

# Fatality Assessment and Control Evaluation Project

Public Health

KY FACE #96KY122

1 May 1997

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

From : Ellyn Moon, M.A., Field Investigator, KY FACE Project

Subject: Sawmill Worker Killed by Circular Saw

## **SUMMARY**

A 32-year-old laborer (the victim) at a sawmill died as a result of injuries received when he lost his balance and fell onto the log carriage directly in front of the 56-inch circular saw. He had been using a cane hook to turn the logs for repeated passes through the saw. After hooking a log, he somehow lost his balance and fell backward onto the carriage; the saw cut him from his shoulders through his midsection. A co-worker (the sawyer) was present, but had been facing another direction and did not see the victim fall. When the sawyer turned around and discovered what had happened, he ran outside, calling for help. The owner's wife called 911 from the nearby office building. Although emergency personnel responded promptly, they found the victim dead at the scene. The deputy coroner was summoned and pronounced the victim dead at 10:05 a.m.

The FACE investigator concluded that, to prevent similar occurrences, employers should:

- install guardrails or barriers between workers and the log carriage, to prevent workers from falling onto the carriage;
- designate a qualified person to conduct regular safety inspections;
- develop, implement and enforce a written safety program which includes worker training in recognizing, avoiding and abating hazards in the workplace.

## **INTRODUCTION**

On November 13, 1996, a 32-year-old laborer for a sawmill operation died of injuries he received when he was cut by a 56-inch-diameter circular saw. On November 14, KY FACE received notification of this incident, and initiated an investigation. A site visit was made by a FACE investigator on November 26. Interviews were held with the deputy coroner, the State Police officer who had investigated, and the owners of the sawmill. Copies of the coroner's report and the death certificate were obtained, and photographs and measurements were made at the scene. (For comparative purposes a visit was later made to another sawmill.)

Although the sawmill had been in operation at this location for many years, the current owners had owned it for less than one year. Except for the victim, who had only worked there for eight days, all the employees (4) had worked for the former owner. The business of the sawmill was to cut logs into lumber, with which pallets were built at the site. At the time of the incident, the business was only operating two to three days per week.

There was no written safety or training program. The owners acknowledged the need for such programs, but, since almost all their employees had years of experience at the sawmill before they purchased it, they had not yet compiled them.

Although the victim had only worked at this sawmill for eight days, his brother was the owner of another sawmill. He had several years' experience working at his brother's sawmill and also at another one in the area. He had also formerly worked as a foreman at a plastics company. His employers considered him to be a safety-conscious person. He seemed to have a good work ethic, and was diligent about keeping his work area clean and clear. His health was good, and he did not have a history of prior injury incidents.

## **INVESTIGATION**

The victim's normal duties included positioning logs as they were transported by the carriage to the circular saw. Each log passed through the sawblade up to ten times, depending upon the lumber dimensions desired. Logs were turned manually using hooks, referred to as "cane hooks," to grab and roll them into different positions.

The incident occurred at approximately 10:00 a.m.; the victim and his co-worker, the sawyer, had been working since 8:00 a.m. The sawyer's back was turned when the victim lost his balance and fell backward onto the carriage, so no one witnessed the incident. Several factors which might have contributed to the fall were cited by the owners and co-workers, however: (1) the victim might have been caught by the log's "hinge" (piece of wood/bark left where the log had been connected to the stump when cut); (2) the victim's cane hook might have slipped, as that particular log was very smooth; and (3) the victim was standing at the front end of the log, with his back toward the sawblade - he would have been more safely positioned at the rear of the log, facing the saw.

As soon as the sawyer realized what had occurred, he ran for help. A call was placed to 911 by one of the owners, who was in the nearby office building. The 911 dispatcher directed her to

find out the severity of the injury, so she ran out to the sawmill building, saw the victim, and ran back to the office, where she had difficulty replacing the call due to shock. When the emergency medical service personnel arrived a few minutes later, they found the victim dead and a call was placed to the coroner's office. The coroner pronounced the victim dead at the scene at 10:05 a.m.

## **CAUSE OF DEATH**

The cause of death as stated on the death certificate was "severed spinal column along with all other major organs from a 56" sawblade extending from posterior to anterior of thoracic cavity." No autopsy was performed.

## **RECOMMENDATIONS/DISCUSSION**

**Recommendation #1:** Employers should install guardrails or barriers between workers and the log carriage, to prevent workers from falling onto the carriage.

**Discussion:** In this case, although there was a heavy-duty plastic barrier between the workers and the sawblade, the floor area alongside the carriage was completely open. Workers stood beside it to turn the logs as the logs were moved back and forth by the carriage. After this fatal incident occurred, the employer did install a metal bar, approximately three feet high, alongside the carriage. A taller guardrail might be more effective, but could interfere with workers' ability to roll the logs.

**Recommendation #2:** Employers should designate a qualified person to conduct regular safety inspections.

**Discussion:** Regular scheduled and unscheduled safety inspections could reveal and correct unsafe work practices or conditions. For example, in this case, it was thought that the victim might have been standing in front of the log as it came toward the sawblade, rather than behind the log, facing the blade. If this was the case, an inspector might have noticed this practice and instructed the victim to change it.

**Recommendation #3:** Employers should develop, implement and enforce a written safety program which includes worker training in recognizing, avoiding and abating hazards in the workplace.

**Discussion:** In this case, the employer did not have a formal written safety or training program to address work procedures. Implementation and enforcement of a comprehensive written safety program might reduce or eliminate worker exposure to hazardous situations. Employees should be required to participate in regularly scheduled training and safety sessions that are conducted by competent personnel. Employees should be encouraged to actively participate in workplace safety.