INVESTIGATION REPORT



Fatality Assessment & Control Evaluation Project

FACE 98-NJ-038-01

February 2, 1999

Laborer Killed When Forklift Truck He was Operating Overturned

SUMMARY

On April 20, 1998, a 42 year-old worker died when the forklift truck he was operating turned over as he drove it around a corner. The company had no forklift training program. Although he may have operated a forklift in the past, the victim was not trained or experienced in its operation. As he turned a corner at a quick speed, his forklift tipped and he attempted to jump clear. The forklift fell on him.

FACE investigators concluded that in order to prevent similar incidents, the following safety guidelines should be followed:

- The employer should expand their new forklift training program to include a hands-on component.
- The employer should conduct a job hazard analysis; policies and training should be implemented based upon the findings of the evaluation.
- Employers should become familiar with available resources on safety standards and safe work practices.





INTRODUCTION

This work-related fatal injury was reported to the NJDHSS FACE staff on April 22, 1998 by the county medical examiner. A site visit was conducted on November 4, 1998. The company manager and two workers were interviewed. The incident site was viewed and photographs were taken. Further information was received from the medical examiner, police report, and federal OSHA.

The employer was a company that distributed food and paper products to restaurants and hotels and maintained a refrigerated warehouse. Their drivers used company trucks to deliver their products. Offices and the warehouse of the three-year old company were located in a rural area. Seventeen workers were employed by the company, none of whom were union members. There was no health and safety program nor formal training procedures in effect.



Example of a forklift truck

The company owned two forklift trucks: the propane-powered truck involved in the fatality and an electric-powered one. The two forklifts had different operational features. The propane-powered truck was lighter in weight than the electric forklift, had a more rapid take-off speed, and the operator had to use the brake to slow the machine. A forklift operator said that the faster speed of the propane-powered truck would have

been noticeable to workers watching its daily operation.

The deceased was a driver's helper who had been employed by the company for eight months. His duties were to load their products into the delivery trucks, accompany the driver to their customers, and unload the truck. He did no driving. He was not a company-designated forklift operator but had occasionally moved the forklift to gain access to skids. He had been told by one of the managers not to drive the forklift. No information is available about his previous employment. He had been unemployed before he was hired.

INVESTIGATION

Employees started work at various times between 5 a.m. and 8 a.m.. On the day of the fatality, the victim started work around 7 a.m.. He was one of four to six workers who loaded delivery

trucks, backed to the loading dock of the warehouse. By 8:30 a.m., his truck was loaded and the driver planned to leave within ten minutes. A propane-powered forklift truck, without a load, was parked in the warehouse with the motor turned off but the key in the ignition. No one observed the victim start the forklift but one of the designated forklift operators saw him driving and told him to slow down; he was going too fast. As the victim drove past him, the witness heard him say that he was going to the bathroom, which was about 200 feet away. As the victim turned the third corner, the forklift tipped. The worker apparently attempted to jump clear and jumped out of the forklift, to his left. He was not wearing a seat belt. The forklift fell on him and he was pinned by the top of the rollover cage.

Workers summoned help and used the company's electric forklift to lift the tipped forklift off of the victim so they could slide him away from it. Police responded to their call, followed by rescue personnel. The victim was transported to a major medical center in a bordering state for treatment. He was pronounced dead in the emergency room before 9 a.m..

CAUSE OF DEATH: The medical examiner determined that death was caused by "massive crushing injuries of the thorax."

RECOMMENDATIONS/DISCUSSIONS

Recommendation #1: The employer should expand their new forklift training program to include a hands-on component.

<u>Discussion</u>: After the fatal injury, the company contracted with a consultant to initiate a forklift training program. Prior to this, only experienced operators were hired and there was no company training program. Four operators, who had previously been designated to operate the forklifts, were certified through the new training program. The forklift training given by the consultant consisted of lectures and audiovisual films, followed by a written examination.

The newly implemented forklift training should be expanded to include a practical, hands-on component with testing on the practical aspects of forklift operation. Demonstration of forklift competence should include normal operation on various surfaces, truck loading, and ways in which potential hazards should be avoided or handled.

The OSHA compliance officer determined that the emergency brake on the forklift was not working properly. There should also be a written policy established that covers all aspects of

equipment maintenance and repair. Rules should clearly state that only certified operators are allowed to use the forklifts. Supervisors should enforce the ruling. General safety training should be given to all workers and it should include hazards of working around forklifts.

Recommendation # 2: The employer should conduct a job hazard analysis; policies and training should be implemented based upon the findings of the evaluation.

<u>Discussion</u>: Work procedures at the company were considered routine. Neither the employer nor workers were aware of potential hazards associated with equipment, the environment or work practices. The company should hire a safety and health consultant who is capable of evaluating the workplace and work practices and recommending changes necessary to ensure worker safety and health. A written safety and health policy should be implemented based on the job hazard analysis.

Recommendation # 3: 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 adhering to 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

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.state.nj.us/health/eoh/survweb/ - The NJDHSS Surveillance website with FACE reports www.dol.gov/elaws -USDOL Employment Laws Assistance for Workers and Small Businesses.

Many equipment manufacturers also maintain their own web sites and offer information about safe use of their equipment.

ATTACHMENTS

U.S. Government Printing Office, U.S. Department of Labor, Occupational Safety and Health Administration, Job Hazard Analysis, 1988. OSHA 3071.

REFERENCES

U.S. Government Printing Office, U.S. Department of Labor, Code of Federal Regulations, 1910.178 and 1910, Section 5(a)(1).

U.S. Government Printing Office, U.S. Department of Labor, Occupational Safety and Health Administration, Job Hazard Analysis, 1988. OSHA 3071.

Guideline for Safe Operation of Powered Lift Trucks; Ontario Ministry of Labor; April 18, 1997.

DISTRIBUTION LIST

<u>Immediate Distribution</u>

NIOSH

Employer

Decedent's family, on request

Labor Union(s)

NJ State Medical Examiner

County Medical Examiner

Local Health Officer

NJDHSS Census of Fatal Occupational Injuries (CFOI) Project

General Distribution

College of New Jersey, Department of Engineering

USDOL-OSHA New Jersey Area Offices (4)

NJDOL Public Employees OSHA

NJDHSS Public Employees OSHA

NJDOL OSHA Consultative Service

NJ State Safety Council

NJ Institute of Technology

NJ Shade Tree Federation

NJ Utilities Association

NJ School Boards Association

Rutgers University, College of Engineering

Stevens Institute

University of Medicine & Dentistry of NJ

Public Service Electric and Gas Company

Liberty Mutual Insurance Company Research Center

Private Consultants (3)

Private Companies (8)

FATALITY ASSESSMENT AND CONTROL EVALUATION (FACE) PROJECT

Investigation # 98-NJ-038-01

Staff members of the New Jersey Department of Health and Senior Services, Occupational Disease and Injury Services, perform FACE investigations when there is a report of a work-related fatal fall or machine-related incident. The goal of the FACE Program is to prevent future incidents by studying and identifying the risk factors that contribute to workplace fatalities, by recommending intervention strategies, and by disseminating information to employers and employees. All NJ FACE data are reported to NIOSH for trend analysis on a national basis. All identifiers are removed from the 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, Maryland, Massachusetts, Minnesota, Missouri, Nebraska, New Jersey, Ohio, Oklahoma, Texas, Washington, West Virginia, and Wisconsin.