

Don't Let Carbon Monoxide Get You

By Rick Bunzel, Mountain View Property Inspection

You can't see it, smell it, or taste it. Yet there's at least a chance it's in your home if you have a furnace, a fireplace, a water heater, or anything else that burns fossil fuels. Lt. Governor Jane Norton, as executive director of the Colorado Department of Public Health and Environment, said, "Carbon Monoxide is the leading cause of accidental poisoning death in the United States. In 2000, in Colorado, nine accidental deaths resulted from carbon monoxide poisoning. Since 1994, approximately 134 people in Colorado have died from unintentional exposure to carbon monoxide. It is very important that Coloradans have all of their fuel-burning appliances checked." Nationally, carbon monoxide puts an estimated 10,000 people in hospital. It's sometimes difficult to tell if you or your family is being poisoned by carbon monoxide because the symptoms are similar to flu and allergies. Low levels can cause nausea, dizziness, weakness and muscle ache. Higher doses can impair judgement, cause paralysis or coma, and death. In many cases people are exposed to carbon monoxide over many months before an accurate diagnoses is made.

Carbon Monoxide Levels and the impact on a person

200 PPM	Slight headache within 2 - 3 hours
400 PPM	Frontal headache within 1 - 2 hours
800 PPM	Dizziness, nausea and convulsions within 45 minutes. Insensible within 2 hours
1600 PPM	Headache, dizziness and nausea within 20 minutes. Death within 30 minutes
3200 PPM	Headache, dizziness and nausea within 5 - 10 minutes. Death within 30 minutes
6400 PPM	Headache, dizziness and nausea within 1 - 2 minutes. Death within 15 minutes
12800 PPM	Death in less than 3 minutes

Carbon monoxide poisoning can occur several ways: when flues or chimneys become blocked; when a furnace has a cracked or rusted heat exchanger; when fuel-burning space heaters, ovens, ranges or grills are operated in the home without adequate ventilation; when car exhaust from an attached garage enters the home and when there's a negative pressure balance between the inside and outside of the home, preventing adequate venting of combustion gases.

Your best defense against this killer is to install one or more carbon monoxide detectors. The latest CO alarms can detect this deadly gas before it reaches the danger level. "According to UL Standard 2034, home carbon monoxide detectors must sound a

warning before carbon monoxide levels reach 100 parts per million over 90 minutes, 200 parts per million over 35 minutes or 400 parts per million over 15 minutes. The standard requires the alarm must sound before an average; healthy adult begins to experience symptoms of carbon monoxide poisoning. The warning provides time to evacuate the premises."

CO detectors come in many styles and range in price from under \$20 to over \$75. Generally the cheaper models only sound the alarm while the more expensive models will sound an alarm and display the CO level. *Consumer Report's* tested CO detectors in October, 2001 and recommended models from Kidde and Senco as having superior performance.

Proper placement of a carbon monoxide detector is important. If only installing one carbon monoxide detector, the Consumer Product Safety Commission (CPSC) recommends it be located near the sleeping area, where it can wake you if you are asleep. Additional detectors on every level of a home will provide extra protection.

But what do you do and who to you call when your carbon monoxide detector goes into alarm? According to Chief Bruce Mygatt of the Boulder Rural Fire Department, "call 911 and vacate the premises immediately. Most fire departments carry sensitive detection equipment that can help identify the source. If anyone is experiencing symptoms of carbon monoxide poisoning: headaches, dizziness, and vomiting let the 911 operator know and immediately move the victim to a location that has fresh air."

Rick Bunzel has 20 years experience as a firefighter in New Jersey, California and Colorado. He is currently a member of the Mountain View Fire Protection District. If you have questions or comments, Rick Bunzel can be contacted at Mountain View Property Inspections @ 303-443-9063 or MVPinspection@attbi.com