



# Carbon Monoxide Poisoning

Steps to ensure your safety from  
carbon monoxide poisoning



Approximately 250 people in the United States die each year from carbon monoxide (CO) poisoning. This deadly gas is hard to detect because it is odorless, colorless and tasteless. Take the following steps to help prevent carbon monoxide poisoning in your home.

## Important Steps

Have a qualified technician inspect fuel-burning appliances at least once each year. Fuel burning appliances such as oil and gas furnaces, hot water heaters and stoves require yearly maintenance. A qualified technician can identify and repair problems with your fuel burning appliances.

Be aware that CO poisoning may be the cause of flu-like symptoms such as headaches, tightness of the chest, dizziness, fatigue, confusion and breathing difficulties. Because CO poisoning often causes a victim's blood pressure to rise, the victim's skin may take on a pink or red cast.

Install a UL Listed CO detector outside sleeping areas. A UL Listed CO detector will sound an alarm before dangerous levels of CO accumulate. Read the manufacturer's instructions carefully before installing a CO detector. If your detector is wired directly into your home's electrical system, you should test it monthly. If your unit is battery operated, test the detector weekly and replace the battery at least once a year.

Know how to respond to a CO detector alarm. If the alarm goes off, turn off appliances, or other sources of combustion at once. Immediately get fresh air into the premises by opening doors and windows. Call a qualified technician and have the problem fixed before restarting appliances. If anyone is experiencing symptoms of carbon monoxide poisoning: headaches, dizziness, vomiting, call the fire department (911) and immediately move to a location that has fresh air. Do a head count to be sure all persons are accounted for. Do not re-enter the premises until it has been aired out and the problem corrected.

## Carbon Monoxide Detectors

Carbon monoxide is a by-product of combustion, present whenever fuel is burned. It is produced by common household appliances such as gas or oil furnaces, clothes dryers, water heaters, ovens and ranges. According to the American Medical Association, carbon monoxide is the number one cause of poisoning deaths in the U.S.A. Making sure furnaces and other potential carbon monoxide sources are properly vented and in good working condition, along with owning a UL listed carbon monoxide detector, could become a matter of life and death.

According to national standards, home carbon monoxide detectors must sound a warning before high carbon monoxide levels are reached. The standard requires the alarm to sound before an average, healthy adult begins to experience symptoms of carbon monoxide poisoning. The warning provides time to evacuate the premises.

# Carbon Monoxide Alarm Requirements in Existing Residential Occupancies

As of January 1, 2013 carbon monoxide (CO) alarms will be required in all residential dwelling units. This applies even for dwellings that don't have fireplaces or gas-fired appliances, because these are not the cause of the most severe incidents. Following a 2006 windstorm, 250 people were treated for carbon monoxide (CO) poisoning in the Puget Sound area and eight died, all from either burning charcoal briquettes inside their homes or from improper use of gasoline-powered generators. In response to these tragedies, new state-wide law and building codes require CO alarms in most residential buildings, including single-family homes.

**All New and Existing Apartments and Rental Houses:** State law requires all covered residential units to have CO alarms installed by New Year's Day, 2013.

**Owner-Occupied Single-Family Homes:** New homes must include CO alarms. Existing owner-occupied homes are exempt from the January 1 deadline, but they are still required to include CO alarms in any building permit application for interior remodeling. When the house is sold, state law also requires that CO alarms be installed before the new owner takes occupancy.

## Placement of Detectors

Proper placement of a carbon monoxide detector is important. If you are installing only one carbon monoxide detector, the Consumer Product Safety Commission (CPSC) recommends it be located near the sleeping area, in order to wake you. Additional detectors on every level and in every bedroom of a home provide extra protection. Homeowners should remember not to install carbon monoxide detectors directly above or beside fuel-burning appliances, as appliances may emit a small amount of carbon monoxide upon start-up. A detector should not be placed within fifteen feet of heating or cooking appliances or in or near very humid areas such as bathrooms.

When considering where to place a carbon monoxide detector, keep in mind that although carbon monoxide is roughly the same weight as air, it may be contained in warm air coming from combustion appliances such as home heating equipment. If this is the case, carbon monoxide will rise with the warmer air. For this reason, CO detector manufacturers suggest mounting the detector on the ceiling. This also puts the detector out of the way of potential interference, such as pets or curious children. CO alarms may be purchased at local hardware and home improvement stores. Models are available that run entirely on batteries or that plug-in with battery backup. Combination smoke alarm/CO alarm units are also available. All units should be UL-2034 compliant.

## Further Information

These new code provisions were developed with input from medical professionals, building operators, engineers and other experts to effectively prevent carbon monoxide poisonings while minimizing cost and disruption to owners and tenants. As all homes and apartments are fitted with CO alarms, the frequency of carbon monoxide poisonings in our community should decrease dramatically.

**Links to these revisions are located on the State Building Code Council web site at:**  
<https://fortress.wa.gov/ga/apps/sbcc/Page.aspx?nid=168>

**Read the full text of the state law at:**  
<http://apps.leg.wa.gov/rcw/default.aspx?cite=19.27.530>

### Questions:

Contact Gig Harbor Fire & Medic One's Prevention Division at 253-851-5111