

# MIOSHA Fact Sheet

## Tree Care Industry



The hazards of the tree care industry can be great and could result in death. Some dangers associated with tree care and removal include: contact with overhead power lines, being struck by fallen tree sections, and faulty or defective equipment. To raise the awareness of those who work in and around the tree care industry, MIOSHA has compiled this fact sheet which outlines training and education services available, tree care industry safety and health related topics, and industry injury and illness statistics.

### Summary of Fatalities

#### Fall from Elevation

- 28-year-old fell approximately 40 feet due to equipment failure, after ascending a tree to perform trimming and cable installation.
- 65-year-old fell approximately 15 feet from the bucket boom truck while performing tree trimming.
- 46-year-old fell approximately 35 feet after rope failure while performing tree trimming for line clearance.
- 75-year-old fell approximately 20 feet after the branch broke to which he was secured.
- 49-year-old fell approximately 55 feet from the bucket of a boom truck after the limb being cut struck the bucket.
- 40-year-old fell approximately 40 feet after rope failure while performing tree trimming – 11/10/2016.

#### Struck By

- 63-year-old was crushed when a 45-foot section of tree trunk fell on the cab of the excavator while land clearing for a construction project.

### MIOSHA Standards

#### General Industry Standard [Part 53, Tree Trimming and Removal](#) (Part 53, Tree Trimming and Removal)

This standard defines the minimum requirements for tree trimming work. Of note are:

#### Employer Responsibility

- **Rule 5311(b):** An employer shall not allow a tool or equipment to be used which is not guarded according to state standards, has a defective guard or is otherwise unsafe.
- **Rule 5311(c):** An employer shall develop rescue procedures such as, but not limited to, removal of injured, stricken or electrically shocked employees from work positions aloft.

#### Personal Protective Equipment

- **Rule 5313(3):** A safety belt, safety strap, tree trimming saddle belt, or rope saddle shall be provided to and used by an employee when working aloft in a tree. A saddle or safety belt made unsafe by damage, defect, or alteration shall not be used.

#### Climbing

- **Rule 5331(1):** An approved safety belt, tree trimming saddle belt or rope saddle shall be used by an employee when aloft.
- **Rule 5331(3):** The climbing employee shall remain tied in until the work is completed and he has returned to the ground.
- **Rule 5331(4):** If it becomes necessary to recrotch, the employee aloft shall retie in or use a safety strap before releasing the previous tie.

#### Pruning and Trimming

- **Rule 5332(2):** A separate work rope, controlled by an employee on the ground, shall be used to lower limbs which cannot be dropped. The work rope shall not use the same crotch over which the climbing rope is run.
- **Rule 5332(4):** Whenever an employee is aloft more than 15 feet, a second employee or supervisor shall be within vocal hearing distance of the treed employee.

LEO is an equal opportunity employer/program.



Consultation Education and Training Division  
530 W. Allegan Street • P.O. Box 30643 • Lansing, Michigan 48909-8143  
www.michigan.gov/miosha • (517) 284-7720  
(CET Fact Sheet #0175 • Revised 08/02/2023)



### **General Industry Standard [Part 58, Aerial Work Platforms](#) (Part 58, Aerial Work Platforms)**

This standard defines the minimum requirements when using elevated and rotating platforms while doing tree-trimming work. Of particular note are Rules 5836(2) and (3) which address fall protection. The employer shall provide a safety harness that has a lanyard which is following Construction Standard [Part 45, Fall Protection](#) (Part 45, Fall Protection), Rules 408.44501 to 408.44502 and which is affixed to attachment points provided and approved by the manufacturer. Any occupant of an aerial work platform described in Rules 408.15802(a) and (c) and figures 1 and 3 shall use a safety harness. A fall arrest system shall only be used where the aerial lift is designed to withstand the vertical and lateral loads caused by an arrested fall. An employee may use a body belt with a restraint device with the lanyard and the anchor arranged so that the employee is not exposed to any fall distance. An employee is required to use a restraint device where the aerial lift cannot withstand the vertical and lateral loads imposed by an arrested fall.

### **Other Important Facts to Consider**

**Electrical:** Know the qualifications of employees who work on tree trimming. There is a difference between a tree worker and a qualified line clearance tree trimmer. A qualified line clearance tree trimmer is an employee trained in working in the proximity of electrical conductors. Understand clearances from energized lines and conductors found in Table 1 for the tree worker when approaching energized conductors while Table 2 governs qualified line worker clearances.

**Personal Protective Equipment:** Eye and head protection shall be provided and used. If employees are exposed to vehicular traffic, orange-colored jackets or vests must be provided at no cost to the employee. Understand and follow safe operating procedures and wear appropriate protection when operating a chain saw.

**Clear the Area:** When felling, before the cut is started, the feller shall check for other employees, dead limbs, angle of tree, wind conditions, and plan a path of retreat. Assisting employees shall be instructed on exactly what they are to do. Other employees are to be cleared away at a distance to

twice the height of the tree being cut. Just prior to the tree falling an audible warning shall be given.

**Chipper Concerns:** When removing brush and using brush chippers, feed the chipper from the side of the centerline of the opening. Employees shall turn away when brush is taken into the rotor chamber. Where applicable, the chipper shall be fed from the curbside. Wear appropriate clothing; you cannot wear loose sleeves, gauntlet gloves, watches, or rings.

Additionally, the brush chipper shall be equipped with a locking device on the ignition system. Access panels for maintenance and adjustment shall be closed. The infeed hopper or table of the brush chipper shall be of such a design to prevent an employee reaching into the rotor blades or knives.

**Use Best Safe Work Practices:** Read the equipment manuals; be trained for your job responsibilities; pre-plan by having a meeting to discuss the job; know the hazards, identify them at the job site and do a walk-around; and know where all members of the crew are located before and during felling and trimming.

### **Create a Pre-Start Checklist to Identify:**

- Condition of trees, limbs to be cut - splits, cankers, cracks
- Equipment needed - eye and head protection, harness, clips, belts
- Check equipment for damage and defects
- Personal protective equipment requirements
- Powered hand tools
- Location of power lines, slope of the work area, cone requirements, warning signs

### **Tree Care Industry Association (TCIA):**

[www.treecareindustry.org](http://www.treecareindustry.org)

### **Michigan Green Industry Association (MGIA):**

[www.landscape.org](http://www.landscape.org) or 1-800-354.6352

### **Occupational Safety and Health Administration (OSHA):** [www.osha.gov](http://www.osha.gov)

### **American National Standards Institute (ANSI):**

[www.ansi.org](http://www.ansi.org)

- A300-2022: Tree Care Operations
- Z133.1-2012: Safety Requirements