

Electrical Safety

Awareness

May is National Electrical Safety Month, a time when we should all become more aware of the dangers associated with working near electricity. Identifying electrical hazards in the workplace and understanding best practices are critical to preventing injuries and property damage.

The shocking truth

Electrical hazards can cause burns, electrocution, shock, arc flashes, fires and explosions. According to the National Fire Protection Association (NFPA), 1,651 workers died in the U.S. from electrical incidents in the 10-year period from 2007 to 2016. That's three fatalities per week!

Did you know? 25% of workplace fires are caused by faulty electrical equipment.

Source: NFPA

While electrical hazards are not the leading cause of on-the-job injuries and fatalities, they are disproportionately much more fatal and costly. For example, here at Northwestern, during the same 10-year time period, there were six electrical-related injuries costing the university \$143,550.29.

Tips for Success When Talking to Your Team

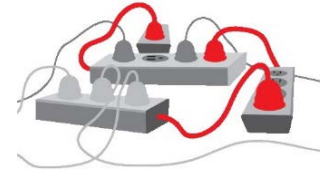
Preparation is Key: Keep the topic relevant. Work with your team to review common electrical hazards in your workplace and discuss how they can be used safely.

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.

Common electrical hazards

Daisy chaining: Power strips and extension cords are rated for specific amounts of electricity. Connecting two or more together creates a potential for electrical failure and fire. See daisy chaining example on the right.



Improper grounding: Equipment that is not properly grounded can cause shock or electrocution. Devices such as ground fault circuit interrupters (GFCIs) are built into cords and outlets to protect us from these hazards. GFCIs must be used in all environments where water is present, such as restrooms and rooftops.

Non-approved electrical equipment: Equipment that has not been tested and approved by an independent testing laboratory exposes you to serious electrical hazards. Always verify equipment by locating the mark of an approved testing laboratory. Visit the Occupational Safety and Health (OSHA) [website](#) for a complete list of nationally-recognized testing laboratories. Below are examples of common approval markings:



Intertek

You have the power to work safe

- ❖ Only qualified persons are permitted to perform electrical work
- ❖ Inspect all electrical devices and tools before each use
- ❖ Do not use extension cords for permanent use (more than 90 days) and do not run them through walls, under rugs, in ceilings, through doorways, near water, or in areas where damage could occur
- ❖ Never remove the ground pin on a 3-prong plug to make it fit into a 2-prong electrical receptacle

Preparation and training are key

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

Safety at home

According to the Electrical Safety Foundation International, an average of 51,000 electrical home fires occur each year, claiming almost 500 lives, injuring more than 1,400 people, and causing \$1.3 billion in property damage. Here are some tips to keep you and your family safe:

- ✓ Replace or repair all damaged power cords and equipment
- ✓ Do not overload outlets by plugging in too many electrical devices
- ✓ Avoid using extension cords as much as possible
- ✓ Keep electrical equipment and outlets away from water, snow, and ice
- ✓ When children are present, install tamper-resistant safety caps on all unused electrical outlets

For Additional Information

Contact Gwen Butler, Director, Environmental Health & Safety, at 847.491.4936

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