



Carbon Monoxide – The Silent Killer Why Should I Care?

Carbon Monoxide is a colourless, odourless, tasteless, toxic gas that enters the body through the lungs during the normal breathing process. It replaces oxygen in the blood and prevents the flow of oxygen to the heart, brain and other vital organs. Hundreds of Canadians are either killed or hospitalized every year from carbon monoxide poisoning. Everyone is at Risk - 88% of all homes have something that poses a carbon monoxide threat.

Q1. How is CO generated in the home?

A1. CO is a by-product of incomplete combustion of fuel such as natural gas, propane, heating oil, kerosene, coal, charcoal, gasoline, wood, or other bio-fuels. This incomplete combustion can occur in any device that depends on burning a fuel for energy or heat. Examples of fuel burning devices include home furnace, space heater, decorative fireplace, wood stove, kitchen stove or grill, gas/charcoal barbeque, hot water heater and gas clothes dryer. Automobiles left running in an attached garage, a portable generator operating near an open window or in the garage, an outdoor gas barbecue operated inside the house, a grill or kerosene heater that is not properly vented, or a fireplace chimney that is dirty or plugged may create unsafe levels of CO as well.

Q2. What are the symptoms of CO poisoning?

A2. Exposure to CO can cause flu-like symptoms such as headaches, nausea, dizziness, burning eyes, confusion, drowsiness and even loss of consciousness, without increased temperature associated with the flu. In severe cases, CO poisoning can cause brain damage and death. The elderly, children and people with heart or respiratory conditions may be more sensitive to CO. It can poison the body quickly in high concentrations, or slowly over long periods of time.

Q3. How do CO alarms work?

A3. CO alarms monitor airborne concentration levels (parts per million) of CO over time, and sound an alarm when elevated levels are detected. They are designed to sense low CO concentrations over a long period of time as well as high concentrations over a short period of time.

Q4. Why are CO alarms required to be installed adjacent to sleeping areas in the home?

A4. The CO alarm must be located outside all sleeping areas of the home to increase the likelihood that you will hear the alarm if it goes off when you are sleeping. It is recommended that additional CO alarm(s) be installed in other levels and/or areas of the home that are in proximity to a CO source as outlined in the manufacturer's instructions.

Q5. If I have sleeping area's on more than one level of my residence how many CO alarms do I need?

A5. CO regulations requires you have a working CO alarm on every level of your home where there are sleeping areas. The alarms are to be located outside the sleeping areas in the hall if there is one.

Q6. At what height should CO alarms be installed?

A6. Unlike smoke, which rises to the ceiling, CO mixes with air. CO alarms may be installed at any height. However, if a combination smoke/CO alarm is used, it must be installed on or near the ceiling as per manufacturer's instructions to ensure that it can detect smoke effectively.



Q7. Do CO alarms sound different from smoke alarms?

A7. Yes. CO alarms sound different from smoke alarms when they activate. It is important to test both alarms so everyone in the household knows the difference between an alarming smoke alarm and an alarming CO alarm. Everyone needs to know the difference between an actual alarm sound versus the low battery or end of life warnings for both their smoke and CO alarms. Consult your instruction manual to obtain further information about the audible signals for each device.

Q8. If your CO alarm sounds, and you or other occupants suffer from symptoms of CO poisoning, what should you do?

A8. Immediately have everyone in the home move outdoors and then call 911 from outside the building.

Q9. If your CO alarm sounds, and no one is suffering from symptoms of CO poisoning, what should you do?

A9. Check to see if the battery needs replacing, or the alarm has reached its "end of life" before calling 911. Consult your instruction manual to obtain further information about the audible signals for each device.

Q10. How often are CO alarms required to be tested?

A10. CO alarms need to be tested at least annually, however it is recommended that they are tested monthly or more frequent if outlined in the manufacturer's maintenance instructions. Alarms should also be tested after the battery is replaced which we recommend doing when the time changes in the spring and fall.

Q11. How is a CO alarm tested?

A11. A CO alarm is tested by activating the test feature as described in the manufacturer's maintenance instructions. Each model may be different that's why it's always important you keep the manufacturer's instructions in a safe place for reference as needed.

Q12. I already have a CO alarm installed in my home. How long are they good for?

A12. CO alarms like smoke alarms will expire over time. The life of the CO alarm is dependent on the manufacturer. Older units typically have a life of 5 - 7years however newer models being manufactured may last for up to 10 years. Check your manufacturer's instructions for details on your unit.

Q13. What if I have all electric appliances in my residence. Do I need to install a CO alarm?

A13. If you have an attached garage then YES a CO alarm needs to be installed outside the sleeping areas. On all levels of your home.

Q14. Do all existing residential buildings require CO alarms?

A14. Existing residential buildings that contain at least one fuel-burning appliance (e.g., gas water heater or gas furnace), fireplace or an attached garage, require the installation of a CO alarm outside the sleeping areas.



Q15. What are examples of residential buildings to which this CO alarm regulation applies?

A15. Residential buildings including:

- Houses (detached, semi-detached, attached)
- Rental Apartments/Condominiums
- Residential Group Homes (adults, youth, children)
- Hostels/Domiciliary Hostels
- Student Residences/Dormitories
- Retirement Homes (classified as residential occupancies)
- Boarding, Lodging, Rooming and Halfway Houses
- Open and semi-secure detention for Youth
- Hotels/Motels
- Clubs (residential)
- Recreational Camps
- Residential Schools
- Camps for Housing Workers
- Convents/Monasteries
- Shelters (homeless/women)

Q.16 Who is responsible for installing CO alarms in rental dwelling units?

A.16 The landlord of the building is responsible for the installation of the CO alarms, however it is the tenant's responsibility to ensure the CO alarm operates and advise the landlord immediately if it stops working.

Q17. Who is responsible for maintaining CO alarms in rental dwelling units?

A17. The landlord is responsible for the maintenance of CO alarms and providing the tenant with CO alarm maintenance instructions, however it is the tenant's responsibility to ensure the CO alarm operates and advise the landlord immediately if it stops working.

Q18. What responsibilities do tenants have under the CO alarm regulation?

A18. Tenants are responsible for notifying the landlord as soon as they become aware that a CO alarm is disconnected or not operating. Tenants may not disable their CO alarms for any reason.

Q19. How expensive are CO alarms?

A19. CO alarms range in price from approximately \$26 to over \$100 depending on whether they are hard-wired, battery operated or plug-in and whether they have additional features (i.e. battery back-up, digital display, etc.). The average mid-range plug-in/battery back-up model is between \$35 and \$40 per unit.

Q20. If I don't comply with the Ontario Fire Code, can I be charged?

A20. Yes anyone found to be in contravention of these requirements risk being issued a ticket under the Provincial Offences Act or may be charged under the Fire Protection and Prevention Act and risk penalties of up to \$50,000 and/or imprisonment for up to one year for individuals or \$100,000 for corporations.

**For information contact the Lakeshore Fire Department at 519-728-0550
or visit our website at www.lakeshore.ca**