

DATE: April 25, 1997

FROM: Minnesota Fatality Assessment and Control Evaluation (MN FACE)
Program Minnesota Department of Health

SUBJECT: MN FACE Investigation 97MN002
Forklift Operator Dies After Being Crushed Between A Loading Dock And A Railroad
Box Car

SUMMARY

A 53-year-old forklift operator driver died of injuries he sustained after he was crushed between a loading dock and a railroad box car. When it was not being used to access rail cars, the dock was stored in a vertical position. The victim was standing underneath the loading dock when the dock released into the lowered position, pinning him between the dock and the boxcar. Two of the victim's coworkers discovered his body approximately 11 hours after the incident occurred. The coworkers placed a 911 call to emergency response personnel who arrived and pronounced the victim dead. MN FACE investigators concluded that, in order to reduce the likelihood of similar occurrences, the following guidelines should be followed:

- employers should ensure that employees avoid potentially hazardous work/nonwork locations;
- employers should ensure that outdated equipment is replaced; and
- employers should design, develop, and implement a comprehensive safety program.

INTRODUCTION

On January 21, 1997, MN FACE investigators were notified of a work-related fatal incident that occurred on January 19, 1997. A telephone interview with the employer was conducted by a MN FACE investigator on March 21, 1997. During MN FACE investigations, incident information is obtained from a variety of sources such as law enforcement agencies, county coroners and medical examiners, employers, coworkers and family members.

The victim worked for a sugar beet manufacturing company that has been in business for 21 years and employs 320 workers on average. The employer has a safety program and a safety director who dedicates 100% of his work time to health and safety. The victim had worked for the

company for 7 years.

INVESTIGATION

The victim operated a warehouse loading dock that was used to access railroad boxcars. The dock measured 5 feet 6 inches wide by 8 feet 6 inches long. When it was not being used to access rail cars the dock was stored in a vertical position. A roll up dock door was located inside the warehouse, immediately behind the loading dock. The dock involved in the incident could be released from either outside the warehouse or inside after the roll up dock door was opened. Once the release was activated, the dock door lowered from its vertical position to a horizontal position. The release of the dock door to the lowered position was slowed slightly by a hydraulic system which had been used to raise the dock door from the lowered position to the vertical position. At the time of the incident the hydraulic system was not working and the dock door had to be raised with a forklift.

On the day of the incident, the victim was working the 7:00 a.m. to 3:00 p.m. shift. He was not scheduled to perform any tasks outside of the warehouse. The victim was last seen by a coworker at approximately 2:30 p.m.. There were no witnesses to the incident. It is unclear why the victim left the warehouse and went to the boxcar area. The roll up dock door was not open and therefore it was not possible that the dock release was activated from inside of the warehouse. There was no apparent reason why the victim would have pulled the release that lowered the dock from outside the warehouse. In summary, it was not possible to determine the circumstances surrounding the victim's death. Two coworkers of the victim discovered his body approximately 11 hours after the incident occurred. The coworkers placed a 911 call to emergency response personnel who arrived and pronounced the victim dead.

CAUSE OF DEATH

The cause of death listed on the death certificate was crushed skull, brain and spinal.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should ensure that employees avoid potentially hazardous work/nonwork locations.

Discussion: In order for employees to reduce the potential of being injured, employers should ensure that employees avoid potentially hazardous work or nonwork areas. Employees must be

made aware of areas that could be hazardous and they should be instructed to stay away from these areas. In this incident, the victim was in a nonwork area that was hazardous whenever the loading dock dropped to it's lowered position. It could not be determined why the victim was in the vicinity of the dock when it lowered and crushed him. If the worker involved in this incident had avoided the hazardous area where the incident occurred, this fatality would have been prevented.

Recommendation #2: Employers should ensure that outdated equipment is replaced.

Discussion: The loading dock involved in this incident had been installed approximately 20 years ago. It could not be determined why the dock dropped to it's lowered position. Although the dock did not have a history of lowering spontaneously it should be replaced with a newer dock. Since the incident occurred, the employer has replaced the dock with a newer model.

Recommendation #3: Employers should design, develop, and implement a comprehensive safety program.

Discussion: Employers should ensure that all employees are trained to recognize and avoid hazardous work conditions. A comprehensive safety program should address all aspects of safety related to specific tasks that employees are required to perform. OSHA Standard 1926.21(b)(2) requires employers to "instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury." Safety rules, regulations, and procedures should include the recognition and elimination of hazards associated with tasks performed by employees.

REFERENCES

1. Office of the Federal Register: Code of Federal Regulations, Labor, 29 CFR part 1926.21 (b)(2), U.S. Department of Labor, Occupational Safety and Health Administration, Washington, D.C., July 1, 1994.

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