***Carbon Monoxide***

**Dangers of Carbon Monoxide**

Carbon monoxide (CO) is a gas you cannot see, taste, or smell. It is often called “the invisible killer.” It is created when fossil fuels such as kerosene, gasoline, coal, natural gas, propane, methane, or wood don’t burn completely. CO gas can kill people and pets.

Carbon monoxide (CO) poisoning can result from gas-, gasoline-, and diesel-fueled vehicles idling inside garages or from malfunctioning or improperly vented water heaters, clothes dryers, furnaces and other heating appliances, and portable generators.

Headache, nausea, and drowsiness are symptoms of carbon monoxide (CO) poisoning.

Exposure to carbon monoxide (CO) can be fatal.

**Installation Tips for Carbon Monoxide Alarms**

Choose a carbon monoxide (CO) alarm that is listed by a qualified testing laboratory (such as Underwriters Laboratories/UL).

Install and maintain carbon monoxide (CO) alarms inside your home to provide early warning and reduce risk of death from carbon monoxide.

When traveling or staying away from home, bring a travel carbon monoxide (CO) alarm.

Install and maintain carbon monoxide alarms (CO) 1) outside each separate sleeping area, 2) on every level of the home, and 3) in other locations as required by laws, codes, or standards. Follow the manufacturer’s instructions for placement and mounting height.

For the best protection, have CO alarms that are interconnected throughout the home. When one sounds, they all sound.

If you have combination smoke–carbon monoxide (CO) alarms, *follow the directions for smoke alarm installation*.

Carbon monoxide (CO) alarms are not substitutes for smoke alarms and vice versa. Know the difference between the sound of smoke alarms and the sound of CO alarms.

**Testing and Replacement**

Test carbon monoxide (CO) alarms at least once a month and replace them if they fail to respond when tested. The sensors in CO alarms have a limited life. Replace the CO alarm according to manufacturer’s instructions or when the end-of-life signal sounds. If in doubt, replace CO alarms every 10 years.

Know the difference between the sound of the carbon monoxide (CO) alarm and the smoke alarm, and the low-battery signals. If the audible low-battery signal sounds, replace the batteries or replace the device. If the carbon monoxide (CO) alarm still sounds, get to a fresh air location and call 9-1-1.

To keep carbon monoxide (CO) alarms working, follow manufacturer’s instructions for cleaning. The instructions are included in the package or can be found on the internet.

**Inside the Home**

Have gas appliances, fuel-burning heating equipment, and chimneys cleaned and inspected per the manufacturer’s instructions.

Before using the fireplace, open the damper for proper ventilation. When finished, leave the damper open until the fire is completely extinguished to prevent smoke and gases generated by embers from entering the home.

*Never* use an oven or stovetop to heat your home.

Purchase heating and cooking equipment that is listed by a qualified testing laboratory (UL).

Vent the exhaust from fuel-burning equipment to the outside to avoid carbon monoxide (CO) poisoning. Keep the venting clear and unblocked.

Use only battery-powered lights in confined areas, such as tents. Do not use fuel burning lamps due to the possible buildup of CO.

**If Your Carbon Monoxide (CO) Alarm Sounds**

Immediately move to a fresh air location outdoors. Make sure everyone is accounted for.

Call 9-1-1 from the fresh air location. Remain there until emergency personnel declare that it is safe

to reenter the home.

**Motor Vehicles**

If your vehicle has an automatic engine starter, check to make sure your vehicle is off if it is in the garage.

Never run a vehicle or other fueled engine or motor in a garage, even if garage doors are open.

Always remove vehicles from the garage right away after starting. The carbon monoxide (CO) gas can build up and charge the home full of CO. The carbon monoxide (CO) gas can kill people and pets.

Make sure the exhaust pipe of a running vehicle is not blocked with snow, ice, or other materials.

**Appliances**

Make sure vents for the dryer, furnace, stove, and fireplace are clear of snow and other debris.

Always use barbecue grills outside, away from all doors, windows, vents, and other building openings. Grills can produce carbon monoxide (CO) gas. Never use grills inside the home or the garage, even if the doors are open.

Generally, a minimum of 3 feet provides enough distance between the grill and anything that can burn (deck, railings, walls, for example) so that heat from the grill does not pose an ignition hazard.

**Portable Generators**

Use portable generators outdoors in well-ventilated areas at least 20 feet from all doors, windows, and

vent openings. Measure the 20-foot distance from the generator to the building.

Never use a generator in an attached garage, even with the door open.

Place generators so that exhaust fumes cannot enter the home through windows, doors, or other openings in the building. The exhaust must be directed away from the building.

If you are using a portable generator, make sure you have battery-operated carbon monoxide (CO) alarms or plug-in CO alarms with a battery backup in the home.

If you are buying or renting a portable generator, choose one that is listed by a qualified testing laboratory (UL).

Do not stand or sit downwind of generator exhaust. If you can smell exhaust, you are inhaling carbon monoxide. Exhaust is toxic and deadly.

**Marina and Boating**

Poorly tuned engines produce more carbon monoxide (CO). Keep your engine properly maintained. Follow the manufacturer’s instructions for service.

Proper ventilation for engine and generator exhaust vents must be clear and pipes should be inspected for leaks.

Get into fresh air right away and get help if you feel symptoms of carbon monoxide (CO) poisoning. These include headache, fatigue, confusion, dizziness, nausea, or seizures. The symptoms can be similar to seasickness. Assume it is CO exposure until you are sure the boat is safe.

Do not swim near the boat’s exhaust vents. Carbon monoxide (CO) accumulates there.

Install carbon monoxide (CO) alarms inside your boat. Test CO alarms before each trip.

Choose a carbon monoxide (CO) alarm that is listed by a qualified testing laboratory (UL).

If the carbon monoxide (CO) alarm sounds, move to a fresh air location.

For questions regarding carbon monoxide alarms please call (208) 612-4060. Reproduced with permission from NFPA.