



Carbon Monoxide

Why am I being warned about potential exposure to carbon monoxide?



- Carbon monoxide (CO) is on the [Proposition 65](#) list for [reproductive toxicity](#).
- Exposure to high levels of carbon monoxide during pregnancy can affect the baby's brain development and cause loss of pregnancy.
- California's Proposition 65 requires [businesses](#) to warn people before exposing them to a significant amount of a [chemical](#) listed under Proposition 65 for cancer or reproductive toxicity.

What is carbon monoxide?

- Carbon monoxide is a colorless, odorless, and poisonous gas.
- It is formed during the combustion of various fuels, including [gasoline](#), [diesel](#) fuel, natural gas, wood, coal, kerosene, and propane, as well as plant-derived substances such as [tobacco smoke](#) and [cannabis \(marijuana\) smoke](#).
- Carbon monoxide can replace oxygen in the bloodstream. During pregnancy, reduced levels of oxygen in the bloodstream can affect the development of the baby's brain.

How does exposure to carbon monoxide occur?



Exposure occurs by breathing air that contains carbon monoxide.

Sources include:

- Cooking and heating appliances that may be incorrectly installed or maintained, or may be inadequately ventilated, such as:
 - ▶ Unvented kerosene, gas, and water heaters.
 - ▶ Wood stoves.
 - ▶ Leaking fireplaces, chimneys, and furnaces.
 - ▶ Charcoal and propane equipment that is improperly used indoors, in garages, or in unventilated areas.

Other sources include:

- Gas stoves, generators, and other gasoline-powered equipment.
- Motor-vehicle exhaust, which can accumulate in garages, [enclosed parking facilities](#), [service stations](#), and [vehicle-repair facilities](#).
- Other gasoline- and diesel-powered engines, such as those in leaf blowers, lawn mowers, weed trimmers, snow blowers, and chain saws.
- Tobacco smoke and cannabis (marijuana) smoke.

During pregnancy, carbon monoxide can pass from mother to baby.

How can I reduce my exposure to carbon monoxide?

- ✓ Ensure that equipment and appliances that produce carbon monoxide are installed correctly, maintained in good condition, and vented to the outside, whenever possible.
- ✓ Install a carbon monoxide alarm in your home, test it frequently, and replace its batteries as recommended.
- ✓ Obtain annual inspections by a trained professional for heating systems and chimneys. Make sure that vent pipes, flues and chimneys are properly connected, cleared of any blockages, properly vented to the outside, and otherwise in good condition.
- ✓ Limit the time you spend in enclosed parking facilities, service stations, and vehicle-repair facilities.
- ✓ Always follow the manufacturer's instructions for fuel-burning equipment, including propane heaters and stoves. Products designated for outdoor use only should not be used indoors.

- ⊗ Never use kerosene heaters, charcoal grills, or barbecues indoors.
- ⊗ Do not idle a car in an enclosed garage or shed, even if the door is open to the outside. Carbon monoxide present in motor-vehicle exhaust can build up very quickly in garages, sheds, and the living areas of homes.
- ⊗ Never leave any machinery with gasoline-powered engines running in enclosed spaces. This includes lawn mowers, weed trimmers, snow blowers, and chain saws.
- ⊗ Never use your gas stove or oven to heat your home.
- ⊗ Do not use unvented gas fireplaces.
- ⊗ Do not use gasoline-burning appliances in enclosed spaces. For example, do not use gasoline-burning generators or camp stoves in homes, basements, campers, tents, vans, trucks, garages, or mobile homes.
- ⊗ Do not smoke. Do not allow children to breathe in tobacco smoke.

For more information:**General Fact Sheets and Resources**

- California Environmental Protection Agency (CalEPA)
California Air Resources Board (CARB)
 - ▶ Carbon Monoxide & Health
<https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>
 - ▶ Combustion Pollutants & Indoor Quality
<https://ww2.arb.ca.gov/resources/documents/combustion-pollutants-indoor-air-quality>
- US Consumer Product Safety Commission (CPSC)
 - ▶ Carbon-Monoxide-Questions-and-Answers
<https://www.cpsc.gov/Safety-Education/Safety-Education-Centers/Carbon-Monoxide-Information-Center/Carbon-Monoxide-Questions-and-Answers>
- Centers for Disease Control and Prevention (CDC)
 - ▶ Carbon Monoxide Poisoning Basics
<https://www.cdc.gov/carbon-monoxide/about/index.html>
- US Environmental Protection Agency (US EPA)
 - ▶ Carbon Monoxide (CO) Pollution in Outdoor Air
<https://www.epa.gov/co-pollution>

Scientific Information on Carbon Monoxide

- Agency for Toxic Substances and Disease Registry (ATSDR)
 - ▶ Toxicological Profile for Carbon Monoxide
<https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=1145&tid=253>

Proposition 65

- California Environmental Protection Agency (CalEPA)
Office of Environmental Health Hazard Assessment (OEHHA)
 - ▶ Proposition 65: Background
<https://www.p65warnings.ca.gov/faq>
 - ▶ Proposition 65: The List of Chemicals
<https://www.p65warnings.ca.gov/chemicals>
 - ▶ Proposition 65: Fact Sheets
<https://www.p65warnings.ca.gov/fact-sheets>