



## ABOUT CARBON MONOXIDE

This document provides guidance for Carbon monoxide (CO) alarms in new and renovated residential buildings. It identifies the sources of CO and provides information about installing CO alarms in existing buildings.

This information is provided for convenience only and is not a substitute for applicable City Bylaws or Provincial or Federal Codes or laws.

CO is a colorless, odorless gas that is highly toxic because it interferes with the body's ability to transport oxygen through the blood to the body's cells.

CO poisoning is the leading cause of accidental poisoning deaths in North America.

Many Provincial jurisdictions require the installation of CO detectors in all new residential buildings and retroactively in certain existing buildings.

Buildings that contain residential occupancy should have CO alarm(s) installed in every bedroom or within 5 meters of each bedroom door, measured along the corridor, if the suite:

- contains a fuel-burning appliance
- shares a wall/floor or ceiling with a service room that contains a fuel burning appliance and the service room is not within the suite of residential occupancy
- shares a wall/floor/ceiling or adjacent attic or crawl space with a storage garage

- if a fuel-burning appliance, such as a fireplace, is located inside a bedroom the CO alarm should be installed within the bedroom.

The CO alarms should meet approved standards, be equipped with an integral hard wired or battery operated alarm and be mounted per the manufacturers' recommendations.

Units combining smoke and CO alarms are acceptable.

Plug-in types should not be used.

### **Existing Buildings**

Although CO alarms are not required in existing buildings in all jurisdictions, CO detectors warn occupants if deadly gas is present.

Only detectors with recognized certification labels should be purchased and these should be installed and maintained in accordance with the manufacturer's instructions.

### **Sources of CO**

Sources of CO include malfunctioning furnaces, exhaust vents for gas or wood burning appliances not properly vented and exhaust fumes from internal combustion engines.

Another source of CO can be from lit charcoal briquettes. CO may be produced in dangerous concentrations from even warm-to-the-touch charcoal briquettes. Lit or warm to the touch charcoal indoors should never be brought indoors. Heating an enclosed area with a charcoal grill can cause suffocation or death.

### **How CO Alarms Work?**

CO alarms trigger an alarm based on an accumulation of CO over time. CO can harm you if you are exposed to high levels in a short period of time, or to lower levels over a long period of time. CO alarms require a continuous power supply, so if the power cuts off then the alarm becomes ineffective. Models are available that offer back-up battery power.