TO: Director, Massachusetts Department of Public Health, Occupational Health Surveillance Program 92MA013

FROM: Massachusetts Fatality Assessment and Control Evaluation (MA FACE) Program Field Investigator

SUBJECT: Massachusetts Lumber Company/Sawmill Laborer Dies Following Strike in the Head.

DATE: October 22, 1992

SUMMARY

A 30 year old male Massachusetts lumber company/sawmill laborer died on April 29th, 1992, approximately one month after being struck in the head during routine maintenance operations. The victim was sweeping sawdust and waste wood debris from the floor of a sawmill chipper room when he struck his head on an operating chipper machine shaker table. Suffering a headache as a result, the victim left work in the middle of the day. Complaining of headache and nausea, the victim was admitted to the regional hospital the following day for treatment of a concussion, subsequently discharged, and cleared to return to work at a later date. Nine days following his return to work, the victim was again hospitalized and soon died from a brain aneurysm. The Massachusetts FACE Investigator concluded that to prevent similar occurrences in the future, employers should:

1. Select and appoint a designated safety person to develop, implement, and enforce a comprehensive safety program that includes, but is not limited to, the use of head protection and the dangers associated with work in the lumber/sawmill industry.

2. Contact sawmill equipment manufacturer(s) to design or assist in the design of equipment safeguarding systems that would prevent employee exposure to blunt, moving, or revolving machinery parts.

3. Restrict use of nonessential, hearing prohibitive personal equipment when working in areas that are typically known to be significantly hazardous.

4. Develop and implement a medical monitoring protocol to ensure that employees suffering potentially dangerous injuries, especially blows to the head, seek immediate medical surveillance and determine, if possible, if all medical recommendations have been followed prior to authorizing return to work.

INTRODUCTION

On Monday, July 27, 1992, following review of recently submitted OSHA fatality data, the Massachusetts Department of Public Health Occupational Fatality Study Coordinator contacted the MA FACE Program Field Investigator to report a questionable traumatic

occupational death occurring on April 29, 1992. The MA FACE Program Field Investigator was soon able to determine that the fatality, although not of the targeted variety, warranted a FACE Program related study. On July 28, 1992, the MA FACE Investigator reviewed the OSHA fatality file on this matter and subsequently spoke with the company President.

The employer was a regional lumber manufacturing facility in business for 19 years. It employed 15 persons in clerical, sawyer and laborer capacities. The company did not employ a designated safety person, nor did it have written comprehensive safety and health policies and/or procedures in place at the time of the incident.

The victim was a company laborer for 1 year and 11 months whose training was primarily on the job. Normally, the victim worked in the finished lumber storage area where he would receive lumber slabs by conveyor and stack them according to length and width.

The employer's first report of injury, the death certificate, medical information, and FOI excerpts of the OSHA record were obtained during the course of the investigation.

INVESTIGATION

On the day of the incident, the sawmill was shut down in anticipation of performing routine maintenance on the chipper which included the replacement of bearings and knives. The company President, Vice President, and two employed sawyers performed all of the chipper related maintenance at approximate eight month intervals.

The investigation revealed that on Friday, March 27th, following "blowdown" of excess sawdust by a coworker that had accumulated in the chipper house, the victim, who normally worked in the storage area stacking fresh cut lumber, appeared and offered to sweep up the debris. Accepting the victim's offer to sweep up, the coworker left the area, leaving the victim, who was wearing a headphone equipped WalkMan type radio clipped to his belt, to cleanup by himself.

Later in the a.m., the victim, claiming he had misjudged his location and struck his head on the chipper shaker table while sweeping up, sought aspirin from coworkers for relief a resultant headache. The shaker table portion of the chipper is a vibrates, spins and sifts wood chips needing to be rechipped again.

Approximately 30 minutes following his initial request for aspirin, the victim, now with more intensified discomfort, again inquired of his coworkers if they had stronger medication. Experiencing negligible relief, he left work midday.

On the following day, March 28th, the victim was admitted to the regional hospital as the result of persistent headache and vomiting. After two days of treatment for a diagnosed concussion, he was discharged from the hospital, advised to remain out of work for two weeks or so, and to follow up with a neurologist. On

Tuesday, April 14th, a coworker spoke with the victim who claimed he was feeling better, was NOT going to see the neurologist, and might be back to work on April 20th.

Although the attending physician did not authorize return to work until April 27th, the victim returned to work on April 20th and worked routinely without incident through April 27th. Suffering a seizure April 28th, he was again admitted to a regional medical center for treatment. On April 29th, the victim's wife telephoned the employer at 7:45 a.m. to report that her husband was near death in the regional hospital with a brain aneurysm. He died approximately two hours later on the same day.

