



THE EHS CONNECTION

ENVIRONMENTAL HEALTH & SAFETY NEWSLETTER-JANUARY 2017

CARBON MONOXIDE: THE INVISIBLE KILLER

More than 400 Americans die from unintentional carbon monoxide poisoning every year, according to the Centers for Disease Control and Prevention. More than 20,000 visit the emergency room, and more than 4,000 others are hospitalized.

WHERE DOES CARBON MONOXIDE COME FROM?

Carbon monoxide is an odorless, colorless gas that often goes undetected, striking victims caught off guard or in their sleep. This "silent killer" is produced by burning fuel in cars or trucks, small engines, stoves, lanterns, grills, fireplaces, gas ranges, portable generators or furnaces. When the gas builds up in enclosed spaces, people or animals who breathe it can be poisoned. Ventilation does not guarantee safety.

The Consumer Product Safety Commission says about 170 people in the United States die every year from carbon monoxide produced by non-automotive consumer products, such as room heaters. So as the weather turns colder, it's important to take extra precautions.

WHO IS AT RISK?

Exposure to carbon monoxide can result in permanent neurological damage or death, and anyone can be at risk.

The CDC says infants, the elderly, and people with chronic heart disease, anemia or breathing problems are more prone to illness or death, but carbon monoxide doesn't discriminate - especially if certain conditions are present.

In July 2015, for example, four young people and a dog were found dead of carbon monoxide poisoning inside a cabin in Maine. Authorities believe they went to bed without shutting off a gas-powered generator running in the basement.

HOW CAN I PREVENT CARBON MONOXIDE POISONING IN MY HOME?

Winter can be a prime time for carbon monoxide poisoning as people turn on their heating systems and mistakenly warm their cars in garages.

The National Safety Council recommends you install a battery-operated carbon monoxide detector in your home near the bedrooms. Check or replace the battery when you change the time on your clocks each spring and fall. The CDC offers these additional tips:

- Have your heating system, water heater and any other gas or coal-burning appliances serviced by a qualified technician every year
- Do not use portable flameless chemical heaters indoors
- Never use a generator inside your home, basement or garage or less than 20 feet from any window, door or vent; fatal levels of carbon monoxide can be produced in just minutes
- Have your chimney checked and cleaned every year, and make sure your fireplace damper is open before lighting a fire and well after the fire is extinguished
- Make sure your gas appliances are vented properly
- Never use a gas oven for heating your home
- Never let a car idle in the garage
- Know the symptoms of carbon monoxide poisoning

STEPS TO TAKE WHEN CARBON MONOXIDE ALARM SOUNDS

The CPSC says never ignore a carbon monoxide alarm, and do not try to find the source of the gas. Instead, follow these steps:

- Immediately move outside to fresh air
- Call emergency services, fire department or 911
- Do a head count to check that all persons are accounted for
- Do not re-enter the premises until emergency responders have given you permission to do so

SYMPTOMS OF CARBON MONOXIDE POISONING

The U.S. Fire Administration has put together materials on the dangers of carbon monoxide. Included is a list of carbon monoxide poisoning symptoms.

Low to moderate carbon monoxide poisoning is characterized by:

- Headache
- Fatigue
- Shortness of breath
- Nausea
- Dizziness

High level carbon monoxide poisoning results in:

- Mental confusion
- Vomiting
- Loss of muscular coordination
- Loss of consciousness
- Death

Symptom severity varies depending on the level of carbon monoxide and duration of exposure. Mild symptoms sometimes are mistaken for flu.

THE STAFF AT ENVIRONMENTAL HEALTH & SAFETY WISHES EVERYONE A SAFE, HEALTHY AND HAPPY NEW YEAR!!! Eric, Tim, Christine, Charlene, Carl and Lisa

HAPPY NEW YEAR!

We hope that 2017 is a great year for everyone on campus. January will be a quiet month at SUNY Oswego with our students home on winter break. Now is a great time start preparing for our upcoming annual OFPC Fire Safety Inspection. Here are some tips that should be followed at ALL times-not just for the inspection!

