The National Institute for Occupational Safety and Health (NIOSH)

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Timber Cutter Dies After Being Struck by Elevated Butt of Previously Felled Tree Which Dropped as He Walked Under it in West Virginia

Case: 03WV045-01
Release Date: March 5, 2004

SUMMARY

On December 2, 2003, a 24-year-old male timber cutter (victim) died of injuries sustained when he was struck from above by the elevated butt section of a tree he had previously felled as he walked under it. Just prior to the incident he had felled another tree which hung. As the skidder approached to mechanically remove the hung tree, the victim began to walk away from the operation. As he did so, he decided to walk directly under the butt section of a tree which remained elevated due to the formation of it's top and position on the bank of the skid road below. While passing under the butt, which was approximately 5-6 feet above the ground, the tree dropped due to victim contact and/or tree top breakage. The contact and/or breakage caused the butt to suddenly drop on top of the victim. Witnessing the incident, the skidder operator responded by immediately running to the victim's aid. Realizing the extent of his head injuries, the coworker ran to the landing to inform the certified logger who in turn told a truck driver to call 911. The certified logger then ran to the victim, noted the massive head trauma, and administered CPR. EMS arrived shortly thereafter, checked for vital signs and found none. The victim was dead at the scene.

The WV FACE Investigator concluded that to reduce the likelihood of similar occurrences, employers should:

- **ensure that workers understand the importance of "working defensively" and that elevated loads can drop at any moment and therefore should be avoided.**
- **develop, implement, and enforce a written safety program which includes, but is not limited to, task-specific safety procedures and worker training in hazard identification, avoidance, and control.**

INTRODUCTION

On December 2, 2003, a 24-year-old male timber cutter (victim) died of injuries sustained when he was struck from above by the elevated butt section of a tree he had previously felled as he walked under it. On December 3, 2003, the West Virginia FACE Investigator was notified of the death by theWest Virginia Bureau of Employment Programs, Workers' Compensation Division. The FACE Investigator contacted the West Virginia Division of Forestry (WVDOF). The incident was reviewed with the WVDOF representative, who then accompanied the investigator to the site where an investigation was

conducted on February 2, 2004. The victim's employer was interviewed. The incident site was examined and photographed. Other informational sources and contacts included: death certificate, medical examiner's report, newspaper articles, WVDOF, and OSHA.

The employer in this incident was a commercial logging company which had been in business for 2 years. The land was privately owned and was being selectively timbered. At the time of the incident, the workforce totaled 5 including the victim and the owner. The company had a designated safety director (owner). Safety meetings were held twice a month. It was reported that new workers were not permitted to work alone and were paired with the owner for at least two weeks for ongoing instruction and guidance. There was no written safety program or task-specific work rules.

The operation had a certified logger at the site who was the owner as well. [Note: The Logging Sediment Control Act of West Virginia (1992) requires that each timbering operation in West Virginia be supervised by a certified logger. To become a certified logger, an individual is required to successfully complete training and pass a test for best management practices (a soil erosion prevention plan) and chain saw safety, as well as possess a current first aid card.[1]]

The victim's job at the time of the incident was that of timber cutter. He had two years of logging experience. He had also successfully completed WVDOF training for best management practices and chain saw safety. He had been with the company for approximately three months when the incident occurred. He was reported to be a cautious worker. The victim was wearing a hard-hat, hearing protection, face screen, and chaps. He had just returned from lunch shortly before the incident.

INVESTIGATION

On December 2, 2003, a 24-year-old timber cutter (victim) died of injuries sustained when he was struck from above by the elevated butt section of a tree he had previously felled as he walked under it. Just prior to the incident he had felled a small hickory tree which hung-up across the skid road below. As the skidder approached to mechanically remove the hung tree, the victim began to walk away from the operation. He decided to take the path of least resistance and walk approximately 28 feet slightly up hill and directly under the butt section of a another hickory tree which remained elevated due to the formation of it's top and position on the bank of the skid road below. The elevated hickory butt measured 16 inches in diameter. While passing under the butt, which was approximately 5-6 feet above the ground, the tree dropped due to victim contact and/or tree top breakage. The contact and/or breakage caused the butt to suddenly drop on top of the victim (see Figure 1). The falling tree pushed the victim down placing his head between the tree butt and the ground. Witnessing the incident, the skidder operator responded by running to the victims aid and freeing his head by hand. Realizing the extent of his head injuries, the coworker ran to the landing to inform the certified logger who in turn told a truck driver to call 911. The certified logger then ran to the victim, noted the massive head trauma, and administered CPR. EMS arrived shortly thereafter, checked for vital signs and found none. The victim was dead at the scene.

CAUSE OF DEATH

The medical examiner listed the immediate cause of death as traumatic head injury.

RECOMMENDATIONS/DISCUSSION

Recommendation # 1: Employers should ensure that workers understand the importance of "working defensively" and that elevated loads can drop at any moment and therefore should be avoided.

Discussion: In this incident the victim, without hesitation, positioned himself directly under an elevated and obviously hazardous load. The butt's elevated orientation greatly reduced the trees's potential for stability. Elevated loads of any type should be avoided at all costs. If the victim had realized the tree's precarious position and understood the unpredictable nature of it's potential energy, he may have decided to not to position himself directly below the load and walk around the elevated butt.

Recommendation #2: Employers should develop, implement, and enforce a written safety program which includes, but is not limited to, task-specific safety procedures and worker training in hazard identification, avoidance, and control.

Discussion: The evaluation of tasks to be performed at the work site form the basis for the development, implementation, and enforcement of a safety program as well as task-specific safety procedures. The key elements of the program should include the communication of task-specific safe work practices and, at a minimum, training in hazard identification and the avoidance and abatement of these hazards. In this incident, the victim was fatally injured when he approached an unsafe situation (an unsecured and unmarked elevated load). Training in the hazards associated with the work environment and task-specific safety procedures through a comprehensive safety program may have provided the victim the information necessary to recognize and avoid a hazardous situation. CFR 1910.266 (i)(3)(iii) requires that workers be trained in the recognition of safety and health hazards that are associated with their assigned job tasks, including the use of measures and work practices to prevent or control these hazards.[2]

REFERENCES

1. West Virginia Logging Sediment Control Act, 1992.
2. Office of the Federal Register: Federal Register, Vol. 59, No. 196, 29 CFR 1910.266, 1995.

ILLUSTRATIONS

Figure l. This illustrates the relationship between the victim and the elevated butt. This is viewed from the skidder operator's perspective. The victim was walking away from the skidder when the tree suddenly dropped.

FATALITY ASSESSMENT AND CONTROL EVALUATION PROGRAM

The WVU Center for Rural Emergency Medicine, through a contract with the West Virginia Department of Health and Human Resources and Bureau for Public Health, conducts investigations on the causes of work-related fatalities within the state. The goal of this program is to prevent future fatal workplace injuries. West Virginia FACE intends to achieve this goal by identifying and studying the risk factors that contribute to workplace fatalities, by recommending intervention strategies, and by disseminating prevention information to employers, employees, trade associations, unions, equipment manufacturers, students, teachers, and others with an interest in workplace safety.

Please use information listed on the Contact Sheet on the NIOSH FACE website to contact In-house FACE program personnel regarding In-house FACE reports and to gain assistance when State-FACE program personnel cannot be reached.

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