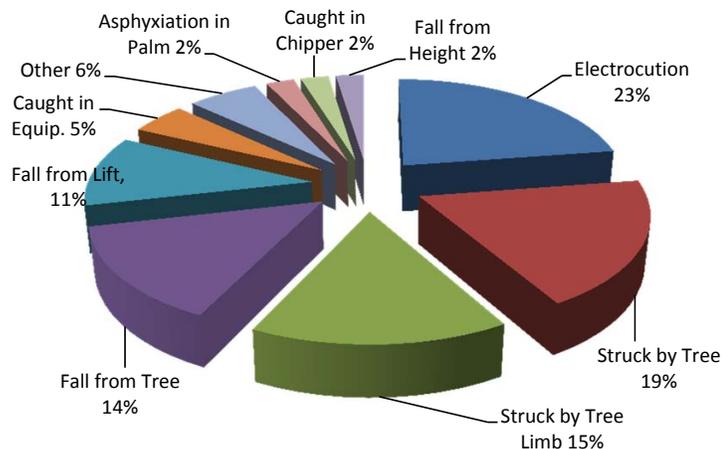


The Top 10 Things You Need to Know when Working Around Electricity¹

1 Electricity is the leading killer in tree care!

All overhead conductors, including service drops and communication wires, shall be considered as energized with potentially fatal voltage. Workers must keep themselves as well as any conductive objects they may be touching at least 10 feet away from ALL conductors.

2012 Fatal Accidents by Cause



2 Electricity seeks a path to ground through any conductive object.

Examples of conductive objects include metal tools, un-insulated aerial lifts, tree branches, ropes, dirty or wet pole tools, extension cords and of course, the human body.

September 4, 2013 - Lanesborough, MA police and fire departments responded to an electrical-related accident where they found Foster Gilbert dangling in a harness. The victim came into contact with a primary electrical conductor belonging to Western Massachusetts Electric Co. An Asplundh crew working in the area was called to the scene with its bucket truck to help with the rescue. Gilbert appeared to have burn marks on his head and leg. He was brought to the closest medical center and later was transferred to Massachusetts General Hospital, where he was listed in critical condition.

¹ Provided by Tree Care Industry Association, www.tcia.org. Visit our web site or call (800) 733-2622 for more information on our safety training programs.

3 Accidents occur when the electrical hazard goes undetected.

When the crew arrives at a work site, the first thing they should do is inspect the site for hazards, including overhead lines that enter the area.

September 7, 2010 - Worker with Bluebonnet Electric Cooperative, Inc. in Luling, TX was removing a large tree that caused outages. Worker was in the bucket and made contact with a live line at shoulder or hand.

4 Storms increase risk!

Downed trees mean downed wires. Conductive objects like chain link fences, aluminum gutters, even the saturated ground itself, can become energized.

October 27, 2010 - A worker for a tree trimming service was electrocuted near Alto, Michigan. The accident happened around 7:30 p.m., well after dark. The man was clearing tree limbs and brush from a property when he grabbed a downed, live electrical wire tangled in the vegetation.

5 Even insulated equipment will not protect you...

... if you simultaneously make contact (directly or indirectly) with the conductor and some other path to ground, such as some part of the tree.



July 27, 2013 - Robert Rogers III of Orefield, PA died when he contacted a 12-kilovolt line. Rogers worked for a contractor for PPL Utilities. He was using a bucket truck as part of a crew trimming trees to clear distribution lines. The contact sparked a fire that destroyed one truck and damaged two others. It also knocked out power to about 1,000 PPL customers.

6 You don't have to be in the tree...

... or even close to the conductor to be exposed to the electrical hazard.

June 10, 2013 - Two itinerant tree trimmers in Kenner, LA were severely shocked and burned when their aluminum ladder contacted a 13kV primary.

June 24, 2013 - A tree worker was critically injured when a tool he was using touched a power line in suburban Elgin, IL. The worker was using a long pole that came into contact with a wire. The worker collapsed and EMTs found him not breathing. Police determined the area was safe and officers performed CPR until paramedics arrived. He was taken to the hospital in critical condition and was also being treated for burns.

7 "Step Potential" is a killer.

Step Potential is a phenomenon where the ground around an energized piece of equipment, and other objects in the immediate area, can become energized. Touching an energized piece of equipment or even walking into or out of an area of step potential can lead to fatal electrical shock.

June 13, 2012 - A tree worker was electrocuted in Newbury, NH when a crane he was working near came in contact with a high-voltage electric line. The worker was standing with his hand on a detached chipper 20 feet from the crane. Electricity traveled down the crane, through the ground and into the wood chipper.

8 Get your bucket tested or know its limitations!

When it rolls off the assembly line, the typical tree care aerial lift with fiberglass upper boom and lower boom insert is an insulated piece of equipment. Insure it stays that way by keeping the booms clean, dry and well maintained, and by having it dielectrically tested at least once per year. Beware, most scissor lifts, backyard lifts and rental yard lifts are NOT insulated!

August 1, 2012 - A worker died from injuries sustained while removing a dead tree on the campus of East Texas Baptist University. Michael Noel was using an extension saw to cut a tree that had been struck by lightning. He was in a scissor lift with a bucket when he was electrocuted.

9 Aluminum extension ladders do not belong on a tree care work site!

Extension ladders can seem like great assets because they're lightweight and relatively inexpensive. But they dramatically increase the crew's risk when electrical hazards are anywhere in the vicinity.

March 26, 2010 - A Florida man died after being electrocuted by a power line in a tree trimming incident, as he was trimming a tree on a ladder. The ladder slipped and made contact with a power line.

July 2, 2011 - A tree worker in Colorado was killed when his extensible chain saw touched electrical conductors. He was standing on an extension ladder.

July, 2012 - ground man in Austin, TX electrocuted when attempting to "walk" a fully extended ladder from one location to another.

10 Workers need training!

Workers who will be exposed to electrical hazards need specific training on how to recognize and avoid them. Language barriers and even illiteracy are not excuses NOT to train.



Just Say No!

Taking on a tree job with overhead electrical conductors in the immediate work area means taking on the biggest risk in what is one of the most hazardous occupations. Do you have the right people, with the right skills and knowledge, the right tools, the right equipment, and the right insurance? Unless you can answer "yes" to all those questions with confidence, then you should consider referring or sub-contracting that job to a colleague in the Tree Care Industry Association or Massachusetts Arborists Association who is properly equipped to deal with the hazards.