmine Rivastigmine Bethanechol Pilocarpine

T: temperature; HR: heart rate; RR: respiratory rate; BP: blood pressure; MDMA: 3,4-methylenedioxy-methamphetamine; MDEA: 3,4-methylenedioxy-N-ethylamphetamine; MAOIs: monoamine oxidase inhibitors; SSRIs: serotonin-specific reuptake inhibitors; SNRIs: serotonin-nonspecific reuptake inhibitors



Appendix 1: APLS Status Epilepticus Guidelines (2022 Update).





References:

The Royal Children's Hospital Melbourne. 2017. Poisoning - Acute Guidelines For Initial Management. Available from: https://www.rch.org.au/clinicalguide/guideline_index/Poisoning_-_Acute_Guidelines_For_Initial_Management/

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