

## HYDROXOCOBALAMIN

<b>THERAPEUTIC EFFECTS</b>	<p>The action hydroxocobalamin in the treatment of cyanide poisoning is based on its ability to bind cyanide ions. Each hydroxocobalamin molecule can bind one cyanide ion by substituting it for the hydroxo ligand linked to the trivalent cobalt ion, to form cyanocobalamin, which is then secreted in the urine.</p>
<b>INDICATIONS</b>	<p>For the treatment of known or suspected cyanide poisoning including patients in CPA secondary to smoke inhalation.</p>
<b>CONTRAINDICATIONS</b>	<p>Known hypersensitivity to hydroxocobalamin or cyanocobalamin.</p>
<b>PRECAUTIONS/SIDE EFFECTS</b>	<p>Potential nausea, vomiting, diarrhea, abdominal pain, eye swelling, irritation, or redness, red colored urine, red colored skin and mucus membrane, and acne like rash.</p> <p>Hydroxocobalamin is physically <b>incompatible</b> with <b>dopamine</b> and <b>fentanyl</b> and the concurrent administration through the same IV line can result in particle formation.</p>
<b>ADULT DOSAGE/ROUTE</b>	<p>5 g (Two 2.5 vials) administrated IV over 15 minutes. May be repeated once based upon the clinical severity of the poisoning with the rate of infusion ranging from 15 minutes to 2 hours, based on the patient's condition. Each vial should be reconstituted with 100 ml of NS and rocked or rotated for 30 seconds to mix solution and then infused over 7.5 minutes.</p>

PEDIATRIC DOSAGE/ROUTE	1. 70 mg/kg IV/IO over 15 minutes; may repeat x1			
	2. Hydroxocobalamin is supplied as 5 gm in 200 mL glass vial*			
	I. Add 200 mL 0.9% NS (D5W or LR are ok); use transfer spike			
	II. Swirl, rock, or invert vial.			
	3. Final concentration: 25 mg/mL; infuse in dedicated line.			
	Weight (kg/lbs)	Dose (mg)	Dose (mL)	Infusion method
	2 kg/4.4 lbs	140 mg	5.6 mL	Syringe pump
	3 kg/6.6 lbs	210 mg	8.4 mL	Syringe pump
	4 kg/8.8 lbs	280 mg	11 mL	Syringe pump
	5 kg/11 lbs	350 mg	14 mL	Syringe pump
	10 kg/22 lbs	700 mg	28 mL	Syringe pump
	15 kg/33 lbs	1050 mg	42 mL	Syringe pump
	20 kg/44 lbs	1400 mg	56 mL	Syringe pump
25 kg/55 lbs	1750 mg	70 mL	Syringe pump	
30 kg/66 lbs	2100 mg	84 mL	Syringe pump	
35 kg/77 lbs	2450 mg	98 mL	Syringe pump	
40 kg/88 lbs	2800 mg	112 mL	Syringe pump	
45 kb/99 lbs	3150 mg	126 mL	Syringe pump	
50 kg/110 lbs	3500 mg	140 mL	Syringe pump	

\*Older Cyanokits (may be expired) supplied as: 2.5 gm in 100 mL vial; add 100 mL of NS (or D5W or LR); use transfer spike; final conc. Also 25 mg/mL; may need 2 vials for dose.