**Hydroxocobalamin**

**ACTIONS:** When given IV, hydroxocobalamin binds cyanide ions to form Cyanocobalamin (vitamin B12) which is then excreted in the urine.

**INDICATIONS:**
- 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.

**PRECAUTIONS:**
- May cause transient elevation of blood pressure.
- 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 will interfere with colorimetric laboratory tests for several days.

**ADVERSE REACTIONS/SIDE EFFECTS:**
- Redness of skin and mucous membranes may be prominently noted.
- Other less common reactions include headache, dizziness, restlessness, eye irritation, throat irritation, dyspnea, pulmonary edema, chest tightness, hypertension, tachycardia, palpitations, nausea, vomiting, diarrhea, abdominal pain, dysphagia, red urine, and hives.

**ADMINISTRATION:**
- Administer 5 gm IV/IO over 15 min
- The 5 gram Cyanokit consists of 2 vials, each with 2.5 grams of hydroxocobalamin powder. Some kits contain a single 5 g vial so check concentration before administering. Each 2.5 g must be reconstituted with 100 mL of Normal Saline (or 200 mL if a single 5 g vial is provided). Saline is not included in the kit. Five grams (two vials) should be given IV over 15 minutes.
- Follow full instructions accompanying the CYANOKIT® for preparation and administration, including use of a transfer spike for normal saline addition to the vial(s), rocking, but not shaking the vial for 60 seconds prior to administration, and administering the infusion from the vial(s).

**PEDIATRIC CONSIDERATIONS:**
- Hydroxocobalamin has not been approved for pediatric use, but in a life-threatening situation should be considered.
- Standard pediatric dose is 70 mg/kg (max single dose 5 g). Follow administration procedure as above.

**SPECIAL NOTES:**
- Hydroxocobalamin is incompatible with many other medications, therefore a separate dedicated vascular access site should be obtained and used for the infusion.