

4. Apply a cardiac monitor, examine rhythm strip for arrhythmias, and obtain a 12-lead EKG if available
5. Check blood glucose level
6. Monitor pulse oximetry and EtCO<sub>2</sub> for respiratory decompensation
7. Patient pertinent history
8. Patient physical examination

#### **Treatment and Interventions**

1. 100% oxygen via non-rebreather mask or high flow oxygen by nasal cannula (HFNC) or CPAP or bag valve mask or advanced airway as indicated
2. If seizure, treat per [Seizures Guideline](#)
3. Consider transporting patients with severe carbon monoxide poisoning directly to a facility with hyperbaric oxygen capabilities if feasible and patient does not meet criteria for other specialty care (e.g., trauma or burn)

#### **Patient Safety Considerations**

1. Consider affixing a carbon monoxide detector to an equipment bag that is routinely taken into scene (if it signals alarm, don appropriate respiratory protection and exit scene) to assist with detection of occult CO toxicity
2. Remove patient and response personnel from potentially hazardous environment as soon as possible
3. Provide instruction to the patient, the patient's family, and other appropriate bystanders to not enter the environment (e.g., building, car) where the carbon monoxide exposure occurred until the source of the poisoning has been eliminated
4. Do not look for cherry red skin coloration as an indication of carbon monoxide poisoning, as this is an unusual finding
5. CO oximeter devices may yield inaccurate low/normal results for patients with CO poisoning. All patients with probable or suspected CO poisoning should be transported to the nearest appropriate hospital based on their presenting signs and symptoms

#### **Notes/Educational Pearls**

##### **Key Considerations**

1. Pulse oximetry is inaccurate due to the carbon monoxide binding with hemoglobin
2. As maternal carboxyhemoglobin levels do not accurately reflect fetal carboxyhemoglobin levels, pregnant patients are more likely to be treated with hyperbaric oxygen
3. Consider [cyanide toxicity](#) if carbon monoxide poisoning is from a fire

##### **Pertinent Assessment Findings**

1. Early and repeat assessment of patient's mental status and motor function are extremely useful in determining response to therapy and the need for hyperbaric therapy
2. Identification of possible etiology of poisoning
3. Time of symptom onset and time of initiation of exposure-specific treatment
4. Response to therapy