

# Overhead Wire Safety Stats and Facts

## FACTS

1. Among electricians, the most serious concern is working "live" or near live wires, instead of de-energizing and using lockout/tagout procedures. Among non-electricians, failure to avoid live overhead power lines and an apparent lack of basic electrical safety knowledge are the major concerns.
2. Electrocutions are the fourth leading cause of death among construction workers in the United States.
3. For non-electrical workers, the main cause of electrocution was contact with overhead power lines. These deaths were the result of failure to de-energize or protect the power lines and failure to maintain minimum clearance distances from power lines.
4. Another cause of electrocutions, especially among non-electrical workers, was contact with machinery, appliances, power tools, portable lights, and defective power/extension cords.
5. In many of the electrocutions, electrical workers and other construction workers touched metal objects that had become energized through contact with live electrical equipment and wiring or with overhead power lines.
6. The most common contacts were with metal ladders, metal pipes, metal wires that were deliberately cut or stripped or were accidentally cut by electric drills or other tools, wires that were energized by contact with live wires, and energized trucks and other vehicles.

## STATS

- There were 166 electrical fatalities in 2019, which was a 3.75% increase over 2018 and the highest number of

electrical fatalities since 2011.

- Contact with / exposure to electric current accounted for 3% of all fatalities in 2019, maintaining the same percentage as in 2018.
- Electrical fatality rates were 0.11 fatalities per 100,000 workers, the rate for all fatalities was 3.6 per 100,000 workers in 2019.
- The construction industry had the highest rate of fatal electrical injuries (0.7 / 100,000) followed by utility (0.4 / 100,000) in 2019. All industries had 0.1 fatalities per 100,000 workers.
- In 2019, 8% of all electrical injuries were fatal.
- Contact with overhead power lines is the leading cause of electrical fatalities for agricultural workers. Of the 1,001 reported power line contact incidents from 2003-2009, nearly 70% resulted in death.
- According to the CDC's NIOSH, the construction industry comprises approximately 8% of the U.S. workforce, yet it accounts for 44% of job-related fatalities. Consider the statistics:
- Electrical hazards cause more than 300 deaths and 4,000 injuries each year among the U.S. workforce.
- Electrocution is sixth among causes of workplace deaths in America.
- Construction trades, and installation/maintenance/repair professionals are the top two groups suffering the most fatal electrocution work-related accidents, from 2003-2007.