Electrical Injuries Stats & Facts

FACTS

1. Not all electrical hazards are created equal. Although each use of electricity creates a potential exposure to a hazard, the dangers vary.
2. Electricity can be either “static” or “dynamic.” Dynamic Electricity is the uniform motion of electrons through a conductor (this is known as electric current). Conductors are materials that allow the movement of electricity through it. Most metals are conductors. The human body is also a conductor.
3. Static Electricity is accumulation of charge on surfaces as a result of contact and friction with another surface. This contact/friction causes an accumulation of electrons on one surface, and a deficiency of electrons on the other surface.
4. Electric current cannot exist without an unbroken path to and from the conductor. Electricity will form a “path” or “loop”. When you plug in a device (e.g., a power tool), the electricity takes the easiest path from the plug-in, to the tool, and back to the power source. This is action is also known as creating or completing an electrical circuit.
5. According to ESFI, many fatal work-related electrical injuries involved overhead power lines. Workers situated near power lines need to be constantly cognizant of the present hazard. Consider all power lines to be live and dangerous, the organization advises. Instruct co-workers to stay away from downed lines as well as any vehicles or objects in contact with them.

STATS

- There were 160 electrical fatalities in 2018. An 18% increase over the previous year and the highest number of fatalities since 2011.
- Fatality rates per 100,000 workers were 0.11 in 2018, compared to 0.13 in 2011.
- Contact with / Exposure to electric current accounted for 3% of all fatalities in 2018. In 2017, they accounted for 2.6%, in 2016 2.9%, 2015 2.7% and 3.1% in 2014.
- All electrically related fatalities were caused by electric shock, no fatalities were caused by burns.
- Construction industry accounted for 54% of all electrical fatalities, the same percentages as in 2017. Professional and business services accounted for 28% of electrical fatalities.
- The construction industry had the highest rate of fatal electrical injuries (0.8 / 100,000) followed by utility (0.55 / 100,000).
- In 2018, 9% of all electrical injuries were fatal.