

HEALTHEAST MEDICAL TRANSPORTATION  
MEDICAL OPERATIONS MANUAL

**HYDROXOCOBALAMIN (CYANOKIT)**

**Drug Classification: Antidote**

**BACKGROUND**

**Pharmacodynamics**

Hydroxocobalamin binds cyanide ions to form cyanocobalamin (Vitamin B12), which is then excreted in the urine.

**Indications**

- Suspected or known cyanide poisoning.
- Smoke inhalation victims who show clinical evidence of closed-space smoke exposure (soot in mouth or nose, sooty sputum) and are either comatose, in shock, or in cardiac arrest.

**Contraindications**

- None in the prehospital setting

**Cautions**

- This medication is incompatible with many other medications. If any other medications need to be administered, a second access should be established.

**DOSAGE and ADMINISTRATION**

1. The kit consists of 2 vials, each with 2.5 grams of hydroxocobalamin powder. Each vial must be reconstituted with 100 mL of normal saline (not included in the kit). Rock the reconstitution for 60 seconds to mix. Do not shake.

ADULT	PEDIATRICS (less than 60 kg)
2. Administer 5 g IV/IO over 15 minutes.	2. Administer 70 mg/kg (max single dose of 5 g) IV/IO.

**ADVERSE REACTIONS/SIDE EFFECTS**

- Will cause red colored urine for up to 5 weeks and red colored skin for up to 2 weeks. The red color of the blood serum and urine may interfere with colorimetric laboratory tests for several days.
- Headache, dizziness, restlessness, eye irritation, throat irritation, dyspnea, pulmonary edema, chest tightness, hypertension, tachycardia, palpitations, nausea, vomiting, diarrhea, abdominal pain, dysphagia, and hives.

**NOTES**

**REFERENCE GUIDELINE:**

**5D Toxic Exposures**