

In This Issue

- Carbon Monoxide Detectors – Definitely Worth It!
- Reducing Exposure to Carbon Monoxide
- What to Look for When Purchasing a Carbon Monoxide Detector
- Frequently Asked Questions About Carbon Monoxide

What to Look for When Purchasing a Carbon Monoxide Detector

There are several models out there with different features. Here are some questions that could help you narrow down which device is suitable for your facility:

- Is the device battery-powered or hardwired?
- If it is hardwired, does it have a back-up battery?
- Does the device monitor battery levels?
- Is it easy to install?
- Does it have a digital display?
- Is it a smart device or traditional/conventional type?
- Are you able to get data from it like past peak CO levels?
- What kind of alarm does it have, tonal or verbal?
- How many decibels is the audio alarm?
- What is the life span of the device?
- Are the indicator lights easy to interpret?
- Does the device self-test?

Carbon Monoxide Detectors – Definitely Worth It!

Carbon monoxide (CO) is an odorless, non-irritating, colorless and poisonous gas generated from faulty furnaces or heaters. Low CO levels can cause headaches, fatigue, visual disturbances, and confusion in children and adults, and high levels can cause suffocation and death.



CO may build up when heaters, stoves, or other gas or charcoal-burning devices are not properly vented or if they malfunction. CO may accumulate inside a house or building especially if it is sealed for energy efficiency. CO gas is dangerous because it replaces the oxygen in the air, and when inhaled, it binds to the cells that the oxygen should have been attached to, leaving no room for oxygen in the body. Although CO poisoning has been identified as a “silent killer,” it is preventable through the proper installation and use of CO detectors.

Importantly, Pennsylvania does not require childcare providers to have carbon monoxide detectors installed. However, some municipalities, such as Allentown, do require CO detectors. This comes after 28 individuals were exposed to a CO leak in October 2022 in a local Allentown daycare facility which had not installed CO detectors.

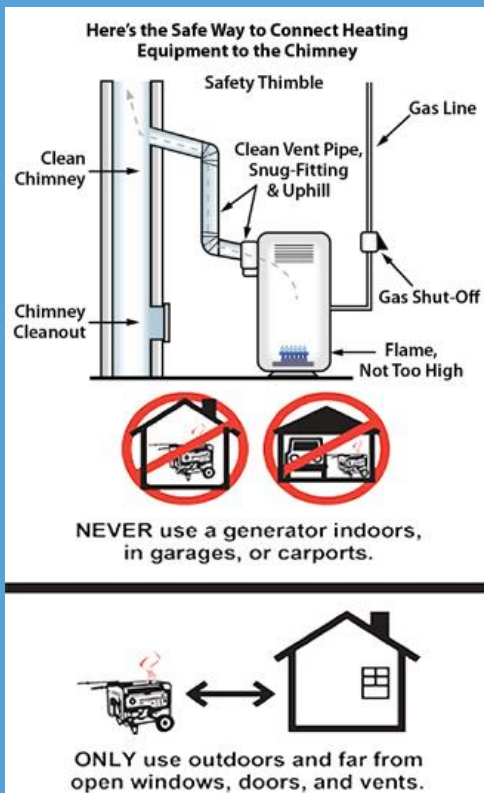
In March 2023, Governor Shapiro and Acting Secretary of the Department of Human Services Dr. Val Arkoosh [announced](#) that child care providers are eligible for two free CO detectors.

Reducing Exposure to Carbon Monoxide

Carbon monoxide poisoning is preventable. Here are tips on staying safe:

- Install an Underwriters Laboratory (UL) approved CO detector on every level of your home or childcare business.
- Regularly inspect and test the detector. If it is battery-operated, check and replace the batteries when necessary.
- Have chimneys, heating systems/furnaces, water heaters and other gas-, oil- or coal-burning appliances serviced annually by a professional.
- Ensure proper use and ventilation of kitchen gas stoves according to manufacturer’s instructions.
- Do not smoke inside or near buildings.
- Do not run a vehicle or generator inside a confined space like a garage, even if a door is open.

IMPORTANT: Never use generators indoors and ensure that heating equipment is connected, vented, and functioning properly.



- Do not use a charcoal grill, camp stove, or other gas or charcoal-burning device inside buildings – this can cause CO to build up.
- Make sure every member of your family or staff knows how they should react if a CO detector alarm goes off - leave the area immediately and call 9-1-1. "GET OUT, STAY OUT, and CALL 9-1-1."

For further guidance on preventing CO poisoning, please visit the Pennsylvania Office of the State Fire Commissioner website: <https://www.osfc.pa.gov/FireSafety/Pages/Carbon-Monoxide-Poisoning-Prevention.aspx>.

Frequently Asked Questions About Carbon Monoxide

Which is better, a smart carbon monoxide detector or a conventional one?

A smart CO detector may provide remote notifications, so if something goes wrong, you will be aware even if you are not at your home or facility.

What is the best location to place a carbon monoxide detector?

The U.S. Environmental Protection Agency (EPA) recommends installing CO detectors no more than five feet above the ground. This is because CO easily blends with the air in your home or facility and rarely rises. In a facility, ensure that the detector is installed where the alarm can be heard clearly. At home, install it close to the sleeping area and make sure that the alarm can wake you.

What should I do when a carbon monoxide detector alarm goes off?

If your CO detector alarm goes off, remain calm, turn off any fuel-burning appliances and evacuate everyone from the building including pets. Make sure that you go to an area that is safe and has adequate fresh air. Do not go back into the house/facility until the source of the leak has been fixed. Call 9-1-1 if anyone shows symptoms such as dizziness, nausea, headache, fatigue, or drowsiness.

How do I ensure that my carbon monoxide detectors work appropriately?

Test and clean the device once a month and refer to the manufacturer's instructions on when and how to replace the batteries, if it is battery operated.

Are carbon monoxide detectors, carbon dioxide (CO₂) monitors, and smoke detectors the same?

No. All three devices have different functions (uses). CO₂ detectors determine the levels of CO₂ gas in the atmosphere. CO detectors determine air quality and ventilation by monitoring levels of CO present. CO₂ is a colorless, odorless, faintly acidic-tasting, nonflammable gas at room temperature. Solid carbon dioxide, is also known by the trade name Dry Ice. The carbon dioxide molecule consists of a carbon atom that is doubly bonded to two oxygen atoms and is non-toxic, unlike CO which is poisonous. Smoke detectors determine the presence of a fire by monitoring for smoke and/or excess heat.

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Resources

- <https://www.osfc.pa.gov/FireSafety/Pages/Carbon-Monoxide-Poisoning-Prevention.aspx>
- <https://www.cdc.gov/co/faqs.htm>
- <https://www.epa.gov/indoor-air-quality-iaq/where-should-i-place-carbon-monoxide-detector>
- <https://www.epa.gov/indoor-air-quality-iaq/indoor-air-quality-iaq-frequently-asked-questions>