INVESTIGATION REPORT



Fatality Assessment & Control Evaluation Project

FACE 98-NJ-055-01

February 26, 1999

Carpenter Dies After Falling Into a Stairwell While Installing a Staircase

SUMMARY

On June 12, 1998, a 44-year-old carpenter died after falling 21 feet into a stairwell while trying to install a wooden staircase. The victim was helping to install the stairs at the construction site of a single family home. He and a co-worker were attempting to install a pre-made flight of stairs into the stairwell when the stairs slipped. The victim, who was holding the stairs on the landing above the co-worker, apparently lost his balance and fell into the basement of the building. NJ FACE investigators concluded that, to prevent similar incidents in the future, these safety guidelines should be followed:

- Workers must use fall protection when working near floor openings with a fall hazard greater than six feet.
- Employers should become familiar with available resources on safety standards and safe work practices.

INTRODUCTION

On June 19, 1998, NJ FACE staff was notified by the county medical examiner of a work-related fatal fall at a construction site that occurred on June 12. A FACE investigator contacted the victim's employer and arranged to conduct a site visit that was done on June 29, 1998. During the visit the employer and general contractor were interviewed and the incident site examined and photographed. The victim's co-worker was not available for an interview. Additional information on the incident was obtained from the OSHA compliance officer, the police report, and the county medical examiner's report.





The employer was a small framing contractor that had been in business for 20 years. The victim was a carpenter who had been subcontracted to help in framing a house. He was well known to the employer who had worked with him over the past seven to eight years. The victim was married with two children, ages 12 and 14.

INVESTIGATION

The incident occurred at the construction site of a single, 6,000 square foot home in a suburban area. Construction on the two story, wood frame house started in January and was expected to be finished in July. The victim usually worked as a self-employed carpenter and had been hired to help build the wood framing. He also did other carpentry work that included installing the main staircase to the house. This was to be a large wooden staircase built in a 20 by 20 foot stairwell reaching from the basement to the second floor. The stairs were installed in several pre-made flights, with each flight reaching a small landing between floors. The stairs were made to have a spiral stairway appearance.

The fall occurred Friday, June 12, 1998 at 2:00 p.m. At that time the victim was working with another carpenter to install the top flight of stairs into the stairwell. Two other flights leading to it were already installed below. The victim worked on the top second floor landing while his coworker worked on the next landing down, about 6 feet below him. The stairs were a premanufactured flight of seven wooden steps that were carried into the stairwell and raised using a wooden pole. The bottom of the stairs were set on the landing below, lined up, and nailed into place. Apparently the workers failed to align the steps properly and needed to redo the job. After removing the nails, the two workers were repositioning the stairs when they lost control of the section. As the stairs fell into the stairwell, the victim tried to grab them and lost his balance. He fell 21 feet into the basement, striking his head on the concrete floor.

The co-worker went into the basement, saw that the victim was bleeding from his head, and called 911. A second worker heard the co-worker call out and came to help. The police and EMS arrived and found the victim in critical condition. A medevac helicopter was called but was grounded due to bad weather. The victim was taken by ambulance to the local hospital where he died in the emergency room.

CAUSE OF DEATH

The county medical examiner found the cause of death to be due to "blunt force trauma of the head."

RECOMMENDATIONS/DISCUSSIONS

<u>Recommendation #1</u>: Workers must use fall protection when working near floor openings with a fall hazard greater than six feet.

Discussion: The federal OSHA standard 29 CFR 1926.510 requires employees to use a fall protection system when working near floor openings with a fall hazard greater then six feet. The appropriate system for this situation would have been a safety harness attached to a lifeline. Guarding the opening with rails and setting up safety nets are other possible options for protecting floor openings.

<u>Recommendation #2</u>: Employers should become familiar with available resources on safety standards and safe work practices.

<u>Discussion</u>: It is extremely important that employers obtain accurate information on working safely and following all OSHA standards. The following sources of information may be helpful:

U.S. Department of Labor, OSHA

On request, OSHA will provide information on safety and health standards. OSHA has several offices in New Jersey that cover the following areas:

Hunterdon, Middlesex, Somerset, Union, and Warren counties	(732) 750-4737
Essex, Hudson, Morris, and Sussex counties	(973) 263-1003
Bergen and Passaic counties	(201) 288-1700
Atlantic, Burlington, Cape May, Camden, Cumberland, Gloucester,	
Mercer, Monmouth, Ocean, and Salem counties	(609) 757-5181

NJ Public Employees Occupational Safety and Health (PEOSH) Program

The PEOSH act covers all NJ state, county, and municipal employees. The act is administered by two departments; the NJ Department of Labor (NJDOL) which investigates safety hazards, and the NJ Department of Health and Senior Services (NJDHSS) which investigates health hazards. Their telephone numbers are:

NJDOL, Office of Public Employees Safety	(609) 633-3896
NJDHSS, PEOSH Program	(609) 984-1863

NJDOL Occupational Safety and Health On-Site Consultative Program

Located in the NJ Department of Labor, this program provides free advice to private businesses on improving safety and health in the workplace and complying with OSHA standards. For information regarding a safety consultation, call (609) 292-0404, for a health consultation call (609) 984-0785. Requests may also be faxed to (609) 292-4409.

New Jersey State Safety Council

The NJ Safety Council provides a variety of courses on work-related safety. There is a charge for the seminars. Their address and telephone number is: NJ State Safety Council, 6 Commerce Drive, Cranford, NJ 07016. Telephone (908) 272-7712

Internet Resources

Information and publications on safety and health standards can be easily obtained over the Internet. Some useful sites include:

www.osha.gov -The US Department of Labor OSHA website.

www.cdc.gov/niosh/ - The CDC/NIOSH website.

www.state.nj.us/health/eoh/peoshweb/peoshome.htm -The NJDHSS PEOSH website.

www.dol.gov/elaws -USDOL Employment Laws Assistance for Workers and Small Businesses.

DISTRIBUTION LIST

<u>Immediate Distribution</u>

NIOSH

Employer

NJ State Medical Examiner

County Medical Examiner

Local Health Officer

NJDHSS Census of Fatal Occupational Injuries (CFOI) Project

General Distribution

USDOL-OSHA New Jersey Area Offices (4)

NJDOL Office of Public Employees Safety

NJDHSS Public Employees OSHA

NJDOL OSHA Consultative Service

NJ State Safety Council

NJ Institute of Technology

University of Medicine & Dentistry of NJ

Rutgers University

Stevens Institute of Technology

College of NJ

NJ Shade Tree Federation

NJ Utilities Association

NJ School Boards Association

Public Service Electric and Gas Company

Liberty Mutual Insurance Company Research Center

Private Consultants (4)

Private Companies (10)