

Buying a CO Detector

Pick a carbon monoxide detector that is right for the space.

1. Decide where the detector is needed.



Home? School? Workplace?
Small Space? Large Space? Ventilation?

2.

Find a unit with
a detection level and alarm
suitable for the space.

Few alert at lower levels but
some record multi-day
exposure at lower ppm.

Most alert between
30-70 ppm.

Alarms that alert at 220 ppm
usually do not sound off at lower
levels or levels over 400 ppm.

Is the model you
selected best for a:

Small Space

Home

Large and Well Ventilated Space

Models of Carbon Monoxide Alarms Will Range in Detection Levels

Parts Per Million (ppm)

11-20

20-30

30-75

75-200

400+



3. Look for options:

Sensor Type.

Battery Back-up.

Memory and Tracking

Certification.

D.M. Sandoval for NM EPHT

Level of Detection and Alert/Alarm

Most detectors alarm at 30 ppm-70 ppm of CO in the air. Keep in mind that "low" levels are below 11 ppm and levels can often range between 11 and 400 ppm. Alarms that are under UL-2034 standards do not alert at levels of CO below 70 ppm, or above 400 ppm and do not sound an alarm when levels of CO are at 30 ppm for thirty days.

Type of Sensor

- Biomimetic - Gel coated disks darken in the presence of CO. Color change sounds the alarm.
 - Benefits are: Less expensive and can be battery operated.
- Metal Oxide Semi-Conductor (MOS) - Heated oxide reacts with CO to determine the levels of the toxic gas.
 - Must be connected to the power of the building.
 - Unit is always plugged in. Battery backup is available.
- Electrochemical - Chemical reaction with CO creates an electrical current that sets off the alarm. Highly sensitive and accurate at all levels of CO.
 - Most of these units come with a readout memory to keep track of CO levels. Many of these units will sound off alert when sensor needs to be replaced.

Battery Backup - Useful for power outages and natural disasters.

Memory - can be useful for tracking lower levels, which are still unhealthy, alerting people to troubleshoot potential sources of on-going exposure such as malfunction in a household appliance.

- Helps to keep track if there is a history of CO exposure.
- Allows user to monitor long term low levels of CO, or high level of exposure.

Is the Detector Certified?

Underwriter Laboratories (UL) - Major company that certifies equipment in the US and Canada have specific standards for CO detectors. Electrical Testing Laboratories (ETL) certification is another company.

Using and Maintaining Your Detector

After you have bought a detector:

- Mark on it the date of purchase so you will know when to replace it. Detectors must be replaced at least every five years because after five years the sensors go bad.
- Place the alarm in an area, where most time in the home is spent such as a bedroom.
- As you purchase more units, place those near other bedrooms and common living areas.
- Next, make it a point to replace the batteries twice a year: in the spring and in the fall when you change your clocks or when you are switching from using a cooling system to a heating system and vice versa.
- Since alarms are meant to be an additional safety measure, it is important to practice routine protection in the home by having furnaces regularly inspected and by not allowing the use of outdoor appliances inside the home or enclosed spaces.