

NJ FACE INVESTIGATION REPORT



Fatality Assessment & Control Evaluation Project

FACE 03-NJ-091

December 14, 2004

Hispanic Construction Worker Dies After Fall from an Improvised Scaffold

On October 1, 2003, a 66-year-old Hispanic carpenter died after he fell from the plank of an improvised scaffold at a construction site. The victim had arrived that day from his home in Costa Rica and was joining his son (the company owner) to work on the construction of an addition to a private, suburban home. The victim was standing on a single, wooden plank placed between a small roof peak and an improvised scaffold made from discarded scrap lumber. He was installing siding on the house when he turned to talk to his son, who had just returned to the jobsite after running an errand. As he turned, the victim apparently lost his balance and fell, striking the sidewalk 10'5" below. NJ FACE investigators recommend the following safety guidelines to prevent similar incidents:

- **Construction contractors should be aware of the federal OSHA safety standards.**
- **Employers should use properly designed and assembled scaffolds and/or ladders for working at heights over six feet.**
- **Employers and employees should conduct a safety survey of the job site before starting work.**



NJ Department of Health & Senior Services
Occupational Health Service
PO Box 360, Trenton NJ 08625-0360
(609) 984-1863



INTRODUCTION

On October 19, 2003, a private citizen notified a NJ FACE investigator of the death of a Hispanic construction worker who had fallen at a construction site. A FACE investigation was initiated on October 21, 2003, and the county Medical Examiner and the victim's employer were contacted. The employer explained that federal OSHA was investigating the incident and that he was scheduled to go to OSHA for an informal conference. The FACE investigator offered to accompany him to informal conference. On October 23, 2003, the FACE investigator and employer arrived at OSHA, and the FACE investigator received permission from OSHA to observe the conference. At that time, the investigator was able to discuss the case with OSHA compliance officers and to briefly interview the employer. Following the conference, the FACE investigator visited and photographed the incident site. Additional information was obtained from the police, emergency medical service, and medical examiner's reports.

The victim's employer was a small construction company who specialized in private home renovations. The company had been in business for four years and had three employees at the time of the incident. The owner was an immigrant from Costa Rica who hired other Hispanic laborers as needed. He spoke functional English, but communicated with his workers in Spanish. Before coming to the United States, the company owner stated that he had worked with his father for most of his life in Costa Rica. He stated that he was not aware of OSHA or that federal safety standards existed. His father, the victim in this incident, was a 66-year-old experienced carpenter who was a resident of Costa Rica. He periodically traveled to the United States to work with his son, and had been doing so for the past four years. His son described him as being healthy and in good physical condition.

INVESTIGATION

The incident occurred at a single-family house located in a heavily suburbanized area. The house was a single-story, wood-framed structure with a tall, peaked roof. The owner wanted to convert the attic into living space by raising the roof and adding dormers. The home owner contacted the company owner and contracted for him to do the carpentry work. Other contractors were hired to do the plumbing and electrical work. A building permit was obtained for the job, naming the victim's company as the general contractor of record.

Prior to the incident, the contractor and his crew had already demolished and rebuilt most of the rear section of the house. The crew removed the entire back section of the peaked roof, which had been built at a slope of approximately 45 degrees. All the discarded wood trusses and surrounding lumber from the rear roof was piled in the backyard of the house. They then rebuilt the roof at a pitch of approximately 10 degrees, effectively raising the roof of the house and greatly increasing the interior space. The rear wall was raised to support the new roof, and new windows were installed in the wall. This part of the project was done quickly to reduce the time the house was open to the weather. Once the new addition was built, the crew started installing vinyl siding on the outside of the house. The crew also started work on the interior of the addition. During the project, the crew built an improvised, homemade scaffold with the discarded lumber from the back yard. This scaffold was poorly built, using wood that had been damaged during the demolition (See Photo 1).



