tells them this detector has been tested, it meets the standard for these detectors, and that it meets the requirements that are in place to protect the health and safety of Canadians."

There are three different types of CO detectors to buy. They range in price from $30 to $70. All of the approved detectors are tested and will do the job.

- **Metal oxide semi-conductor detectors** – This is the original type of detector that plugs in and has a battery backup. It works when the heated tin oxide reacts with the CO to determine the gas level.
- **Biometric detectors** – These detectors have gel-coated discs that get dark when CO is present and the colour change sounds the alarm. It's not as costly and operates on batteries.
- **Electrochemical detectors** – These detectors are extremely accurate, have digital displays, and a memory feature. They sound an alert when it needs to be replaced. They work by chemically reacting with CO, which creates an electrical current that sets off the alarm.

While all these detectors will alert you to CO, considering splurging for a highly accurate one if there are children, elderly, or pregnant women in the home or anyone with respiratory or heart problems. Some detectors are a combination smoke and CO detector.

Most units come with a test button that you should try once a week. If yours doesn't have such a button, there are CO detector kits you can buy to do tests. Change the batteries regularly on units that don't plug into the wall. And make sure you replace the detectors at least once every five years unless the unit specifies otherwise; some come with a replacement date on them.

Where Do I Place Carbon Monoxide Detectors in My Home?

The ideal spot for your CO detector is close enough to your bedroom to hear it when you are sleeping. Place it at waist height or lower. Make sure not to place the detector in unheated areas of the home or near vents and appliances. If your detector is plugged into the wall, make sure it's not in an outlet that is controlled by a switch on the wall. Read the manufacturer's instruction booklet that comes with the detector for further directions.

What if the Alarm Goes Off?

If your CO alarm goes off, take it seriously even if you feel well. Get everyone out of the house. If you know where the CO is coming from, turn off the source, air out the house, and reset the alarm. If anyone feels ill at any time, call 911 from a neighbour's house. If you don't know where the CO is coming from, call the utility company or the fire department once you have evacuated everyone.

If it's not possible for you to leave the building, open doors and windows to let in as much fresh air as possible and immediately call for help.

Carbon Monoxide First Aid

Immediately move anyone with suspected CO poisoning into fresh air. If possible, get some oxygen into their lungs as breathing fresh air slowly will reduce the level of CO in someone's system. Get the person to a doctor or call 911.

Boating and Carbon Monoxide

Most people don't think of carbon monoxide when they go boating for the afternoon, but CO from engines and generators can build up around boats. The back deck and/or swim platform are especially hazardous areas. Transport Canada offers some tips on how to avoid CO poisoning when out on the water:

- Do not idle your boat's engine, heat its cabin, or cook unless doing so in well-ventilated areas.
- Be especially careful in modified areas such as cabin extensions and areas fitted with canvas tops.
- Use a carbon monoxide detector designed for a vessel and check the detector's batteries before every trip.
- Engines left idling in poorly ventilated areas create dangerous concentrations of CO; a tail wind can easily carry CO back on board.
- CO can build up when: two vessels are tied to each other; you are docked alongside a seawall; an improper load distribution causes the bow to ride high; or when your vessel is stationary and a fuel-burning appliance or engine is running.

A marine inboard gas motor can have CO outputs equal to that of 188 car engines. You can buy CO detectors for boats (marine grade detectors) but they aren't 100 per cent reliable due to the airflow on boats.

John Gignac sums up carbon monoxide poisonings and deaths, "We all need to end the silence on this silent killer. Families need to take heed of the dangers of CO and realize that there is only one way to protect themselves, and that is with an approved carbon monoxide detector. Humans can't see, smell, or taste carbon monoxide. And exposure to it creates symptoms similar to the flu. So every home needs one."

What is Carbon Dioxide?

People often confuse carbon monoxide with carbon dioxide. That's not surprising since there is only one oxygen molecule of difference between the two compounds. As we've seen, carbon monoxide (CO) is a colourless, odourless gas that can kill you. Carbon dioxide (CO_2) is present in the atmosphere at all times and is one of the substances produced by living plants and mammals. We exhale carbon dioxide when we breathe. While CO_2 can be harmful if inhaled in large quantities, it isn't toxic or poisonous like it's cousin, carbon monoxide.