

Carbon monoxide is a poisonous gas. It is odorless, tasteless, and invisible. Carbon monoxide can occur naturally in the environment. It is released by erupting volcanoes and forest fires. It is also produced any time a carbon-based fuel is burned, such as coal, natural gas, or wood. Carbon monoxide is a major component of motor vehicle exhaust fumes and is also in tobacco smoke.

### HOW DOES CARBON MONOXIDE GET INTO MY BODY?

You breathe in carbon monoxide in the air. It may accumulate in indoor spaces from fuel-burning devices, such as generators, water heaters, space heaters (fuel-burning only), gas furnaces, clothes dryers, wood-burning stoves, gas cooking ranges, and small engines. People may breathe in carbon monoxide when around tobacco smoke.



### WHAT CAN CARBON MONOXIDE DO TO ME?

Carbon monoxide can accumulate in the blood and prevent the delivery of oxygen to the body. It can cause sudden illness and death when present at high concentrations in the air. Symptoms of carbon monoxide exposure include fatigue, dizziness and confusion, headache, rapid heartbeat, irregular breathing, persistent cough or wheezing, and nausea and/or vomiting. People with certain health conditions, such as heart disease, respiratory problems, and anemia, infants, and the elderly are generally more susceptible to having symptoms. Long-term exposure to elevated levels of carbon monoxide has been linked with increased risk of heart disease.

### WHAT ARE THE ENVIRONMENTAL REGULATIONS FOR CARBON MONOXIDE?

The U.S. Environmental Protection Agency (EPA) limits carbon monoxide in outdoor air to 9 parts per million (ppm) averaged over 8 hours (35 ppm averaged over 1 hour). Additionally, the Occupational Safety and Health Agency limits carbon monoxide in workplace air to 50 ppm during an 8-hour day and 40-hour week.

Pennsylvania tracks carbon monoxide poisoning mortality and carbon monoxide poisoning hospitalizations. Data are on the [Enterprise Data Dissemination Informatics Exchange<sup>1</sup>](https://www.health.pa.gov/topics/HealthStatistics/EDDIE/Pages/EDDIE.aspx) (EDDIE) by county and other traits.

### WHAT CAN I DO?

- Install carbon monoxide detectors in all bedrooms and living rooms in your home and check batteries when changing the time on clocks in the spring and fall.
- Do not run a vehicle or generator inside a confined space like an attached garage, even if a door is open.
- Do not smoke or work to quit smoking. Do not smoke inside the building.
- Have chimneys, heating systems, water heaters, and any other gas-, oil- or coal-burning appliances serviced by a qualified technician every year.
- Ensure proper use and ventilation of kitchen stoves according to the manufacturer's instructions.
- Do not use a generator, charcoal grill, camp stove, or other gas or charcoal-burning device inside.
- If you suspect exposure (e.g., symptoms of dizziness or nausea), leave the area immediately and visit an emergency medical care provider. Most hospitals can test for and treat carbon monoxide poisoning.

If you have questions or concerns about carbon monoxide, please contact the Division of Environmental Health Epidemiology at [dehe@pa.gov](mailto:dehe@pa.gov) or 717-787-3350.