



# Portable Generators and Carbon Monoxide Poisoning

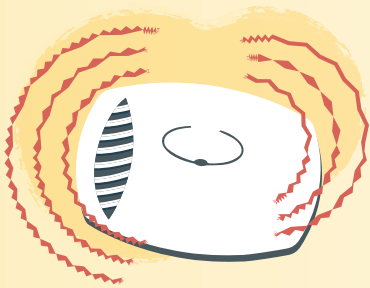


Fuel-burning portable generators (generators) are popular with Michigan homeowners, campers and hunters. Generators are convenient, but they can also be dangerous because they give off carbon monoxide (CO). CO is a poisonous gas that you cannot see, taste or smell. It can be deadly when you breathe it in. It is important to use generators safely to reduce your risk of CO poisoning.

## You can prevent CO poisoning when using a generator.

Generators burn carbon-based fuel (e.g., gasoline, propane, diesel, natural gas). When generators run too close to enclosed or partly enclosed spaces like homes, garages, buildings, campers or carports, CO can build up inside. This can cause CO poisoning in people. Follow these tips for CO safety when using a portable generator:

### Install CO detectors.



- Install battery-operated or battery back-up CO detectors on all floors and near all sleeping areas in your home.
- Test CO detectors according to the manufacturer's instructions.
- Replace batteries twice a year. During time changes (spring and fall) is an easy way to remember.
- Replace your CO detector every 5 years or according to the manufacturer's instructions.
- **Know that opening windows and doors and using fans is NOT enough to stop a deadly CO buildup in your home.**

### Properly use generators.



- Use generators outside. **DO NOT** use generators inside your home, garage, carport, basement, porch or any other enclosed space.
- Keep generators **at least 20 feet** from people, structures or enclosed spaces. Use an extra-long extension cord if needed.
- Always use a CO detector in your home when running a generator.
- Keep generators away from doors, windows or air intake vents.
- **Remember CO can build up and linger for hours, even when the generator has been shut off.**

### Educate your friends and family about CO symptoms.

Remind friends and family:

- Keep generators 20 feet away from enclosed spaces like houses and garages.
- Know that CO poisoning symptoms are like the flu.
- When someone has CO poisoning symptoms, they should get to fresh air immediately, and then call 911.



## CO facts to know.



CO is a poisonous gas. You cannot see, taste or smell CO, but it can be deadly when you breathe it in.



CO can build up in enclosed or partly enclosed spaces.



ALL carbon-based fuel-burning appliances and equipment including generators release CO.



People who are sleeping or intoxicated might not notice CO poisoning symptoms before it's too late.



Carbon-based fuels include natural gas, kerosene, gasoline, propane, charcoal, oil, etc.



Install CO detectors near all sleeping areas and on every floor to alert you of CO.

## CO poisoning has flu-like symptoms.

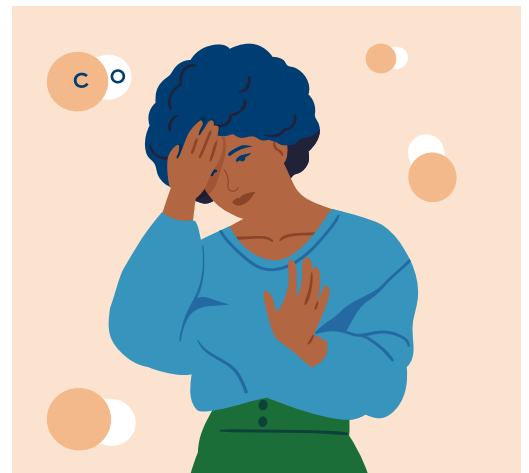
CO poisoning symptoms are similar to the flu.

**Symptoms should not be ignored.**

**You could DIE within minutes if you do nothing.**

Symptoms of CO poisoning are:

- Headache.
- Dizziness.
- Nausea.
- Vomiting.
- Fatigue.
- Weakness.
- Chest tightness.
- Confusion.
- Unconsciousness.
- Coma.
- Death.



**Call 911 if you have CO symptoms.**

**If you suspect CO poisoning or have symptoms OR if your CO detector goes off, leave the enclosed or partially enclosed space and move to fresh air right away.**

**Then, call 911 or go to the nearest emergency room as fast as possible for treatment.**

**After you call 911, stay away from the enclosed space even if you aren't experiencing symptoms until the fire department tells you it is safe to return.**

## CO poisoning is preventable.



**Learn more about CO poisoning.**

Go to [Michigan.gov/CarbonMonoxide](https://Michigan.gov/CarbonMonoxide) or scan the QR code.



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