

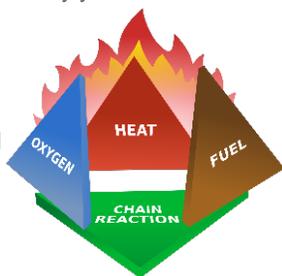
Fire safety

Big or small, fire safety is for all!

October is National Fire Prevention Month, a time when we should all become more aware of fire safety and prevention. Fires are among the deadliest workplace hazards. According to the Bureau of Labor Statistics, there are over 1,200 fire-related injuries and over 120 fire-related deaths in the workplace every year in the U.S.

The basics

Understanding how fires start can save your life. To create and sustain fire, you must have the following in the right proportions:



- **Oxygen:** This is plentiful in most of our work areas; the normal atmosphere contains about 21% oxygen
- **Fuel:** This can be anything that will burn, such as paper, wood, liquids, or even metals
- **Heat:** This is required to release vapor from the fuel and cause ignition
- **Chain reaction:** This is how fire sustains combustion using oxygen, fuel, and heat

Once ignited, fire will continue to burn until at least one of the above components is removed, either naturally or by extinguishment, such as a portable fire extinguisher, fire hose, or sprinkler system in your building.

Tips for Success When Talking to Your Team

- **Preparation is Key:** Keep the topic relevant. Work with your team to review fire safety in your workplace and make sure everyone knows what to do and where to go in the event of a workplace fire.
- **Stay Positive:** Keep the focus on what can be done to create a safe workplace, instead of focusing on what has gone wrong in the past.
- **Share a Story, Ask for a Story:** Storytelling is a powerful method to convey information. Stories from your employees make the topic even more relatable.

Fire in the workplace

Fires can start from many sources in the workplace. Fire and smoke can spread very quickly, especially when doors and windows are open. Here are some examples of common sources of fire in the workplace and how to prevent them:

- The biggest cause of workplace fires are **Overloaded or damaged electrical equipment**, such as outlets or electrical cords. Always ensure electrical equipment is in good condition, not overloaded, and used as intended.
- Sparks and heat from hot work, such as **welding, cutting, or grinding**, can easily ignite materials in the area. Inspect your work area before any hot work and be sure to complete a permit. Always have a fire watch during and after hot work, as indicated on the permit.
- Only **smoke** in designated areas and dispose of cigarettes in fire-safe smoking waste containers.
- Storage of **flammable liquids**, such as aerosols and paint thinners, must be in approved storage cabinets. Ensure cabinets are not blocked by equipment or materials and always close flammable liquid containers after use.
- Shop rags soaked with oil or paint can self-ignite, which is also known as **spontaneous combustion**. Used shop rags must be stored in air-tight, self-closing metal containers.
- The accumulation of combustible materials is a serious fire hazard. **Good housekeeping** is one of the best fire prevention methods. Empty the trash often and never block sprinkler heads, standpipes, alarm panels, alarm pull stations, or fire extinguishers.

There's a fire in my area!

- ✓ Stay calm. You are not required to fight a fire, but you are expected to activate the building fire alarm (pictured at right) or call 911 to report the emergency.
- ✓ Evacuate the area immediately and encourage others to exit.
- ✓ You may attempt to extinguish the fire using a portable fire extinguisher if the fire is small and you are comfortable doing so. Never put yourself in danger to fight a fire!
- ✓ Even if you extinguish a fire yourself, you must still contact the authorities as the fire might not be completely out or it could re-ignite.



Preparation and training are key

Risk Management offers fire extinguisher training in the spring and summer at the Evanston campus. Training is available upon request and is one hour. Contact Gwen Butler at gwen.butler@northwestern.edu or 847.491.4936 for details.

Learn more: Complete *Fire Extinguisher Safety* training at learn.northwestern.edu.

Safety at home

3 out of 5 fire deaths happen in homes with no smoke detectors or no working detectors, according to the National Fire Protection Association. Working smoke detectors provide early warning so you and your family can get outside quickly. Below are safety tips to keep your family safe:

- ✓ Smoke detectors should be installed in all sleeping rooms, hallways, and basements.
- ✓ Test all smoke detectors monthly and replace every 10 years.
- ✓ Ensure a fire extinguisher is on every level. Inspect extinguishers monthly and replace every 12 years, if damaged, or after use.

For Additional Information

Contact Gwen Butler, Director, Environmental Health & Safety, at 847.491.4936 with any questions.

Do you or your team have a safety story you'd like to share? Contact Risk Management Services at gwen.butler@northwestern.edu for details.