Winter 2023

THE ANTIDOTE

News and Notes from the Blue Ridge Poison Center

Carbon Monoxide: A Sneaky Poison

- A group of teens was having a party in the garage of a house. They were using a propane space heater in the garage for heat. After a while, they all developed headaches and felt sick. One person fainted. All were treated at the emergency department and recovered. The fire department detected high levels of carbon monoxide in the garage.
- A woman in her 70's called the Blue Ridge Poison Center because she and her grandson felt "dizzy and wobbly" and were having trouble walking. They were operating a portable power generator in the mudroom of their house. The poison center specialist advised they may have carbon monoxide poisoning and should leave the house immediately and call 9-1-1 to be transported to an emergency department. The grandmother said she "didn't want to bother the rescue squad" and would drive them herself. The poison center specialist warned that this was dangerous because she would be driving impaired and could cause an accident.



Carbon monoxide alarms save lives.

• A man called 9-1-1 because his wife was slurring her words. He thought she might be having a stroke. When the fire department arrived, they discovered a car had accidentally been left running in the garage. The whole house smelled like engine exhaust. Tests showed very high levels of carbon monoxide inside the home.

The stories above are all true cases reported to the Blue Ridge Poison Center. Winter is coming and bringing increased risk of carbon monoxide (CO) poisoning. **In fact, more people die from accidental CO poisoning during the winter months than any other time of year.** CO is a poisonous gas formed when you burn any carbon-based fuel. It is a sneaky poison because it has no smell and no color. People may not be aware that they are breathing it.

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INSIDE: Antifreeze—is bitter better?

According to the U.S. Centers for Disease Control and Prevention, nearly 50,000 people in the U.S. visit an emergency department each year--and over 400 people die-- from accidental CO poisoning. **Symptoms of CO poisoning are often mistaken for the flu or other illness, and may include:**

- Headache
- Nausea and vomiting
- Chest pain
- Feeling tired, weak, or dizzy
- Confusion
- Loss of consciousness ("passing out")



Winter is the deadliest time of year for CO poisoning.

Very high concentrations of CO can cause loss of consciousness and even death in only a few breaths. A person who survives CO poisoning may suffer permanent damage to the brain or other organs.

A large number of CO poisoning cases are the result of portable power generators placed too close to a home. Other common sources include oil or gas furnaces, automobile engines, woodstoves, fuel-burning appliances like space heaters, and charcoal or gas grills.

Protect your family:

- Do not use portable generators or other fuel-burning appliances in an enclosed space such as a basement, attic, storage shed, or garage.
- Have all chimneys and furnaces inspected and cleaned by a professional once a year.
- Do not heat your home with a gas-powered oven or stove.
- Do not run your car engine in the garage, even with the garage door open.
- Make sure the tailpipe of your car is not blocked, especially by snow or leaves. A blocked tailpipe can cause CO gas produced by the engine to build up quickly inside the car.

The most important preventive measure you can take is to **install carbon monoxide detectors in your home.** If the alarm sounds—or if you suspect someone may be suffering from CO poisoning—move all people and pets outdoors to fresh air immediately. Then call 9-1-1 for help. Do not ignore an alarm, or try to find the source of the gas yourself. CO is invisible and can act very quickly.

POISON TRIVIA



TRUE or FALSE? For a medicine bottle to meet the legal definition of *child resistant*, 90% of senior adults tested must be able to open and close the bottle easily.

Answer on page 4

ANTIFREEZE: Is Bitter Better?



Antifreeze is a liquid that prevents the radiator in your automobile from freezing. It's also often mixed with engine coolant to help prevent overheating. Antifreeze contains liquid alcohols like ethylene glycol, propylene glycol, or methanol. A person who swallows antifreeze may feel "drunk" and have symptoms such as slurred speech, nausea and vomiting, dizziness, difficulty walking, and sleepiness.

