Carbon Monoxide

Please be advised that the Chief Fire Official has the authority to enforce the Fire Code within his or her jurisdiction and should be contacted prior to implementing any opinion expressed in the following information.

Visit the Office of the Fire Marshal and Emergency Management website for a list of questions/answers pertaining to the legislation. Visit their website now.

Ontario is taking another step to keep families and homes in Ontario safe by making carbon monoxide alarms mandatory in all residential homes.

The new regulation, which comes into effect October 15, 2014, updates Ontario's Fire Code following the passage of Bill 77 last year. These updates are based on recommendations from a Technical Advisory Committee which was led by the Office of the Fire Marshal and Emergency Management and included experts from fire services, the hotel and rental housing industries, condo owners and alarm manufacturers.

Carbon monoxide alarm will now be required near all sleeping areas in residential homes and in the service rooms, and adjacent sleeping areas in multi-residential units. Carbon monoxide alarms can be hardwired, battery-operated or plugged into the wall.

Broadly speaking, these amendments will have the following effect:

- Testing and maintenance requirements that apply to smoke alarm now apply to CO alarms
- Under the Fire Code amendments, CO alarms will be required in existing residential occupancies, where:
- Single dwelling homes (e.g., privately owned homes) have an attached storage garage and/or a fuel burning appliance.
- CO alarms will be required only near sleeping areas of these occupancies and not throughout the entire home.
- Multi-unit buildings (e.g., apartment buildings or condominium buildings, hotels, etc.) have an attached storage garage and/or a fuel burning appliance/service room. Within these buildings, CO alarms will only be required:

  Near sleeping areas of suites that contain a fuel burning appliance within the suite.
  Near sleeping areas of suites that are adjacent to a storage garage and/or service room with a fuel burning appliance.

Link to Ontario Regulation 194/14: http://www.e-laws.gov.on.ca/html/source/regs/english/2014/elaws_src_regs_r14194_e.htm

Quick Facts

- More than 50 people die each year from carbon monoxide poisoning in Canada, including 11 on average in Ontario.
- Bill 77, an Act to Proclaim Carbon Monoxide Awareness Week and to amend the Fire Protection and Prevention Act, 1997, received royal assent in December 2013.
- The first Carbon Monoxide Awareness Week will take place November 1-8, 2014.
- The Ontario Building Code requires the installation of carbon monoxide alarms in homes and other residential buildings built after 2001.

Why Should I Care About Carbon Monoxide?

It Kills.

Many Canadians die every year from carbon monoxide poisoning in their own homes, most of them while sleeping.

It Injures.

Hundreds of Canadians are hospitalized every year from carbon monoxide poisoning, many of whom are permanently disabled. Everyone is at Risk - 88% of all homes have something that poses a carbon monoxide threat.

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.

Where does Carbon Monoxide Come From?

Produced when carbon-based fuels are incompletely burned such as:

- Wood
- Propane
- Natural Gas
- Heating Oil
- Coal
- Kerosene
- Charcoal
- Gasoline

What Are the Main Sources of Carbon Monoxide in my Home?

Wood burning/gas stoves, gas refrigerators, gasoline engines, kerosene heaters and others.

How Can I Tell if There is a Carbon Monoxide Leak in my Home?

- Headache, nausea, burning eyes, fainting, confusion, drowsiness.
- Often mistaken for common ailments like the flu
- Symptoms improve when away from the home for a period of time
- Symptoms experienced by more than one member of the household.
- Continued exposure to higher levels may result in unconscious, brain damage and death.
- The elderly, children and people with heart or respiratory conditions may be particularly sensitive to carbon monoxide.

Environment

- Air feels stale/stuffy
- Excessive moisture on windows or walls
- Sharp penetrating odour or smell of gas when furnace or other fuel burning appliance turns on.
- Burning and pilot light flames are yellow/orange, not blue
- Pilot light on the furnace or water heater goes out
- Chalky white powder or soot build up occurs around exhaust vent or chimney.

How Can I protect Myself and my Family?

- Regularly maintained appliances that are properly ventilated should not produce hazardous levels of carbon monoxide
- Have a qualified service professional inspect your fuel burning appliance(s) at least once per year.
- Have you chimney inspected and cleaned every year by a W.E.T.T. certified professional.
- Be sure your carbon monoxide alarm has been certified to the Canadian Standard Association (CSA) CAN/CGA 6.19 standard or the Underwriters Laboratories (UL) 2034 standard.
- Install a carbon monoxide alarm in or near the sleeping area(s) of the home.
- Install the carbon monoxide alarms(s) in accordance with the manufacturer's instructions.

What Should I Do if my Carbon Monoxide Alarm Starts Beeping?

ALWAYS REACT TO A CARBON MONOXIDE ALARM THAT HAS ALARMED! GET OUT OF YOUR HOME AND CONTACT YOUR LOCAL FIRE DEPARTMENT FOR ASSISTANCE.

If you have any questions regarding CO safety, please contact your local fire department.

To Keep Safe Please Remember:

You have a responsibility to know about the dangers of carbon monoxide. Your knowledge and actions may save lives.
A carbon monoxide alarm is a good second line of defense. It is not a substitute for the proper care and maintenance of your fuel burning appliance(s). Take the time to learn about the use of carbon monoxide alarms in your home to ensure you are using the equipment properly and effectively.

Where To Install A Carbon Monoxide Alarm

Since carbon monoxide moves freely in the air, the suggested location is in or as near as possible to sleeping areas of the home. The human body is most vulnerable to the effects of carbon monoxide during sleeping hours. To work properly the unit must not be blocked by furniture or draperies. Carbon Monoxide is virtually the same weight as air and therefore the alarm protects you in a high or low location.

For maximum protection, a carbon monoxide alarm should be located outside primary sleeping areas, in sleeping areas and in each level of your home.

Where NOT to Install a CO Alarm

Some locations may interfere with the proper operation of the alarm and may cause false alarms or trouble signals.
CO alarms should not be installed in the following locations:

- Where the temperature may drop below 4.4o C (40oF) or exceed 37.8oC (100oF).
- Near paint thinner fumes or household cleaning products. Ensure proper ventilation when using these types of chemicals.
- Within 1.5m (5 feet) of any cooking or open flame appliances such as furnaces, stoves and fireplaces.
- In exhaust streams from gas engines, vents, flues or chimneys.
- Do not place in close proximity to an automobile exhaust pipe; this will damage the alarm.

Maintenance

Test your carbon monoxide alarm regularly to make sure it is operating properly. The owner's manual should tell you how to test your alarm. Remember to check the manual for information on when to buy a new carbon monoxide alarm.