MO FACE Investigation #95MO049

SUBJECT:

Construction Foreman Dies Following 45-Foot Fall From Roof of Condominium

SUMMARY:

On May 18, 1995, a 55-year-old construction foreman died after falling 45 feet from the roof of a four story condominium unit. The victim was on the roof with a co-worker who was installing wood-trim around a chimney enclosure when he may have stepped backwards off the roof. He was conscious at the scene, but later died at an area hospital.

The MO FACE Investigator concluded that in order to prevent similar occurrences, employers should:

- ensure that fall protection equipment is provided and used by workers where the potential for a fall from an elevation exists;
- designate a competent person to conduct scheduled and unscheduled site visits to evaluated field compliance with company safety rules and procedures;
- develop, implement and enforce a comprehensive safety program that includes, but is not limited to, employee restrictions set by management on specific job duties. The plan should describe the disciplinary actions that will be taken when employees work beyond their authorized area.

INTRODUCTION:

A 55-year-old construction foreman fell 45 feet from the roof of a condominium while assisting a co-worker install wood trim around a chimney enclosure. The company had been in business for three years and employed 15 persons at the time of the incident. There were five employees working at the incident site. The victim had been employed by this company for almost two years. He had experienced a previous fall approximately a year prior to this incident, and injuries sustained from the fall restricted him from lifting heavy objects and restricted him from working on roofs, ladders, or from scaffolding.

Construction safety was designed into the condominium structure by incorporating a deck walkway which extended out about four feet from each floor and surrounded three sides of the condominium complex. The edge of the walkway was protected by a temporary wooden railing. This was done to protect employees while doing finishing work on each level. Fall protection equipment was provided by the employer consisting of lanyards, safety belts, and ropes.

The MO FACE investigator was notified of the incident on May 18, 1995. The investigator met with the employer on May 23, and visited the incident site. On June 1, the investigator continued the investigation and interviewed the employer. Records obtained for this investigation include police report, ambulance run sheet, and fire department report.

INVESTIGATION:

The victim was a construction foreman and was working as a general carpenter, building a lake-front condominium. On the day of the incident, the employer met with the construction crew at the job site to discuss various tasks that needed to be done. The employer finished his discussion and then left the job site. Shortly after the employer left, the victim went to the roof. A co-worker was already on the roof installing cedar wood trim on a chimney enclosure located near the west exterior wall. The co-worker then noticed the victim holding a section of two-by-four lumber, possibly to hold pieces of siding in place for the co-worker. Neither the victim nor co-worker was using any type of fall protection. Although the event that lead to the victim's fall was unwitnessed, it is believed that the victim, while assisting the co-worker, took a step backwards from the chimney and fell off the

roof. The victim struck the temporary wooden railing around the deck on the fourth floor of the condominium, then continued falling and struck the first floor metal railing on the adjacent condominium before falling to the ground. A co-worker called 911 and notified emergency personnel. Upon arrival at the hospital, it was found that the victim had massive internal injuries. The victim then went into cardiac arrest and was pronounced dead.

CAUSE OF DEATH:

Massive Internal Injuries

RECOMMENDATIONS AND DISCUSSION:

Recommendation #1: Employers should ensure that fall protection equipment is provided and used by workers where the potential for a fall from an elevation exists.

Discussion: In this incident the victim was not utilizing any fall protection though the employer provided fall protection equipment, consisting of safety belts and lanyards.

According to 29 CFR 1926, Subpart M, employees who work at a height of six feet or greater are required to use fall protection. A secure anchorage point should be located with a lanyard being tied to the anchorage point.

Employers should begin phasing out safety belts and provide full body harnesses. A full body harness is used because safety belts have been proven not to distribute the force of a fall adequately throughout the body. The use of a full body harness will be mandatory in 1998.

Recommendation #2: **Employers should designate a competent person to conduct scheduled and unscheduled site visits to evaluated field compliance with company safety rules and procedures.**

Discussion: Although management was responsible for safety on the job sites, additional scheduled and unscheduled safety inspections should be conducted by a competent person to ensure that company safe-work procedures are being followed. No matter how comprehensive, a safety program cannot be effective unless implemented in the workplace. Even though these inspections do not guarantee the elimination of occupational injury, they do demonstrate the employer's commitment to the enforcement of the safety program and to the prevention of occupational injury.

Recommendation #3: **Employers should develop, implement and enforce a comprehensive safety program that includes, but is not limited to, employee restrictions set by management on specific job duties. The plan should describe the disciplinary actions that will be taken when employees work beyond their authorized area.**

Discussion: According to the employer, the victim was instructed not to work on roofs, ladders, or from scaffolding. On the day of the incident, shortly after the employer left the job site, the victim proceeded to the roof.

The purpose of a comprehensive safety plan is to outline general safety guidelines throughout the company. The plan should clearly describe the duties employees are allowed to perform. It is imperative that employers and supervisors enforce disciplinary actions to those employees who do not adhere to specific instructions on what areas they are allowed to work. This will ensure that the employees are working within their job duties and capabilities and provide a safer working environment.

The Missouri Department of Health, in co-operation with the National Institute for

Occupational Safety and Health (NIOSH), is conducting a research project on work-related fatalities in Missouri. The goal of this project, known as the Missouri Occupational Fatality Assessment and Control Evaluation (MO FACE), is to show a measurable reduction in traumatic occupational fatalities in the State of Missouri. This goal is being met by identifying causal and risk factors that contribute to work-related fatalities. Identifying these factors will enable more effective intervention strategies to be developed and implemented by employers and employees. This project does not determine fault or legal liability associated with a fatal incident or with current regulations. All MO FACE data will be reported to NIOSH for trend analysis on a national basis. This will help NIOSH provide employers with effective recommendations for injury prevention. All personal/company identifiers are removed from all reports sent to NIOSH to protect the confidentiality of those who voluntarily participate with the program.

SIGNATURES:

_____

Daniel A. Stark
MO FACE Program

_____

Thomas D. Ray
MO FACE Program Coordinator
Chief Investigator

_____

Daryl Roberts
Chief
Bureau of Environmental Epidemiology