DATE: August 10, 1998

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

SUBJECT: MN FACE Investigation 98MN00601
Construction Worker Dies After Being Struck By Plywood That Fell From Work Platform

SUMMARY

A 69-year-old male carpenter (victim) died after he was struck by several sheets of plywood that fell from a forklift. The victim and five other carpenters were working on a two-story townhouse. Two workers placed approximately 30 sheets of plywood onto a portable work platform and used a forklift to lift it to the edge of the roof. While two workers worked from the raised platform, the victim and a coworker worked directly beneath it at ground level. After the workers had installed several sheets of plywood on the roof, they asked the victim's coworker to reposition the forklift. The coworker attempted to reposition the lift based on verbal directions from one of the workers on the raised platform. The coworker was not trained to operate the lift's hydraulic control levers. While he attempted to lower the lift, he moved the control lever that caused the forklift to tilt. When it tilted forward the sheets of plywood slid off and struck the victim when they fell to the ground. The operator of the lift ran to the victim and began to remove the sheets of plywood from him. He called for help from other workers at the site. Another worker ran to the scene from the back of the townhouse and lowered the platform to the ground. A call was placed to emergency personnel who arrived at the scene shortly after being notified of the incident. The victim was transported to a local hospital where he was pronounced dead shortly after he arrived. MN FACE investigators concluded that, in order to reduce the likelihood of similar occurrences, the following guidelines should be followed:

- workers should never work at locations directly beneath other workers unless adequate protection from falling objects is provided; and

- workers should not be allowed to operate equipment before receiving proper operator training.

INTRODUCTION

On January 23, 1998, MN FACE investigators were notified of a work-related construction fatality that occurred on January 22, 1998. The local police department was contacted and a releasable copy of their investigative report was obtained. Although a site investigation was not conducted, the detailed police department report, which included a transcript of their interviews that were conducted at the incident site and copies of their photographs taken at the incident site, provided specific and comprehensive information concerning the cause of this fatality. 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 as a general carpenter for a construction company that builds residential single and multi-family houses. The company had been in business for 6.5 years and employed from 10 to 15 workers depending on the amount of new construction business during various seasons of the year. Employees of the company had been working at this site for about two months. At each job site, an assigned job site foreman was responsible for general work site safety issues. The victim had worked for the employer for approximately two years.

INVESTIGATION

On the day of the incident, the victim and five other carpenters were working on various framing aspects of a two-story townhouse. Two workers placed approximately 30 sheets of plywood onto a portable steel work platform known in the construction industry as a skytrack. A skytrack is slid onto the forks of a commercial forklift and is used to raise construction workers and material to heights as high as twenty feet. In this incident, the skytrack was being used to assist the workers installing plywood to the roof of the townhouse directly above the front entry of the building.

While the workers worked from the skytrack, the victim and a coworker worked directly beneath it at ground level installing sheathing in the area of the front entry to the townhouse. After the workers on the skytrack had installed several sheets of plywood, they asked the victim's coworker to reposition the skytrack to another area so they could install additional sheets of

plywood. Although the coworker told investigators that he had never operated this type of forklift, he entered the cab of the forklift and attempted to reposition it. While he attempted to reposition the lift based on verbal directions from one of the workers on the skytrack, the victim continued to work directly beneath it. The forklift operator had to use the hydraulic control levers to move the skytrack away from the townhouse and lower it to the ground. While he attempted to lower the lift, he moved a control lever that caused the forklift to tilt forward. When the platform tilted forward, the sheets of plywood slid off and struck the victim when they fell to the ground. The operator of the lift jumped from the cab, ran to the victim and began to remove the sheets of plywood from him. He called for help from other workers at the site. Another worker ran to the scene from the back of the townhouse and lowered the skytrack and the two workers to the ground. A call was placed to emergency personnel who arrived at the scene shortly after being notified of the incident. The victim was transported to a local hospital where he was pronounced dead shortly after he arrived.

CAUSE OF DEATH

The cause of death listed on the death certificate was closed head trauma due to an industrial accident.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Workers should never work at locations directly beneath other workers unless adequate protection from falling objects is provided.

Discussion: Whenever work is done at a raised elevation, other workers should not work directly beneath the elevated work site unless adequate protection from falling objects is provided. In this incident, two workers were working directly beneath a raised platform where no protection from falling objects was provided. When the raised platform was tilted forward while being lowered, the plywood fell from the platform and struck the unprotected worker who was working on the ground. In situations like the one associated with this incident, workers should never work directly beneath a work platform where they could be struck be falling material. If the ground level workers in this case had been directed to work at a different location until the workers on the platform had finished installing plywood on the roof, this

fatality would have been prevented.

Recommendation #2: Workers should not be allowed to operate equipment before receiving proper operator training.

Discussion: Employers should ensure that workers are properly trained to safely operate equipment that they are required to use at their work site. If only some employees are trained to operate certain equipment, then untrained workers must never be allowed to operate any equipment on which they have not received proper training. In this case, an untrained worker was told to lower a forklift that was supporting a raised work platform. The untrained worker was not familiar with the hydraulic controls and when the wrong control lever was activated, the platform tilted and the sheets of plywood fell from the platform.

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