

# Fatality Assessment and Control Evaluation Project

Public Health

KY FACE #97KY031

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To: Carl Spurlock, Ph.D., Director, Kentucky Injury Prevention and Research Center

From : Amy Scheerer, Investigator, KY FACE Project

Subject: Logger Killed When Struck by Tree Limb During Hauling

## SUMMARY

A 52-year-old male was killed on a logging site when a tree limb struck him in the back of the head. He had no previous logging experience and had been working with his friend who was a full-time logger for six days when the fatal incident occurred. The two men were working alone on the logging site and it was about 5:30 pm when they chained a load of three logs to the bulldozer to be dragged downhill to be loaded on a truck. A branch that was about 8 feet long and 4-5 inches in diameter stuck out of one of the logs at approximately a 45 degree angle. When the logger started the bulldozer, he noticed that his friend was a safe distance away and began to pull the logs. As he did this, the branch sticking out became lodged behind a standing tree. Apparently the victim walked over near the load and was attempting to start his chainsaw when the branch that was caught behind the standing tree suddenly gave way and hit the victim in the back of the head. When the logger driving the bulldozer turned around to check on the load, he saw his friend lying face down on the ground beside the load of logs; the chainsaw lying nearby was still running. The logger drove his bulldozer down the hill to a convenience store to call for help. Rescue personnel were dispatched at 6:11 pm and arrived on the scene at 6:27 pm. The victim showed vital signs upon EMS arrival and a life flight helicopter was called to the scene. He was transported to a trauma center, but died several hours later. In order to prevent similar incidents from occurring, FACE investigators recommend that:

- Loggers should wear appropriate personal protective equipment (PPE) while working
- Employers should provide proper training to new employees
- Loggers should attend the Master Logger Program for education regarding Occupational Safety and Health Administration (OSHA) logging standards and safety procedures

## INTRODUCTION

On 17 April 1997, FACE was informed of a 52-year-old male who was involved in a logging incident on 15 April and died on 16 April. An investigation was initiated and a site visit was made on 23 May 1997. The EMS personnel who treated the victim at the scene were interviewed and they accompanied the investigator to the site. The EMS report was reviewed. An interview was conducted at the logging site with the logger who was working with the victim. Photographs were taken of the site although the area had been altered slightly since the incident. No photographs were taken at the scene of the incident.

The victim in the incident had worked as a truck driver at a cement company for 22 years. After recently losing his job with the company, he went to work for his friend who was a full-time logger. He planned to learn the business then purchase a truck to haul logs. He had no previous experience logging and had only been working with his friend for six days when the fatal incident occurred.

The employer was a full-time logger who had been self-employed for 18 years. He owned a bulldozer and leased property for logging purposes. He usually hired one or two other loggers to assist him at a site. There was no formal training or safety program in place. The use of personal protective equipment (PPE), such as hard hats, was not a requirement at the job site.

## **INVESTIGATION**

On the day of the incident, the weather was warm and clear. This was the sixth day that the victim had been working with his friend who was a full-time logger. As usual, the two men were working alone on the mountain land that the logger leased. The logging site was about a half mile up a dirt path on a hillside densely covered with trees. Trees stood on both sides of the dirt path used by the bulldozer. Because the victim had no logging experience, the full-time logger was training him as they worked although there was no formal process. Neither of the men wore hard hats or other personal protective equipment (PPE) while working.

It was about 5:30 in the afternoon when the loggers had secured a load of three logs to the bulldozer to be taken down the hillside to a clearing where they would be loaded on a truck. As the logger got on the bulldozer to pull the logs, he noticed that his friend was about 15-20 feet away trying to start his chainsaw. A branch that was about 8 feet long and 4-5 inches in diameter stuck out of one of the logs being hauled at approximately a 45 degree angle and as he began to pull the load of logs, the branch sticking out became lodged behind a standing tree. When the logger driving the bulldozer turned around to check on the load, he saw his friend was lying face down on the ground beside the load of logs; the chainsaw lying nearby was still running. Although the incident was unwitnessed, apparently the victim walked over near the load when the branch that was caught behind the standing tree suddenly gave way and hit the victim on the lower portion of the back of his head. The logger ran over to his friend and found that he was severely injured. He repositioned the victim's head to the side to decrease the risk of suffocation then drove the bulldozer down the hill to a nearby convenience store to call for help. Rescue personnel were dispatched at 6:11 pm. When they arrived on the scene at 6:27 pm, the victim still showed vital signs although he had suffered a severe head injury and was bleeding profusely. The life flight helicopter was summoned to the scene and the victim was taken on a

stretcher approximately 40-50 feet to the top of the hill where there was a open field for the helicopter to land. At 7:32 pm the helicopter left the scene and transported the victim to a trauma center. The victim showed vital signs for several more hours, but died at the hospital at 12:55 am.

## **CAUSE OF DEATH**

Cause of death according to the coroner's report was brain injury with open wound.

## **RECOMMENDATIONS/DISCUSSION**

***Recommendation #1:*** Loggers should wear appropriate personal protective equipment (PPE) while working.

***Discussion:*** Employers should require their employees to wear appropriate PPE, such as head, eye, and leg protection while working at the logging site. In this case, neither of the loggers were wearing hard hats or other PPE. It is unknown whether a hard hat would have prevented an injury because the limb struck the victim on the lower portion of the back of the head and neck, however his injuries may have been less severe if his head had been protected.

***Recommendation #2:*** Employers should provide proper training to new employees.

***Discussion:*** Employers should properly train employees in safe methods and practices of logging. Training should include recognizing, avoiding and abating common hazards encountered while logging. In this case, the employer should have stressed the importance of safe practices, such as staying a safe distance away from the logs and equipment during skidding operations.

***Recommendation #3:*** Loggers should attend the Master Logger Program for education regarding Occupational Safety and Health Administration (OSHA) logging standards and safety procedures.

***Discussion:*** Loggers should be aware of proper procedures and safety practices to ensure a safe work environment. For more information about the Master Logger Program, contact Larry Lowe at the Kentucky Department of Natural Resources (502-564-4496).

## **REFERENCES**

American Pulpwood Association (APA), Inc. Safety Alert (94-S-11); March/April 1994.

National Institute for Occupational Safety and Health (NIOSH). ALERT- Preventing Injuries and Deaths of Loggers; December 1994.