

Hydroxocobalamin

Classification

Vitamin (form of vitamin B12)

Indications

- CCP: Patients with known cyanide ingestion
- CCP: Patients from enclosed space fires with altered levels of consciousness

Contraindications

Allergy to hydroxocobalamin

Adult dosages

- CCP: All indications
- 70 mg/kg IV. Typical adult dose is 5 g for a 71 kg person.
- Second half-dose may be given depending on the severity of the poisoning, or the clinical response to treatment

Pediatric Considerations And Dosing

[Follow weight-based dosing](#)

- CCP: All indications
- 70 mg/kg IV.
- Second half-dose may be given depending on the severity of the poisoning, or the clinical response to treatment

Mechanism Of Action

Hydroxocobalamin binds directly with cyanide molecules, which prevents cyanide binding to cellular mitochondria

Pharmacokinetics

Following IV administration:

- Onset: Immediate
- Half-life: 24-48 hours

Excretion is in the urine

Adverse Effects

Hydroxocobalamin may cause a temporary reddish discoloration of the skin, plasma, urine, and mucous membranes. These changes last for approximately two to three days.

Overdose

Single doses of hydroxocobalamin are safe in all patients not allergic to vitamin B12.

Warning And Precautions

Hydroxocobalamin may interfere with co-oximetry measurements, complicating the assessment of victims of smoke inhalation who may suffer from both cyanide and carbon monoxide poisoning.

