



Electricity and Tree Care Work

A Deadly Combination



Contact with electricity is one of the leading causes of death for tree care workers. Here are just a few examples of electrocutions that could have been prevented:

- A **26-year-old landscaper**¹ was electrocuted while trimming tree branches from a portable work platform. He had been using a pole saw to trim tree branches. The pole saw came in contact with the energized overhead power lines and he was electrocuted and then ignited. There were no co-workers or supervisors on the site when the incident happened. He died later that day of his injuries.
- A **tree trimmer was electrocuted**² while trimming tree branches in a residential front yard. He was hired by a homeowner to trim the branches of a tree that was growing into utility lines. He was attached to the tree with climbing spurs and fall protection while cutting the branch with a chain saw. The branch that was cut did not fully detach from

1. www.cdc.gov/niosh/face/stateface/ma/13MA019.html

2. www.cdc.gov/niosh/face/stateface/ca/11CA003.html

the tree and struck the energized power line, sending an electric current into the victim's body. The investigation determined that the worker had not followed requirements on line clearance and proximity to energized lines.

- In New Jersey, a **21-year-old landscaper**³ was electrocuted when a felled tree landed on an overhead power line and caused the power line to drop. The investigation determined that the family-owned business had no written safety and health policy.

This publication is intended for small business owners and front line supervisors who perform regular tree-trimming operations (i.e., operations not involving line-clearance tree trimming).

Don't become part of a tragic headline. Be sure that you and your employees know the risks of tree work near sources of electricity, and prepare them by doing the following:

3. www.cdc.gov/niosh/face/stateface/nj/01nj117.html

Be Prepared

- Train workers about potential hazards in a language that they understand.
- Before any work begins, survey the area for hazards.
- Have an emergency plan.
- Electricity can travel through the ground in some cases where you don't expect it — be sure that workers wear properly insulated footwear and other required PPE.
- Consider asking the utility company to de-energize nearby power lines.

Follow Safe Work Practices

- Maintain a distance of at least 10 feet from overhead lines (and more than 10 feet if the voltage to ground is over 50 kV (see 29 CFR 1910.333(c)(3)(i)); workers should not rely solely on protective clothing to protect against electrical hazards.
- Ensure that workers have no direct contact with an energized conductor, such as a power line.

- Ensure there is no indirect contact with an energized conductor, such as a tree limb or tool touching a power line.
- Ensure that workers are not standing close to grounding elements. The power can travel through the ground.

Provide the Right Gear

- Employers must provide proper gloves and shoes for hazards present where tree work is being performed.
- When electrical hazards are present, employers must also provide rope that is free of moisture and contaminants and that provides appropriate insulation.
- Always provide fall protection for climbers.

Be Alert

- Assume that all lines are energized at all times.
- Anticipate when limbs might fall onto power sources.
- It only takes a moment for a fatality to occur.

Employers that are hired to clear trees from power lines must follow applicable OSHA requirements. See, for example, 29 CFR 1910.268, 29 CFR 1910.269, and 29 CFR 1910 Subpart S. For more information about OSHA's standards addressing the hazards associated with clearing trees from around power lines, see the latest update ([Oct. 5, 2015](#)).⁴

Remember, it is the employer's responsibility to comply with OSHA rules and keep workers safe.

4. www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=FEDERAL_REGISTER&p_toc_level=2&p_keyvalue=TOC2015

Call OSHA. We can help. It's confidential.



U.S. Department of Labor



**Occupational Safety
and Health Administration**

1-800-321-OSHA (6742) • www.osha.gov

OSHA 3861-07 2016