PRE-INSPECTION WALK THROUGH TIPS

- Remove all Extension Cords and replace them with Power Strips with Over Current Protection Breakers.
- Extension Cords not being used shall be disconnected from the outlet and properly coiled up. No Power Strips can be plugged into another Power Strip or Extension Cord. Device used must be plugged directly into an outlet.
- Repair/Replace Frayed Electric Cords and have any Junction Boxes or Electrical Covers replaced so that connections and wires are not exposed.
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- Labeled Fire Doors cannot be propped open. Remove any prop open devices.
- Properly secure any Gas Cylinders to prevent them from falling over by using Chain and/or Straps to a fixed point.
- Combustible Storage cannot be within 18 inches in rooms that are protected by Sprinklers and 24 inches without sprinklers.
- Check Flame Retardant requirements for Curtains/Drapes in Assembly Spaces of 50 or more people and Lab Spaces.
- Ensure that all Hallways and Stairwells are free of obstructions-especially Combustible Material Storage.
- Ensure that all Exit Signs are Illuminated and in Good Condition.
- Ensure that All Ceiling Tiles are in place and not broken.
- Ensure that all Fire and Life Safety equipment is accessible and not obstructed.
- Maintain Unobstructed Exits and Egress.

Annual OFPC Fire Inspection Top 10 Cited Violations

- Improper Use of Extension Cords
- Swinging Fire Doors Do Not Close & Latch
- Obstructed Means of Egress Including Snow & Ice
- Excessive & Unsafe Accumulation of Combustible Storage
- General Electrical Hazards-Frayed Cords, Damaged Outlets, Etc.
- Extinguishers Improperly Installed and Maintained
- Propped Open Fire Doors
- Fire Resistance Rating Not Maintained
- Excess Combustible Storage in Mechanical Rooms
- Illegal Power Taps to Outlets, Electrical

If you have any questions or concerns about fire safety in your area please feel free to call or e-mail our Fire Marshal, Tim Ganey x3156/timothy.ganey@oswego.edu

The New York State Office of Fire Prevention and Control (OFPC) was originally established shortly after World War II as the Division of Safety in the state Office for Local Government.

In 2010 the Office of Fire Prevention and Control was merged into the newly created Division of Homeland Security and Emergency Services (DHSES). This merger brought together several state offices which all provide public protection services; collectively under one agency these offices together produce synergy resulting in effective and efficient collaboration and coordination benefiting emergency services, citizens and businesses throughout New York State. OFPC's main goal is the effective and efficient delivery of essential fire and life safety protection to all New Yorkers.

Among its many other tasks, OFPC inspects over 25,000 buildings-including every building on the SUNY Oswego Campus-annually for fire and life safety hazards.

COLD WEATHER CAN BE DANGEROUS FOR ANYONE WHO ENJOYS OUTDOOR WINTER SPORTS, AND PEOPLE WHO WORK OUTDOORS DURING WINTER MUST BE PARTICULARLY MINDFUL OF THE RISKS

BEFORE VENTURING OUTSIDE IN WINTER, BE SURE TO:

- * Check the temperature and limit your time outdoors if it's very cold, wet or windy
- * Bundle up in several layers of loose clothing
- * Wear mittens rather than gloves
- * Cover your ears with a warm hat
- * Wear socks that will keep your feet warm and dry



FROSTBITE

Even skin that is protected can be subject to frostbite. It's the most common injury resulting from exposure to severe cold, and it usually occurs on fingers, toes, nose, ears, cheeks and chin. If caught early, it is possible to prevent permanent damage. If not, frostbite can lead to amputation.

Superficial frostbite affects the skin surface, while the underlying tissue remains soft. The skin appears white, waxy or grayish-yellow and is cold and numb.

