

Tree Work is Dangerous

Don't get hurt, get trained!



In New Jersey, from 2011-2020, **40 workers DIED and approximately 430 workers were INJURED during tree trimming and pruning activities.** A majority of the fatalities were due to struck-by, falls, machine-related, transportation-related, and electrocution incidents. The NJ Department of Health's investigations into the factors surrounding the fatalities described below showed that each one could have been prevented had proper work practices been followed.



Falls

A 28-year-old tree worker tied himself off with a lanyard, to a branch, at a height of 60 feet in a tree that was to be taken down. He anchored his climbing line to the trunk of the tree, leaving an excess amount of slack. He straddled the branch facing outward and made two cuts in front of him. After the second cut, the branch fractured at the trunk, behind the worker. He fell for 20 feet, attached to the branch by his lanyard, before the slack in his climbing line was taken up and stopped his fall. His climbing line then snapped from the strain, and he died after falling 40 feet onto a concrete driveway.

- ▶ Use appropriate fall prevention methods when working in trees.
- ▶ Position climbing lines so there is no slack; this way worker can't free-fall to a lower level.
- ▶ Check the condition of tree branches before climbing on them.
- ▶ Inspect the condition of climbing lines and other equipment prior to each use.



Electrocutions

A 22-year-old tree trimmer was electrocuted while working near a power line. He and a groundman were assigned to remove a dead 45-foot tree that had power lines running between the branches. He planned to trim the branches on the side of the tree near the wires before removing the tree. He died when his hands contacted a power line that carried 220 volts of electricity.

- ▶ The employer and worker should check the tree for safety hazards, including the location of the power lines.
- ▶ Workers and equipment must be at least 10 feet from energized power lines unless the worker is a qualified line clearance arborist and uses appropriate equipment.
- ▶ The employer should notify the utility company if work must be done within 10 feet of an energized power line.



Struck by Falling Object

A crew leader worked from an elevated aerial lift while a 47-year-old laborer hauled brush to a chipping machine. Upon returning from break, the leader resumed work and told the laborer to stay away from the tree. He cut a trunk section at a height of 50 feet which measured 3 feet in length and 14 inches in diameter. Unknown to him, the laborer had walked under the tree and was subsequently struck by the falling section.

- ▶ Clearly mark work zone boundaries with cones or safety tape.
- ▶ Establish clear methods of communication between workers at the job site.
- ▶ The worker in the tree (or aerial lift) must give clear warnings to the ground crew.
- ▶ The ground crew must acknowledge that the warning was received.

Storm Cleanup

A 59-year-old tree care worker was cutting a tree that had been knocked down by a storm. The tree was still partially attached at the stump, and he was cutting sections with a chainsaw to free up the tree. The worker had already made several cuts, beginning at the canopy end of the tree, working his way towards the stump. He had completed cutting four sections and began working on the final section (closest to the stump). Here the ground was sloped, and the victim was standing on the downhill side of the tree. As he cut the final section, it fell and twisted in an unexpected manner, landing on top of the victim, crushing him to death.

- ▶ While operating a chain saw, the safer working position is on the uphill side of the work (when conditions permit).
- ▶ When a bind occurs, pressure areas result. Take the time to check if the fallen tree is binding. If so, check the direction of the bind; then make small cuts to release pressure.
- ▶ Always have a clear retreat path when felling/limbing branches.
- ▶ Perform a hazard assessment of the work area before starting.

REMEMBER:

- ✓ Ensure that you and your workers are properly trained
- ✓ Plan the job; storm cleanup can pose additional hazards
- ✓ Inspect the tree and climbing equipment for defects before each job *
- ✓ Don't take shortcuts!

*A NJ certified tree expert or ISA-certified arborist can be consulted to assess the tree and its environment (see back page).

OVER

TRAINING

- ▶ **The Committee for the Advancement of Arboriculture (CAA)**
Visit the CAA website for a listing of courses offered and registration information
<http://caanj.org>

STANDARDS OF PRACTICE

- ▶ **American National Standards Institute (ANSI)**
ANSI Z133-2012. Safety Requirements for Arboricultural Operations
<https://www.ansi.org/>
- ▶ **Occupational Safety and Health Administration (OSHA) standards:**
 - 29 CFR 1910.137 Electrical Protective Equipment
 - 29 CFR 1910.268 Telecommunications
 - 29 CFR 1910.269 Electric Power Generation, Transmission, and Distribution
 - 29 CFR 1910.333 Selection and Use of Work Practices<https://www.osha.gov/SLTC/treecare/index.html>

PROFESSIONAL ASSOCIATIONS

- ▶ **The Committee for the Advancement of Arboriculture**
370 E Veterans Highway
Jackson NJ 08527
732-833-0325
<http://caanj.org>
- ▶ **Tree Care Industry Association (TCIA)**
<http://tcia.org/>
- ▶ **The International Society of Arboriculture (ISA) and its professional affiliates:**

ISA National Headquarters PO Box 3129 Champaign IL 61826 1-888-472-8733 http://www.isa-arbor.com/	New Jersey ISA Chapter 206 Colorado Trail Presidential Lakes Browns Mills NJ 08015 (609) 283-0040 http://www.njarboristsisa.com/
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GOVERNMENT AGENCIES

- ▶ **New Jersey Department of Health (NJDOH)**

Fatal Occupational Injuries Surveillance (FOIS) Project
The incidents featured in this hazard bulletin were investigated by the NJDOH. All the investigation reports contain safe work practice recommendations and are distributed to employers and others interested in workplace safety. These reports are available on the NJDOH website.
609-826-4984
<http://www.nj.gov/health/workplacehealthandsafety/occupational-health-surveillance/fatal-injuries/>
- ▶ **U.S. Department of Labor, Occupational Safety and Health Administration (OSHA)**

-- enforces OSHA standards in the private sector.
New Jersey OSHA Area Offices:
 - Hunterdon, Middlesex, Somerset, Union, and Warren counties: 732-750-3270
 - Bergen and Passaic counties: 201-288-1700
 - Atlantic, Burlington, Cape May, Camden, Cumberland, Gloucester, Mercer, Monmouth, Ocean, and Salem counties: 856-596-5200
 - Essex, Hudson, Morris, and Sussex counties: 973-263-1003
- ▶ **NJ Department of Environmental Protection**
NJ Board of Tree Experts
<http://www.njparksandforests.org/forest/community/cte.html>
- ▶ **NJ Department of Labor and Workforce Development**
Office of Public Employees Occupational Safety & Health
-- enforces OSHA standards in the public sector
609-633-3896
http://lwd.dol.state.nj.us/labor/lsse/employer/Public_Employees_OSH.html
- ▶ **National Institute for Occupational Safety and Health (NIOSH)**
Fatality Assessment and Control Evaluation (FACE) Program
1-800-356-4674
<https://www.cdc.gov/niosh/face/>

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New Jersey
Certified Tree Expert
In Your County

NJ Board of Tree Experts
<http://njtreeexperts.org/>



Public Health Services Branch
Consumer, Environmental and
Occupational Health Service
Occupational Health
Surveillance Unit

