

Additional Information

For further information regarding Carbon Monoxide Poisoning:

<http://www.cdc.gov/nceh/airpollution/carbonmonoxide/>

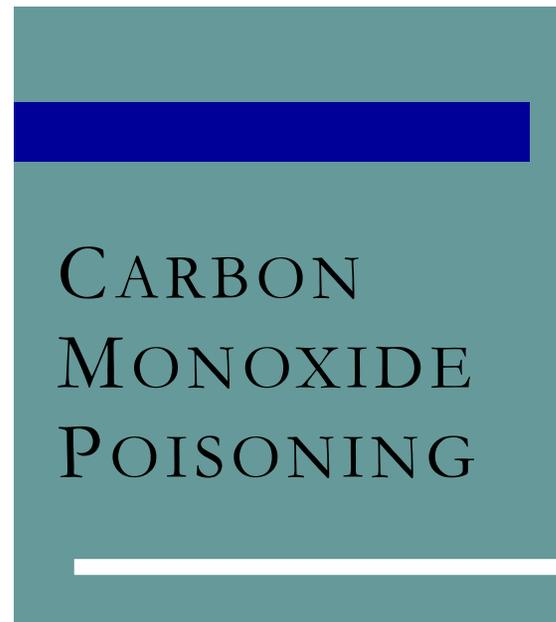
<http://www.nlm.nih.gov/medlineplus/carbonmonoxidepoisoning.html>

For further information, contact the Utah Department of Health HSEES Coordinator at 801-538-6191.

The State of Utah participates in the HSEES program as part of the Agency for Toxic Substance and Disease Registry's Hazardous Substance Emergency Events Surveillance (HSEES) Program at the Utah Department of Health. Information regarding spills and releases of hazardous substances throughout Utah are reported to the HSEES program. The reported data are analyzed and risk factors are determined. Prevention strategies are developed to minimize the risk of exposure to the public when/if hazardous releases occur.

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UTAH HSEES PROGRAM
Hazardous Substance Emergency
Events Surveillance



What is Carbon Monoxide

Carbon Monoxide (also known as CO) is an odorless, colorless gas. Sources include engines, natural gas furnaces and water heaters, indoor wood stoves, kerosene space heaters, open fires, and smoldering coals.



In the state of Utah since 1999 to June of 2004, there have been 611 releases of Carbon Monoxide. The releases resulted in 1265 individuals evacuated, 31 individuals were seen at a hospital with nausea and headache, 23 were seen at a hospital for headache and dizziness. One instance 1200 individuals were evacuated from a dorm at a training center and 29 individuals were seen at a hospital for nausea and headache.

How Deadly is Carbon Monoxide?

Carbon monoxide attaches to the hemoglobin in red blood cells and prevents those cells from carrying oxygen. The more CO that enters the bloodstream, the less able the blood is to carry oxygen to the body. In high amounts, CO can limit the human body's ability to carry oxygen in the blood stream to vital organs, which can be fatal. Carbon Monoxide should not be confused with Carbon Dioxide (or CO₂), which is a normal part of respiration.



Red Blood Cell

What Are The Symptoms?

- **Headache and/or Dizziness, Chest Pain, and Nausea** may occur with mild exposure. Some are similar to flu symptoms, so you may not realize that you are being exposed to carbon monoxide.
- **Unconsciousness and Death** may occur with higher amounts. Since confusion can be one of the side effects of carbon monoxide poisoning, you may not be able to make decisions that could save your life. CO is a deadly poison which can kill within minutes



What To Do?

- **Get Fresh Air** Leave the area and don't return until the problem is fixed.
- Communicate concerns so others may also take action.
- Make any phone calls away from the area when notifying authorities.
- **ACT IMMEDIATELY.** Severe cases require emergency medical treatment.



Prevention

Ventilation:

- Avoid hard physical activity in a city during weather inversions or during peak traffic times.
- Give all combustion sources plenty of air.
- Inspect flues and chimneys often.
- Do not operate fuel-burning appliances (heating appliances, barbecues, etc.) in enclosed areas without adequate ventilation.
- Make sure vents to furnaces and water heaters are not blocked and run properly.
- Do not run a car engine inside a closed garage.
- Replace car mufflers and tail pipes, when corroded.



Carbon Monoxide Detectors

- Carbon Monoxide detectors with alarms are available in stores for extra protection. They are similar to smoke alarms, and the alarm will sound if the CO level becomes unsafe. Your local gas company will test your home for CO if you suspect a gas leak, smell fumes, or have CO poisoning symptoms.

