



## Toolbox Talk: Electrical Safety

### Introduction/Overview:

Many hazards exist in today's modern world. One of the most dangerous hazards is from electrical sources. Electrical energy is one of the most common causes of fires. Shock and electrocution are possible when electrical appliances and power cords are not maintained or used correctly. All employees should have the knowledge to recognize, avoid, and correct electrical hazards.

### Electrical Fire Statistics:

- The National Fire Protection Association has reported approximately 3,340 fires occurred in the office setting from 2007 to 2011.
- Furthermore, according to the Electrical Safety Foundation International (ESFI), electrical failures or malfunctions were factors in an estimated 51,000 home fires in 2015. These fires caused 500 deaths, 1,400 injuries, and \$1.3 billion in property damage.
- Electrical distribution and lighting equipment were responsible for 12% of the 3,340 fires reported and were the second most common causative factor. Cooking was the number one cause and made up 29% of the total reported fires.

### Talking Points to prevent electrical-related incidents:

- Never allow objects to be placed on electrical cords or run under carpets and mats.
- Never allow flexible power cords to be used in areas where the cords may be crushed, pinched, or damaged.
- Never use extension cords as a permanent source of power.
- Appliances should always be plugged into a wall outlet and never into a power strip or surge protector.
- Do not plug a surge protector into another surge protector!
- Never overload wall outlets. Rule of thumb: one plug and one outlet.
- If outlets, switches, or breakers feel warm, burned, or if a plastic burning smell is present, immediately contact building maintenance or the fire department if the hazard is unknown.
- Replace surge protectors according to the manufacturer's recommendations.
- Never use power cords without the round ground pin or if the rubber covering is damaged.
- Never leave heat-producing appliances on and unattended.
- Be sure there are no combustible materials stored close to heat-producing appliances.
- Space heaters are especially troublesome and should be used with caution, and all manufacturer's safety recommendations followed.

Developed by:

## Talking Points to prevent electrical hazards:

- Ensure all employees are aware of the above talking points.
- Ensure periodic safety inspections occur on all electrical appliances and devices.
- Ensure all electrical equipment is shut off when not using.
- If any questionable burning smell is noticed, shut off the appliance and call a licensed electrician.

## Additional Discussion Notes:

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## Final Thoughts:

If all employees have the appropriate electrical safety knowledge and training, they can ensure their home and work environment is safer, which may reduce or eliminate the potential for property loss or injury.

**NOTE:** Always promote discussion with the attendees. If a question comes up that no one in attendance can answer, please contact OWC or the Loss Control Innovations consultants for assistance.

### **Johnny Nugent**

Risk Management Specialist

[johnny.nugent@dhrm.virginia.gov](mailto:johnny.nugent@dhrm.virginia.gov)

804-225-2168

### **Lee Affholter, COSS, ASC**

Loss Control Consultant

[laffholter@lcinnovations.com](mailto:laffholter@lcinnovations.com)

757-256-3364

### **Curtis H. Stacy, MESH, ASC, COHC**

Loss Control Consultant

[curtis.stacy@dhrm.virginia.gov](mailto:curtis.stacy@dhrm.virginia.gov)

434-594-8978

## References:

The Electrical Safety Foundation International (ESFI)

[Home Electrical Fires](#)

[Home Electrical Safety](#)

[Electrical Safety for Homeowners and Consumers](#)

National Fire Protection Association

[U.S. Structure Fires in Office Properties](#)

State Office of Risk Management

[Office Electrical Safety](#)