

Tree Trimmer Dies After Falling 60 Feet From A Tree

DATE: December 23, 1994

SUMMARY

On October 15, 1993, a 38 year-old owner and operator of a small tree trimming company was killed after he fell approximately 60 feet from a large tree he was working in. The victim was working with two other employees to cut some branches from the tree when he fell to the ground. NJDOH FACE investigators concluded that, in order to prevent similar incidents in the future, employers should follow these safety guidelines:

- **Tree trimmers must be properly trained in the positioning and securing of climbing ropes.**
- **Employers should conduct a job hazard analysis of the work area before starting a job.**
- **Employers should consider certifying their supervisors and other interested workers as NJ Certified Tree Experts.**

INTRODUCTION

New Jersey FACE personnel were notified of this fatality from the county medical examiner on October 18, 1993. On November 4, 1993, FACE investigators visited the incident site to photograph the tree and interview a neighbor. Most of the information on the incident was gathered from the state police report, OSHA file, medical examiner's report, and newspaper article.

The victim was the 38 year-old owner and operator of a small tree trimming and landscaping service. Although he employed two helpers at the time of the incident, the victim was the only tree climber in the company. Information was not available on his training or background. The company closed shortly after the incident.

INVESTIGATION

The incident occurred at the rear of a small residential apartment building located in the center of a small town. The victim, who owned and operated the small tree trimming and landscaping service, had been contracted to remove and/or trim at least two trees in a wooded area behind the building. On October 15, 1993 he arrived on site with two employees and set up his climbing and safety ropes in the tree.

No one actually witnessed the fall. At about 2 p.m., the victim was climbing in the tree about 60 feet above the ground while his helpers stayed on the ground. He was reportedly wearing a climbing harness consisting of a safety belt and leg loops with a metal D-ring fixed to the front of the belt. Attached to the

back of the belt was a chain saw that was not in use. He also used two lengths of 100 foot, 5/8 inch diameter climbing rope, one of which had a safety hook attached at the end. A neighbor reported that the victim reached for a hand saw shortly before falling. As he fell, he became entangled in the ropes before striking the ground on his right side and shoulder. One rope remained looped in the tree while the second rope was on the ground, possibly attached to the victim's safety harness. The local rescue squad responded to a neighbor's call for help and had to cut the rope to free the victim. The victim was transported to the local hospital where he was declared dead on arrival at 3:06 p.m. Investigations by the NJ State Police and federal OSHA failed to determine the exact cause of the fall. Examinations of the ropes and harness did not find any equipment failures, and the cuts in the rope were accounted for by rescue efforts. One possible explanation was that the victim was tied off to the rope with a figure eight knot, which he may have loosened in order to reach for the saw.

CAUSE OF DEATH

The county medical examiner determined the cause of death to be from multiple traumatic injuries.

RECOMMENDATIONS AND DISCUSSION

Recommendation #1: Tree trimmers must be properly trained in the positioning and securing of climbing ropes.

Discussion: Although it is not known why the victim fell, it is possible that an error in his fall protection setup caused his safety lines to fail. To prevent these types of incidents, it is vital that the user is properly trained in setting up a fall protection system. Also, all knots and attachment points must be double-checked before use. If there is any doubt about a setup, then a second safety line should be considered to backup the first line.

Recommendation #2: Employers should conduct a job hazard analysis of the work area before starting a job.

Discussion: Before starting any job, the employer and employees must examine the worksite and plan the work. This planning should also include an examination of the work area for fall and other related hazards such as electrical, chemical (e.g. pesticides), and machine related hazards. Once identified, the workers should discuss ways of correcting or avoiding the hazards.

Recommendation #3: Employers should consider certifying their supervisors and other interested workers as NJ Certified Tree Experts.

Discussion: The New Jersey Department of Environmental Protection (NJDEP) currently has a Certified Tree Expert program. A Certified Tree Expert is a person who has been examined and proven to be competent in diagnosing, treating, and preventing tree injuries. The program encourages its members to

take continuing education and training courses, and sponsors safety training and other programs. Additional information on Certified Tree Experts is included in this report or can be obtained by calling the NJDEP at (609) 726-1621.

ATTACHMENTS

NIOSH ALERT: Request for Assistance in Preventing Falls and Electrocutions During Tree Trimming. DHHS (NIOSH) Publication 92-106, August 1992. NIOSH Publications Dissemination, Cincinnati OH. Phone (513)533-8287.

New Jersey Department of Environmental Protection (NJDEP) Certified Tree Expert Information.

REFERENCES

American National Standards Institute, Inc., ANSI Z133.1-1988 American National Standard for Tree Care Operations-Pruning, Trimming, Repairing, Maintaining, and Removing Trees, and Cutting Brush-Safety Requirements.

It is important that employers obtain correct information on safety regulations and methods of ensuring safe working conditions. Sources of information for small tree trimming companies include:

The Committee for the Advancement of Arboriculture. This organization offers courses on basic and advanced tree climbing and other pertinent courses in tree safety and arboriculture. For information, contact David Shaw, Monmouth County Shade Tree Commission, P.O. Box 1255, Freehold, NJ 07728-1255. The telephone number is (908) 431-7903.

National Arborists' Association offers videos on safety and a manual titled "Tailgate Safety for Tree Care Professionals." The address of the Association is The Meeting Place Mall, Route 101/P.O. Box 1094, Amherst, NH 03031-1094. The phone number is (603) 673-3311.

Local utility companies offer seminars for tree trimmers in avoiding electrical hazards.

U.S. Department of Labor, OSHA. On request, OSHA will provide information on federal safety standards. OSHA has several offices in New Jersey which cover the following areas:

Hunterdon, Union, Middlesex, Warren and Somerset Counties.....(908) 750-3270
Essex, Sussex, Hudson and Morris Counties.....(201) 263-1003
Bergen and Passaic Counties.....(201) 288-1700
Atlantic, Gloucester, Burlington, Mercer, Camden, Monmouth,
Cape May, Ocean, Cumberland and Salem Counties.....(609) 757-5181

The NJ Safety Council provides a variety of courses on work-related safety. There is a charge for the seminars. Their address is 6 Commerce Drive, Cranford, New Jersey 07016. Telephone (908) 272-7712

To contact [New Jersey State FACE program personnel](#) regarding State-based FACE reports, please use information listed on the Contact Sheet on the NIOSH FACE web site. Please contact [In-house FACE program personnel](#) regarding In-house FACE reports and to gain assistance when State-FACE program personnel cannot be reached.