CAUSE OF DEATH

The medical examiner listed the cause of death as (YET TO BE DETERMINED)

RECOMMENDATIONS/DISCUSSION

RECOMMENDATION #1: Employers should select and appoint a designated safety person to develop, implement, and enforce a comprehensive safety program that includes, but is not limited to, the use of head protection and the dangers associated with work in the lumber/sawmill industry.

DISCUSSION: Although it cannot be definitively proven that the victim's jobsite related blow to the head caused the resultant brain aneurysm or that head protection may have prevented it, the employer lacked effective development and enforcement of comprehensive safety and health provisions, including but not limited to, a head protection program in an industry typically noted as highly hazardous. The appointment of a designated safety person to develop, implement, and enforce a comprehensive safety program that included head protection requirements in such high hazard industry remains a fundamental requirement that should be strictly adhered to. (See OSHA Standard 29 CFR 1910.132 (a))

RECOMMENDATION #2: Employers should contact sawmill equipment manufacturer's to design or assist in the design of equipment safeguarding systems that would prevent employee exposure to blunt, moving, or revolving machinery parts.

DISCUSSION: While there are many industrial related machinery safeguarding requirements in existence, the sawmill chipper shaker table is not among those pieces of equipment covered by current standards. In the absence of such requirements, employers should attempt to identify work area hazards not covered by current standards and take appropriate measures to reduce or eliminate potential employee exposures. Historically, many employers have successfully petitioned equipment manufacturer's to design, or assist in the design, of machinery related safeguarding systems that while not required, have significantly aided them in the

reduction or elimination of work related mishaps. NOTE: In the absence of manufacturer installed safeguarding systems, the employer is strongly encouraged to work very closely with the equipment manufacturer, and a legal representative, in the development, design, and installation of specific safeguarding systems. Compromising and/or altering the intended manufactured use of any equipment by failing to include the manufacturer in the development, design, and installation of safeguarding systems could result in potentially serious legal liability.

RECOMMENDATION #3: Employer's should restrict use of non essential, hearing prohibitive personal equipment when working in areas that are typically known to be significantly hazardous.

DISCUSSION: The incident investigation revealed that the victim was wearing a headphone equipped WalkMan type radio clipped to his belt when he was struck by the chipper machine shaker table. It remains extremely vital, especially in high hazard areas, that employee's be fully aware of their surroundings. Use of a nonessential, audio inhibiting device in the workplace seriously impaired the victim's ability to comprehend that he was dangerously close to the operational chipper machine shaker table. Although this death may never be directly linked to the unfortunate sequence of events that preceded it, the victim may not have been struck by the shaker table had he been fully aware that it was operational while sweeping around it. Any and all equipment used in the workplace should be actively restricted to that which is required and necessary to effectively and safely achieve the desired result.

RECOMMENDATION #4: Employers should develop and implement a medical monitoring protocol to ensure that employees suffering potentially dangerous injuries, especially blows to the head, seek immediate medical surveillance and determine, if possible, if all medical recommendations have been followed prior to authorizing return to work.

DISCUSSION: Although not lawfully required, employer's should consider the development and implementation of an internal medical incident protocol that not only demands ALL work related incidents to be immediately reported, but that assesses the degree of potential employee harm and acts on that potential. While it is typical for employee's to momentarily rest and return to work following a strain, sprain, etc., we have seen the results of a delay in seeking prompt medical attention. Given the likelihood that any given employee will suffer more acute or chronic medical symptoms hours, days, or weeks later, it is often imperative that medical intervention be administered as soon as possible. The possibility of worsening the present condition, by returning to work unchecked, also remains everpresent.

Relative to this incident, the potential harm suffered by the victim was not considered, assessed, or evaluated. Consequently, no requirement or encouragement was given by anyone that medical

intervention be sought until persistent headache and subsequent nausea set in the following day.

Secondly, although the attending physician did not authorize return to work until April 27th, the employer authorized the victim to return to work one week earlier, on April 20th. There is generally a reason that physicians require the injured to remain out of work for a specified period of time.

Lastly, when the victim began to feel better, he chose not see a neurologist against the advice of his attending physician. Had the employer known of this, he may have refused the victim to return to work until ALL recommended medical surveillance and treatment had been administered. The issue of patient/physician confidentiality may obviously hinder an employer's efforts to do this, however, a letter from the attending physician stating that the injured is sufficiently rehabilitated to return to work may accomplish the same goal.

In closing, none of these matters may have had a bearing on the ultimate end result. However, they show the need for an internal medical assessment and surveillance protocol to ensure that victim's of work related incidents obtain timely care and that they do not return until deemed medically fit.

REFERENCES

1. Office of the Federal Register: Code of Federal Regulations, Labor 29, July 01, 1991: Part: 1910.132 (a)

2. U.S. Department of Labor, Occupational Safety and Health Administration (Springfield, MA) COSHO Investigative Summary