

On March 25, 2009, Governor Bill Ritter signed into law Colorado House Bill 1091 requiring the installation of carbon monoxide alarms in most homes. This bill is called the Lofgren and Johnson Families Carbon Monoxide Safety Act.

Frequently Asked Questions – Carbon Monoxide

What is carbon monoxide (CO)?

Carbon monoxide is a poisonous gas that cannot be seen or smelled and can be fatal within minutes of exposure. Carbon monoxide is produced by the incomplete burning of various fuels, including; coal, wood, charcoal, oil, kerosene, propane, and natural gas. Carbon monoxide may also be produced by other internal combustion engine-powered equipment or products such as portable generators, cars, lawn mowers, and power washers.

Can carbon monoxide make me sick?

Yes! At low concentrations, carbon monoxide can cause fatigue and other flu-like symptoms in healthy people and chest pain in people with heart disease. At higher concentrations, carbon monoxide can cause impaired vision and coordination, headaches, dizziness, confusion, and nausea. Carbon monoxide can cause death at very high concentrations.

What should I do if I think I am experiencing carbon monoxide poisoning?

If you suspect carbon monoxide exposure, take immediate action. You should leave your home and call your fire department to report your symptoms from a neighbor's home. Seek medical advice if you have any symptoms that you think may be related to chemical exposure.

How does carbon monoxide poisoning work?

Red blood cells pick up carbon monoxide quicker than they pick up oxygen. If there is a lot of carbon monoxide in the air, the body may replace oxygen in blood with carbon monoxide. This blocks oxygen from getting into the body, which can damage tissues and result in death.

Can a medical test determine if I have been exposed to carbon monoxide?

Although carbon monoxide levels can be measured in exhaled breath, urine, blood, and other tissues, no reliable method exists to determine the level of your exposure. Nonetheless, your health care provider can use tests of EKG, MRI, CT Scan, and electrolytes to evaluate the health effects of carbon monoxide exposure.

What are the health effects of carbon monoxide?

The health effects of breathing in carbon monoxide depend on the concentration of CO in the air, the duration of exposure, and the health status of the exposed person. Carbon monoxide poisoning can be acute, occurring over minutes to a few hours. Or, poisoning can occur over many days, weeks, or months and involve relatively low carbon monoxide concentrations.

CO is called the "silent killer" because if the early signs are ignored, a person may lose consciousness and be unable to escape to safety. Under certain conditions, lethal concentrations of CO have occurred within 10 minutes in the confines of a closed garage with a car engine running inside or when a portable generator is used in or near a house.

For most people, the first signs of exposure to low concentrations of CO include mild headache and breathlessness with moderate exercise. People with heart disease are more likely to be affected by CO, even at low concentrations.

Continued exposure can lead to flu-like symptoms including more severe headaches, dizziness, tiredness, and nausea that may progress to confusion, irritability, and impaired judgment, memory and coordination. Exposure to very high levels of carbon monoxide can cause seizures, coma, respiratory failure, and death. Exposure to high carbon monoxide levels during pregnancy is associated with birth defects and fetal death.

Recent studies indicate that these symptoms and many other serious and longer-lasting health effects may continue, even after the carbon monoxide source is removed. These longer lasting health effects may include: heart and brain damage, learning and memory impairments, emotional and personality effects, and sensory and motor disorders.

How can I tell the difference between carbon monoxide poisoning and the flu?

It could be carbon monoxide poisoning if:

- You feel better when you are away from your home;
- Several people in the home get sick at the same time (the flu is usually passed from person to person);
- The family members who are most affected spend the most time in the home;
- Symptoms occur or get worse shortly after turning on a fuel-burning device (furnace, oven, fireplace) or running a vehicle in attached garage;
- Indoor pets also appear ill (pets may experience symptoms first);
- You don't have a fever, generalized aching, or swollen lymph nodes typical with a cold or virus or flu; or
- Symptoms appear at the same time as signs of inappropriate ventilation, maintenance, or operation of fuel-burning devices.

What is a carbon monoxide alarm?

Carbon monoxide alarm may be similar in size and shape to a smoke detector. A carbon monoxide alarm constantly samples the air, monitors for the presence of carbon monoxide, and sounds an alarm when carbon monoxide is detected at dangerous levels. These alarms may be battery powered, plug into existing outlets, or may even be "hard-wired" into the home. In addition, carbon monoxide alarms and smoke detectors may be combined into one device. Always follow the manufacturer's instructions and any local codes when installing a carbon monoxide alarm.

Where can I get a carbon monoxide alarm?

You should be able to purchase a carbon monoxide alarm at home improvement or hardware stores.

For more information about health effects that could be related to carbon monoxide, please contact Shannon Rossiter, MPH at 303-692-2617, or toll free at 1 (888) 569-1831, extension 2617.