# Amp up Electrical Safety While Trimming Trees


Falling trees are responsible for about 30 percent of all power outages. Trees also conduct electricity and create potential safety hazards when branches grow too close to power lines. For example, an unsuspecting child could climb an overgrown tree, come in contact with a live power line and risk electrocution. Electrocution is also a danger for workers employed to trim trees. Tree trimming is a necessary, but also dangerous job

## WHAT'S AT STAKE?

Every year, thousands of workers die or suffer injury as a result of ladders, scaffolds, poles, pipes, trimmers, chainsaws, vehicles and loads coming in contact with power lines. In some cases there doesn't even need to be contact between an object and a power line in order for electrocution to occur. That's because electricity can jump when an object such as a metal ladder comes in proximity to the line. This danger becomes even more complicated when overgrown trees are thrown into the mix. A tree limb touching a power line can conduct electricity through a pruning tool or other object to a worker, potentially causing electrocution. Tree limbs in contact with electrical lines can also dry out and fall from a tree, injuring or killing people walking or working below.

**EXAMPLE**

A 37-year-old Internet cable installer working from a cherry picker died after he came in contact with a high-voltage power line hidden in a tree. His body caught fire and co-workers worked frantically to douse the flames, but the worker did not survive his injuries.

## HOW TO PROTECT YOURSELF

Anyone who works near overhead power lines must be trained in safe procedures and methods to help them recognize the hazards and know how to avoid coming near or in contact with these lines. Here are some tips: n Identify the location, height and voltages of all overhead power lines on your jobsite.

- Identify hazardous foliage near the lines in question. Determine the possible electrical hazards posed by tree trimming or other work tasks. Maintain a minimum distance of 10 feet (3.5 meters) from all power lines. Do not erect scaffolding or operate machinery close to power lines. Also, trim trees from a minimum distance of 10 feet from the primary (top) conductors.

- If you come across a fallen or sagging wire, assume it is live and do not go near it. Contact the local utility company immediately.
- Always check for overhead electrical hazards when moving scaffolds, high loads and other objects that extend high into the air. A worker trimming trees that overhang the system should trim only as high as the worker can reach with the equipment on site. Never use a stick or tape measure to determine distances to power lines. Estimate your distance instead. When in doubt, increase the distance between your working area and the line.
- If safe clearances cannot be maintained, contact the utility company to have the lines de-energized, guarded or temporarily re-routed. Be particularly careful when operating heavy equipment around power lines. If a tree contacts a line and that tree also contacts machinery, the operator risks electrocution. Cement pumpers and cranes may also touch energized lines. Prevent contact at all costs. Do so by knowing the precise height of your load.
- Know what to do and what not to do if equipment or a person touches a line. Don’t rush in to save someone who may still be in contact with a high voltage electrical current, or you could become a victim yourself. The power source must be disconnected first. Call the utility company and emergency personnel. Warn others away from the area and isolate the hazard if possible.

## FINAL WORD

Overhead power lines are a danger not only to workers, but also to people conducting maintenance and repairs to their homes and yards. When doing projects around the home, follow the same precautions you would on the job and keep a safe distance away from power lines.