

# How To Install Smoke and Carbon Monoxide Detectors

By Carol Turner

According to the United States Fire Administration, each year carbon monoxide poisoning claims more than 200 lives and sends another 10,000 people to the hospital emergency room for treatment. The USFA also says that more than 4,000 Americans die and more than 25,000 are injured in fires every year.

The statistics are sobering. There is, however, something that can be done: install smoke and carbon monoxide detectors in your home. It's a simple step, and it could save your life.

"Both smoke and carbon monoxide detectors are important," said Marko Bourne of FEMA's public affairs department. "They are early warnings devices to get you out of the house as soon as possible."

## CARBON MONOXIDE

According to the USFA, carbon monoxide is an odorless, colorless and toxic gas. Because it is impossible to see, taste or smell the toxic fumes, carbon monoxide, or CO, can kill you before you are aware it is in your home.

At lower levels of exposure, carbon monoxide causes mild effects that are often mistaken for the flu. These symptoms include headaches, dizziness, disorientation, nausea and fatigue. The effects of carbon monoxide exposure can vary greatly from person to person, depending on age, overall health and the concentration and length of exposure.

The USFA says carbon monoxide gas can come from several sources: gas-fired appliances, charcoal grills, wood-burning furnaces or fireplaces and motor vehicles.

Everyone is at risk for carbon monoxide poisoning. Medical experts believe that unborn babies, infants, children, senior citizens and people with heart or lung problems are at even greater risk for carbon monoxide poisoning.

The USFA recommends installing at least one UL (Underwriters Laboratories) listed carbon monoxide alarm with an audible warning signal near the sleeping areas and outside individual bedrooms. These alarms measure levels of carbon monoxide over time and are designed to sound an alarm before an average, healthy adult would experience symptoms. It is very possible that you may not be experiencing symptoms when you hear the alarm. That does not mean that carbon monoxide is not present.

Bourne said carbon monoxide detectors are particularly important during cold weather, when people are using indoor heating methods. “Anything that uses a flame has the potential to produce carbon monoxide,” he said. “Even oil burners can cause carbon monoxide build-up.”

It is very important, Bourne stressed, to have any home heating equipment maintained by a professional to reduce the risk of carbon monoxide build-up in the home.

Bourne said many more people have installed carbon monoxide detectors in their homes in the last several years. “There has been a tremendous public education campaign over the last decade or so about the need for carbon monoxide detectors,” he said. “And more people are using them, but not nearly as many as ought to be.”

According to the USFA, what you need to do if your carbon monoxide detector goes off depends on whether or not anyone is feeling ill.

If no one is feeling ill:

- Silence the alarm
- Turn off all appliances and sources of combustion (i.e. furnace and fireplace)
- Ventilate the house with fresh air by opening doors and windows
- Call a qualified professional to investigate the source of the possible carbon monoxide buildup.

The USFA offers steps you can take to protect yourself and your family from carbon monoxide poisoning, including:

- Have a qualified professional check all fuel burning appliances, furnaces, and venting and chimney systems at least once a year.
- Never use your range or oven to help heat your home, and never use a charcoal grill or hibachi in your home or garage.

- Never keep a car running in a garage. Even if the garage doors are open, normal circulation will not provide enough fresh air to reliably prevent a dangerous buildup of carbon monoxide.

When purchasing an existing home, have a qualified technician evaluate the integrity of the heating and cooking systems, as well as the sealed spaces between the garage and the house.

## **FIRE AND SMOKE**

According to the USFA, 80 percent of all fire deaths occur in the home. Nearly half of the residential fires and three-fifths of residential fire fatalities occur in homes with no smoke alarms.

The USFA offers the following tips for using smoke alarms in your home:

- Place a smoke alarm on each level of your home and in all outside bedrooms.
- Check smoke alarms monthly by pushing the test button. If you cannot reach the button easily, use a broom handle.
- Change the batteries in your alarms twice a year - perhaps when you change your clocks for Daylight Savings Time.
- Teach children what the smoke alarm sounds like and what to do: leave the house immediately by crawling under the smoke when they hear the alarm sound.
- If cooking smoke sets off the alarm, do not disable it. Turn on the range fan, open a window or wave a towel near the alarm.
- Do not remove the batteries to put in other appliances such as personal stereos or games.
- Smoke alarms wear out over time. Replace yours if it is 10 years old or older.
- Consider buying a lithium battery-powered smoke alarm that will operate for 10 years and is sealed so it cannot be tampered with or opened.