

# CARBON MONOXIDE FACT SHEET

North Carolina Division of Public Health • Occupational and Environmental Epidemiology Branch

## **Chemical Information**

- Colorless, nonirritating, odorless, and tasteless gas.
- Toxic by inhalation.
- Produced from both human-made and natural sources.
- Common sources of CO in the home include automobiles, lawnmowers, portable generators, charcoal grills, and other combustion sources that use fuel.
- Most common human-made source is from car exhaust.

## **Hazards Identification**

### **Acute Exposure**

- Causes headache, dizziness, vomiting, and nausea.
- High levels can cause one to become unconscious or die.

### **Chronic Exposure**

- Exposure to moderate and high levels of CO over long periods of time has also been linked with increased risk of heart disease.

- People who survive severe CO poisoning may suffer long-term health problems such as neurological effects and memory disturbances.
- The Environmental Protection Agency (EPA) Acute Exposure Guideline Level 2 (AEGL - 2) for carbon monoxide is 27 ppm for an 8-hour period.

### **Prevention Tips\***

- Have your heating system, water heater, and other appliances serviced each year.
- Be sure all natural gas appliances are properly ventilated outside the home.
- Install a battery powered CO detection - device in your home, preferably near sleeping areas.
- Call for medical help if you feel you have CO poisoning and have symptoms such as feeling dizzy, light-headed, or nauseous.
- Do not use a generator, grill, or any gas burning device in your home or garage or near a window.
- Do not run a vehicle inside a garage.

- Do not burn anything in a clogged fireplace or an unvented stove.
- Do not use a generator, grill, or oven to heat your home.

\* Derived from the Centers for Disease Control and Prevention's website:  
<http://ephtracking.cdc.gov/showCoPrevention.action>

### **Stability & Reactivity**

- Incompatible and reactive with strong oxidizers, bromine trifluoride, chlorine trifluoride, and lithium.
- Highly flammable, dangerous fire and explosion risk.

## **Glossary**

The Environmental Protection Agency (EPA) defines Acute Exposure Guideline Levels (AEGLs) as threshold exposure limits for the general public that are applicable to emergency exposure periods ranging from 10 minutes to 8 hours. The three AEGLs are defined as follows:

AEGL-1 – airborne concentration of a substance at which the general population could experience notable discomfort, irritation or certain asymptomatic non-sensory effects.

AEGL-2 – airborne concentration of a substance at which the general population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

AEGL-3 – airborne concentration of a substance at which the general population could experience life threatening health effects or death.

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