

NJ FACE INVESTIGATION REPORT



Fatality Assessment & Control Evaluation Project

FACE 03-NJ-054

August 30, 2004

Municipal Road Worker Struck by a Truck at a Worksite

On June 22, 2003, a 51-year-old municipal road worker was killed when he was struck by a small dump truck at a worksite. The victim was part of a work crew that was cleaning the roads in an urban downtown area. Shortly before 8:00 a.m., the crew was taking a break near the intersection of two one-way streets. The victim was talking to the driver of the dump truck and asked him for a cigarette. He then turned away from the truck to light the cigarette as the truck started moving and turning at the intersection. As the truck turned, the side of the truck's bed struck the victim, knocking him to the ground. He was conscious as he was transported to the local emergency room, where he died of his injuries later that day. NJ FACE investigators recommend following these safety guidelines to prevent further incidents:

- **Employers should set up roadway work zones as per the USDOT *Manual on Uniform Traffic Control Devices*.**
- **Employers should develop an internal traffic control plan for the safe operation of vehicles within the work zone.**
- **Employers should conduct a job hazard analysis of all work activities with the participation of the workers.**



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



INTRODUCTION

On July 10, 2003, NJ FACE staff received a newspaper article about the death of a municipal employee who was killed in a roadway work zone. A FACE investigator contacted the employer and arranged a site visit, which was conducted on July 30, 2003. During the visit, the FACE investigator interviewed the employer, labor union representative, and two co-workers who were with the victim that day. The incident site was also examined and photographed. Additional information was obtained from the police report, the medical examiner's report, and the compliance officer from the New Jersey Department of Labor and Workforce Development, Office of Public Employees Safety.

The victim's employer was the municipal Department of Public Works (DPW) for a large New Jersey city. The DPW was responsible for the construction, operation, and maintenance of city properties, including the roadways. The city employed a total of 1,600 employees, 274 of whom worked for the DPW. Most of the employees were unionized. The DPW's training program was on-the-job, with new employees trained by a supervisor or other trained employee. Safety practices include a safety committee that meets when there was a safety concern and a designated safety person for each DPW location. The victim was a laborer who had worked for the DPW since 1986.

INVESTIGATION

The incident occurred on Sunday, June 22, 2003, in an urban city of 8.4 square miles and approximately 150,000 residents. The DPW's usual working hours were Monday through Friday, 7:30 a.m. to 4:00 p.m., but employees often worked weekends for overtime. A crew of five workers (two drivers and three laborers) arrived at the DPW garage at 5:15 a.m. for a street sweeping operation. At 6:00 a.m. the crew took two vehicles, a street sweeping truck and a small dump truck, into the center of town. The morning was dry and overcast and there was almost no traffic as the crew started work. This was a slow-moving mobile operation where the three laborers walked ahead of the street sweeper and used leaf blowers to blow debris into the center of the street. The street sweeper collected the debris as it followed the laborers. Large items such as bags and cardboard were thrown into the back of the dump truck, which was also used to carry the crew's leaf blowers and other equipment. The crew did not use any traffic

control devices such as cones or signboards, although the trucks were equipped with flashing yellow lights. All the workers wore orange safety vests; the laborers with the leaf blowers wore earplugs for hearing protection.



Photo 1
Dump Truck Involved in Incident



Photo 2
Incident Site
Arrow indicates direction of turn

The early morning passed uneventfully as the crew moved into the center of town. Shortly before 8:00 a.m., the crew took a break near the intersection of two one-way roads. The driver of the dump truck parked his vehicle on the right hand side of the road near the intersection. The victim, who was working with the leaf blower, went to the passenger side of the truck and asked the driver for a cigarette. The driver passed him the cigarette, and the victim turned around and started to light up. While the victim stood with his back to the truck, the driver started to move forward and turn right against the one-way street. As he did this, the side of the truck's bed



Photo 3
Part of truck that struck the victim

(which protruded 8 inches from the truck body) struck the victim, knocking him to the ground. Another co-worker saw the impact and yelled for the driver to stop. They went to the victim who was conscious and complaining of pain. The police were notified of the incident at 7:52 a.m. Police and EMS arrived on the scene, finding the victim with bruising and swelling on his right side and back area. He was transported to the local emergency room, where he was found to have a broken pelvis. Despite extensive treatment, the victim's condition quickly deteriorated and he died in the hospital at 12:10 p.m.

RECOMMENDATIONS/DISCUSSIONS

Recommendation #1: Employers should set up roadway work zones as per the USDOT *Manual on Uniform Traffic Control Devices*.

Discussion: This incident occurred while the victim was on break and was not directly related to the worksite set up. However, the work crew did not use any type of traffic control devices, which puts the crew at greater hazard from street and internal work zone traffic. NJFACE recommends setting up work zones as per the USDOT *Manual on Uniform Traffic Control Devices*, which outlines using specific procedures and warning devices (such as truck-mounted traffic attenuators) to protect the workers at the worksite.

Recommendation #2: Employers should develop an internal traffic control plan for the safe operation of vehicles within the work zone.

Discussion: The victim was struck when the driver of the dump truck took a right turn at the corner against one-way traffic. It is not known why the driver turned in the wrong direction. It is important that the movement of traffic in a work zone should be safe and predictable. NJFACE recommends that employers develop a traffic control plan to control the flow of traffic in the work zone. A simple plan could include obeying all traffic laws, staying a specified distance from all moving vehicles, and using special safety procedures (such as spotters) if special maneuvers are necessary.

Recommendation #3: Employers should conduct a job hazard analysis of all work activities with the participation of the workers.

Discussion: To prevent incidents such as this, NJFACE recommends that employers conduct a job hazard analysis of all work areas and job tasks with the employees. A job hazard analysis should begin by reviewing the work activities that the employee is responsible for and the equipment that is needed. Each task is further examined for mechanical, electrical, chemical, or any other hazard the worker may encounter. The results of the analysis can be used to design or modify the standard operating procedures for the job. Additional information on conducting a job hazard analysis is included in the appendix.

RECOMMENDED RESOURCES

It is extremely important that employers obtain accurate information on health, safety, and applicable OSHA standards. NJ FACE recommends the following sources of information which should 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
- 🌐 Federal OSHA Website: www.osha.gov

NJ 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/lse/lspeosh.html

NJDHSS, Public Employees Occupational Safety & Health Program

- ☎ Telephone: (609) 984-1863
- 🌐 Website: www.state.nj.us/health/eoh/peoshweb

NJDLWD Occupational Safety and Health On-Site Consultation Program

Located in the NJ Department of Labor and Workforce Development, 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 NJ 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.

2. *NIOSH Alert: Preventing Worker Injuries and Deaths From Moving Refuse Collection Vehicles*. NIOSH publication # 97-110, NIOSH Publications Dissemination, 4676 Columbia Parkway, Cincinnati OH 45226. Telephone 1-800-356-4674.

DISTRIBUTION LIST

NIOSH

Employer

Labor Union(s)

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-054

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. For further information, 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.

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

