



"Safety Comes First"

Case Western Reserve University Environmental Health and Safety

Dec 2024 –
Jan 2025

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In this issue:

National Radon Action Month

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| National Radon Action Month | 1 | January is National Radon Action Month. Radon can't be seen, smelled, or tasted, but high levels of the gas can cause health problems and even death if undetected. The Environmental Protection Agency (EPA) and U.S. Surgeon General encourage all Americans to test their homes, schools, and other buildings for radon to avoid unnecessary exposure. If high levels are found, you can implement a plan to protect yourself and your loved ones. |
| <i>Fire Extinguishers: Requirements and Training</i> | 2 | A preventable health risk, exposure to radon is the leading cause of lung cancer deaths among nonsmokers and accounts for approximately 12% of lung cancers annually in the United States. An estimated 15,000 to 22,000 Americans die each year from radon-related disease. |
| <i>Secondary Trauma in the Workplace</i> | 4 | During National Radon Action Month, you can take these four steps to prevent radon exposure and stay healthy: |
| <i>Winter Holiday Fire Safety</i> | 5 | Test your home with an easy-to-use test kit, which can be found online or in home improvement stores. Any home can be affected by radon moving up from soil gas or even well water. |
| <i>Chemical Spotlight: Propyl Alcohol</i> | 7 | Attend a National Radon Action Month event in your area. |
| <i>Fun Page</i> | 8 | Spread the word. Spend time encouraging others to test their homes. Write letters to local media or representatives asking your community to learn about the dangers of radon from the Centers for Disease Control and Prevention (CDC), the Radon Leaders Saving Lives Campaign, or the EPA. |
| <i>Staff</i> | 9 | Build or buy a radon-resistant new-construction home whenever possible. |
| 2025-1 | | Source: Safety BLR |

Fire Extinguishers: Requirements and Training



“...all fire extinguishers (must) be located so they’re easily accessible to employees.”

Most workplace fires start as small fires that could be safely and quickly extinguished. Providing an adequate number of properly maintained portable fire extinguishers and training your employees to use them could save your company from experiencing dramatic losses from a large, out-of-control fire. The requirements of the Occupational Safety and Health Administration's (OSHA) portable fire extinguisher standard apply to all employers, with two exceptions:

1. If you have a written fire safety policy that requires all employees to evacuate immediately when the fire alarm sounds and you have met the requirements of emergency action and fire prevention plans.
2. If you designate and train only certain employees to use fire extinguishers (for example, fire brigade members). Otherwise, you must meet the requirements of the standard, which stipulate that all fire extinguishers:
 - Be located so they’re easily accessible to employees.
 - Be fully charged and in operable condition at all times.
 - Always be kept in their designated place except when being used.
 - Be selected and distributed around your facility based on the classes of fires that may occur in each work area.
 - Be located so that travel distance to an extinguisher meets the requirements of the standard:
 - 75 feet for Class A
 - 50 feet for Class B (flammables)
 - 50 to 75 feet for Class C (energized electrical equipment)
 - 75 feet for Class D (combustible materials)
 - 30 feet for Class K (combustible cooking media)

Fire Extinguishers, cont.

(Continued from page 2)

- Be visually inspected once a month and receive annual maintenance.

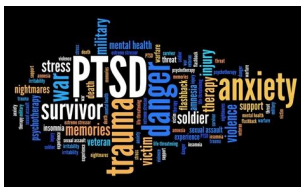
Alternative equivalent protection must be provided whenever a fire extinguisher is removed from service for maintenance. In addition, regularly scheduled and properly recorded hydrostatic testing on extinguishers must be performed by trained personnel with suitable testing equipment.

All employees who are expected to use fire extinguishers must be trained in the principles of extinguisher use and the hazards involved. Any training program should contain, at a minimum, the following elements:

- How fires start
- Classes of fires
- How fires are extinguished
- Types of extinguishers
- Fight-or-flight decision
- How to use a fire extinguisher (**PASS** system)
 - **P**ull the pin, **A**im the nozzle at the base of the fire, **S**queeze the handle to discharge the extinguisher, and **S**weep the nozzle from side to side at the base of the fire until it is out.
- Visual inspections of fire extinguishers
- Care and maintenance requirements
- Location and signage requirements

“Alternative equivalent protection must be provided whenever a fire extinguisher is removed from service for maintenance.”

Secondary Trauma in the Workplace



“Understanding the signs of secondary trauma will help leaders to support employees when they need it most.”

Whether working in a high-hazard industry or witnessing a colleague’s struggle in a toxic work environment, we all face the possibility of being exposed to secondary trauma.

While personal injury refers to harm or an accident directly sustained by an individual while performing work-related tasks, such as a fall or exposure to hazardous materials, secondary, or vicarious, trauma arises when an individual is indirectly affected by exposure to another person’s pain or emotional struggle.

Secondary trauma often unfolds over a longer period of time because in many cases, it can be the result of repeated exposure to traumatic events. That may occur from listening to a victim’s stories, responding to the aftermath of horrific events, or viewing difficult images over and over. Secondary trauma can be profound and completely change a person’s emotional responses and view of the world, yet many people don’t realize it’s a risk.

