

# Cyanide Toxicity

---

1. **Identification** – the substance has been positively identified
2. **Medical Control** – On-line medical control has been established with Mercy Medical Center and if needed the local receiving facility
3. **Rescuer Safety** – The victim is thoroughly decontaminated and EMS personnel are in a safe environment
4. **Supportive Care** – Basic and advanced life support measure are secured before consideration of antidotal therapy. This might include high flow oxygen
5. **Assessment** – The victim’s symptoms are appropriate for the toxin.
6. **HAZMAT DRUG ADMINISTRATION**
  - a. **Amyl Nitrite** – One ampule of Amyl Nitrite should be broken, poured on a gauze pad, and held under the patient’s nose – 30 second exposure followed by 30 second rest; cycle repeated with another ampule until Sodium Nitrate can be administered to a maximum of four cycles. (Protect your hands with gloves.) This may be administered to an intubated patient if spontaneously breathing. If not, ampules of Amyl Nitrate may be placed inside the bag-valve-mask. May need to use two bag-valve-masks to give the 30 second rest.
  - b. **Sodium Nitrate** – Stop Amyl Nitrite administration. Administer 300 mg of Sodium Nitrate (10 ml of 3% solution) intravenously over 2 – 5 minutes.
  - c. **Sodium Thiosulfate** – Immediately follow Sodium Nitrite with 12.5 gm of Sodium Thiosulfate 50 ml of a 25% solution intravenously over 5 minutes.
  - d. **Monitor** – If toxic signs reappear, Sodium Nitrite and Sodium Thiosulfate may be repeated one time at one-half dose.
7. **Ongoing assessment**
8. **Continued contact with medical control**

Steve Stroman, MD, FACEP, FAAEM, EMT-P  
Medical Director, Oshkosh Fire Dept