



## Electrical Safety (Safety Talk)

The hazards associated with electricity affect the majority of workplaces. Whether you are in general industry, construction, or even farming electrical hazards are present. It is important to be able to recognize the electrical hazards around you and know how to mitigate them.

### Electricity-Related Injuries

According to the Electrical Safety Foundation International, between 1992 and 2010 there were 5,096 fatalities in the United States due to contact with electricity. There were a total of 66,748 injuries that required days away from work in the same time period due to electricity. The construction industry experiences the **majority of injuries and fatalities**. In these statistics they do not include injuries caused by secondary events. For example, an individual falling from a ladder and sustaining injuries due to getting shocked. If these types of injuries were included the statistics would be higher. Everyday individuals suffer some type of shock, but do not seek or require treatment for their injuries. Because of this, it is difficult to fully track the occurrence of electrical shock in the workplace.

### Common Electrical Hazards

- Overhead powerlines
- Underground powerlines
- Lightning
- Faulty equipment
- Working on energized equipment
- Improper grounding
- Damaged insulation

### Electrical Safety

- Maintain at least a 10 foot distance from 50kV overhead powerlines, add more distance as the voltage increases. Also avoid the poles themselves to avoid bringing lines to the ground.
- Call your local 811 utility locator prior to digging to avoid unexpectedly striking an underground electrical line or any other utility.
- Inspect all cords for damaged insulation or missing ground prongs. If either of these conditions exist get them fixed by a professional or remove them from use.
- Never work on energized equipment. Always follow proper lock and tag out procedures before performing electrical work. Test the power after locking and tagging out to ensure there is no power being fed to what you are working on.



- Do not operate electrical equipment in wet conditions. Also avoid having electrical components in a wet environment unless they are protected.
- Secure all electrical boxes and panels. Ensure components in and around these panels are in good working condition and not missing.

## **Summary**

There are many different electrical hazards in any one workplace. It is important to understand electrical safety and respect the dangers electricity poses. Eliminate any electrical hazards in your work area to avoid an injury to yourself or another coworker.

## **Discussion point:**

-What are some electrical hazards you can face today and how can you mitigate them to protect yourself?