

POWER LINES



*Actual site where
worker was electrocuted

No Safety

No Attention

No Procedures



Working around Overhead Power Lines

Power lines are a serious and potentially fatal hazard to workers when safety precautions are not followed. Electrocution remains a major cause of deaths in construction. Part of the reason is that at home, and on the job, we take electricity for granted. Historically, electrocution accounts for about 20% of all fatalities in construction. Cranes, backhoes, dump trucks, drill rigs and aerial lifts are common types of equipment involved in contacts with overhead power lines. However, low-tech equipment like ladders, tools and tool extensions, and scaffolds are frequently involved.

Overhead power lines should be located before beginning work, and then ensuring workers and equipment are always at least 10 feet away from them. Workers should never touch anything that is in contact with a power line. Additionally, workers should be instructed to carry ladders and other pieces of equipment horizontally instead of vertically and lower all equipment apparatus before driving.



Actual jobsite where worker was electrocuted

What should employers do?

- Initial worksite surveys should include locating and identifying all overhead power lines. The heights of the wires and distance from the worksite should be noted on site diagrams to make sure workers and supervisors are aware.
- If work must be done near energized lines, contact the local utility company for assistance. The utility company may need to shut down the lines while you are working near them. If overhead lines cannot be shut down, the utility company can install insulation over the lines during the time you will be working near them.
- Ensure all workers keep conductive materials 10 feet away from unguarded, energized lines up to 50 kilovolts. For every 10 kV over 50, increase distance by an additional 4 inches of clearance.
- Workers should not operate equipment around overhead power lines unless authorized and trained to do so. Use a spotter.
- Do not allow use of metal ladders in dangerous situations.
- Train all workers in emergency communication and proper techniques for providing aid to someone after an electrical accident.

For more information, contact your local power company, OSHA, or your FCBI Loss Prevention Representative.

Sources:

The Electrical Safety Foundation International (ESFI)