TO: Director, National Institute for Occupational Safety and Health

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

SUBJECT: Tile Setter Dies after Falling Approximately 30 Feet while at Work at a Commercial Office Building in California

SUMMARY
California FACE Report #94CA017
April 11, 1995

On September 16, 1994, a 29-year-old white, non-Hispanic male, tile setter (the decedent) died after falling approximately 30 feet while replacing tiles and brick veneer on a four-story open air parking structure damaged during the 1994 Northridge earthquake. The decedent and a co-worker had been making repairs above two outside elevator doors. The decedent apparently was standing on an unstable, portable, wooden step-ladder adjacent to a 43 inch, 16 foot long pedestrian guardrail. The decedent fell from the ladder through the opening above the guardrail to a second story concrete landing. No one witnessed the decedent fall. An office employee saw the victim after the fall occurred and informed the decedent's co-worker that his partner had fallen. The co-worker ran to the decedent and remained with him until paramedics arrived. The decedent was transported by the paramedics to a local hospital where he underwent emergency treatment. He was pronounced dead at 12:10 a.m. on September 16, 1994. The CA/FACE investigator concluded that in order to prevent similar future occurrences employers should:

· implement and maintain a written Illness and Injury Prevention Program (IIPP).

· require the use of scaffolds when employees are doing work in locations which cannot be safely accessed with a ladder or when safety belts and lanyards are not appropriate.

· require that all equipment such as ladders be inspected on a regular basis so that employees are not at risk when using them.

INTRODUCTION

On September 15, 1994, a 29-year-old male tile setter fell approximately 30 feet from a fourth floor parking structure where he had been working. The CA/FACE investigator was informed of the incident by a California Occupational Safety and Health Administration (Cal/OSHA) safety engineer on 9/21/94. A joint site investigation was conducted by the CA/FACE investigator and the Cal/OSHA engineer on 9/23/94. The employer was interviewed and photographs of the incident site were taken. The CA/FACE investigator also obtained copies of the Cal/OSHA Report and the Coroner's Autopsy Report.

The employer in this incident was a tile and brick specialty contractor who employed 17 workers. The decedent had worked for his employer for 45 days. On the day of the incident, two employees were working at the site. According to the decedent's employer, the work the decedent was doing was appropriate for his job description and well within his capabilities. The

decedent was not wearing any personal protective equipment (PPE) and had received no specific safety training for the job he was performing. The employer had conducted a site safety survey prior to the commencement of this job.

INVESTIGATION

On the day of the incident, the decedent and a co-worker had been instructed by their supervisor to replace tiles and brick veneer located above two outside elevator doors on the fourth floor of a parking structure (see exhibit 1A). The decedent's co-worker stated, that toward the end of their shift, the decedent asked him to assist with cleanup. He stated that while he was cleaning the site, he saw the decedent climb a wooden ladder which was near, or against, the elevator tower wall (see diagram 1A). The wooden ladder measured 6 feet in height had been determined to be unstable by some office workers who were interviewed after the incident. One office worker stated that she had put a note on the ladder stating it was unsafe and should be disposed. The employer and decedent's co-worker stated that they were unaware of any note and they had used the ladder the previous day.

Although no one witnessed the incident, it is believed that he was standing on a step-ladder to the left of the elevators adjacent to a guardrail at the edge of the elevator platform. The pedestrian guardrail was 43 inch high and 16 feet (**see Exhibit 1**). The decedent fell from the ladder through the opening above the guardrail to a second story concrete canopy. This canopy was located approximately 20 feet below the 4th floor. No one witnessed the actual incident but the distance the decedent fell was estimated to be approximately 30 feet if the ladder and decedent's height are taken into consideration. The portion of the wall on which the decedent had last been seen working is narrow and difficult to access with a ladder. The employer stated that the decedent had not been instructed to do any repair work at that location and was to only make repairs in the brick veneer and tiles located above the two elevator doors. At approximately 2:35 p.m., an office worker yelled to the decedent's co-worker that his partner had fallen from the fourth floor parking structure. The co-worker ran to the decedent's aid and found him lying on the second floor concrete canopy. The co-worker stayed with his partner on the second floor until paramedics arrived and transported him to the hospital. An emergency right craniotomy was performed for a subdural hematoma, but he could not be sustained. He was pronounced dead at the hospital at 12:10 a.m. on September 16, 1994, approximately ten hours after the incident.

CAUSE OF DEATH

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

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should implement and maintain a written Illness and Injury Prevention Program (IIPP).

Discussion: The employer in this incident did not have a written IIPP which was in compliance with the California Code of Regulations (CCRs). Under Title 8 of the CCRs section 1509, every employer shall establish, implement and maintain an effective IIPP in accordance with section 1509 of the General Industry Safety Order. This plan shall include the following:

1) A system for ensuring that employees comply with safe and healthy work practices (and)
2) Procedures for identifying and evaluating workplace hazards including scheduled periodic

inspections (and)
3) Methods and/or procedures for correcting hazards in timely manner based on the severity of the hazard (and)
4) Employee training and instructions.

Recommendation #2: Employers should require the use of scaffolds when employees are doing work in locations which cannot be safely accessed with a ladder or when safety belts and lanyards are not appropriate.
Discussion: This incident may have been prevented if the decedent had used a scaffold instead of a ladder to accomplish his work. The area he was working in at the time of the incident was very small (see diagram 1A). Under Title 8 of the CCRs section 1637 (a) scaffolds shall be provided for all work that cannot be done safely by employees standing on permanent or solid construction at least 20 inches wide, except where such work can be safely done from a ladder.

Recommendation #3: Employers should require that all equipment such as ladders be inspected on a regular basis so that employees are not at risk.
Discussion: The ladder the decedent had been using had been determined to be unstable and unsafe for work by employees of the office building. Employers and employees should inspect all equipment on a regular basis to make sure it is safe for use.

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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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