

Carbon Monoxide: The Invisible Winter Danger in Upstate New York

During a severe flooding event in Oneida, New York, last summer many homes were left without electricity. An elderly couple used a generator to power their home while waiting for service to be restored. Over time, both began to feel unwell, experiencing headaches, dizziness, nausea, and increasing confusion. Their symptoms were subtle at first and could easily have been mistaken for fatigue or a mild illness. They reported never smelling or noticing anything unusual in their home, yet eventually both were diagnosed with carbon monoxide poisoning and required hospitalization.

Situations like this highlight how quickly carbon monoxide exposure can become dangerous. Carbon monoxide poisoning happens most often in the winter, when people spend more time indoors and rely on furnaces, kerosene space heaters, and backup generators to stay warm and keep their homes running.

Carbon monoxide is a toxic gas produced when fuels such as oil, wood, gasoline, or charcoal do not burn completely. It is especially dangerous because it is colorless, odorless, and tasteless, earning it the nickname “the silent killer.” Because it cannot be seen or smelled, carbon monoxide can build up inside homes without warning and reach life-threatening levels in a short amount of time.

Nationwide, the Centers for Disease Control and Prevention reports that accidental carbon monoxide exposure leads to more than 100,000 emergency department visits, about 14,000 hospitalizations, and hundreds of deaths each year. Carbon monoxide remains the leading cause of death from poisoning in the United States.

Locally, the risk is just as real. In 2024, the Syracuse Fire Department responded to 273 calls related to carbon monoxide concerns. Data from the Upstate New York Poison Center serving all counties north of Westchester County show approximately 250 reported carbon monoxide cases last year, including 55 cases in Onondaga, Oswego, and Oneida counties, and one reported death.

However, poison center data likely underrepresent the true number of exposures and deaths. Not every case is reported, and some fatalities – particularly those related to suicides, house fires, or natural disasters when generators and kerosene heaters are heavily used – may not be fully captured in these statistics.

Carbon monoxide poisoning can occur easily and without warning. Common sources include furnaces and heating systems, gas stoves, fireplaces, portable generators, and running cars even briefly in attached garages. Since carbon monoxide is impossible to see or smell, symptoms are often the first warning. These symptoms may feel like the flu (but without a fever) and can include headache, dizziness, weakness, nausea or

vomiting, fatigue, and confusion. In severe cases, exposure can lead to loss of consciousness, heart complications, or death.

The good news is that carbon monoxide poisoning is largely preventable. Every home should have working carbon monoxide detectors on every level and near sleeping areas, with batteries checked regularly. Generators and grills should never be used indoors or in garages and should be placed at least 20 feet away from the home, with exhaust pointed away from doors and windows. Cars should never be left running in garages, even with the door open. Heating systems and fuel-burning appliances should be inspected routinely, and vents and chimneys should be kept clear and unobstructed.

If a carbon monoxide alarm sounds or symptoms appear, everyone should leave the home immediately and call emergency services.

Taking these simple precautions can prevent serious illness and save lives as winter continues in Central New York. Carbon monoxide may be invisible, but with awareness and preparation, its dangers do not have to be.