# Hillsborough County Fire Rescue STANDING ORDERS AND PROTOCOL

Section: Drug Reference Page 1 of 2

Subject: AMYL NITRITE
Section #: 348.04

Issue Date: March 21, 2011

Revision Date:

Approved By:

Michael Lozano, Jr., M.D., HCFR Medical Director

# **Amyl Nitrite**

#### 1. CLASSIFICATION

a. Vasodilator related to nitroglycerin.

# 2. ACTIONS / DESCRIPTIONS

- a. Induces the formation of methemoglobin. Thus changes the iron (Fe<sup>+2</sup>) in the blood to (Fe<sup>+3</sup>). In cases of cyanide poisoning, the methemoglobin combines with the cyanide to form non-toxic cyanmethemoglobin.
- The vapors are absorbed rapidly through the alveoli causing effects within one minute after inhalation.
- c. Rapid acting vasodilator administered by inhalation.
- d. Causes a non-specific relaxation of smooth muscle primarily vascular smooth muscle.
- Causes coronary vasodilation, decreased systemic vascular resistance, and decreased left ventricle preload and afterload.

#### 3. INDICATIONS

- a. Cyanide poisoning in the conscious patient
- b. Cyanide poisoning without complications from carbon monoxide poisoning

# 4. CONTRAINDICATIONS

- a. Glaucoma: acute narrow angle
- b. Recent head trauma or cerebral hemorrhage due to increases in intraocular and intracranial pressures

#### 5. PRECAUTIONS

- a. Glaucoma
- b. Hypotension

#### 6. ADVERSE REACTIONS

- a. Dizziness
- b. Blushing of the face
- c. Syncope
- d. Hypotension
- e. Tachycardia
- f. Restlessness
- g. Weakness
- h. Methemoglobinemia in high doses
- Cold sweats
- j. Muscle twitching

#### 7. Dosage

- a. Inhalations for up to 30 seconds. Inhale for 15 seconds then stop for 15 seconds.
- b. Every two (2) minutes use a fresh capsule.
- c. Once an IV has been established, give sodium nitrite and discontinue amyl nitrite.

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# **DRUG ACTION TIME**

a. Effects begin within one (1) minute of inhalation.

# INFORMATIONAL POINTS

- a. Keep the patient sitting or lying during drug administration.
- Methylene blue is the antidote for severe methemoglobinemia.
- Do not give if elevated HbCO level in the blood has not been corrected.