Photo 1
**Damaged wood used to make the
improvised scaffold**

The incident occurred on Wednesday, October 1, 2003. The weather was clear with a reported temperature of 75 degrees. The company owner and a crew of three workers arrived at 8:00 a.m. to continue work on the house, which they had started the week before. The day went uneventfully, with the workers installing vinyl siding on the house. At approximately 4:30 p.m., the victim arrived at the jobsite after just having flown in that day from Costa Rica. The company owner (his son) was away from the work site to get a gutter, so the victim started installing siding on the side of the house. He was standing on a 2" by 6" wood plank set 10" 5" above a concrete walkway. One end of the plank was placed on the peak of a small porch roof, and the other end rested on the improvised scaffold at the back of the house.



Photo 2
Porch roof peak used to support the scaffold plank

A short time later, the company owner arrived back at the house and greeted his father. The victim, who was bending and cutting siding, turned around to talk to him, apparently lost his balance, and fell from the narrow plank. He fell to the concrete, striking his head and losing consciousness. At 5:10 p.m., the police received a 911 call from a neighbor who saw the victim on the ground. EMS responded at 5:15 p.m. and arrived at the scene within a minute. They found the victim conscious but disoriented and combative, and transported him to a NJ Level 1 Trauma Center where he underwent surgery for severe head injuries. The victim's condition deteriorated, and he was pronounced dead on October 2, 2004, at 11:20 p.m.

RECOMMENDATIONS/DISCUSSIONS

Recommendation #1: Construction contractors should be aware of federal OSHA safety standards for the construction industry.

Discussion: The employer in this incident was a small construction contractor who received all of his training in Costa Rica. When he started his business in New Jersey, he was unaware of OSHA safety standards that he needed to follow. To prevent future incidents, it is important that new companies are aware of applicable safety, health, and environmental standards.

Currently, there is no comprehensive method to notify employers of safety and health standards and regulations. NJ FACE recommends creating a system for informing new employers about the regulations that they must follow. One possibility is a simple, comprehensive resource booklet given to new employers when the business is incorporated or registered. The booklet would outline the different regulatory agencies with telephone numbers to obtain more information. A web site would also be useful, such as a site where employers could enter their type of business and location (state) to get specific information on the regulations that apply to their business.

Recommendation #2: Employers should use properly designed and assembled scaffolds and/or ladders for working at heights over six feet.

Discussion: The scaffold used in this incident was an improvised, homemade scaffold made with scrap wood left over from the demolition work. This scaffold was unsafe and could have collapsed at any time. The unguarded wood plank from which the victim fell was an extension of this scaffold and was inherently unsafe. NJ FACE recommends that employers and employees always use properly designed and assembled commercial scaffolds and/or ladders when working at heights. The employer did own a commercial metal scaffold, but it was not in use at this jobsite.

It should also be noted that fall protection is required in most cases when working six or more feet above the ground. A proper scaffold with safety railings is adequate, but more fall protection may be needed in other situations, such as during roofing. If employers have questions about whether fall protection is needed or adequate, they should contact the federal OSHA area office or OSHA On-Site Consultation Program for advice.

Recommendation #3: Employers and employees should conduct a safety survey of the job site before starting work.

Discussion: To prevent incidents such as this, NJ FACE recommends that employers conduct a safety survey of the work area with all employees. This should consist of a brief walk-through to look for any apparent hazards at the worksite, such as fall, electrical, chemical, equipment, or other hazards they may encounter. Once found, the hazard can be corrected. Information on a more thorough survey, called a job hazard analysis, is included in the Appendix.

RECOMMENDED RESOURCES

It is essential that employers obtain accurate information on health, safety, and applicable OSHA standards. NJ FACE recommends the following sources of information which can help both employers and employees:

U.S. Department of Labor, Occupational Safety & Health Administration (OSHA)

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

- ☎ Hunterdon, Middlesex, Somerset, Union, and Warren counties.....(732) 750-3270
- ☎ 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.....(856) 757-5181

OSHA also has extensive Spanish language resources on its website:

🌐 Federal OSHA Website: www.osha.gov

New Jersey Public Employees Occupational Safety and Health (PEOSH) Program

The PEOSH act covers all NJ state, county, and municipal employees. Two state departments administer the act; the NJ Department of Labor and Workforce Development (NJDLWD), which investigates safety hazards, and the NJ Department of Health and Senior Services (NJDHSS) which investigates health hazards. PEOSH has information that may also benefit private employers.

