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"Protect Your Family and Yourself from Carbon Monoxide Poisoning"

Indoor Environments Division (6607J)
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Carbon Monoxide Can Be Deadly

You can't see or smell carbon monoxide, but at high levels it can kill a person in minutes. Carbon monoxide (CO) is produced whenever any fuel such as gas, oil, kerosene, wood, or charcoal is burned. If appliances that burn fuel are maintained and used properly, the amount of CO produced is usually not hazardous. However, if appliances are not working properly or are used incorrectly, dangerous levels of CO can result. Hundreds of people die accidentally every year from CO poisoning caused by malfunctioning or improperly used fuel-burning appliances. Even more die from CO produced by idling cars. Fetuses, infants, elderly people, and people with anemia or with a history of heart or respiratory disease can be especially susceptible. Be safe. Practice the DO's and DON'Ts of carbon monoxide.

CO Poisoning Symptoms

Know the symptoms of CO poisoning. At moderate levels, you or your family can get severe headaches, become dizzy, mentally confused, nauseated, or faint. You can even die if these levels persist for a long time. Low levels can cause shortness of breath, mild nausea, and mild headaches, and may have longer term effects on your health. Since many of these symptoms are similar to those of the flu, food poisoning, or other illnesses, you may not think that CO poisoning could be the cause.

Play it Safe

If you experience symptoms that you think could be from CO poisoning:

- ✓ **DO GET FRESH AIR IMMEDIATELY.** Open doors and windows, turn off combustion appliances and **leave the house.**
- ✓ **DO GO TO AN EMERGENCY ROOM** and tell the physician you suspect CO poisoning. If CO poisoning has occurred, it can often be diagnosed by a blood test done soon after exposure.
- ✓ **DO** Be prepared to answer the following questions for the doctor:
 - Do your symptoms occur only in the house? Do they disappear or decrease when you leave home and reappear when you return?
 - Is anyone else in your household complaining of similar symptoms? Did everyone's symptoms appear about the same time?
 - Are you using any fuel-burning appliances in the home?
 - Has anyone inspected your appliances lately? Are you certain they are working properly?

Prevention is the Key to Avoiding Carbon Monoxide Poisoning

- ✓ **DO** have your fuel-burning appliances -- including oil and gas furnaces, gas water heaters, gas ranges and ovens, gas dryers, gas or kerosene space heaters, fireplaces, and wood stoves -- inspected by a trained professional at the beginning of every heating season. Make certain that the flues and chimneys are connected, in good condition, and not blocked.
- ✓ **DO** choose appliances that vent their fumes to the outside whenever possible, have them properly installed, and maintain them according to manufacturers' instructions.
- ✓ **DO** read and follow all of the instructions that accompany any fuel-burning device. If you cannot avoid using an unvented gas or kerosene space heater, *carefully follow the cautions* that come with the device. Use the proper fuel and keep doors to the rest of the house open. Crack a window to ensure enough air for ventilation and proper fuel-burning.
- ✓ **DO** call EPA's [IAQ INFO Clearinghouse \(1-800-438-4318\)](#) or the [Consumer Product Safety Commission](#) [EXIT disclaimer](#) (1-800-638-2772) for more information on how to reduce your risks from CO and other combustion gases and particles.
- ✓ **DON'T** idle the car in a garage -- even if the garage door to the outside is open. Fumes can build up very quickly in the garage and living area of your home.
- ✓ **DON'T** use a gas oven to heat your home, even for a short time.
- ✓ **DON'T** *ever* use a charcoal grill indoors -- even in a fireplace.
- ✓ **DON'T** sleep in any room with an unvented gas or kerosene space heater.
- ✓ **DON'T** use any gasoline-powered engines (mowers, weed trimmers, snow blowers, chain saws, small engines or generators) in enclosed spaces.
- ✓ **DON'T** ignore symptoms, particularly if more than one person is feeling them. You could lose consciousness and die if you do nothing.

A Few Words About CO Detectors

Carbon Monoxide Detectors are widely available in stores and you may want to consider buying one as a back-up --**BUT NOT AS A REPLACEMENT** for proper use and maintenance of your fuel-burning appliances. However, it is important for you to know that the technology of CO detectors is still developing, that there are several types on the market, and that they are not generally considered to be as reliable as the smoke detectors found in homes today. Some CO detectors have been laboratory-tested, and their performance varied. Some performed well, others failed to alarm even at very high CO levels, and still others alarmed even at very low levels that don't pose any immediate health risk. And unlike a smoke detector, where you can easily confirm the cause of the alarm, CO is invisible and odorless, so it's harder to tell if an alarm is false or a real emergency.

So What's a Consumer to Do?

First, don't let buying a CO detector lull you into a false sense of security. Preventing CO from becoming a problem in your home is better than relying on an alarm. Follow the checklist of DOs and DON'Ts.

Second, if you shop for a CO detector, do some research on features and don't select solely on the basis of cost. Non-governmental organizations such as Consumers Union (publisher of *Consumer Reports*), the American Gas Association, and Underwriters Laboratories (UL) can help you make an informed decision. Look for UL certification on any detector you purchase.

Carefully follow manufacturers' instructions for its placement, use, and maintenance.

If the CO detector alarm goes off:

- Make sure it is your CO detector and not your smoke detector.
- Check to see if any member of the household is experiencing symptoms of poisoning.
- If they are, get them out of the house immediately and seek medical attention. Tell the doctor that you suspect CO poisoning.
- If no one is feeling symptoms, ventilate the home with fresh air, turn off all potential sources of CO --

your oil or gas furnace, gas water heater, gas range and oven, gas dryer, gas or kerosene space heater and any vehicle or small engine.

- Have a qualified technician inspect your fuel-burning appliances and chimneys to make sure they are operating correctly and that there is nothing blocking the fumes from being vented out of the house.

This fact sheet has been translated into [Spanish](#), Vietnamese, Chinese and Korean. If you would like to get a copy of this fact sheet in one of these languages, contact [IAQ INFO](#) at 1-800-438-4318.

Links

Office of Air and Radiation page - "[CO - How Carbon Monoxide Affects the Way We Live and Breathe](#)"

National Center for Environmental Health

Air and Respiratory Health Branch

Centers for Disease Control and Prevention

[Checklist for Prevention of Carbon Monoxide Poisoning](#) [EXIT disclaimer >](#)

U.S. Consumer Product Safety Commission,

Office of Information and Public Affairs,

Washington, D.C. 20207

[Carbon Monoxide Questions and Answers](#) (CPSC document #466) [EXIT disclaimer >](#)

The U.S. Consumer Product Safety Commission protects the public from the unreasonable risk of injury or death from 15,000 types of consumer products under the agency's jurisdiction. To report a dangerous product or a product-related injury, you can go to CPSC's forms page - www.cpsc.gov/talk.html [EXIT disclaimer >](#) and use the first on-line form on that page. Or, you can call CPSC's hotline at (800) 638-2772 or CPSC's teletypewriter at (800) 638-8270, or send the information to info@cpsc.gov.

American Lung Association Fact Sheet on Carbon Monoxide

www.lungusa.org/air/carbon_factsheet99.html [EXIT disclaimer >](#)

Occupational Safety and Health Administration's Fact Sheet on Carbon Monoxide (a pdf file) -

www.osha.gov/OshDoc/data_General_Facts/carbonmonoxide-factsheet.pdf [EXIT disclaimer >](#)

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