Electrical Safety

May is National Electrical Safety Month, a time to learn and refamiliarize yourself with electrical hazards in the workplace and to understand the best practices to prevent injuries (e.g., burns, shock, and electrocution) and property damage from fires. According to the Electrical Safety Foundation International (ESFI), 69% of all electrical fatalities in the workplace involve non-electrical occupations and unexpected contact with electricity is the 2nd leading cause of death. Therefore, it is critical that you are aware of the necessary precautions to keep you and your colleagues safe.

Common electrical hazards

- **Daisy chaining** (i.e., plugging one power strip into another) is not permitted since it can overload the circuits and cause a fire. Power strips and extension cords are rated for specific amounts of electricity.
- **Improperly grounded** power tools and equipment can cause serious injury. Ground fault circuit interrupters (GFCIs) are built into cords and outlets to protect you from injury and must be used where water is present, such as in bathrooms, mechanical rooms, and outdoor environments.
- **Modifying or overriding** safety features on electrical tools and equipment, such as removing an electrical plug grounding prong, creates a potential shock hazard. Always use tools and equipment as designed and intended.

You have the power to work safe

- Be aware of potential electrical hazards in your work area (e.g., exposed wiring, wet areas, open circuit breaker panels) and report any hazards to your supervisor immediately.
- While it may be tempting to reset a breaker after it trips, breaker panels must remain locked, and only qualified electricians can reset breakers.
- Inspect electrical tools, cords, and equipment prior to use, and do not use them if damaged or not functioning properly.
- Extension cords can only be used on a temporary basis and for no more than 90 days because continuous use can cause rapid cord deterioration and the risk of fire.
- Keep electrical equipment clean and maintained; store them in a clean and dry environment, such as a storage cabinet, when not in use.

Learn more: Review the National Institute for Occupational Safety & Health (NIOSH) website and complete online electrical safety training. Report all injuries: Online or call (847) 491-5582.

Safety at Home

According to the National Fire Protection Association (NFPA), an average of 51,000 electrical home structure fires occur each year, claiming almost 500 lives and causing over $1.3 billion in property damage. Here are a few tips to keep your family safe at home:

- Never run extension cords under rugs or through doors or windows to prevent damage and fires.
- When children are present, install tamper-resistant safety caps or covers on all unused electrical outlets. Serious shock and burn injuries can occur if an object (e.g., fork) is inserted into unprotected outlets.
- Electricity can easily travel through water, so avoid using electrical equipment and devices in wet environments. A plugged-in cell phone dropped into a bathtub could cause serious injury!
- Electric space heaters require more electrical flow than other appliances, so it's important to use them as intended and never connect them to power strips or extension cords as they may not be equipped to handle the load, thus creating a risk of fire.

For Additional Information Contact Environmental Health and Safety at ehs@northwestern.edu.

Tips for Success

**When Talking to Your Team**

**Preparation is Key:** Keep the topic relevant to your work. Work with your team to review potential electrical hazards in your work area and discuss the required procedures for the work tasks.

**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.