NJDLWD, Office of Public Employees Safety

☎ Telephone: (609) 633-3896

🌐 Website: www.nj.gov/labor/lsse/lspeosh.html

NJDHSS, Public Employees Occupational Safety & Health Program

☎ Telephone: (609) 984-1863

🌐 Website: www.state.nj.us/health/eoh/peoshweb

New Jersey Department of Labor and Workforce Development Occupational Safety and Health On-Site Consultation Program

This program provides free advice to private businesses on improving safety and health in the workplace and complying with OSHA standards.

☎ Telephone: (609) 984-0785

🌐 Website: www.nj.gov/labor/lsse/lsonsite.html

New Jersey State Safety Council

The New Jersey State Safety Council provides a variety of courses on work-related safety.

There is a charge for the seminars.

☎ Telephone: (908) 272-7712.

🌐 Website: www.njsafety.org

Internet Resources

Other useful internet sites for occupational safety and health information:

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

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

www.nsc.org - National Safety Council.

www.state.nj.us/health/eoh/survweb/face.htm - NJDHSS FACE reports.

www.cdc.gov/niosh/face/faceweb.html - CDC/NIOSH FACE website.

REFERENCES

1. *Job Hazard Analysis*. US Department of Labor Publication # OSHA-3071, 1998 (revised). USDOL, OSHA/OICA Publications, PO Box 37535, Washington DC 20013-7535.

DISTRIBUTION LIST

NIOSH

Employer

Incident Site Owner

NJ State Medical Examiner

County Medical Examiner

Local Health Officer

NJDHSS Occupational Health Service Internet Site

NJDHSS Census of Fatal Occupational Injuries (CFOI) Project

Fatality Assessment and Control Evaluation (FACE) Project

Investigation # 03-NJ-091

Staff members of the New Jersey Department of Health and Senior Services, Occupational Health Service, perform FACE investigations when there is a report of a targeted work-related fatal injury. The goal of FACE is to prevent fatal work injuries by studying the work environment, the worker, the task and tools the worker was using, the energy exchange resulting in the fatal injury, and the role of management in controlling how these factors interact. FACE gathers information from multiple sources that may include interviews of employers, workers, and other investigators; examination of the fatality site and related equipment; and reviewing OSHA, police, and medical examiner reports, employer safety procedures, and training plans. The FACE program does not determine fault or place blame on employers or individual workers. Findings are summarized in narrative investigation reports that include recommendations for preventing similar events. All names and other identifiers are removed from FACE reports and other data to protect the confidentiality of those who participate in the program.

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. Please visit the NJ FACE website at www.state.nj.us/health/eoh/survweb/face.htm or the CDC/NIOSH FACE website at www.cdc.gov/niosh/face/faceweb.html for more information.

This NJ FACE report is supported by Cooperative Agreement # 1 U60 OH0345-01 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.

Patrick Bost, M.S.
FACE Principal Investigator
Occupational Health Surveillance Program

Emily O'Hagan, R.N., M.P.H.
FACE Investigator
Occupational Health Surveillance Program

Daniel Lefkowitz, Ph.D.
FACE Investigator
Occupational Health Surveillance Program

Barbara Gerwel, M.D.
Project Coordinator
Occupational Health Surveillance Program

Donald Schill, M.S., CIH
Research Scientist
Occupational Health Surveillance Program

David Valiante, M.S., CIH
Program Manager
Occupational Health Surveillance Program

Gary Ludwig, M.S.
Director
Occupational Health Service

Eddy A. Bresnitz, MD, MS
State Epidemiologist / Senior Assistant
Commissioner
Division of Epidemiology, Environmental
and Occupational Health

