Start your Electrical Safety Program – Quick Tips

Keep workers safe by developing and implementing an electrical safe work program (ESWP) that incorporates these key elements

An extremely potent source of energy that powers lights, tools, machinery and many other devices that we use in our daily lives, electricity can also cause injury or death when not handled properly.

A national consensus safety standard that identifies safe work practices to protect workers from the hazards of electricity, including electric shock and electrocution, arc flash, and arc blast, the National Fire Protection Association's NFPA 70: National Electric Code (NEC) for electrical design, installation and inspection safety standards addresses commercial, residential and industrial occupancies.

Getting Proactive About Safety

There are other proactive steps you can take to help prevent electrical shock or similar injuries: Keep workers away from energized equipment or circuits and train qualified workers on the correct procedures when working on energized equipment or circuits. Prior to using or performing maintenance on electrical equipment, the employee should first check that it is safe by:

- Verifying that electrical equipment is not located in a hazardous environment, such as a damp/wet location or where it is exposed to high temperatures and flammable gases and vapors.
- Making sure overcurrent and safety devices, such as fuses, circuit breakers, and ground fault circuit interrupters (GFCI), have not been tampered with and are working correctly.
- Inspecting the power cord and plug to ensure there are no defects, such as cuts in the insulation exposing bare wiring.
- Identifying whether the equipment has an emergency shutoff switch and where it is located prior to use.
- Making sure there is sufficient space around the electrical equipment or circuit to allow for operation and maintenance.
- Removing all personal metal jewelry prior to using or working on electrical equipment or circuits.
- De-energizing electrical equipment before testing or repairing in

accordance with the Lockout/Tagout standard 29 CFR 1910.147. (If de-energizing the electrical equipment or circuit is not feasible, then appropriate tools and personal protective equipment [PPE] must be used and worn.)

Electrical safety is the responsibility of everyone on the job site. It is important to establish an ESWP that includes employee training on electrical safety. Training employees on the basics of electrical safety should include its effects on the body, first aid procedures when someone is shocked, how to fight an electrical fire and how to identify hazards. Follow these do's and don'ts when developing your plan of action:

Do:

- Read and follow electrical equipment instruction manuals prior to using
- Use safety signs, barricades and tags to identify and protect electrical equipment
- Only use extension cords as a temporary solution
- Use waterproof cords in an outdoor application
- Contact a certified electrician when electrical repair is needed

Don't:

- Overload outlets by using splitters
- Touch electrical equipment, including power cords with wet or damp hands
- Allow dirt, grease or dust to accumulate on electrical equipment
- Use temporary wiring in place of permanent wiring
- Use cords or equipment that are not properly grounded

Sources:

Electrical Safety in the Workplace, OSHA

Source: Grainger Know How – https://www.grainger.com/know-how