

## Portable Generator Hazards

Portable generators are useful when temporary or remote electric power is needed. However, if used incorrectly, gasoline, kerosene, and other gas-powered generators can cause carbon monoxide poisoning, electric shocks, fires, and burns. Generator accidents can be fatal!

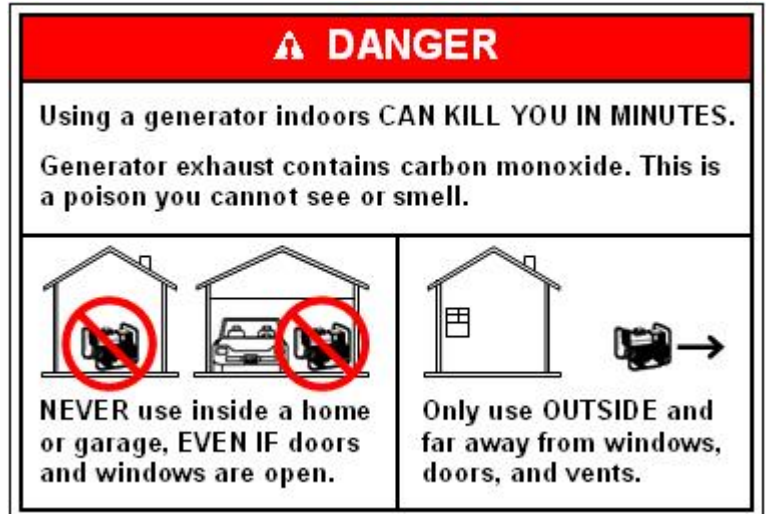
### Carbon Monoxide (CO) Poisoning

Every year, people die in accidents related to portable generator use. For example, a young camper was killed by CO from a portable generator's exhaust tube adjacent to the victim's campsite. Most deaths involve CO poisoning from portable generators used indoors or in partially-enclosed spaces. The Consumer Product Safety Commission reports that between 1999 and 2004 portable generators caused 172 CO poisoning deaths in the U.S.

Generators produce high levels of CO in their exhaust. Carbon monoxide around a generator and its exhaust tube can build up within minutes, even outdoors. Carbon monoxide can linger for hours, even after the generator is shut off.

You cannot see or smell carbon monoxide. So even if you do not smell exhaust fumes, you may still be exposed to CO.

You can help protect yourself by installing CO alarms (battery-operated or plug-in with battery back-up) in your home, RV, cabin of your boat or other area where carbon monoxide may be present. Carbon monoxide detectors should be certified to the latest UL safety standards. Test your CO detector monthly. Replace the batteries in the spring and in the fall when clocks are changed for daylight savings time.



*Danger labels such as the one above are required on all portable generators manufactured or imported on or after May 14, 2007.*

If you start to feel sick, dizzy, or weak while using a generator, **GET TO FRESH AIR IMMEDIATELY! DO NOT DELAY!** The carbon monoxide from generators is deadly and can quickly overcome you and others in the area.

### Electrical Hazards

Generators pose a risk of shock and electrocution, especially if they are operated in wet conditions. If you must use a generator when it is wet outside, operate the generator under an open, canopy-like structure on a dry surface where water cannot reach it or puddle or drain under it. Do this without operating the generator indoors or near openings to any building, in order to help avoid the CO hazard. Dry your hands, if wet, before touching the generator.

Use only heavy-duty extension cords that are specifically designed for outdoor use when connecting appliances to a portable generator. Make sure the wattage rating for each cord exceeds the total wattage of all appliances connected to it. Use extension cords that are long enough to allow the generator to be placed outdoors and far away from windows, doors, and

vents to the home or to other structures (tents, other RVs, etc.). Check that the entire length of each cord is free of cuts or tears and that the plug has all three prongs. Protect the cord from getting pinched or crushed if it passes through a window or doorway.

**NEVER** try to power the house wiring by plugging the generator into a wall outlet. This is sometimes called “backfeeding.” Backfeeding is extremely dangerous! It presents an electrocution risk to utility workers and neighbors served by the same utility transformer. It also bypasses some of the built-in household circuit protection devices.

### **Fire Hazards**

Generators and the fuel you use to run them can cause fire hazards. Never store fuel for your generator in the home. Gasoline, propane, kerosene, and other flammable liquids should be stored away from living areas, and only in properly labeled, non-glass safety containers. Do not store fuel near a fuel-burning appliance, such as a furnace or water heater. Before refueling the generator, turn it off and let it cool down. Gasoline spilled on hot engine parts could ignite.

### **Protect Yourself and Your Family**

With a little knowledge and adherence to a few basic precautions, these types of accidents can be prevented. Follow the safety tips below to protect yourself and your family:

- **Always follow the manufacturer’s instructions** when using your generator.

### **CO Poisoning Hazards:**

- **NEVER use a generator inside** of a home, garage, crawlspace, shed, or other enclosed area. Locate the unit outdoors and far from doors, windows, and vents.
- **Always run your generator in a well-ventilated area, and only if you can vent its exhaust safely.** Make sure the exhaust hose is placed far from other campers, tents, boats, cabins, etc.
- **Install CO alarms** in your home, RV, boat or other area where CO may be present.

### **Electrical Hazards:**

- **Keep the generator dry.**
- **Dry your hands, if wet, before touching the generator.**
- **Use the right extension cord.**
- **Check your equipment and cords before use.** Double check where the exhaust is facing, where the generator is located, and the condition of the electrical cords.
- **NEVER plug the generator into a wall outlet.** “Backfeeding” is extremely dangerous and presents an electrocution risk.

### **Fire Hazards:**

- **Never store generator fuel in the home or near an ignition source.**
- Before refueling the generator, turn it off and let it cool down.

### **For more information**

DHFS Fact Sheet on Carbon Monoxide Poisoning -- <http://dhfs.wi.gov/eh/Air/fs/CO.htm>

DHFS Fact Sheet on Health Tips for Your Home -- <http://dhfs.wisconsin.gov/hometips>

WI Bureau of Environmental and Occupational Health -- (608) 266-1120