

# CYANIDE ANTIDOTE: CYANOKIT

02/04/2020

[PARAMEDIC]

<b>ACTIONS</b>	Hydroxocobalamin works by binding directly to the cyanide ions, creating cyanocobalamin, a natural form of vitamin B12, which is excreted in the urine.
<b>INDICATIONS</b>	<ol style="list-style-type: none"><li>1. Suspect cyanide poisoning in any person exposed to smoke in a closed space, or any smoke inhalation victim with soot in mouth, altered mental status and low blood pressure.</li><li>2. Known chemical exposure to cyanide containing chemicals.</li><li>3. Symptoms include;<ul style="list-style-type: none"><li>• <u>Early symptoms</u> - headache, vertigo, confusion, drunken behavior, shortness of breath.</li><li>• <u>Advanced symptoms</u> - N&amp;V, chest tightness, generalized seizures, coma, dilation of pupils, cardiac arrhythmias, hypertension (early), hypotension (late), asystole, apnea, non-cardiac pulmonary edema.</li></ul></li></ol>
<b>PRECAUTIONS</b>	A separate IV should be established for other medications to prevent precipitation.
<b>SIDE EFFECTS</b>	Cyanokit's most common adverse reactions (>5%) are transient and include: <ol style="list-style-type: none"><li>a. Chromaturia (red-colored urine)</li><li>b. Erythema (skin redness)</li><li>c. Rash</li><li>d. Substantial increase in blood pressure</li><li>e. Nausea</li><li>f. Headache</li><li>g. Injection site reactions</li></ol>

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**PROCEDURE**

- ~~1. Collect 4 ml of blood in each of two green top vacutainers. (These green top blood tubes are stored with the Cyanokits.) Write the following information on each green top tube: patient name: last, first and middle initial, date of birth, date and time collected, and initials of person collecting the specimen. Deliver the filled tubes with the patient to the receiving hospital.~~
2. The recommended diluent is 100 mL of 0.9% Sodium Chloride injection, although 100 mL of Lactated Ringers injection or 5% Dextrose injection (D5W) may also be used. Refer to the diagram on page 3 for steps in administering the medication.

**2.5 g vials:**

- Take two 2.5 g vials and add 100 mL of normal saline to each vial. Administer these two vials by IV infusion over 7.5 minutes per vial for a total infusion time of 15 minutes (approximately 15 mL/min).
- Rock or rotate vial for 30 seconds to mix solution. (Do not shake)

**5 g vials:**

- Add 200 mL of normal saline to the vial. Administer by IV infusion over 15 minutes.
- Rock or rotate vial for 30 seconds to mix solution. (Do not shake)

**ADULT**



**Cyanide Poisoning: MD**

The starting dose is 5 g IV infusion.

- Depending on the severity and the clinical response, a second dose of 5 g may be administered over an infusion rate of 15 minutes to 2 hours, based on patient's condition.
- **Monitor B/P carefully, a significant rise may occur.**

**PEDIATRIC**



**Cyanide Poisoning: MD**

70 mg/kg, up to a maximum of 5 g.  
Prepare dose as noted above.

## Pediatric Cyanide Antidote Dosage Chart

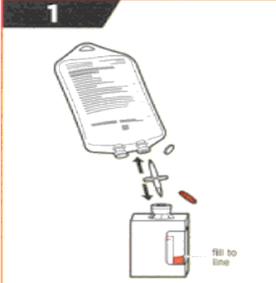
Weight in kg

5kg	8kg	10kg	12kg	15kg	20kg	25kg	30kg	35kg	40kg	45kg	50kg
14ml= 350mg	22ml= 550mg	28ml= 700mg	34ml= 850mg	42ml = 1050mg	56ml = 1400mg	70ml = 1750mg	84ml = 2100mg	98ml = 2450mg	112ml= 2800mg	126ml= 3150mg	140ml= 3500mg

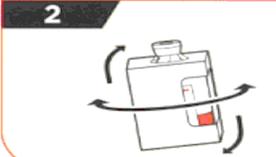
Dosages on chart calculated to provide 70 mg/kg when one or two 2.5 g vial are diluted with 100cc diluent added to each vial. At this concentration the correct dose is 2.8 mL/kg.

2.5 gram vials

**Easy to administer in 4 simple steps<sup>1</sup>**



**1**



**2**



**3-4**

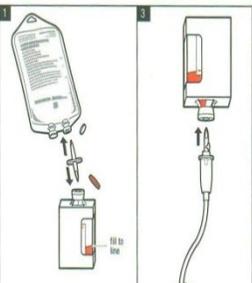
**Starting Dose: 5 g (2 vials)**

- 1. Reconstitute:** Add 100 mL of 0.9% Sodium Chloride Injection\* to vial using transfer spike. **Fill to line. Vial in upright position**
- 2. Mix:** Rock or rotate vial for 30 seconds to mix solution. Do not shake
- 3. Infuse First Vial:** Use vented IV tubing to hang and infuse over 7.5 minutes
- 4. Infuse Second Vial (Repeat Steps 1 and 2 before second infusion):** Use vented IV tubing to hang and infuse over 7.5 minutes

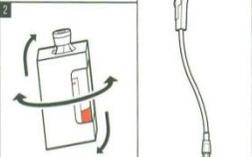
5 gram vials

**For Intravenous Use**

To be reconstituted with 200 mL of 0.9% Sodium Chloride Injection  
Diluent Not Included



**1**



**2**

**Complete Starting Dose: 5 grams**

- 1. Reconstitute**  
Place the vial in an upright position.  
Add 200 mL of 0.9% Sodium Chloride Injection to the vial using the transfer spike. **Fill to the line.**
- 2. Mix**  
The vial should be repeatedly inverted or rocked, not shaken, for at least **60 seconds** prior to infusion.
- 3. Infuse Vial**  
Use vented intravenous tubing, hang and infuse over **15 minutes.**

**One 5 g vial is a complete starting dose**

See Package Insert for alternate diluents, incompatibilities with other drugs and full prescribing information.

For more information visit [www.cyanokit.com](http://www.cyanokit.com)  
or call 1-800-776-3637  
See reverse for additional information

Component # 658-2      NDC 11704-370-01

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