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PUBLIC HEALTH SERVICE/CDC/NIOSH/DSR
FACE 97-19

TO: **Director, National Institute for Occupational Safety and Health**

FROM: **Division of Safety Research, NIOSH**

SUBJECT: **Electric Line Technician Dies After Falling From Forklift--North Carolina**

SUMMARY

A 36-year-old male electric-line technician (the victim) died after falling from and being run over by a forklift. The victim and a co-worker were moving transformers from a supply yard to a warehouse to be prepared for installation on the following day. The men had taken one transformer, sitting on a wooden pallet, to the warehouse and set the pallet down on the loading dock. On the return trip to the supply yard, the victim was standing on the forks of the forklift. As the coworker approached an intersection, he slowed down and turned his head to see if there was any oncoming traffic. When he turned his head back, he could not see the victim. He stopped the forklift, got off, and saw the victim underneath the right side of the forklift. The coworker called for help, then ran to the warehouse to get a second forklift. The coworker lifted the forklift from the victim as two men from the warehouse pulled the victim clear. The rescue squad transported the victim to the hospital where he was pronounced dead on arrival. NIOSH investigators conclude that, to prevent similar incidents, employers should:

- *ensure that employees adhere to the existing regulations pertaining to the use of forklifts*
- *encourage all workers to actively participate in workplace safety.*

INTRODUCTION

On July 21, 1997, a 36-year-old male electric line technician (the victim) died after falling from and being run over by a forklift. On July 25, 1997, officials of the North Carolina Occupational Safety and Health Administration (NCOSHA) notified the Division of Safety Research (DSR) of this fatality, and requested technical assistance. On August 30, 1997, a DSR safety specialist conducted an investigation of the incident. The incident was reviewed with the NCOSHA compliance officer and the city director of human resources. The incident site was visited and photographed, and the police report was obtained.

The victim was employed by the electric division of a city public utilities department. The city employed 225 full-time workers, 15 of whom were in the electric division. All city department divisions had specific written safety programs. Weekly safety meetings were conducted by crew supervisors and documented monthly safety meetings were conducted by each division. New employees were placed in an orientation program before the actual start of work and were trained for jobs they would perform in their respective departments. Training was provided on the job. The victim had worked for the electric division for 10 months. This was the first fatality experienced by the electric division.

INVESTIGATION

The victim and a coworker, both classified as Electric Line Technician I by the city electric division, had finished their assigned duties for the day at the city services compound and decided to transport line transformers from the supply yard to the warehouse to be prepared for installation the next day. Since the ditch digger trailer normally used to transport the transformers was in use off the grounds, the men borrowed a Toyo TCM FHG 36, dual-front tire forklift, from the warehouse workers. The men traveled to the supply yard approximately 150-feet away from the warehouse. A transformer sitting on a wooden pallet was lifted by the forklift and taken to the warehouse loading dock. While the coworker drove the forklift, the victim stood on the pallet and rode to the loading dock.

After the pallet was placed on the dock the coworker backed away from the dock and began to travel back to the supply yard. The victim was standing on the forks on the return trip.

Approximately 55 feet from the loading dock, the supply-yard road intersected the 29-foot-wide main compound road. An 8-foot-square dumpster was located on the left side of the supply-yard road at the intersection. As the forklift approached the intersection, the coworker slowed the machine and looked to the left around the dumpster to see if any vehicles were approaching. When the coworker turned his head back, he could no longer see the victim and immediately stopped the forklift. When he dismounted the machine, he saw the victim under the right rear of the forklift between the rear tires. The coworker ran toward the warehouse shouting for help. Two warehouse workers came to the dock. One ran back inside to call the rescue squad while the other ran to the forklift. The coworker got a second forklift from the warehouse and used it to lift the rear of the first forklift off the victim while the two warehouse workers pulled the victim clear. The men covered the victim with a blanket until the rescue squad arrived, approximately 10 minutes later. The victim was transported to the hospital where he was pronounced dead on arrival.

CAUSE OF DEATH

The attending physician listed the cause of death as multiple traumatic injuries--heavy-machinery crush.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should ensure that employees adhere to the existing regulations pertaining to the use of forklifts.

Discussion: In this incident neither worker had received training in the safe operation of forklifts. Although warehouse personnel are trained in the safe operation of forklifts, electric division employees are not. To comply with 29 CFR 1910.178 (1) employers should ensure that only trained and authorized personnel operate forklifts. Additionally, to comply with 29 CFR 1910.178 (m)(3), unauthorized personnel should not be permitted to ride forklifts. If riding is authorized, safe seating shall be provided. Stickers prohibiting riders on the forks of the forklift were present and clearly visible on the sides of the forklift mast.

Recommendation #2: Employers should encourage all workers to actively participate in workplace safety.

Discussion: Employers should encourage all workers to actively participate in workplace safety and should ensure that all workers understand the role that they play in the prevention of workplace injury. In this instance the victim was riding on the forks of the forklift. Workers and co-workers should look out for their personal safety and the safety of co-workers. When workers observe hazardous conditions or activities, they should, depending on the circumstances, notify management and/or remind co-workers of the proper way to perform their tasks and protect themselves. Employers must instruct workers of their responsibilities to participate in making the workplace safer. Increased worker participation will aid in the prevention of occupational injury.

REFERENCES

29 CFR 1910.178(1) Code of Federal Regulations, Washington, D.C.: U.S. Government Printing Office, Office of the Federal Register..

29 CFR 1910.178(m)(3) Code of Federal Regulations, Washington, D.C.: U.S. Government Printing Office, Office of the Federal Register.

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Fatality Assessment and Control Evaluation (FACE) Project

The National Institute for Occupational Safety and Health (NIOSH), Division of Safety Research (DSR), performs Fatality Assessment and Control Evaluation (FACE) investigations when a participating State reports an occupational fatality and requests technical assistance. The goal of these evaluations is to prevent fatal work injuries in the future by studying the working environment, the worker, the task the worker was performing, the tools the worker was using, the energy exchange resulting in fatal injury, and the role of management in controlling how these factors interact.

States participating in this study: North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, and Virginia.

Additional information regarding this report is available from:

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