

MIOSHA Hazard Alert

FATALITY HAZARD ALERT: TREE TRIMMING

Six tree trimmers in Michigan have died so far this year in separate incidents due to work-related injuries. Most of the deaths were due to falls. That makes tree trimming one of the deadliest jobs in the state. MIOSHA is asking those in the tree trimming business to be on high alert for unsafe work practices that can lead to fatalities.

The fatality rate among Michigan tree trimmers in 2016 is 45 per 100,000 workers (based on the U.S. Census Bureau count of 13,389 employees in the landscaping services industry). This rate is more than 14 times the state average, which is 3.2 fatalities per 100,000 workers per year (in 2014).

Over the last several years, an additional seven tree trimmers in Michigan have died on the job due to fatal injuries. The types of exposures that caused the fatalities were falls; workers struck by falling trees, branches, and passenger vehicles; and an electrocution after contact with a power line.

Here are brief descriptions of the six fatalities in 2016 and the results of the subsequent MIOSHA investigation (as available):

- *On February 29, 2016, a 28-year-old worker fell to his death while performing tree trimming operations when his fall protection equipment failed. He was ascending a tree to trim branches and to install a cable between two trees for support. While ascending, the rope bridge of the fall harness positioning saddle broke. The employee fell approximately 20 feet and struck the edge of the house roof and then fell another 20 feet to a wood deck below. The MIOSHA fatality investigation determined that the positioning saddle was worn, torn, and frayed. The investigation also determined that the positioning saddle was not inspected prior to use. A serious citation was issued for GI Part 53, Tree Trimming and Removal, Rules 408.15311(b) & 408.15313(3).*



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- *On March 21, 2016, a 66-year-old owner/operator died as a result of injuries sustained after a fall from a bucket of an aerial work platform. The owner was operating an articulating boom truck, moving cut limbs attached to the boom truck by rope over to the wood chipper when the bucket tipped forward. He fell approximately 15 feet to the ground. The MIOSHA fatality investigation determined fall protection was not utilized by the operator of the aerial work platform. A serious citation was issued for GI Part 58, Aerial Work Platforms, Rule 408.15836(1).*
- *On August 15, 2016, the torso of a 24-year-old owner/operator was struck and squeezed by rigging rope that was attached to the tree he was topping causing his death. His body remained in the saddle for approximately one hour as he could not be retrieved. He was approximately 30 feet aloft while making the cut when his saw became stuck. He asked a helper to back up the S-10 pickup truck that the tree was rigged to when the trunk snapped falling on the opposite side of him, causing the rigging rope to move and become tense. The MIOSHA investigation is ongoing.*
- *On September 19, 2016, a 46-year-old journeyman tree trimmer fell to his death while performing line clearance duties in a residential subdivision. He fell approximately 35 feet to the ground when his climbing rope came untied from his climbing saddle. The MIOSHA investigation is ongoing.*
- *On September 21, 2016, a 75-year-old tree trimmer fell to his death while performing tree trimming operations. He fell approximately 20 feet to the ground after attempting to climb higher in the tree. The 4-inch branch that his climbing rope line was tied around broke at the crotch of the tree. The MIOSHA investigation is ongoing.*
- *On October 3, 2016, a 49-year-old owner was approximately 55 feet up in the air in a bucket truck attempting to trim a large oak tree from a private residence. The owner tied a rope around the limb that was approximately 6-8 inches in diameter and tied the other end to the bucket truck. While cutting the limb, the limb split and struck the bucket causing the owner to fall from the bucket to the ground. The MIOSHA investigation is ongoing.*

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Tree Trimming—Hazards to Look For

MIOSHA is requesting employers engaged in tree trimming and companies that contract tree trimming services to review and observe the work practices of employees in this dangerous occupation and to take steps to ensure that safe methods are followed. Many of the unsafe work practices are easily observable and are violations of MIOSHA rules. Unsafe work methods encompass:

- Employees lacking proper personal protective equipment, such as hard hats, safety glasses, and high-visibility vests next to roadways.
- Missing or inadequate signs on the road warning approaching vehicles of the roadside tree-trimming operations ahead.
- Employees working aloft in a tree without proper fall protection.
- Employees in the bucket of an aerial lift without fall protection or not anchored or tied off to the bucket.
- Employees working too close to electrical wires.
- Employees standing under, in the path of, or in close proximity to limb cutting, limb dropping, or tree felling.
- Inadequate guarding on the wood chipper.
- Poor limb or tree felling procedures that could cause employees to fall from trees or employee to be struck by falling tree or limbs.
- Employees too close to the feed end of a chipper.

If you see any of these hazardous activities, take action immediately to assure the safety of workers.

MIOSHA and OSHA provide numerous resources to help employers create a strong safety program and train their employees. Educational materials include the MIOSHA Fact Sheet on the [Tree Care Industry](#) and from OSHA: [OSHA Quick Card on Tree Trimming & Removal Safety](#), [OSHA webpage for the Tree Care Industry](#), [Hurricane eMatrix for Waste/Debris Removal and Reduction](#), and [OSHA Fact Sheet on Using Aerial Lifts](#).



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Health hazards also can affect tree trimmers. Health hazards include exposures to chemicals, noise, and heat. The high noise levels from chain saws, wood chippers, and other loud equipment can lead to hearing loss. Working outdoors under the sun in hot weather can produce a variety of heat-related illnesses like skin rashes, fainting, and even death from heat stroke. A useful slogan to prevent heat-related illnesses is Water, Rest, and Shade. Health hazards are addressed in the MIOSHA Fact Sheet on [Health Hazards in the Green Industry](#).

This fall, MIOSHA field staff will be on the lookout for tree trimming operations during their travels. If the compliance officer observes serious hazards at a job site, an inspection can be initiated on the spot.

MIOSHA Standards

Many MIOSHA standards cover the work operations and hazards in this industry. The applicable General Industry Safety Standards include Parts 1, 7, 33, 38, 53, 58, 85, 86 and 92. The Occupational Health Standards are Parts 380, 430, 433, 472, 474, and 554. These standards and publications related to the hazards are located on the [MIOSHA website](#).

Free MIOSHA Consultation Services

MIOSHA's [Consultation, Education and Training \(CET\) Division](#) is available at no cost to help employers develop a safety program and comply with current MIOSHA regulations. Employers can contact CET at 517-284-7720 for a free evaluation of their job site. The best time to take advantage of these free services is before an accident happens.