Fatality **A**ssessment and **C**ontrol **E**valuation Project

Public Health

KY FACE #98KY063

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TO: Michael Auslander, DVM, MSPH, Kentucky Department for Public Health, Division of Epidemiology, Surveillance and Investigations Branch

FROM: Amy Scheerer, MSPH, KY FACE Project Investigator

SUBJECT: Logger Fatally Injured by Falling Limb

SUMMARY

A 60-year-old male logger (the victim) was killed when a falling limb struck him on the head. He had been involved in the logging industry all of his life and had been working for a small logging business for six days when the fatal incident occurred. At about 9 a.m. on the day of the incident, the owner of the company went with the victim to where he would be felling trees. The victim was not wearing any personal protective equipment (PPE). They talked for a few minutes then the owner left on the bulldozer. When he returned 20-25 minutes later, he found the victim lying on the ground. No vital signs were detected. Although the incident was unwitnessed, it was apparent that he had been hit in the head by a falling limb. A broken-off branch lying nearby was about 4 inches in diameter and 4-5 feet long. The owner ran back to the truck about 3/4 mile from the scene to call 911 using the cellular phone. The police and emergency medical services were dispatched to the scene after receiving the call at 9:54 a.m. The coroner was contacted and pronounced the victim dead at the scene. In order to prevent similar instances from occurring, FACE investigators recommend that:

- Appropriate personal protective equipment (PPE) should be worn at the logging site.
- A hazard assessment of the logging site should be completed before beginning work to identify and control potential hazards.
- Employers should develop and enforce a written safety program.
- Loggers should attend the Master Logger Program for education regarding Occupational Safety and Health Administration (OSHA) logging standards and safety procedures.

INTRODUCTION

On September 4, 1998, FACE investigators were notified of a 60-year-old male logger who was killed on September 1. An investigator traveled to the site on September 10. An interview was conducted with the county coroner who responded to the scene. No photographs were taken by the coroner or other officials at the scene of the incident. A copy of the medical examiner's report was obtained. An interview was conducted with the company owner who was still working at the site. Photographs were taken of the site where the incident occurred. An interview was conducted via phone with the OHSA compliance officer who handled the case.

The victim was an experienced logger who had been involved in this industry most all of his life. In addition to logging, he raised tobacco on his farm. His primary job on the logging site was to fell and limb trees for transportation to the landing by skidder. He had been friends with the owner of the company and began working for him just six days prior to the fatal incident. The victim had not attended the Kentucky Master Logger Program.

The owner of the company had also been involved in the logging industry most of his life. Prior to logging full-time, he worked in the mining industry for 19 years. When he went into the logging business full-time, he purchased a skidder and a bulldozer and attended the Kentucky Master Logger Program. The owner employed 2-3 loggers at a site depending on the work load. There was no written safety program or formal training provided. The use of personal protective equipment at the job site was encouraged, but not required. This was the first fatality for the company.

INVESTIGATION

Before the victim came to work with this company, the owner had spent time clearing roads and paths at the wooded mountain area. They began work at the site in late August, logging mostly poplar. The fatal incident occurred on their sixth day at the site. The weather was warm and pleasant; the month of August had been unusually dry.

On the morning of the incident the owner and two loggers began work as usual. At about 9 a.m. the owner accompanied the victim to where he would be felling trees. The site was in a wooded mountain area about 3/4 mile from the landing where the owner left his truck. Although the bulldozer path used to travel there was steep and winding, the site where the victim worked was a relatively level area that was approximately 20 yards downhill from the bulldozer path.

As was his normal practice, the victim was not wearing a hard hat or any other personal protective equipment. Hard hats were available in the truck and the owner encouraged employees to wear one but the victim declined to do so. After arriving at the site and talking for a few minutes, the owner left on the bulldozer and said he would be back shortly. The victim worked alone and felled two trees while the owner was gone. The other logger was not working nearby at the time of the incident. In about 20-25 minutes the owner drove back over to where he had left the victim working. As he came near the site, he did not hear the victim's chainsaw running. The owner called out to make sure he was far enough away if a tree was being felled. When he did not receive a response to his calls, he parked the bulldozer on the path and went down the hillside on foot. He found the victim lying on the ground on his back; his head was badly injured and he was unresponsive. Although the incident was unwitnessed, the victim apparently had been standing near the stump of the tree he had felled when a limb from a nearby

tree broke off and struck him on the head. A jagged limb that was 4-5 feet long and about 4 inches in diameter was lying near the victim and appeared to be the one that fell although it was not clear which tree it came from.

Finding no vital signs, the owner ran back to the truck to call for help on the cellular phone kept there. The police and emergency medical services were dispatched to the scene after receiving the call at 9:54 a.m. The coroner was contacted at 10:28 a.m. and he arrived at 11:05, pronouncing the victim dead at the scene.

CAUSE OF DEATH

The cause of death on the medical examiner's report was blunt force injuries of the head.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Appropriate personal protective equipment (PPE) should be worn at the logging site.

Discussion: OSHA regulations for logging state that employers should provide employees with appropriate head protection and ensure that it is worn when the employee works in an area where there is potential for head injury from falling or flying objects [CFR 1910.266 (d) (1) (vi)]. In this case, the employer had hard hats available for his employees and although he encouraged his employees to wear the hard hats, it was not enforced. In this situation, wearing appropriate head protection could have lessened the impact of the falling limb and the fatal injury could have been avoided. Although it is not known for certain whether a hard hat would have prevented this fatal injury, wearing the appropriate PPE should be required by employers to reduce the risk of injury for all employees at the logging site.

Recommendation #2: A hazard assessment of the logging site should be completed before beginning work to identify and control potential hazards.

Discussion: The logging site should be evaluated for potential hazards such as dead, rotten or broken limbs and trees (also known as snags or "widowmakers"), as well as lodged trees and limbs. In addition, a hazard assessment should include factors such as lean of the tree to be felled, location of other trees or obstacles in the area, wind conditions, and slope of the land. In this case, an assessment of the area by the logger and owner when they arrived at the site in the morning may have alerted them to the snag and work could have proceeded a safe distance away or extra precautions could have been taken in felling trees in the area.

Recommendation #3: Employers should develop and enforce a written safety program.

Discussion: A safety program should include, but is not limited to, training and policies about wearing the appropriate PPE, including hard hats, safety glasses, chaps, boots and gloves; using of chainsaws; operating heavy equipment; and recognizing, avoiding, and abating potential hazards.

Recommendation #3: Loggers should attend the Master Logger Program for education regarding Occupational Safety and Health Administration (OSHA) logging standards, safe logging techniques, and best management practices.

Discussion: Loggers should be aware of OSHA standards and proper logging techniques

to ensure a safe work environment. For more information about the Kentucky Master Logger Program, contact the Kentucky Department of Natural Resources (502-564-4496).

References

Office of the Federal Register. CFR 1910.266, Code of Federal Regulations. Washington, DC: US Government Printing Offices; 1995.