



Carbon Monoxide Poisoning

What substance is colorless, tasteless, poisonous, and deadly that we are all exposed to almost every day? It is a gas called "carbon monoxide". It is produced by burning almost any kind of fuel and is present in everything from cigarette smoke to car exhaust. In extremely low levels, it does not cause harm. But, amounts as little as 15 parts per million can begin to affect vulnerable people. Unfortunately, our bodies prefer carbon monoxide to oxygen, but carbon monoxide does not have the ability to keep us alive the way oxygen does. In fact, it interferes with the body's ability to get oxygen to all of its cells.

Sources of Carbon Monoxide in the Environment

Common sources in your home include the furnace, the fireplace or wood burning stove, gas stoves, kerosene heaters, hot water heaters, and clothes dryers. Proper venting is extremely important for these appliances. Ideally, every year homeowners should have fuel burning appliances and their ventilation systems checked by a certified heating or appliance professional. Homeowners should also check pilot lights on these appliances. Pilot lights that keep going out can be a danger signal of carbon monoxide build-up. So can pilot lights that burn with a yellow flame rather than a blue one.

If you have a newer home or have recently weatherized your home, it may be very "air-tight". In "air-tight" homes even minimal amounts of carbon monoxide from appliances can add up to dangerous levels unless there is adequate ventilation. Checking flues and other air outlets becomes especially important in these homes.

Outside, items such as lawn mowers, power generators, and barbeque grills also produce lots of carbon monoxide. This is one reason why generators and grills should never be operated in the house or attached garage – more ventilation is needed! Place them away from open windows and doors, too. Remember that gasoline is also a fuel – don't warm up the car in the garage. Even if the door is open, carbon monoxide can build to dangerous levels.

Symptoms of Carbon Monoxide Poisoning

Every year, hundreds of people die of carbon monoxide poisoning. It may be present in your home without your even knowing it. Some of the symptoms of exposure to relatively low levels of carbon monoxide include:

- headaches
- dizziness
- fatigue
- nausea
- shortness of breath
- confusion

Of course, these are common symptoms that can be caused by any number of conditions. Nevertheless, if you notice that your symptoms get better when you are away from home, and then get worse again when you return – take note! Some appliances in your home may be producing this deadly gas. Higher levels of carbon monoxide can cause unconsciousness and death.

Some people are at greater risk than others. Pregnant women and their unborn babies, and children are at increased risk. So are the elderly, those with respiratory or heart conditions, and those who suffer from anemia. But the bottom line is that everyone is at risk when a killer is invisible!



Detecting Carbon Monoxide

There are effective ways to identify carbon monoxide in the home even though it is not apparent to human senses. Carbon monoxide detectors are good, and they are getting better. The earliest models were not very accurate, and only lasted a year or two before they needed to be replaced. Accuracy has improved a lot and newer models now often last for five years or longer. The future holds the promise of even better technology. The best models have digital read-outs and are approved by the Underwriter Laboratory (UL).



Digital detectors can find carbon monoxide at levels that are below the danger threshold. But any reading that is greater than 10 parts per million may indicate a problem that needs to be checked out. By the time a detector alarm goes off, the level is generally higher than that.

Like smoke detectors, the placement of carbon monoxide detectors is very important. Generally, a detector should be near the bedroom(s). If the homeowner has more detectors available, other "hot-spots" include the garage, the kitchen, and rooms with fireplaces and / or gas burning appliances. Since each brand has slightly different characteristics, be sure to follow the directions included with the packaging.

If a carbon monoxide alarm does go off, get everyone out of the house and call 9-1-1. They will send the fire department to check it out. Opening all the windows can bring down the carbon monoxide levels, but the source of the build-up needs to be identified and fixed. Proper maintenance, good ventilation, and improved technology can keep this invisible killer at bay.