

**Toxicity varies between antihistamines but is generally dose dependent. Anticholinergic delirium + arrhythmias are features of severe toxicity.**

## Toxicity / Risk Assessment

### ***Sedating Antihistamines:***

- Promethazine: sedation, 33% incidence of anticholinergic delirium with ingestions > 250 mg (50% > 1000 mg)
- Diphenhydramine: > 1000mg – expect severe toxicity
- Pheniramine: more likely to cause seizures
- Chlorpheniramine: sedation and anticholinergic toxicity
- Orphenadrine: considered more toxic than other antihistamines (may cause ↑QRS, ↑QT, arrhythmias)

### ***Non-sedating Antihistamines:***

- Loratadine: large doses may cause anticholinergic toxicity
- Doxylamine: rhabdomyolysis associated with >20mg/kg
- Cetirizine: sedation, anticholinergic toxicity, ↑QT following large ingestions
- Fexofenadine: anticholinergic effects in large ingestions

### **General clinical features:**

- CNS: altered conscious state, sedation, agitated delirium
- CVS: tachycardia, arrhythmias, hypotension
- Anticholinergic: warm dry skin, urinary retention
- Rarely: seizures / hyperthermia / rhabdomyolysis

## Management

Management is supportive. Maintain electrolytes within normal ranges.

### **Decontamination**

Activated charcoal should be offered to alert cooperative patients within 2 hours of ingestion

### **Agitation**

- Check for urinary retention and signs of anticholinergic delirium

### **Anticholinergic delirium**

- Exclude urinary retention
- Supportive care +/- titrated doses of diazepam (5-10mg oral 30 minutely PRN or IV 10-15 minutely PRN)
- Consider physostigmine (discuss with clinical toxicologist – see separate guideline)
- Droperidol may be required in severe behavioural disturbance resistant to benzodiazepines

### **Seizures**

- Benzodiazepines: Diazepam 5 mg IV every 5 minutes as necessary

### **Ventricular arrhythmias** in setting of wide QRS > 120ms (discuss with clinical toxicologist)

- 1 mL/kg 8.4% solution of NaHCO<sub>3</sub> slow IV bolus, repeat every 5 minutes until arrhythmia resolved OR serum pH = 7.50-7.55 (avoid pH>7.55)

### **Disposition**

- Discharge pending mental health assessment if clinically well + normal CVS state + normal ECG at 6 hours post exposure
- Advise patient not to drive for at least 72 hours post exposure