Fatality Assessment and Control Evaluation Project

Public Health

KY FACE #97KY122

10 December 1997

TO:	Carl Spurlock, PhD, Director, Kentucky Injury Prevention and Research Center, and Epidemiologist, Kentucky Department for Health Services
FROM:	Amy Scheerer, Field Investigator, Kentucky Fatality Assessment and Control Evaluation (KY FACE) Project
SUBJECT:	Dislodged Tree Strikes Logger

SUMMARY

A 64-year-old self-employed logger (the victim) was killed when a lodged tree fell and struck him. He was working with his 19-year-old son and a logger who owned a skidder. The victim had cut a beech tree that was approximately 24 inches in diameter at the base. Before the tree was able to fall, it became lodged against another tree standing near it. The victim was aware of the hazard and informed his son and the other logger to stay away from the area. The two continued working about 70-80 yards away, however the victim stayed in the area about 30 yards from the lodged tree. While the victim was running the chainsaw to limb some felled trees, the tree became dislodged by a strong gust of wind and fell toward the victim. He was hit in the back of the head by a limb as the tree fell. His son saw the tree fall and went to check on his father. Upon finding him lying on the ground unresponsive, the son took the truck and went to their home about 1/4 mile down the road to call for help. Rescue personnel were dispatched at 12:41 pm and arrived on the scene in about 15 minutes. The coroner was summoned and pronounced the victim dead at the scene. In order to prevent similar events from occurring, FACE investigators recommend that:

- Loggers should remove, fell, or avoid dangerous trees (including lodged trees)
- Loggers should wear personal protective equipment such as hard hats

INTRODUCTION

On October 14, 1997, FACE was informed of a logger who was killed by a falling tree on

October 12. A site visit was made on October 27, 1997. Interviews were conducted with the county coroner, the victim's coworker, the victim's older son, and EMS personnel. A copy of the coroner's report was obtained and photographs were taken at the site.

The 64-year-old victim was self-employed and had been in the logging business all of his life. He was reportedly an experienced and conscientious logger. He and the logger who owned the skidder (present at the scene that day) bought the hardwood timber on land that was near where the victim lived. They worked together logging the area and then sold the timber to local mills. The victim's 19-year-old son who was at the scene on the day of the incident had very little logging experience and only helped out occasionally. The victim was in generally good health.

INVESTIGATION

On the morning of the incident, the victim and his son drove their truck to the logging site about 1/4 mile down the road from where they lived. The logger who owned the skidder met them at the site and they began work about 9 am. The victim worked at an area near the roadway, felling trees and preparing them for transport, while the skidder operator and the victim's son worked at an area farther back from the roadway. None of the loggers wore hard hats or other personal protective equipment. At approximately 12 pm, the victim was working on felling a beech tree that was approximately 24 inches in diameter at the base. Before the tree was able to fall, it became lodged against another tree standing near it. The victim was aware of the hazard and yelled to his son and the other logger to stay away from the area. The two continued working about 70-80 yards away, however the victim stayed in the area about 30 yards from the lodged tree near the direction it was cut to fall. Using a chainsaw, he began limbing some felled trees to prepare them for transport to a mill. Although the weather was clear and pleasant that day, winds became increasingly strong and gusty later in the morning. While the victim was running the chainsaw with his back toward the lodged tree, the tree became dislodged by a strong gust of wind and fell toward the victim. He was hit in the back of the head by a limb approximately 4 inches in diameter as the tree fell. The son and the other logger saw the tree fall and the son went to check on his father. Upon finding him lying on the ground unresponsive, the son drove the short distance to their home to call for help. Rescue personnel were dispatched at 12:41 pm. The fire department arrived first on the scene followed by Emergency Medical Personnel at 12:58 pm. The coroner was summoned and pronounced the victim dead at the scene. The victim's older son was also called to the scene before the body was removed.

CAUSE OF DEATH

Cause of death as given on the coroner's report is multiple injuries and fractures to the back of skull due to being struck with a tree limb from a falling tree.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Loggers should remove, fell, or avoid dangerous trees (including lodged trees).

Discussion: OSHA guidelines pertaining to handling dangerous trees is outlined in 29 CFR 1910.266 (h) (1). This section states that "each danger tree, including lodged trees and snags, shall be felled or removed using mechanical or other techniques that minimize employee exposure before work is commenced in the area of the danger tree" and if the danger tree is not removed, "it shall be marked and no work shall be conducted within two tree lengths of the danger tree…." In this case, the victim was aware of the hazard presented by the lodged tree because he informed his coworkers to stay away from the area. However, he continued to work in the high risk area, approximately 30 yards from the lodged tree and near the direction that the tree had been cut to fall. It is possible that the hazardous situation could have been abated by immediately felling the tree in a controlled manner with the assistance of a coworker, rather than allowing the lodged tree to remain in a position that put all the workers at risk. If the tree can not be felled right away, loggers should remain a safe distance away from the area.

Recommendation #2: Loggers should wear personal protective equipment such as hard hats. Discussion: In this case, the victim did not normally wear any head protection while on the job and was not wearing any at the time of the incident. It is not known for certain whether a hard hat could have prevented the injuries that the victim suffered when the limb struck him in the back of the head, but it could have minimized the severity. OSHA guidelines pertaining to personal protective equipment are directed at employers who are to assure that employees wear head protection on the job site when there is a potential for head injury from falling or flying objects [CFR 1910.266 (d) (1) (vi)]. The logger in this incident was self-employed, but following the guidelines for wearing PPE would decrease the risk of injury associated with this high-risk work environment.

REFERENCES

American Pulpwood Association Inc. The Logger's Guide to the New OSHA Logging Safety Standards (95-A-14). Rockville, MD: Author; 1995.

NIOSH. Preventing Injuries and Deaths of Loggers (Alert). Cincinnati, OH: Author; 1995. (DHHS [NIOSH] Publication No. 95-101)

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