

Public Health

KY FACE #96KY01901

9 May 1996

TO: *Carl Spurlock, PhD, Director, Kentucky Injury Prevention and Research Center, and Epidemiologist, Kentucky Department for Health Services*

FROM: *Ellyn Moon-Hampton, Field Investigator, Kentucky Fatality Assessment and Control Evaluation (KY FACE) Project*

SUBJECT: *Logger Killed by Falling Snag*

SUMMARY

A 42-year-old logger was killed after being struck on the head by a falling limb from a snag (dead standing tree). The victim had been working with one co-worker, who had temporarily left the scene to remove some logs. They were selectively cutting dead or dying trees which were approximately 20 inches in diameter. While his co-worker was away, the victim cut a tree which broke a snag approximately 30-35 feet up. The snag fell directly on the victim, striking him in the forehead. He was not wearing any type of head protection at the time of the incident. The victim was transported to a nearby hospital and later transferred to a trauma center, but died the same day. The KY FACE investigator concluded that, to prevent similar occurrences, the following precautions should be taken:

- Ensure that tree fellers properly evaluate the area around timber to be felled so that potential hazards can be identified and appropriate control measures implemented*
- Provide and enforce the use of personal protective equipment (PPE)*
- Ensure that emergency messages can be transmitted quickly*
- Designate a qualified person to conduct regular safety inspections*
- Loggers should attend the Master Logger Program for education regarding logging standards and safety practices*

INTRODUCTION

On February 8, 1996, a 42-year-old logger died after being struck on the head by a falling snag. KY FACE was notified of the incident on March 7 by the Census of Fatal Occupational Injuries (CFOI) administrator at the Kentucky Department of Labor. On April 4 a FACE investigator traveled to the scene. The co-worker of the victim was interviewed, and photographs and measurements of the scene were taken. Copies were later obtained of the death certificate and the coroner's report. The Occupational Safety and Health (OSH) compliance officer was later interviewed by telephone.

INVESTIGATION

The employer, a manufacturer of wood trim and cabinet parts, is a family-owned business which has been in operation since 1958. The company has vertically integrated tracts of land on which dead or dying timber is cut and used as raw material for the final product. A total of about 3000 acres is currently owned, of which 800 are located in Kentucky. The company employs 350 people. Three workers are full-time at the site where this incident occurred, a former farm which consists of wooded acreage plus a house and barn. A small sawmill has been set up in the barn, where low-grade timber is processed; the higher grades are sent to the company's main plant in Indiana.

The victim was a college graduate and had been exposed to and worked in logging all his life; he was recommended to the company by the state forester in the area. Before coming home to Kentucky to work, he had spent time in Africa, where he was involved in harvesting ebony trees. He had only been employed by this company for about two weeks, and had only been cutting trees for the company one week before the incident occurred. Prior to this incident the victim had never been ill nor suffered any serious injury, according to his mother.

Although the company had a comprehensive written safety program for its manufacturing plant, the logging division was relatively new. The safety program for the Kentucky logging sites had been written by the victim himself, and, according to the OSH compliance officer, was an excellent program. The company's overall safety record is good enough to have earned it the lowest workers' compensation rates available.

The day of the incident was cold but there was no snow or ice on the trees; the ice on the nearby creek was in the process of melting. The victim and his co-worker, who was the company's safety director and also an EMT, had been felling trees and were almost ready to break for lunch. The co-worker left to take some logs up the hill, and while he was away, the victim began working on the next tree to be felled, an elm approximately 20 inches in diameter and 28 feet tall.

Although the incident was unwitnessed, evidence at the scene suggests that the victim was having trouble getting the tree to fall in the proper direction. He had inserted two wedges into the cut; he normally used only one. As the elm fell it hit a dead tree approximately 10-15 feet away, causing a limb to break and fall. He was hit directly on the forehead by the falling snag. He was not wearing any type of head protection or personal protective equipment at the time. It was his practice not to wear a hard hat because it obscured his peripheral vision.

When the co-worker returned to the work site, he found the victim and realized immediately what had occurred. He checked the victim and found that he was still alive, then ran to his truck to summon help. (Normally the loggers had a cellular phone at the work site, but none was available that day.) The co-worker drove back to the office, a distance of about two miles, and called the rescue service, which arrived within fifteen minutes. They placed the victim on advanced life support and transported him to the local hospital. He was then transferred to the regional trauma center, but died the same day.

CAUSE OF DEATH

The cause of death as stated on the death certificate was "head injury." No autopsy was performed.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Ensure that tree fellers properly evaluate the area around timber to be felled so that potential hazards can be identified and appropriate control measures implemented.

Discussion: Fellers, particularly new employees, should be provided with training in safe work practices and instructed to evaluate their work area prior to beginning work. Such training should include factors such as the lean of the tree to be cut, wind conditions, and the locations of other trees in the immediate work area, as well as the need to identify potential hazards such as dead, broken or rotten limbs or trees (snags). Once identified, any snags should be felled or otherwise removed before commencing logging, as detailed in 29 CFR 1910.266(c)(3)(ii) and 29 CFR 1910.266(e)(2)(ii).

Recommendation #2: Provide and enforce the use of personal protective equipment (PPE).

Discussion: 29 CFR 1910.266(c)(1)(iii) requires that approved safety helmets be provided to workers. Employers should provide workers with the required PPE, instruct workers in the proper use of the PPE, and require its use.

Recommendation #3: Ensure that emergency messages can be transmitted quickly.

Discussion: Cellular phones or two-way radios should be used by workers who are away from the central office. Cellular phones in particular would enable workers to place emergency calls immediately.

Recommendation #4: Designate a qualified person to conduct regular safety inspections.

Discussion: To ensure that workers, particularly new employees, are performing their tasks in the safest possible manner, scheduled and unscheduled safety inspections should be conducted at job sites. Any potential hazards or improper work practices which are identified should be immediately corrected.

Recommendation #5: Loggers should attend the Master Logger Program for education regarding logging standards and safety practices.

Discussion: Loggers should be aware of proper procedures and safety practices to ensure a safe environment for workers. (Note: In this case, the Safety Director is currently arranging for employees to attend this program.)

Reference:

29 CFR 1910.266. Code of Federal Regulations, Washington DC: US Government Printing Office, Office of the Federal Register.