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CLINICAL BULLETIN			
Bulletin #	Title		Date Issued
#2025-02-12-01	Clinical Bulletin re: Severe Cyanokit® Shortage		February 12, 2025
Superseded	Released By:	Source:	Pages
N/A	Maine EMS	MDPB	2
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**Situation**

Cyanokit® (hydroxocobalamin), the antidote for cyanide poisoning, has recently been added to the drug shortage list. It is predicted to be in extremely limited supply until at least the spring of 2025.

**Background**

Cyanokit® is used to treat cyanide toxicity, which can occur during a house fire through smoke inhalation. Cyanide disrupts oxidative phosphorylation, leading to loss of ATP production in mitochondria, and is known as a "cellular asphyxiant." Essentially, cyanide prevents the utilization of oxygen. Symptoms of cyanide toxicity range from mild (dyspnea and palpitations) to severe (cardiovascular collapse). These symptoms can overlap with other more common causes, such as soot inhalation, thermal injury to the airway, carbon monoxide exposure, or exacerbation of underlying cardiovascular disease. *Not all smoke inhalation causes cyanide poisoning.*

**Assessment**

Use of Cyanokit® for smoke inhalation without symptoms of severe cyanide toxicity has been noted in the past. This can contribute to additional drug shortage and does not come without consequences for the patient as hydroxocobalamin interferes with certain lab measurements (due to bright red color of the medication) potentially altering hospital care.

**Recommendation**

In cases of severe shock with coma or frank cardiac arrest, the use of Cyanokit® should not be delayed. For all other cases of suspected cyanide exposure, evaluate for evidence of cellular asphyxia in a timely fashion: signs of cardiac ischemia on EKG, cardiovascular instability. Then, consider consultation with the Northern New England Poison Control Center prior to the use of Cyanokit®. The poison center commonly consults on potential cyanide exposure cases and can guide clinicians in the responsible use of Cyanokit®. The Northern New England Poison Center can be contacted at (800) 222-1222 to discuss any potential cyanide poisoning.

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With offices located at the Central Maine Commerce Center, 45 Commerce Drive, Suite 1, Augusta, ME 04330

This medication shortage is expected to be very severe and last until at least the Spring of 2025. If your EMS Agency or Fire Department has Cyanokit®s in stock and are willing to share these with a hospital in the case that the hospital's supply is depleted, please contact the Northern New England Poison Control Center by email at [NNEPC@MaineHealth.org](mailto:NNEPC@MaineHealth.org).

Thank you for your attention and consideration during this time of medication shortages. The EMS System nationally has seen unprecedented numbers of medications shortages over the past decade and your efforts have and will continue to lessen the impact of these events. Thank you for this, and for all you do.

Maine EMS and the MDPB continue to monitor this situation and will continue to work with agencies as this issue develops. For further questions, please contact Maine EMS Staff at [maine.ems@maine.gov](mailto:maine.ems@maine.gov) or call 207-626-3860. Or you can contact any MDPB member.