

Carbon Monoxide

Carbon Monoxide is a colorless, odorless gas that robs the body of oxygen needed to survive. It is produced whenever any fuel (such as wood, charcoal, gasoline, oil, kerosene, propane, or natural gas) is burned. Furnaces, fireplaces, water heaters and other heat producing items that use fuel or wood must be vented and working properly in order to prevent the build-up of carbon monoxide. Carbon monoxide exposure is responsible for more poisoning deaths in the United States than anything else.

Sources

Sources of carbon monoxide include un-vented kerosene, propane, and gas space heaters, leaking chimneys and vents, broken furnaces, gas water heaters, wood stoves, fireplaces, gas ovens/ranges and gas clothes dryers. Car and boat exhaust fumes are also sources.

Health Effects

Exposure to carbon monoxide can be deadly. The Consumer Product Safety Commission reports that hundreds of people per year are killed by accidental carbon monoxide poisoning and thousands of people get sick from it. Carbon monoxide is dangerous because it blocks your body from absorbing the oxygen it needs. Symptoms of carbon monoxide poisoning vary based on the amount that a person is exposed to, the length of time, and the general health and age of the person. Mild exposure symptoms may seem like the flu and include: mild headache and weakness, dizziness, sleepiness, shortness of breath, tightness in the chest, nausea and/or vomiting. High levels of carbon monoxide or exposure that lasts a long time can cause confusion, loss of muscle control, blurred vision, extreme headache, weakness, fainting, convulsions and even death.

Updated

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Source

Federal Emergency Management Agency

Environmental Protection Agency

U-M Plant Operations

More Information

<http://www.fema.gov/>

<http://www.epa.gov/>

<http://www.plantops.umich.edu/>

Prevention / Mitigation / Preparedness – Carbon Monoxide

Purchase and install a carbon monoxide detector that meets Underwriters Laboratories (UL) standard 2034-95. Carefully follow the manufacturer’s instructions for proper placement, use and maintenance.

Purchase gas appliances that vent their fumes to the outside. Have them installed by a heating professional. Contact Plant Operations at (734) 647-2059 for assistance.

Read and follow all of the instructions that accompany any fuel-burning devices.

Pay attention to symptoms (headache, dizziness, tiredness and/or a sick feeling in your stomach), especially if more than one person is feeling sick.

Never cook or heat with a grill indoors—even if you put it inside a fireplace ground floor.

Never run vehicles in the garage—even if the door is open. Carbon monoxide can accumulate quickly and enter your home.

Do not sit in a parked vehicle with the engine running for a long period of time.

Do not use fuel-powered machines (mowers, trimmers, snow blowers, chain saws) or tools (welders, pumps, compressors, generators, high pressure washers, concrete cutting saws) in buildings or semi-enclosed spaces.

Do not use gas stoves or ovens for heating.

Do not use an un-vented gas or kerosene space heater.

Response – Carbon Monoxide

If you suspect a carbon monoxide problem, immediately open doors and windows and get out of the house or building into fresh air.

Go directly to the emergency room or call 911 and tell them that you suspect carbon monoxide poisoning. If you are the one that is sick, you should not drive. Call 911 immediately.

If carbon monoxide poisoning has occurred, it can usually be found by a simple blood test done at the hospital soon after exposure.

Contact the University OSEH department (734) 647-1142 for response assistance and air monitoring

Recovery – Carbon Monoxide

Contact the University OSEH department (734) 647-1142 for response assistance and air monitoring

If the carbon monoxide source is potentially due to faulty building equipment, contact Plant Operations (734) 647-2059 for immediate assistance

Stay calm. Reassure staff, faculty and students.