

# Unintentional Carbon Monoxide Poisoning Annual Surveillance Report Summary: 2023

Carbon monoxide (CO) is an odorless, colorless and tasteless gas produced by the burning of carbon-based fuel (e.g., gasoline, natural gas, wood). CO exposure can lead to illness, known as CO poisoning.

The Michigan Department of Health and Human Services (MDHHS) oversees the CO Poisoning Surveillance Program. This program collects data from hospitals, emergency departments, the Michigan Poison Center, emergency medical services and death certificates on cases of illness and death due to unintentional CO poisoning in Michigan. The program analyzes the data to identify high risk groups and trends in CO poisoning. This annual report provides analysis results for the 2023 data.

## Results of the Analysis

- Among Michigan residents in 2023, there were 481 cases of illness due to unintentional CO poisoning. This number included 31 deaths.
- Women 25-44 years old and men 65 years and older had the highest CO poisoning rates.
- Available data suggests Black Michiganders had higher rates of CO poisoning than white Michiganders.
- Almost half of all CO poisonings occurred in the coldest months (December, January and February).
- The most common CO sources were vehicles, generators, furnaces and water heaters.
- The most common exposure site was residential settings, such as homes and apartments.

## CO Poisoning Prevention Recommendations

Based on these results, the following are CO poisoning prevention recommendations:

- Properly vent and service furnaces, water heaters and other carbon-based fuel burning appliances every year.
- Have a mechanic check vehicle exhaust systems every year.
- Do not use machines and tools that use carbon-based fuel in enclosed or poorly ventilated areas, such as basements.
- Install CO detectors on all floors and near every sleeping area in a home. Test detectors monthly and replace their batteries twice a year.

- Place generators at least **20 feet** from the home and never inside a home or garage.
- Do not heat living spaces with a gas oven.

## What's Next?

### MDHHS will

- Continue to conduct unintentional CO poisoning surveillance in the state of Michigan.
- Release updated reports annually to public health partners and the public.
- Use the best available data to inform people on the risks of CO poisoning and how to prevent it.
- Update CO data on the MiTracking data portal ([Michigan.gov/mitracking](https://Michigan.gov/mitracking)) annually.
- Develop health education messaging and materials for use by health educators and regional community engagement teams.

To read the full report, visit the [MDHHS Carbon Monoxide webpage](#).



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