



NIOSH Issues Nationwide Alert on Dangers of Tree Trimming

NIOSH UPDATE:

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On November 22, at least 25 people died and over 200 were injured when a string of tornados swept through six southeastern states. Tornados leveled homes, destroyed businesses, and ravaged the landscape, inflicting millions of dollars in losses. Although the storm has passed, the devastation and danger will linger for months to come. In the aftermath hundreds of Americans are working to repair the damage and restore homes and lives that were destroyed. Tragically, some of these workers may be risking their own lives.

Procedures that are dangerous under routine conditions are even more hazardous when performed during the massive cleanup efforts that follow natural disasters. For example, workers involved in tree-trimming and clearing of downed power lines face heavy work loads and longer hours, placing them at increased risk of death and injury. One such worker, a 22-year-old man, was fatally injured while clearing trees during cleanup operations following Hurricane Andrew. According to the local coroner's report, the young worker fell to his death while attempting to trim branches.

Unfortunately, this incident is not unique. While the hazards of tree-trimming are especially pronounced during cleanup operations, tree trimmers and cutters are always at risk. NIOSH reports that at least 181 workers involved in tree trimming operations died as a result of injuries incurred at work between 1980 and 1988. The two leading causes of death were electrocutions (68) and falls (52). To warn workers involved in tree trimming and cutting of these hazards, the National Institute for Occupational Safety and Health (NIOSH) has issued an Alert describing eight fatal incidents involving tree trimmers. Of the eight fatalities NIOSH investigated, six occurred during normal felling and maintenance procedures. The other two fatalities were electrocutions that occurred during cleanup following a hurricane and a tropical storm.

According to Dr. Thomas Bender, Director of the NIOSH Division of Safety Research, these fatalities are clearly preventable. "We must act now to inform workers of the crucial prevention steps that can save their lives," he stated.

To prevent future deaths and injuries, workers must be told of the hazards they face and the means of prevention. The following page summarizes the key information in the NIOSH Alert, "Preventing Falls and Electrocutions During Tree Trimming." NIOSH urgently requests your assistance in disseminating this information to those at risk.

Preventing Falls and Electrocutions During Tree Trimming

Who is at risk?

Workers who trim or cut trees are at risk. This includes many electric utility, telephone, and cable television workers. During the period from 1980 to 1988, NIOSH identified 181 work-related deaths among workers involved in tree trimming and cutting. Due to limitations in data collection, these fatalities represent the minimum number of workers who actually died. The two leading causes of death were electrocution (38%) and falling (29%).

Why are workers dying?

NIOSH investigations suggest that many tree trimmers and their employers are not complying with Occupational Safety and Health Administration (OSHA) standards and may be unaware of the risks posed by inadequate or improper safety procedures and equipment.

The NIOSH Alert describes the circumstances of the deaths of eight workers, ranging in age from 21 to 46. All of these deaths could have been prevented.

NIOSH Alerts...

NIOSH issues Alerts in response to immediate occupational health hazards. The Alerts are designed to inform workers that they are at risk and to propose ways of reducing that risk. Prevention of hazardous conditions cannot occur unless workers are in fact aware of hazards and how to avoid them. To accomplish this task, NIOSH Alerts request the assistance of health and safety officials, editors of appropriate trade journals, and employers in the effort to inform workers and implement recommendations. It is the goal of the Institute that through dissemination of these warnings, occupational injury and disease will be prevented.

How can workers be protected?

- Before beginning work, tree trimmers should take the following steps to prevent fatal falls and electrocutions:
- Conduct an initial and daily jobsite survey before beginning work to identify hazards and implement appropriate controls.
- Assume that all powerlines are energized and avoid all contact (direct or indirect) until it is verified that the lines are de-energized.
- Maintain minimum working distances from energized conductors as specified by OSHA [29 CFR 1910.268 (q)(2) (iv)]. Safe distances range from 2 to 15 feet depending on the voltage.
- Use only nonconductive tools, materials, and personal protective equipment.
- If work must be performed near a powerline or within minimum working distances specified by OSHA, make sure that your employer has contacted the utility company to discuss de-energizing, grounding, or shielding the powerlines.
- Inspect trees and limbs for structural weakness before climbing or cutting.
- Use appropriate fall protection equipment.
- Inspect all equipment before each use to ensure that it is not damaged or defective.
- Use safe work procedures to prevent inadvertent cutting of climbing ropes, lanyards, and safety belts or straps.
- Use safe work procedures for climbing, felling, topping, and pruning trees.
- Ensure that employees required to operate mobile equipment (for example, aerial buckets) have been properly trained.
- Participate in any training programs offered by your employer.

The above information is a summary of the key points in the Alert. For copies of the Alert {Publication number DHHS (NIOSH) 92-106}, write or fax requests to: NIOSH Publications Dissemination 4676 Columbia Parkway Cincinnati, OH 45226 FAX: 513/533-8573

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