San Mateo County Emergency Medical Services Carbon Monoxide/Cyanide

History

- · Industrial or closed space fire
- · Facial burns
- · Previous CO poisoning
- Propane powered equipment (e.g., power mower, tractor, gas powered equipment)
- Gas home heaters, natural gas stoves, kerosene
- Gas clothes dryer or hot water heater
- Multiple people or pets with similar symptoms

Signs and Symptoms

- AMS
- Malaise/Fatigue
- Flu-like symptoms
- Weakness
- Headache
- Dizziness
- Blurred vision
- Ataxia
- Seizure
- Nausea/vomiting/cramping
- Chest pain

Differential

- · Diabetic emergency
- Infection/sepsis
- Myocardial infarction
- Anaphylaxis
- · Renal failure
- · Head injury/trauma
- Ingestion/toxic exposure

Immediately remove from exposure Airway support Ε High flow Oxygen regardless of SpO₂ Blood glucose analysis Cardiac monitor CO-oximetry (SpCO), if available 12-Lead ECG Establish IV/IO Consider, EtCO₂ monitoring If systolic BP < 90 Normal Saline bolus 500ml IV/IO Maximum 2L Notify receiving facility. **Consider Base Hospital** for medical direction

Emergency Hyperbaric Chambers John Muir Medical Center -Walnut Creek

Pearls

- For suspected cyanide poisoning, contact the receiving hospital early.
- CO is colorless and odorless.
- Pulse oximetry will likely be normal with CO toxicity.
- Hyperbaric oxygen is recommended for those with AMS, seizure, coma, focal deficits, blindness, CO levels > 25% or > 20% if pregnant. John Muir Medical Center – Walnut Creek is the only emergency hyperbaric chamber in the Bay Area. Contact the Base Hospital for direction.
- Baseline carboxyhemoglobin levels in chronic smokers is 5-10%.
- Consider cyanide poisoning in any patient with CO intoxication.
- Consider cyanide poisoning in any patient with AMS.



Treatment Protocol R