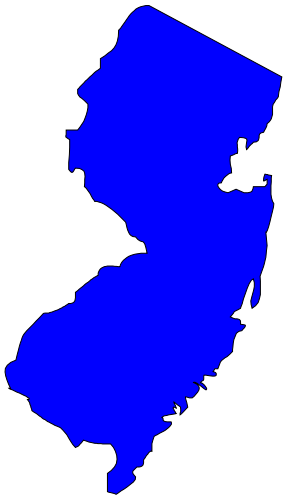
F.A.C.E.
INVESTIGATION REPORT

Fatality Assessment and Control Evaluation Project

FACE #96-NJ-056-01
Warehouse Supervisor Dies After Falling
9 Feet From the Forks of A Forklift Truck



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

SUBJECT: FACE Investigation #96-NJ-056-01
Warehouse Supervisor Dies After Falling 9 Feet From the Forks of A Forklift Truck

DATE: March 24, 1997

SUMMARY

On August 5, 1996, a 40-year-old supervisor at a meat packing plant died after falling from the raised forks of a forklift truck. The incident occurred in the plant's cold storage room when the victim asked the forklift operator to lift him up to get some product samples from a pallet on a storage rack. As the victim was being lowered, he lost his footing on the forks and fell about nine feet to the concrete floor. NJ FACE investigators concluded that, in order to prevent similar incidents in the future, these safety guidelines should be followed:

o Employers should develop and implement a written training and certification program for operating forklift trucks.

o Employers should conduct a job hazard analysis of all work activities with the participation of the workers.

o Employers and employees should develop and implement a written comprehensive safety program.

INTRODUCTION

On August 7, 1996, NJ FACE investigators were notified by the medical examiner's office of a death resulting from a fall from a forklift truck. On the following day, FACE investigators conducted a site visit to interview the employer and examine the incident site. Two witnesses were also interviewed and photographs were taken of the site. Additional information on the incident was gathered from the OSHA files, the police report, and the medical examiner's report.

The employer was a meat packing company that processed pork hams. The company had been in business since 1978 and relocated to this plant in 1988. The company operated 24 hours a day and employed 215 unionized workers in a primarily two-shift operation. An employee was assigned responsibility for safety and had developed some specific written safety programs, such as lock-out/tag-out. However, the company did not have a written general safety or job training program. Job training at the plant was mostly on-the-job, including training for the forklift operators.

The victim was a 40-year-old male assistant production supervisor who had worked for the company for 17 years. Promoted to assistant supervisor in 1988, he was responsible for assisting the production supervisor and carrying out the daily production schedule. The victim was described as a dedicated worker by a company representative.

INVESTIGATION

The company was located in a large, well-maintained plant located in an urban area. The plant processed pork hams into products such as Canadian bacon and lunch meat. The process started with receiving sections of pork hams from the slaughterhouse. These sections were skinned and deboned by machine, with the remaining fat being removed by hand. After injection with a curing agent, the meat was packed into molds and then cooked by boiling in water. Smoked products were wrapped in cloth netting and cooked in the smoke room. The finished products were labeled, packed, and taken to a cold storage room on pallets.

The incident occurred in the plant's cold storage room. This large room contained several three-tier storage racks for palleted goods. The storage racks were standard steel-frame warehouse racks with the top shelf being ten feet high. The racks were loaded with a battery-powered "hi-lo" forklift truck that was operated by a worker exclusively assigned to this area. This "hi-lo" was a 5,200 pound narrow aisle rider forklift truck with 24 foot reach and a 3,200 pound capacity. A separate personnel cage was available for lifting employees on the forks and was used for maintenance work. Other workers in the room used powered pallet-jacks to remove products for shipping. The cold room was kept at a temperature of 30-34 degrees and was observed to be free of visible water or ice. However, the company representative stated that there may have been some condensation on the forklift or racks at the time of the incident.

Work at the plant started early in the morning, with the employees arriving between 4:00 and 6:00 a.m., depending on the department where they worked The victim usually started at 5:00 a.m. to implement the production schedule. On the morning of the incident, a Monday, the

forklift operator spoke briefly with the victim. He told the operator that this would be a heavy day with a lot of samples. Part of the victim's duties were to pull samples of product for delivery to trade shows. The forklift operator stated that the usual procedure for getting the samples was to use the forklift to lower a pallet from the cooler racks to the floor, where the victim would open a box and take the samples. At about 12:20 p.m., the victim asked the forklift operator to lift him up to a pallet to get some samples. The victim appeared to be in a hurry to get the samples, which he needed for a trade show. The forklift operator told him that there was some product at floor level but the victim wanted samples from the top of the rack. Facing the lift, the victim stood with one foot on each fork and was raised up to the top rack. He opened a box on the pallet and removed three rolls of Canadian bacon, which he placed under his arm. The operator then started to lower the forklift.

The forks had descended less than a foot when the victim slipped. The forklift operator saw him flailing his arms to try grabing onto the racks. The victim struck the end of the forklift blade and then fell about nine feet to the concrete floor, striking his shoulder and head. Before the forklift operator could tell him to stay still, the victim staggered back up to his feet and fell again, possibly striking the storage rack. As the forklift operator attended to the victim, another worker ran from the cold room and called for help. The police and EMS arrived to find the victim unconscious and transported him to the local hospital, where he died of his injuries at 5:00 p.m.

CAUSE OF DEATH

The county medical examiner attributed the cause of death to "blunt force trauma to head and torso due to fall."

RECOMMENDATIONS/DISCUSSIONS

Recommendation #1: Employers should develop and implement a written training and certification program for operating forklift trucks.

Discussion: During the investigation it became apparent that the victim had stood on the forks to get samples a number of times before. This demonstates a lack of understanding on the dangers of forklifts by both the victim and the forklift operator. To prevent future incidents, the FACE program recommends that the company institute a training program for the safe use of forklifts and powered pallet-jacks. Training should include classroom training covering general operating and safety procedures, use of personnel cages, back up alarms, and other operating and safety topics. Once the employees receive hands-on instruction with the equipment, they should

receive a certification to operate the machine. FACE recommends periodic refresher training to renew the certification. To prevent non-certified drivers from operating the forklifts, it is suggested that keys to the equipment are held only by certified operators.

Recommendation #2: Employers should conduct a job hazard analysis of all work activities with the participation of the workers.

Discussion: To prevent incidents such as this, we recommend that employers conduct a job hazard analysis of all work areas and job tasks with the employee(s). 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 fall, electrical, chemical, or any other hazard the worker may encounter. The results of the analysis can be used to design or modify a written employee job description. If employers are unable to conduct a proper job hazard analysis, they should consider hiring a safety consultant.

Recommendation #3: Employers and employees should develop and implement a comprehensive written safety program.

Discussion: It is recommended that all employers emphasize worker safety by developing and implementing a comprehensive safety program to reduce or eliminate hazardous situations. This program, which may be developed as part of a joint labor/management safety committee, should include the recognition and avoidance of hazards identified by the job hazard analysis and include appropriate worker safety training. Records should be kept of any training conducted.

REFERENCES

Code of Federal Regulations 29 CFR 1910. US Government Printing Office, Office of the Federal Register, Washington DC

ATTACHMENTS

Job Hazard Analysis. OSHA 3071, US Department of Labor, Occupational Safety and Health Administration, Washington DC. 1988.

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