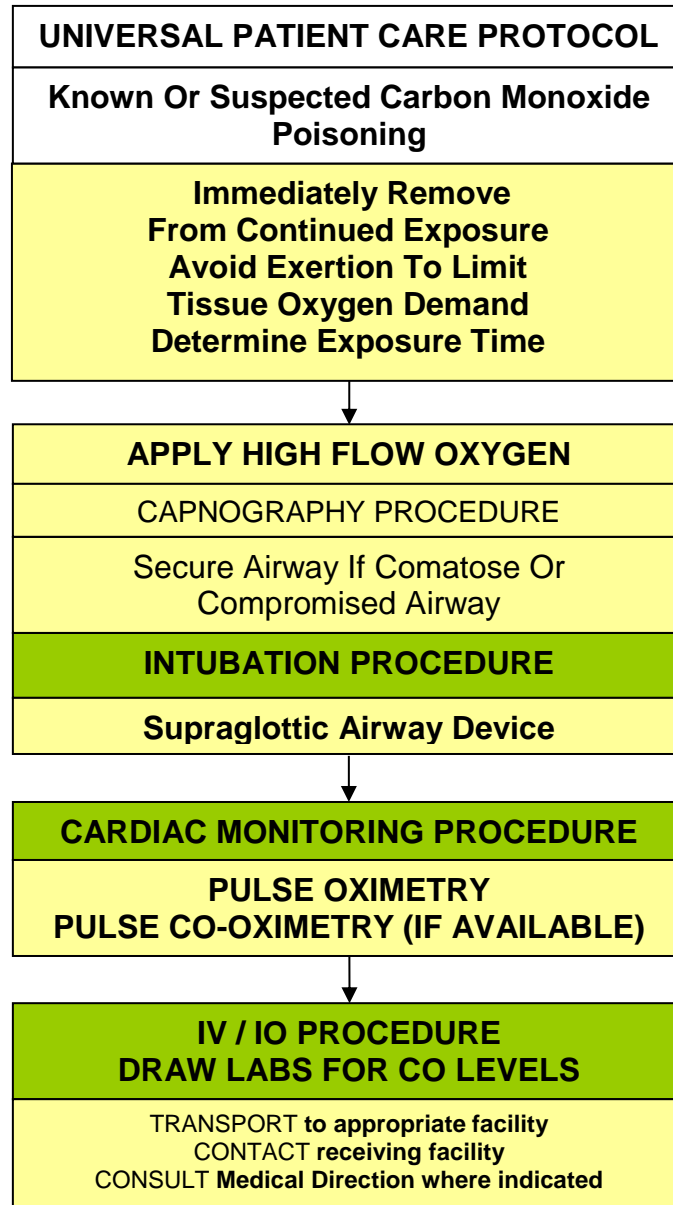




# Section 5: Adult Medical Emergencies Protocol

## ADULT MEDICAL EMERGENCIES: TOXIC INHALATION / CARBON MONOXIDE

E	EMT	E
A	AEMT	A
P	PARAMEDIC	P
M	MED CONTROL	M



CO Levels
<10% Mild
10% - 20% Moderate
>20% Severe
Special Considerations for Pregnant Females and Children



## Section 5: Adult Medical Emergencies Protocol

### ADULT MEDICAL EMERGENCIES: TOXIC INHALATION / CARBON MONOXIDE-Cont.

HISTORY	SIGNS AND SYMPTOMS	DIFFERENTIAL DIAGNOSIS
<ul style="list-style-type: none"><li>• Inhalation of potentially carbon monoxide containing atmosphere</li><li>• Duration of exposure</li><li>• Reason (suicidal, accidental, criminal)</li><li>• Past medical history, medications</li></ul>	<ul style="list-style-type: none"><li>• Malaise, fatigue, drowsiness</li><li>• Flu like symptoms</li><li>• Headache</li><li>• Dyspnea</li><li>• Nausea / vomiting</li><li>• Diarrhea</li><li>• Abdominal pain</li><li>• Dizziness</li><li>• Visual disturbances</li><li>• Memory disturbances</li><li>• Syncope</li><li>• Seizures</li><li>• Coma</li><li>• Incontinence</li></ul>	<ul style="list-style-type: none"><li>• Flu / severe cold</li><li>• Chronic fatigue</li><li>• Migraine</li><li>• Myocardial infarction</li><li>• Diabetic emergencies</li><li>• Altitude sickness</li><li>• Ingested toxins</li><li>• Meningitis</li><li>• Hypothyroidism</li></ul>

#### CO Levels

<10% Mild

10% - 20% Moderate

>20% Severe

Special Considerations for Pregnant Females and Children

**GREATER CLEVELAND POISON CONTROL 1-800-222-1222**

- Exam: Mental Status, Skin, HEENT, Heart, Lungs, Abdomen, Extremities, Neuro
- Consider CO poisoning with any patient exposed to products of combustion.
- Causes and exposure may include malfunctioning gas appliances, vehicle exhaust, improper use of gas burning heaters, animal dung, environmental waste and fires.
- Normal CO levels do not necessarily mean there was not CO poisoning. This is especially true if the patient has already received extensive oxygen therapy.
- Patients that show signs and symptoms at lower CO levels include: pregnant females, infants, children and the elderly.
- Vitals may be normal but could be tachycardic, hypo or hypertensive.
- Cherry red skin is rarely seen. "When you're red your dead"!
- PREGNANT patients are special circumstances as the affinity for fetal hemoglobin to carbon monoxide is very high and therapy including hyperbaric care is considered early on.
- Patients that demonstrate altered mental status may NOT sign refusals for treatment or transport.
- Known or suspected CO poisoning patients should receive high flow oxygen despite Spo2 readings.
- The use of a pulse oximeter is not effective in the diagnosis of carbon monoxide poisoning, as patients suffering from carbon monoxide poisoning may have a normal oxygen saturation level on a pulse oximeter.
- **Pulse oximetry is still used on all CO poisonings as hypoxia in addition to the CO represents serious compounding respiratory issues possibly from other causes.**  
Pulse CO-oximeters estimate carboxyhemoglobin levels with a non-invasive finger clip similar to a pulse oximeter.