#### **Smoke Detector Program**



## Where to Place Smoke Alarms, CO Detectors and Fire Extinguishers in Your Home

It is important to install fire safety products and carbon monoxide (CO) detectors, and ensure they are working properly in your home. Understanding how to help protect your home and family from fire or carbon monoxide is a top priority. For whole home protection, follow these safety recommendations on the placement and installation of smoke detectors, carbon monoxide alarms and fire extinguishers in your home.

## **Home Smoke Detectors**

The National Fire Protection Association (NFPA) recommends installing at least one home smoke detector on every level of your home (including your basement and attic), inside every bedroom, and outside each sleeping area. Make sure smoke detectors are installed high on the walls or near the center of the ceilings, and at least 10 feet away from cooking appliances. When installing on the wall, place the smoke alarm at least 12 inches from the ceiling. This is because smoke rises and will make the alarms the most effective.

### **Carbon Monoxide Alarm**

The NFPA recommends that you install a carbon monoxide alarm, like smoke alarms, on every level of your home, inside every bedroom, and outside each sleeping area. Make sure carbon monoxide detectors are also installed near attached garages in case a car is left running, and anywhere else the manufacturer recommends.

However, not every spot is ideal to install a carbon monoxide alarm. The following places can create false alarms or prevent your carbon monoxide alarm from properly identifying dangerous levels of CO in your home:

- Too close to any fuel-burning appliance, at least 10 feet away
- Humid areas like your bathroom
- In direct sunlight
- Places where there's too much air circulation, like near fans or vents

Most importantly, don't forget to test home smoke and carbon monoxide detectors at least once a month and to change the batteries every six months to help ensure your home is protected 24/7.

# Symptoms of CO poisoning

CO enters the body through breathing. CO poisoning can be confused with flu symptoms, food poisoning and other illnesses. Some symptoms include shortness of breath, nausea, dizziness, light headedness or headaches. High levels of CO can be fatal, causing death within minutes.

The concentration of CO, measured in parts per million (ppm) is a determining factor in the symptoms for an average, healthy adult.

- 50 ppm: No adverse effects with 8 hours of exposure
- 200 ppm: Mild headache after 2-3 hours of exposure
- 400 ppm: Headache and nausea after 1-2 hours of exposure
- **800 ppm**: Headache, nausea, and dizziness after 45 minutes; collapse and unconsciousness after 1 hour of exposure
- 1,000 ppm: Loss of consciousness after 1 hour of exposure
- 1,600 ppm: Headache, nausea, and dizziness after 20 minutes of exposure
- **3,200 ppm**: Headache, nausea, and dizziness after 5-10 minutes; collapse and unconsciousness after 30 minutes of exposure
- 6,400 ppm: Headache and dizziness after 1-2 minutes; unconsciousness and danger of death after 10-15 minutes of exposure
- **12,800 ppm**: Immediate physiological effects, unconsciousness and danger of death after 1-3 minutes of exposure

### Fire Extinguishers

While it's recommended that there's a fire extinguisher on every level of your home, there are a few additional, key places to consider when deciding placement.

**Kitchen:** With a majority of house fires starting in the kitchen, this is an important room to have a fire extinguisher

**Garage/Workshop:** Garages are home to a variety of combustible and flammable items along with spark generating tools that can cause fires

**Laundry Room:** Lint is highly flammable making the dryer a common cause of house fires Near Sources of Heat: This includes patio grills, fireplaces, chimneys, furnaces, wood stoves, and electrical panels

A home fire extinguisher can save lives by putting out small fires or containing them until help arrives, but it's important to remember that they have their limitations. Your priority should be exiting your home safely.

### **Supporting Documents**

Carbon Monoxide Detectors 151.81 KB