### Clinical Practice Guidelines: Toxicology and toxinology/Paraquat

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### Date
March, 2017

### Purpose
To ensure a consistent approach to the management of Paraquat poisoning.

### Scope
Applies to all QAS clinical staff.

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### Review date
March, 2020

### Information security
This document has been security classified using the Queensland Government Information Security Classification Framework (QGISCF) as UNCLASSIFIED and will be managed according to the requirements of the QGISF.

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**Paraquat**

Paraquat is a caustic herbicide. It is usually lethal in overdose and just 15 mL of a 20% solution is fatal. Early haemodialysis to facilitate paraquat elimination may be life saving, but this is the exception.

### Clinical features

- **Immediate:**
  - gastrointestinal upset

- **Early (hours):**
  - oral corrosive injury, metabolic acidosis with large ingestions, hypotension and respiratory distress

- **Delayed (24 – 48 hours):**
  - progression of acidosis, multi-organ failure, coma, seizures

- **Late (> 48 hours):**
  - pulmonary fibrosis if patient survives

### Risk assessment

- Deliberate ingestions of more than a mouthful is typically fatal.[1]
- Dermal and inhalational exposures are unusual however fatalities have occurred via these routes.[2]

### Decontamination

- Remove clothes and wash skin if topical exposure

### Consider:

- Oxygen
- IPPV
- Analgesia
- Antiemetic

### Transport to hospital

Pre-notify as appropriate

### Additional information

- In children, an ingestion of as little as a teaspoon can be fatal.[1]
- Patients with paraquat poisoning may be harmed by supplemental oxygen. Avoid oxygen unless patient is hypoxaemic – target SpO₂ 88 – 92%.[3]
- Fuller’s Earth or a clay slurry can be administered to assist with decontamination.[2, 4]