

San Mateo County Emergency Medical Services

# Carbon Monoxide/Cyanide

For suspected or known carbon monoxide exposure

### 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 heaters
- 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

E	Immediately remove from exposure
	Airway support
	<b>High flow Oxygen</b> regardless of SpO <sub>2</sub>
P	Blood glucose analysis
	Cardiac monitor
	CO-oximetry (SpCO), if available
	12-Lead ECG
	Establish IV/IO
	<i>Consider</i> , EtCO <sub>2</sub> monitoring
If systolic BP < 90 <b>Normal Saline bolus 500ml IV/IO</b> <i>Maximum 2L</i>	

[Emergency Hyperbaric Chambers](#)  
John Muir Medical Center – Walnut Creek

 **Notify receiving facility.**  
**Consider Base Hospital for medical direction** 

### Pearls

- 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.
- For suspected cyanide poisoning, contact the receiving hospital early.
- Consider cyanide poisoning in any patient with AMS.

Adult Respiratory Distress Treatment Protocols