Understanding the signs of secondary trauma will help leaders to support employees when they need it most. Everyone’s experience of secondary trauma is different, but typical symptoms may include:

- Avoidance of work, meetings, and responsibilities
- Hypervigilance around colleagues or certain working conditions
- Rigid, binary thinking, with little room for compromise
- Argumentative behavior
- Emotional shutdown or burnout
- Abuse of alcohol or drugs

If employees can recognize these signs in themselves or coworkers, they can use strategies to help prevent or address secondary trauma. Strategies might include taking advantage of available resources, regularly communicating with managers, striving for work/life balance, attending trauma-informed workshops, and participating in regular assessments of workplace safety to ensure a feeling of comfort and security, especially after experiencing secondary trauma.

Winter Holiday Fire Safety

The holiday season brings the festive opportunity to decorate homes and businesses, gather with friends and family, and prepare special meals. The U.S. Fire Administration (USFA) warns that those same decorations and activities may increase your community's chance of a fire.

According to the National Fire Protection Association's winter holiday fire facts:

- U.S. fire departments responded to an estimated average of 835 home structure fires per year that began with decorations, excluding Christmas trees. These fires caused an annual average of 3 civilian fire deaths, 30 civilian fire injuries, and \$14 million in direct property damage.
- Electrical distribution of lighting equipment was involved in more than two in five (41%) home Christmas tree fires.
- Nearly one of every five (20%) Christmas tree fires were started by lamps or bulbs. Eleven percent were started by candles.
- Roughly two of every five (40%) home Christmas tree fires started in the living room.
- Candle fires peak in December and January, with 11% of candle fires in each of these months.
- Thanksgiving is the peak day for home cooking fires, followed by Christmas Day and Christmas Eve.
- Year-round, one-third (32%) of home decoration fires was started by candles. This jumped to almost half in December, when candles started 46% of such fires. Cooking started one-fifth (20%) of decoration fires.

To safely enjoy the holiday season, make sure to apply these tips in your house or office:

1. **Candles:** Keep candles at least 12 inches away from anything flammable. Check that candle holders are stable and away from pets or children who may knock them over. Consider using battery-operated flameless candles instead to mimic the look and feel of real candles without the risk.
2. **Holiday lights:** Inspect holiday lights each year before hanging them with clips, not nails. Throw away any strands with frayed wires, and read the manufacturer's instructions for the maximum number of

(Continued on page 6)

“Thanksgiving is the peak day for home cooking fires, followed by Christmas Day and Christmas Eve.”

Winter Holiday Fire Safety, cont.



*“...keep
a close
eye on
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food
cooking
on the
stove or
in the
oven.”*

(Continued from page 5)

strands to connect. Unplug all lights before leaving the house or going to bed.

3. **Christmas trees:** Water your tree every day to keep it from getting dry. Place your tree at least 3 feet away from any heat source, and avoid blocking any exits. As soon as your tree becomes dry and brittle, discard it.
4. **Fireplace:** Hire a professional to inspect your fireplace and clean your chimney before burning wood.
5. **Gifts:** Be cautious when buying devices with lithium-ion batteries, which are found in toys, smartphones, and even scooters. When not used correctly or damaged, these batteries can catch fire or explode.
6. **Cooking:** When preparing holiday meals, keep a close eye on any food cooking on the stove or in the oven. Use a timer to avoid overcooking or burning food. Keep all flammable kitchen accessories—oven mitts, wooden utensils, towels—away from your stovetop.

By following these safety tips and encouraging your guests to do the same, we can avoid holiday fires and focus on celebrating the season with loved ones.



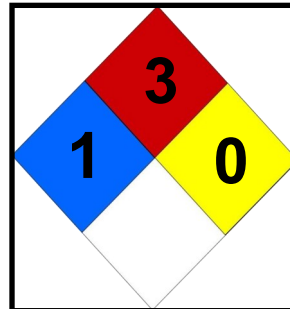
Source: Safety BLR

Chemical Spotlight: Propyl Alcohol

Propyl alcohol is a colorless liquid with a mild odor of alcohol. It's used in printing, making textile and leather products, and making other chemicals. Propyl alcohol isn't compatible with oxidizing agents, acid chlorides, acid anhydrides, strong bases, metals, and metal salts. Store in tightly closed containers in a cool, well-ventilated area away from combustibles. Sources of ignition are prohibited where propyl alcohol is used, handled, or stored. Metal containers involving the transfer of propyl alcohol should be grounded and bonded. Use only nonsparking tools and equipment, especially when opening and closing containers of propyl alcohol.

If propyl alcohol is spilled or leaked, evacuate persons not wearing protective equipment from the area of the spill or leak, and remove all ignition sources. Also, use personal protective gloves and clothing. Safety equipment manufacturers recommend butyl rubber and Viton as protective materials. Wear indirect-vent and impact- and splash-resistant goggles, as well as a face shield.

