TO: Director, National Institute for Occupational Safety and Health

FROM: California Fatality Assessment and Control Evaluation (FACE) Program

SUBJECT: While Installing Metal Frames of a Residential Building, a Handyman Falls 20 Feet from a Scaffold and Dies in California

SUMMMARY

California FACE Report #94CA013
April 24, 1995

A 55-year-old white, Hispanic male (the decedent) fell 20 feet from an unsecured scaffold and died two days later. He and a co-worker had been installing metal frames on the exterior wall of a residential building when the incident occurred. The decedent was apparently working from a ladder on the scaffold and was trying to pull a nail out of the wall. The scaffold was not tied off and it moved away from the building. The decedent fell hitting his head on the second story, and then continued to fall to the cement below. The distance from the scaffold to the ground was 20 feet. The decedent and the co-worker were not wearing any type of Personal Protective Equipment (PPE) at the time of incident. The victim was transported to the hospital where a craniotomy was performed. He was pronounced dead on May 18, 1994 at 6:00 p.m. The CA/FACE investigator concluded that in order to prevent similar future occurrences, employers should:

- require that employees tie off scaffolds before beginning a job when the height of the scaffold exceeds three times the least base dimension.
- prohibit employees from using ladders positioned on scaffolds.
- develop, implement, and enforce a comprehensive written safety program that includes, but is not limited to, training in fall hazard recognition and the use of fall protection devices.
- conduct frequent scheduled and unscheduled work-site surveys to assess potential safety hazards and to ensure compliance with safe workplace procedures. Once an assessment has been completed, written safety rules and procedures should be developed, implemented, and enforced with participation from workers.

INTRODUCTION

On May 18, 1994, a 55-year-old handyman (the decedent) died after falling 20 feet from a scaffold where he and a co-worker had been installing frames on the exterior wall of a residential building. The CA/FACE investigator was informed of this incident on June 15, 1994 by a safety engineer with the California Occupational Safety and Health Administration (Cal/OSHA). A phone interview was conducted with the employer but the CA/FACE investigator was denied entry to the incident site. A copy of the Cal/OSHA Report and the

Coroner's Autopsy Report were obtained by the CA/FACE investigator.

The employer in this incident was a post-production and sound corporation that worked on feature films and television programs. The company had been in business since 1978 and was incorporated in 1983. There were 12 employees working for the corporation and three had the same job description as the decedent. The decedent had worked for his employer for 10 years and was experienced in scaffold work. The company had worked at the incident site off and on over a two year period. A safety officer was on staff who devoted approximately 25% of his time to safety issues. Safety training was provided to employees including on-the-job and new job training. The company had a written Injury and Illness Prevention Program (IIPP) in compliance with Title 8 of the California Code of Regulations (CCRs) section 3203, Injury and Illness Prevention Program (IIPP). However, the IIPP did not address the type of fall protection appropriate for this type of situation, so was not fully or adequately implemented.

INVESTIGATION

On May 16, 1994, the day of the incident, at 2:44 p.m., the decedent and a co-worker were installing metal frames on the exterior wall of a residential building. Although no one witnessed the incident, it appears that the decedent was working from a ladder positioned on a scaffold platform. He was pulling a nail from the wall of the building when the scaffold moved away from the building. This action caused the decedent and the co-worker to lose their balance and fall forward towards the building. The scaffold had not been tied off to the building. Safety tie off wires were present, but they had been cut. The decedent hit his head on the roof of the second story approximately eight feet below where they were working, and then fell an additional 12 feet to the cement floor below. The co-worker only fell to the second story fracturing his right and left wrists. The decedent was transported to a hospital where procedures including a craniotomy were performed to no avail. The decedent was pronounced dead on May 18, 1994, at 6:00 p.m.

CAUSE OF DEATH

The Coroner's Autopsy Report stated the cause of death as craniocerebral trauma.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should require that employees tie off scaffolds before beginning a job.

Discussion: This incident may have been prevented if the workers had tied the scaffold to the building before beginning work. Under Title 8 of the California Code of Regulations (CCRs) section 1644 (a) (5) (A), ties shall be required at the free ends of the scaffold when the height of the scaffold platform exceeds 3 times the least base dimension. The scaffold in this incident had a 3 feet base width and was 20 feet above the ground.

Recommendation #2: Employers should prohibit employees from using ladders while at work on scaffolds.

Discussion: Although it is not positively known if the decedent was standing on a ladder

positioned on the scaffold, the available evidence indicates that this occurred. If he was using a ladder, the added height and instability of this configuration may have contributed to his death.

Recommendation #3: Employers should develop, implement, and enforce a comprehensive written safety program that includes, but is not limited to, training in fall hazard recognition and the use of fall protection devices.
Discussion: Employers should emphasize safety of their employees by designing, developing, implementing, and enforcing a comprehensive safety program that prevents falls. The safety program should include, but not be limited to, the recognition and avoidance of fall hazards and the use of appropriate fall protection.

Recommendation #4: Employers should conduct frequent scheduled and unscheduled work-site surveys to assess the potential safety hazards and to ensure worker compliance with established work procedures. Once an assessment has been completed, written safety rules and procedures should be developed, implemented, and enforced with participation from workers.
Discussion: The job site should be surveyed periodically by employers to find potential hazards and to provide a safe and healthy workplace for employees. All identified hazards must be adequately addressed through engineering control measures, or changes in work practices if effective engineering controls are not available or feasible. In addition, each employee should be adequately trained to recognize hazards and avoid injury. Employers must instruct workers of their responsibility in making the workplace safer. Increased worker participation will aid in the prevention of occupational injury.

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FATALITY ASSESSMENT AND CONTROL EVALUATION PROGRAM

The California Department of Health Services, in cooperation with the Public Health Institute and the National Institute for Occupational Safety and Health (NIOSH), conducts investigations of work-related fatalities. The goal of this program, known as the California Fatality Assessment and Control Evaluation (CA/FACE), is to prevent fatal work injuries in the future. CA/FACE aims to achieve this goal by studying the work environment, the worker, the task the worker was performing, the tools the worker was using, the energy exchange resulting in fatal injury, and the role of management in controlling how these factors interact. NIOSH-funded, state-based FACE programs include: Alaska, California, Iowa, Kentucky, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, Oklahoma, Oregon, Washington, West Virginia, and Wisconsin.

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Additional information regarding the CA/FACE program is available from:

California FACE Program
California Department of Health Services
Occupational Health Branch
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