

# Carbon monoxide gas is dangerous!

Carbon monoxide poisoning can cause brain damage and death.

- Carbon monoxide gas is the leading cause of accidental poisoning deaths in the United States.
- Carbon monoxide gas is produced by common household fuel-burning appliances. When not properly vented, poison gas from these appliances can build up in a room or building.
- Early symptoms of carbon monoxide poisoning such as headaches, nausea, and fatigue are often not connected to carbon monoxide as the deadly gas builds up undetected.

A carbon monoxide detector/ alarm is a device that will detect the presence of carbon monoxide (CO) and sounds an alarm to give people in the area a chance to safely leave the building. CO detectors/ alarms by themselves are not smoke detectors, and vice versa.

However, there are combination smoke/ CO devices. CO detectors/ alarms are usually plugged into a wall electrical outlet or wired directly into a building's electrical system.



Owners of multi-unit residential buildings which contain fuel-burning appliances shall install carbon monoxide (CO) detectors/ alarms.\*

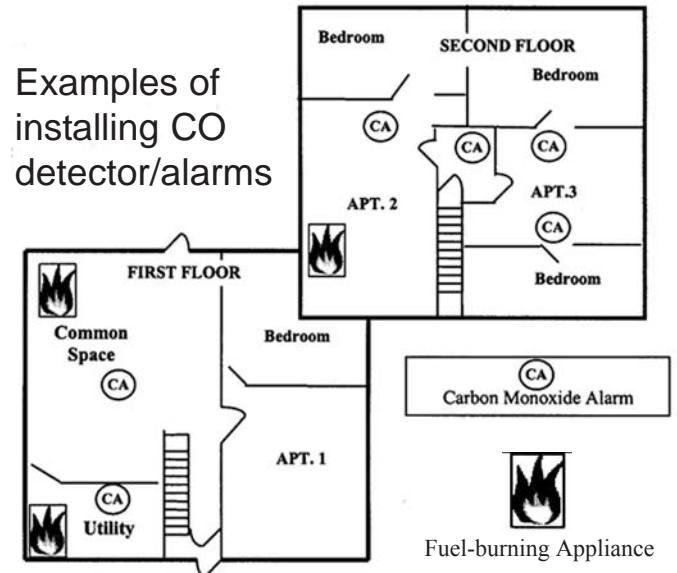
Examples of fuel-burning appliances: Stoves, ovens, grills, clothes dryers, furnaces, boilers, water heaters, heaters, and fireplaces.

- Where must the detector/alarms be placed?**
1. In the basement of the building if the basement has a fuel-burning appliance;
  2. Within 15 feet of each sleeping area of a unit that has a fuel-burning appliance;
  3. Within 15 feet of each sleeping area of a unit that is immediately adjacent to a unit that has a fuel-burning appliance;
  4. In each room not used as a sleeping area that has a fuel-burning appliance, a CO detector/ alarm shall be installed not more than 75 feet from the fuel-burning appliance;
  5. In each hallway leading from a unit that has a fuel-burning appliance, in a location that is within 75 feet from the unit. If there is no electrical outlet within this distance, the CO detector/ alarm shall be placed at the closest available electrical outlet in the hallway. The 75-foot installation limit is measured from the door of the unit along the hallway.

## Sample floor plan of where to install CO detectors/alarms

- Utility room needs CO device within 75 feet of furnace. If device instructions require a minimum separation from the furnace greater than the room allows, the device should be outside the room.
- Common space needs CO device within 75 feet of fireplace.
- Apartment 1 does **not** need a CO device because it does not have a combustion appliance and it is not adjacent to a unit with a combustion appliance.
- Apartment 2 with a gas range needs a CO device within 15 feet of the bedroom.
- Apartment 3 needs CO devices within 15 feet of **each** bedroom because it is adjacent to apartment 2, which has a combustion appliance.
- Second floor corridor needs a CO device because it serves apartments with combustion appliances.

## Examples of installing CO detector/alarms



\*An exception to installation of CO detector/alarms: If the building is pre-October 2008, CO detector/alarms are not needed if there is no enclosed attached garage and all fuel-burning devices are closed-combustion (do not release combustion air to the interior of the building). Those closed-combustion devices require annual inspections.

- There are separate regulations covering carbon monoxide detectors/alarms in **one- and two-family dwellings** in Wisconsin. There are also separate regulations covering **smoke detectors** in various types of buildings.

- Any carbon monoxide detector that bears an Underwriters Laboratories listing mark or similar mark from an independent product **safety certification** organization is acceptable for use in Wisconsin.

- Carbon monoxide detectors/alarms must be **installed according to the instructions** of the manufacturer of the device.

- The installation of CO detectors/alarms must be **throughout the entire building** where a portion of the building includes multi-unit residences.

- The installation of CO detector/alarms in **“adjacent units”** applies to units located on the same floor level.

- Violations of the CO regulations in Comm 62.1200 are subject to possible **penalties**. See s. 101.149 (8), Stats.

## Maintenance Requirements

The owner of a residential building must maintain carbon monoxide detectors / alarms according to the manufacturer’s instructions.

An occupant of a unit in a residential building may give the owner of the residential building written notice that a CO device is not functional or has been removed by a person other than the occupant. The owner of the residential building shall repair or replace the nonfunctional or missing device within five days after receipt of the notice.

## Electrical Supply

In new construction built since October 1, 2008, CO devices must be powered by the building electrical system and include a battery backup. Multiple alarms within one living unit must be interconnected. In pre-2008 buildings, detectors/alarms may just be battery-powered and interconnection is not required.

**Carbon monoxide detectors/alarms can be damaged by freezing temperatures.**

Carbon monoxide detector / alarm requirements for **tourist rooming houses** (commercial cabins) are found in Wisconsin’s Uniform Dwelling Code, Comm 21.095.

**Find a copy of this brochure online:** <http://dsps.wi.gov/SB/SB-COBrochure711.pdf>

S&B also has **one and two-family dwelling smoke alarm and CO detector/ alarm info** online: <http://dsps.wi.gov/sb/docs/SB-UdcAlarmsGeb11.pdf>

# Carbon monoxide alarms are needed in most multi-unit residential buildings in Wisconsin

In Wisconsin, if you have fuel-burning appliances in a multi-unit residential building (3 or more units), you must have carbon monoxide detectors/alarms.

Carbon monoxide is a colorless, odorless gas produced by incompletely burning fuel containing carbon. You can’t see it, smell it, or taste it; but carbon monoxide can kill.



A carbon monoxide detector/ alarm is a device that detects the presence of carbon monoxide and sounds an alarm to give people in the area a chance to safely leave the building.

What are some examples of multi-unit residential buildings subject to the requirement for detectors/alarms? They include public buildings used for sleeping or lodging, such as hotels, motels, condominiums, apartment buildings, dormitories, fraternities, sororities, convents, seminaries, jails, prisons, home shelters, and community-based residential facilities. Also included are tourist rooming houses (cabins) and bed and breakfast establishments. Hospitals and nursing homes are not included.



Safety and Buildings Division, Wisconsin Department of Safety and Professional Services