

F.A.C.E. INVESTIGATION REPORT

Fatality Assessment and Control Evaluation Project

FACE #98-NJ-020-01
Construction Worker Dies After Falling 21 Feet
From A Load Of Lumber On a Forklift Truck



New Jersey Department of Health and Senior Services
Occupational Disease and Injury Services
P.O. Box 360
Trenton, New Jersey 08625-0360
(609) 984-1863

TO: Division of Safety Research
National Institute for Occupational Safety and Health
Morgantown, West Virginia

FROM: Fatality Assessment and Control Evaluation (FACE) Project
New Jersey Department of Health & Senior Services (NJDHSS)

SUBJECT: FACE Investigation #98-NJ-020-01
Construction Worker Dies After Falling 21 Feet From A Load Of
Lumber On a Forklift Truck

DATE: August 20, 1998

SUMMARY

February 21, 1998, a 39-year-old construction worker died after falling from a load of lumber on a forklift truck. The incident occurred at the construction site of a private home as the victim and his co-workers were unloading wood beams raised to a second story window on a forklift. After starting to pull the heavy beams from inside the house, the victim stepped out onto the beams on the forks to push them. When the beams shifted, the victim lost his balance and fell 21 feet onto a stack of lumber. NJ FACE investigators concluded that, to prevent similar incidents in the future, these safety guidelines should be followed:

- Employers should conduct a job hazard analysis of all work activities with the participation of the workers.
- Employers should become familiar with available resources on safety standards and safe work practices.
- Employers and employees should be aware of the dangers of drugs and other substances that may impair judgement or alertness.

INTRODUCTION

On February 24, 1998, NJ FACE investigators were notified by the medical examiner's office of a death resulting from a fall from a forklift truck at a construction site. A FACE investigator contacted the employer and arranged a site visit conducted on March 5, 1998. During the visit investigators interviewed the employer and a witness and photographed the incident site. Additional information on the incident was gathered from the OSHA file, the police report, and the medical examiner's report.

The employer was a small construction company that specialized in framing and residential home construction. The company had been in business for 12 years and employed one worker (the victim) at the time of the incident. The company also subcontracted two other employees who were paid but provided their own insurance. The victim was a 39-year-old male carpenter with about ten years of experience. A friend of the employer, he had worked on and off with the company since its inception. He had been working on this job when it started in December 1997. The victim had a 13-year-old daughter and was an active volunteer firefighter.

INVESTIGATION

The incident site was a two-story wood frame house being built on a beach fronting the ocean. This was one of three new homes being built on sites previously occupied by small stores that had been torn down. Although the three homes were being constructed simultaneously, each was being built by a different contractor. The construction company involved in the incident was subcontracted to do the framing on the building and had started work in December 1997. To help with the job, the company owner hired the victim and subcontracted two other workers. Construction was scheduled to be completed in late March or early April 1998.

The incident occurred on a cold Saturday morning. Shortly before 8:00 a.m., the company owner, victim, and a subcontracted carpenter arrived at the site to start work. Their first operation of the day was to lift a load of beams up to the second story of the building. The glue pressed, laminated wood beams were of various sizes, measuring 3 inches by 9 or 12 inches with lengths of 16 to 20 feet. Operating an all-terrain forklift borrowed from a friend, the owner lifted a load of ten beams to the second story windows at the front of the building. The forks were positioned so the beams pointed in towards the windows, making it easier to pull them into the building. The victim was standing inside the windows and started pulling them in, but was apparently having trouble with the heavy beams. He walked out the window (which measured 5.5 feet tall by 3.5 feet wide) onto the load of beams on the forks to push them into the building

from the outside. When only two beams remained, he turned around to get back into the window. This caused the beams he was standing on to teeter toward the window. The victim lost his balance and tried to jump for the window but missed, falling 21 feet onto a stack of lumber.

The company owner helped the victim and called 911 for help. The victim, who had landed on his back, was having difficulty breathing when the police and EMS arrived. A med-evac helicopter was ordered but canceled as the victim's condition quickly worsened. He lost all vital signs and CPR was started as the ambulance left the scene. The victim was transported to the local hospital where he was pronounced dead on arrival.

CAUSE OF DEATH

The county medical examiner determined the cause of death to be from "blunt thoracic injuries."

RECOMMENDATIONS/DISCUSSIONS

Recommendation #1: Employers should conduct a job hazard analysis of all work activities with the participation of the workers.

Discussion: It is recommended that employers conduct a daily job hazard analysis of the work activities and construction area with the employees. This can be done while planning the day's work, and should include an examination of the work area for fall hazards, loose debris, electrical, weather conditions, and other hazards the workers may encounter. After identifying the hazards, the crew should be instructed on how to correct or avoid them.

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

Discussion: FACE recommends that employers should emphasize worker safety by developing a safety program to reduce or eliminate hazardous situations. The following sources may be helpful in obtaining information on safety standards and developing a safety program:

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.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.

Recommendation #3: Employers and employees should be aware of the dangers of drugs and other substances that may impair judgement or alertness.

Discussion: The medical examiner's report noted a positive toxicology for alcohol and drugs in the victim's blood. The FACE project strongly recommends a "no tolerance" policy toward working under the influence of alcohol and illegal drugs. Employers and employees must be made aware of the dangers that alcohol and drugs (including prescription, non-prescription, and illegal drugs) may present in the workplace. Training should include strong warnings about the use of drugs that may impair a worker's judgement, alertness, and physical abilities. Employees found to have problems should be referred to the company's employee assistance program or an outside counseling service.

DISTRIBUTION LIST

Immediate Distribution

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)