

Working Safely Around Overhead Power Lines

Introduction:

Some of the most hazardous conditions at a jobsite are those that are not so obvious. How often do you survey the work area for hazards before beginning any task, but forget to look up? One of the most important safety tips when performing a daily survey of the jobsite is to Look Up! Always identify the location of all power lines. Overhead electric power lines are the cause of many accidents that lead to severe injury or death when workers accidentally make contact with them. When it comes to safety, there is no room for complacency. Pay attention to what you are doing, stay focused on the task at hand, and don't get in a hurry.

Discussion Points:

- Conduct daily surveys of the work site
- Never get closer than 10 feet to power lines
- If a piece of equipment makes contact with a power line, stay inside the cab if possible
- Call the utility company to insulate power lines before working around them

Discussion:

It is important that all employees working near overhead power lines know the power line safety practices. Companies should implement control measures that include: a clear job pre-plan, the use of safety equipment, and training of all employees who will be working near power lines before beginning any task.

The first rule to enforce is to maintain a safe working distance. According to OSHA, “never get closer than 10 feet to a power line.” Best practice is to stay 20 feet away from any active power line, because electrical frequency varies from 120 to 750,000 volts; some power lines, such as transmission lines, are high voltage lines which carry more current over a long distance.

When a piece of equipment such as a crane or boom truck makes contact with a power line, the equipment operator should remain inside the cab. After contact, the current will flow in a ripple pattern outwards through the ground, and electrocution can occur when someone contacts the energized ground. If the equipment operator must exit the cab in the case of fire or some other immediate hazard, the worker should jump clear from the equipment, landing on both feet at the same time, keeping them together. Once on the ground, if you must move, shuffle your feet heel-to-toe, keeping your feet contacting one-another. Separating your feet can cause electrical current to flow through your body, causing electrocution and possible death. Also, be careful not to touch any part of the equipment and the ground at the same time.

When working around overhead power lines, follow the company's and OSHA's rules and regulations, never approach downed power lines, and remember, power can flow through the ground and could injure or kill anyone making contact with it.

As always, stay safe out there!

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