



**Toxins & Environmental  
CYANIDE POISONING  
Practice Guideline**

**Patient Care Goals**

1. Identify patients with suspected cyanide toxicity
2. Maintain adequate oxygenation and ventilation
3. Identify traumatic injury
4. Provide transport to appropriate hospital destination

**Patient Presentation**

Inclusion Criteria

Pt with suspected cyanide poisoning due to enclosed smoke in halation or manufacturing/industrial exposure (plating)

Early symptoms: headache, dizziness, tachycardia, SOB  
 Unstable vital signs and symptoms: hypotension, altered mental status, **seizure, life-threatening dysrhythmia/ischemia**, severe air hunger regardless of SPO2 value

**Cardiac arrest**

**Patient Management**

Early consideration of CN toxicity and preplanning to utilize hydroxocobalamin is imperative give the steps required for infusion

**Medications**

- Cyanokit® / Hydroxocobalamin in IV/IO over 15 minutes (Pt unstable or cardiac arrest)

Adult (≥40 kg): 5 g

Pediatric (<40 kg): 70 mg/kg

Dedicated IV/IO line is critical; hydroxocobalamin is not compatible with most medications

Cyanokit® provides medication, vented IV tubing, and transfer spike

Medication turns red when reconstituted

Cyanide kits may be supplied by industrial facility where there is a risk of employee exposure

**Patient Safety Considerations:**

- Complete trauma exams are critical
- Consider obtaining CO value via Rad57 or ZOLL CO oximetry if available

Appropriate transport destination is imperative for patient outcomes

- Adult patients: Consider transport to hyperbaric facility (St Lukes) for patients without trauma or burns
- Pediatric patients: Transport to Children’s Hospital

**Quality Improvement**

Key Documentation Elements

1. Onset/duration of exposure
2. Airway status
3. Frequent vital signs
4. Pediatric patients: pt wt