Over time, the body breaks down and converts the alcohols in antifreeze into other, more dangerous chemicals. These chemicals may affect a person's breathing, heart rhythm, and cause serious damage to the kidneys and other organs. It's possible to lose consciousness, become unresponsive, and die. It can take many hours for symptoms to

develop, so a person may not realize they are in danger. It is important to seek medical help immediately if someone

swallows antifreeze, even if they feel fine.

Children, pets, and wildlife are attracted to antifreeze because it has a sweet taste. In the early 2000's, most antifreeze manufacturers started adding a bitter chemical to antifreeze called *denatonium benzoate*, or Bitrex[®]. Many states including Virginia now require all antifreeze sold to contain Bitrex[®]. The hope is that if children try to swallow the terrible-tasting antifreeze, they will spit it out.

Unfortunately, studies have shown that the number of childhood antifreeze ingestion cases did not significantly drop after Bitrix-laced products hit the market (Litovitz, et. al., 2008). This study also showed that there was no difference in the medical outcome of the children who swallowed antifreeze with or without Bitrex[®].

"It's not uncommon for young children to eat or drink something that tastes bad," says Kristin Wenger, Education Coordinator for the Blue Ridge Poison Center. "Parents often share stories with me of disgusting things their child ate. Some of these stories are pretty funny, but some are frightening and have resulted in harm to their child. Bottom line: don't assume that a child will naturally avoid or spit out any product that contains Bitrex[®]."



Not just for antifreeze! Bitrex[®]is added to many potential poisons including detergent, lithium batteries, and pesticides. "It's a good idea," says Kristin Wenger of the Blue Ridge Poison Center. "But don't rely solely on Bitrex[®] to prevent poisoning. Store products out of the sight and reach of children...just in case." [image: https://www.bitrex.com/]

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What about animals? There are a few studies that show Bitrex® may be somewhat effective at preventing wildlife and pets from eating or drinking products laced with it. But just like children, animals are unpredictable and not always deterred by a bitter taste.

Additional precautions should be taken to protect others from antifreeze:

- Clean up antifreeze spills immediately and completely. Even a spoonful is enough to cause harm.
- Check the ground beneath your car's engine regularly for leaks. Antifreeze manufacturers often add brightly colored dye to their product to make this easier.
- Store antifreeze up high, out the sight and reach of children.
- Don't store antifreeze in cups or bottles used for beverages. Someone could drink it by mistake.
- When you replace antifreeze, or if you flush your radiator, remember to take the used antifreeze to your local auto repair or radiator shop to be properly recycled or discarded. Never flush it down the drain or dump it into a driveway, roadside, or waterway. (Not only is that dangerous to people, pets, and wildlife-- it is illegal).

If you suspect that someone has ingested any amount of antifreeze, contact the Blue Ridge Poison Center immediately. Do not wait for symptoms to develop. Call 1-800-222-1222, 24-hours a day.



WARNING: Applesauce Pouches Recalled for High Lead Levels

Health officials are investigating a potential link between high blood lead levels in children and certain apple purée and applesauce products which contain cinnamon. Several products have been found to contain extremely high levels of lead, including:

- WanaBana brand apple cinnamon fruit purée pouches
- * Schnucks brand cinnamon applesauce pouches
- * Weis brand cinnamon applesauce pouches

Lead is a toxic metal which can cause permanent damage to the developing bodies and brains of young children. More information about the specific recalled products (including photos) may be found on the <u>FDA's website</u>.

The Blue Ridge Poison Center is affiliated with University of Virginia Health. Other funding sources include the Virginia Department of Health and HRSA. We are accredited by America's Poison Centers. Proudly serving the Commonwealth since 1978. Join the mailing list to receive this quarterly newsletter, or visit <u>www.brpc.virginia.edu</u>.









Poison Trivia answer: TRUE. If a senior adult cannot easily open AND close a medicine bottle's cap, they will refuse to use it. They will put their medicines in another less-secure tontainer, which could endanger container which could endanger poung children visiting their home.