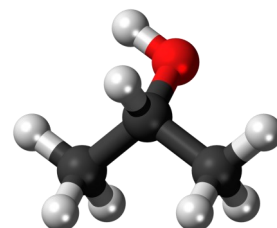
Prevent further leakage or spillage if it's safe to do so, and keep propyl alcohol out of confined spaces, such as sewers, because of the possibility of an explosion. Cover liquid with an activated charcoal adsorbent, and place in covered containers for disposal. Ventilate and wash the area after cleanup is complete. It may be necessary to contain and dispose of propyl alcohol as a hazardous waste. Contact your state Department of Environmental Protection (DEP) or your regional office of the federal Environmental Protection Agency (EPA) for specific recommendations.



“...evacuate persons not wearing protective equipment from the area of the spill or leak.”



Source: Safety BLR

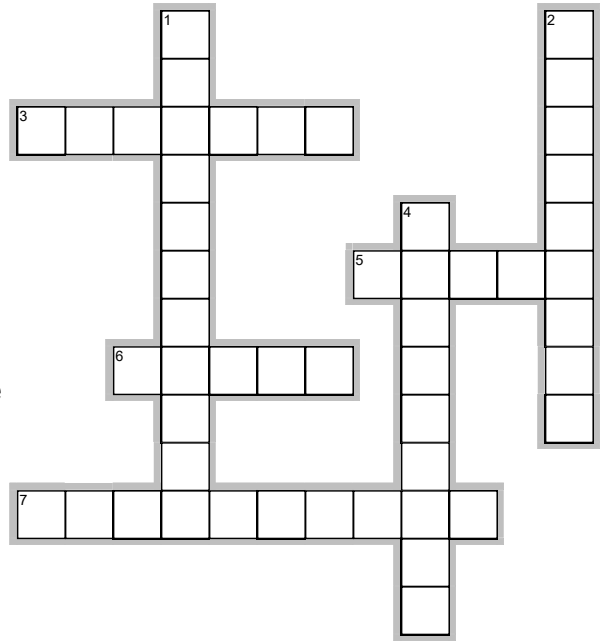


Fun Page

FUN PAGE

Across

3. Consider using battery-operated flameless _____ instead of the wicked wax ones.
5. _____ containers involving the transfer of propyl alcohol should be grounded and bonded.
6. Exposure to _____ is the leading cause of lung cancer deaths among nonsmokers.
7. Class C fire extinguishers are used for _____ fires.

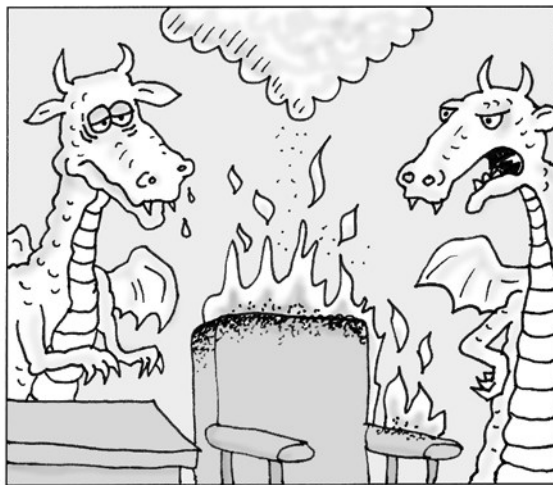


Down

1. Regularly scheduled and properly recorded _____ testing on extinguishers must be performed by trained personnel with suitable testing equipment.
2. Hire a professional to inspect your _____ before burning wood.
4. _____ trauma can be profound and completely change a person's emotional responses and view of the world.

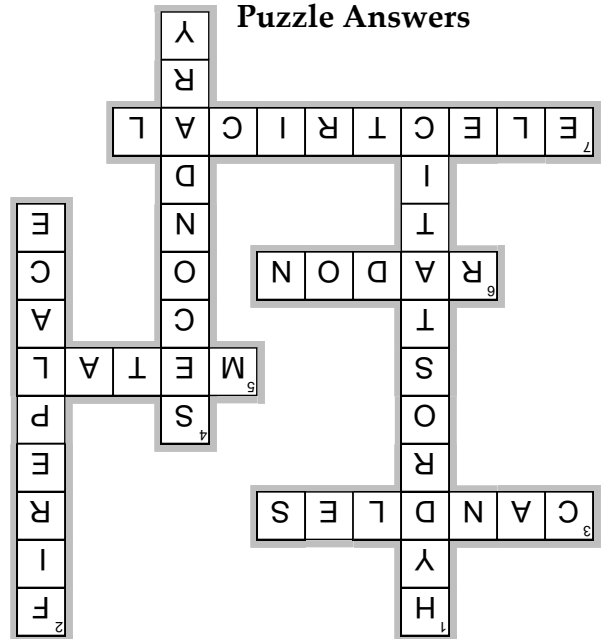
EclipseCrossword.com

Funny Corner



“Gesundheit! Now where the heck is the fire extinguisher?”

Puzzle Answers



EclipseCrossword.com

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Safety Quotes

*Better
dead sure
than sure
dead.*

*~Author
Unknown*

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