

Public Health
Kentucky FACE 96KY10201
Date: 3 December 1996

To: Carl Spurlock, PhD, Director, Kentucky Injury Prevention and Research Center

From: Amy Scheerer, Kentucky FACE Investigator

Subject: Logger Killed When Struck by Tree

SUMMARY

A 59-year-old male was killed when he was struck by a tree while logging on a mountainside. The victim was working with two other men doing contract work for a local lumber company. All three men were full-time loggers and had many years of experience. On the morning of the incident, the men were working on a steep mountainside. One logger was working at the top of the hill operating a skidder that he owned to pull the cut trees up the hill. At the time of the incident, the victim was working about 30-35 feet from the top of the hill. After cutting down the trees, he would secure them with chains to be pulled up by the skidder (choker). The other logger was working several yards farther down the hill and did not witness the fatal incident. The victim had put the choker on a large log that was 12 inches in diameter and about 50 feet long. When the skidder began to pull the attached log, it dislodged a smaller log that was lying nearby. The dislodged log was pulled toward the victim, hitting him in the legs and knocking him to the ground. Due to the steep angle of the hillside, the skidder operator could not see that the logger had fallen to the ground. As the skidder continued to pull the larger log uphill, it struck the victim in the head. The logger suffered massive skull fractures and died within seconds. In order to prevent similar incidents from occurring, the FACE investigator recommends:

- * All workers should be clear of the skidding area before moving the logs
- A system of communication between workers should be maintained at all times
- * Skid trails should be cleared of brush and trees before being used
- * Loggers should attend the Master Logger Program for education regarding OSHA logging standards and safety procedures

INTRODUCTION

On 9 October 1996, a 59-year-old male was killed when he was struck by a log on a mountainside. Kentucky FACE was notified of the incident on October 11 and an investigation was initiated. A FACE investigator traveled to the site of the incident on October 29. Interviews were conducted with the county coroner and the deputy coroner who were present at the scene. They accompanied the investigator to the mountainside where the incident occurred. Photographs were taken of the site. A copy of the death certificate and coroner's report were obtained.

INVESTIGATION

The victim in this case was a 59-year-old male who had been a full-time logger for most of his life. His usual practice was doing contracted work for a local hardwood lumber company. He worked with two other loggers, one of whom owned a skidder; all three men had many years of logging experience.

On the day of the incident, the three men began work early in the morning on a mountain where they often logged. It was clear and cool that day and there had been no recent rainfall. The site of the incident was a hillside with a slope of 45 degrees and densely covered with trees; fallen leaves and uneven terrain made the steep hill even more hazardous to work on. The victim of the fatal incident was working about 30-35 feet from the top of the hillside. The other logger was working several yards farther down the hillside which extended approximately 250 feet. After cutting down the trees, the loggers would secure a log with chains attached to a skidder which was parked at the top of the hill on fairly level ground. The skidder operator would then pull the log up the mountainside to be taken to a clearing for cutting and loading. From where the skidder was parked, the operator was unable to see the other loggers due to the angle of the hill and the trees.

The victim had secured a large log measuring about 12 inches in diameter and 50 feet long with chains. The log extended straight down the mountainside. As the skidder operator began to pull the large log up the hillside, it dislodged a smaller felled tree measuring about 6 inches in diameter and 30-35 feet long that was lying on the ground.

The smaller tree struck the victim in the legs and knocked him to the ground. The skidder operator was unaware that the logger had fallen and continued to pull the log uphill. As he did, the large log struck the victim in the head causing massive skull fractures. He died within seconds. Although the other logger did not witness the incident occur, he turned to see the victim on the ground and ran to the top of the hill to tell the skidder operator and call for help. Rescue crews were called at 10:15 a.m. and arrived within 10 minutes. The victim was pronounced dead at the scene at 10:30 a.m.

CAUSE OF DEATH

On the death certificate the cause of death is given as skull fractures due to being hit by falling tree.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: All workers should be clear of the skidding area before moving the logs.

Discussion: The American Pulpwood Association (APA) Logger's Guide to the New OSHA Logging Safety Standards states that during skidding (or yarding) "no log shall be moved until each employee is in the clear" and that "no yarding line shall be moved unless the yarder operator has clearly received and understood the signal to do so" (see Recommendation/Discussion #2).

Recommendation #2: A system of communication between workers should be maintained at all times.

Discussion: The APA guidelines state that hand signals or audible contact, such as whistles, horns, or radios should be used in cases where noise or restricted visibility prevent a clear understanding of normal voice communication between workers. In this case, because the skidder operator was unable to see the other loggers due to the steep slope of the hill, a system of communication such as two-way radios could be used to signal when the area was clear and safe.

Recommendation #3: Skid trails should be cleared of brush and trees before being used (APA Safety Alert 93-S-35).

Discussion: Examining skid trails for possible hazards can help decrease the risk of injury. In this case, the attached log struck a felled tree that was lying in the path. The victim who was standing nearby was knocked to the ground by the smaller tree and then fatally injured by the log. Clearing the area of potential hazards and workers during skidder operations would make a safer work environment.

Recommendation #4: Loggers should attend the Master Logger Program for education regarding OSHA logging standards and safety procedures.

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

REFERENCES

American Pulpwood Association, Inc. (APA). Safety Alert 93-S-35, September 1993.

American Pulpwood Association, Inc. (APA). The Logger's Guide to the New OHSA Logging Safety Standards. Washington, DC:APA.