If the condition is allowed to progress to deep frostbite, all layers of the skin are affected and the outcome likely will be more serious. The skin will become completely numb, blisters may form and eventually the skin tissue dies and turns black.

IF YOU SUSPECT FROSTBITE:

- * Get indoors immediately
- * Seek medical attention
- * Remove constrictive clothing and jewelry that could impair circulation
- * Place dry, sterile gauze between toes and fingers to absorb moisture and keep them from sticking together
- * Elevate the affected area to reduce pain and swelling
- * For superficial frostbite, you may also place the affected area in water that is 100 to 105 degrees until the tissue softens

HYPOTHERMIA

Hypothermia occurs when the body's temperature drops below 95 degrees. Severe shivering, one of the first signs of hypothermia, is beneficial in keeping the body warm. But as hypothermia progresses, shivering gives way to drowsiness or exhaustion, confusion, shallow breathing, irregular heartbeat, slurred speech, loss of coordination and, eventually, unconsciousness and even death.

In one of the most bizarre symptoms of hypothermia, "paradoxical undressing," a person actually undresses instead of bundling up. Researchers believe that in the final throes of hypothermia, a person may feel like he or she is overheating due to a rush of warm blood to the extremities.

SO WHAT SHOULD YOU DO IF YOU ENCOUNTER SOMEONE SUFFERING FROM HYPOTHERMIA?

- * Move the victim inside and remove any wet clothing
- * Call for medical attention
- * Add blankets, pillows, towels or newspapers beneath and around the victim
- * Cover the victim's head
- * Handle the victim gently to avoid cardiac arrest
- * Keep the victim in a horizontal position
- * If necessary, give CPR



None of these steps are a substitute for proper medical care. Be sure to seek medical attention for frostbite and hypothermia as soon as possible.

IF YOU GO TO EXTREMES

Winter is fun. So go make those snow angels and tackle that double black diamond. Just make sure to limit exposure and bundle up.

If you're considering taking the Polar Plunge, make sure to consult a doctor first to determine if you have any underlying health problems. The enormous shock of these types of activities puts a strain on the heart, doctors say. Keep in mind:

- * Cold shock will have you gasping for air
- * Blood flow will divert to your organs
- * You may become paralyzed or weak
- * Blood pressure increases due to constricted blood vessels, causing greater risk of stroke

SPACE HEATER SAFETY

Safety is a top consideration when using space heaters. The U.S. Consumer Product Safety Commission estimates that more than 25,000 residential fires every year are associated with the use of space heaters, resulting in more than 300 deaths. In addition, an estimated 6,000 people receive hospital emergency room care for burn injuries associated with contacting the hot surfaces of room heaters, mostly in non-fire situations.

When buying and installing a small space heater, follow these guidelines:

- Only purchase newer model heaters that have all of the current safety features. Make sure the heater carries the Underwriter's Laboratory (UL) label.
- Choose a thermostatically controlled heater, because they avoid the energy waste of overheating a room.
- Select a heater of the proper size for the room you wish to heat. Do not purchase oversized heaters. Most heaters come with a general sizing table.
- Locate the heater on a level surface away from foot traffic. Be especially careful to keep children and pets away from the heater.

VENTED AND UNVENTED COMBUSTION SPACE HEATERS

Space heaters are classified as vented and unvented or "vent-free." Unvented combustion units are not recommended for use inside your home, because they introduce unwanted combustion products into the living space—including nitrogen oxides, carbon monoxide, and water vapor—and deplete air in the space. Most states have banned unvented kerosene heaters for use in the home and at least five have banned the use of unvented natural gas heaters.

Vented units are designed to be permanently located next to an outside wall, so that the flue gas vent can be installed through a ceiling or directly through the wall to the outside. Look for sealed combustion or "100% outdoor air" units, which have a duct to bring outside into the combustion chamber. Sealed combustion heaters are much safer to operate than other types of space heaters, and operate more efficiently because they do not draw in the heated air from the room and exhaust it to the outdoors. They are also less likely to backdraft and adversely affect indoor air quality.

