

Carbon Monoxide Information

What is carbon monoxide?

Carbon monoxide, or CO, is a poisonous gas that cannot be seen or smelled and can kill a person in minutes. Carbon monoxide can quickly build up to unsafe levels in enclosed or semi-enclosed areas.

What are some common sources of carbon monoxide?

Carbon monoxide is produced by incomplete combustion from cars and trucks, small gasoline power equipment like weed trimmers and chain saws, boat engines, gas and camp stoves, lanterns, burning charcoal and wood, and gas ranges, ovens, or furnaces. Tobacco smoke is a significant source of carbon monoxide in homes with smokers.

What are the symptoms of carbon monoxide poisoning?

Common symptoms are headache, dizziness, fatigue, weakness, confusion, and nausea. Breathing in high levels of carbon monoxide can cause loss of consciousness and death. People who are sleeping can die from carbon monoxide poisoning before ever knowing they are being exposed to the gas.

Who is at risk from carbon monoxide poisoning?

All people and animals are at risk for carbon monoxide poisoning. Certain groups, such as unborn babies, infants, and people with chronic heart disease, anemia, or respiratory problems, are more easily affected by carbon monoxide poisoning.

What should be done if you suspect someone has carbon monoxide poisoning?

- Immediately go outside to get fresh air. Call 911.
- If someone is unconscious and cannot leave, open windows and doors to bring in fresh air. Turn off the source of carbon monoxide. Call 911.

Should a carbon monoxide detector be installed in my home?

Yes, these detectors are similar to smoke alarms and can warn you when carbon monoxide levels become unsafe. If the alarm goes off, evacuate the building and call 911. Follow the carbon monoxide detector instructions for routine maintenance, including regular replacement of batteries. If the carbon monoxide detector is wired to the electrical supply, make sure it has back-up batteries for when the electricity is off.

Washington State law requires carbon monoxide alarms to be installed in most newly constructed residences by July 1, 2011. For more information on the new amendments to the Building Code, Residential Code, and Fire Code requiring installation of carbon monoxide alarms, see the [State Building Code Council's Carbon Monoxide Alarm page](#).

How do I prevent carbon monoxide poisoning during a power outage?

- Never use a charcoal or gas grill in an enclosed space, such as inside your home, garage, or in a tent or camper. See our fact sheet on [preventing carbon monoxide poisoning during a power outage](#), which is available in multiple languages.
- Don't burn charcoal in your fireplace. A charcoal fire will not create a chimney draft strong enough to push the carbon monoxide to the outside.
- Never use a generator inside your home, garage, carport, basement, or near an outside window, door, or vent. Generators should be at least 15 feet away from buildings. Even at 15 feet away, air flow patterns could still blow carbon monoxide into homes through attic vents, windows, or doors, so it's very important to have a working carbon monoxide detector inside the home. Get tips on [using a generator during a power outage](#).
- Never use a gas range or gas oven to heat your home.
- Never sleep in a room while using an unvented gas or kerosene heater.

How can I prevent carbon monoxide poisoning from vehicles and other equipment?

- Never run a vehicle in a garage, even when the garage door is open.
- Have a mechanic check the exhaust system of your car every year. A small leak in your car's exhaust system can lead to a build up of carbon monoxide inside the car.
- Don't allow people to travel inside truck canopies and campers. Vehicle exhaust can be drawn into the covered or enclosed area of canopies and campers.

- Boaters should be aware of exhaust "back drafting" into the boat's cabin, cockpit, or deck. Make sure people swim and play away from the engine exhaust of the boat. Don't "teak surf" or hang onto and ride on the swim platform on the back of boats.
- Never use gasoline powered equipment indoors or in poorly ventilated areas.

How can I prevent carbon monoxide poisoning from my home appliances?

- Have oil and gas appliances and fireplaces, as well as wood stoves, checked every year by a trained professional.
- Make sure chimneys and flues are routinely checked and cleaned. Never burn anything in a stove or fireplace that isn't vented.
- Don't use unvented fueled heaters.
- If you suspect a gas leak, leave your home immediately, call 911, and contact your gas company. Don't go back into the home until the problem has been resolved.

More Information

- [Carbon Monoxide Poisoning, CDC](http://www.cdc.gov/co/default.htm)
<http://www.cdc.gov/co/default.htm>
Educational materials in various formats and languages, prevention and clinical guidance, and research studies.
- [Sources of Carbon Monoxide in the Workplace, Labor and Industries](http://www.lni.wa.gov/Safety/Topics/AtoZ/CarbonMonoxide/default.asp)
<http://www.lni.wa.gov/Safety/Topics/AtoZ/CarbonMonoxide/default.asp>
Common sources of carbon monoxide in the workplace, examples of incidents, and how to prevent exposure.
- [Power Outage - Emergency Preparedness](http://www.doh.wa.gov/Emergencies/EmergencyPreparednessandResponse/PowerOutages.aspx)
<http://www.doh.wa.gov/Emergencies/EmergencyPreparednessandResponse/PowerOutages.aspx>
- [Washington Tracking Network](http://www.doh.wa.gov/PublicHealthandHealthcareProviders/HealthcareProfessionsandFacilities/DataReportingandRetrieval/WashingtonTrackingNetworkWTN.aspx)
<http://www.doh.wa.gov/PublicHealthandHealthcareProviders/HealthcareProfessionsandFacilities/DataReportingandRetrieval/WashingtonTrackingNetworkWTN.aspx>
Understand how hazards in the environment, exposures, and health outcomes change over time or across regions.