Less expensive (and less efficient) units use the room air for combustion. They do not have a sealed glass front to keep room air away from the fire and should not be confused with a sealed combustion heater.

In addition to the manufacturer's installation and operating instructions, you should follow these general safety guidelines for operating any combustion space heater:

- For liquid-fueled heaters, use only the approved fuel. Never use gasoline! Follow the manufacturer's fueling instructions. Never fill a heater that is still hot. Do not overfill the heater -- you must allow for the expansion of the liquid. Only use approved containers clearly marked for that particular fuel, and store them outdoors.
- Have vented space heaters professionally inspected every year. If the heater is not vented properly, not vented at all, or if the vent is blocked, separated, rusted, or corroded, dangerous levels of carbon monoxide (CO) can enter the home causing sickness and death. CO also can be produced if the heater is not properly set up and adjusted for the type of gas used and the altitude at which it is installed.

ELECTRIC SPACE HEATERS

Electric space heaters are generally more expensive to operate than combustion space heaters, but they are the only unvented space heaters that are safe to operate inside your home. Although electric space heaters avoid indoor air quality concerns, they still pose burn and fire hazards and should be used with caution.

For convection (non-radiant) space heaters, the best types incorporate a heat transfer liquid, such as oil, that is heated by the electric element. The heat transfer fluid provides some heat storage, allowing the heater to cycle less and to provide a more constant heat source.

When buying and installing an electric space heater, you should follow these general safety guidelines:

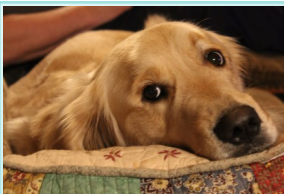
- Electric heaters should be plugged directly into the wall outlet. If an extension cord is necessary, use the shortest possible heavy-duty cord of 14-gauge wire or larger. Always check and follow any manufacturer's instructions pertaining to the use of extension cords.
- Buy a unit with a tip-over safety switch, which automatically shuts off the heater if the unit is tipped over.

ERGONOMIC ASSESSMENT: CHRISTINE BODY HAS BEEN DOING ERGONOMIC ASSESSMENTS SINCE 1996 AND IS AVAILABLE TO DO THEM HERE ON CAMPUS. SHE CAN BE REACHED AT 312-2770 AND WOULD BE HAPPY TO ASSIST YOU WITH ANY QUESTIONS OR ISSUES.

JANUARY WORD SEARCH

For a chance to win a great prize (more like an OK prize, but-hey, it's a PRIZE!), complete the Word Search and send it via e-mail to lisa.drake@oswego.edu OR through Campus Mail: Lisa Drake, 110 Lee Hall. Make sure to put your name on it! The winner for December was Barbara Marotta. Look for: Carbon Monoxide, Odorless, Colorless, Silent Killer, Detector, Generator, Alarm, Layers, Mittens, Hat, Socks, Frostbite, Hypothermia, Shivering, Medical Attention, Happy New Year, OFPC Inspection, Extension Cords, Power Strip, Fire Doors, Combustible Storage, Exit Signs, Ceiling Tiles, Space Heater, Underwriters Laboratory, Vented, Unvented, Electric, Convection.

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CALVIN'S TIP FOR THE MONTH: BRING A TOWEL ON LONG WALKS TO CLEAN OFF STINGING, IRRITATED

PAWS. AFTER EACH WALK, WASH AND DRY YOUR PET'S FEET AND STOMACH TO REMOVE ICE, SALT AND CHEMICALS—AND CHECK FOR CRACKS IN PAW PADS OR REDNESS BETWEEN THE TOES.

DUTCHISM FOR JANUARY

BEWARE THE STORM

THE SNOW FALLS SILENT THROUGH THE NIGHT,
A SILENCE FALLS WITH SHADOWS AND LIGHT,
THE HILL RESIDES IN A WHITE GOWN-
I'M OUTTA HERE I'M GOIN' TO TOWN.