

DATE: February 27, 1996

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

SUBJECT: MN FACE Investigation 95MN05101
Farmer Dies After Falling 45 Feet From Silo

SUMMARY

A 50-year-old male farmer (victim) died from injuries sustained when he fell 45 feet from a silo. On the morning of the incident, the victim used a silo blower to blow recently harvested corn into a silo. After adding several loads of corn, the victim climbed the silo door ladder rungs until he reached the fifth door from the top. The victim was wearing a pair of general purpose "tennis" type shoes at the time of the incident. He opened the door, possibly to check on the level of the corn in the silo. After opening the door and while standing on the silo door ladder rungs, he slipped from the rungs and fell to the bottom of the silo. He was found by his wife lying face down on the concrete floor of the silo room. She immediately placed a call to emergency medical personnel. They arrived at the scene shortly after being notified and transported the victim to a local hospital where he was pronounced dead shortly after arrival. MN FACE investigators concluded that, in order to reduce the likelihood of similar occurrences, the following guidelines should be followed:

- workers should always wear footwear that is appropriate for the work environment.

INTRODUCTION

On September 25, 1995, MN FACE investigators were notified of a farm work-related fatality that occurred on September 27, 1995. The county sheriff's department was contacted and releasable information obtained. Information obtained included a copy of their report and copies of their photos of the incident site. A site investigation was not conducted by MN FACE investigators.

INVESTIGATION

On the morning of the incident, the victim used a silo blower to blow recently harvested corn into a silo. The concrete block silo was connected to a barn by a silo room that was essentially a small addition to the barn. The silo room extended from the barn to the side of the silo where the silo doors existed. A solid versus caged metal silo chute extended through the roof of the silo room to the top of the silo and enclosed the area in the vicinity of the silo doors. The metal chute provided

an enclosed area for workers to climb the silo door ladder rungs from the ground to the top of the silo.

Prior to the day of the incident, the silo had been filled to a level within 25 to 30 feet from the top of the silo. After adding several loads on the day of the incident, the victim climbed the silo door ladder rungs until he reached the fifth door from the top. He apparently opened the fifth door, possibly to check on the level of the corn in the silo. While either opening the door or while standing on the silo door ladder rungs, he slipped from the rungs and fell approximately 45 feet to the bottom of the silo. He was found by his wife lying face down on the concrete floor of the silo room. She immediately placed a call to emergency medical personnel. They arrived at the scene shortly after being notified and transported the victim to a local hospital where he was pronounced dead shortly after arrival.

The silo door rungs and the inside of the silo chute were wet and slippery at the time of the incident. The victim was wearing tennis shoes at the time. The dust on the ladder rungs of the top four doors was not disturbed and indicated that the victim did not climb above the fifth silo door from the top. Dust was also rubbed off the silo chute in the area of the fifth door. This was consistent with a worker bracing himself with his feet on the ladder rungs and his back against the silo chute, thus freeing both hands to release the silo door latch and push the door open.

CAUSE OF DEATH

The cause of death listed on the death certificate was blunt force trauma from fall

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Workers should always wear footwear that is appropriate for the work environment.

Discussion: In this case, the victim was wearing a pair of general purpose "tennis" type shoes. Although they may have provided adequate traction throughout most of the victim's work environment, they may not have been appropriate for climbing the silo door ladder rungs. The ladder rungs were wet and slippery due to condensation and the accumulation of feed dust on them. Shoes with non-skid soles that are designed to reduce the risk of slipping should be worn whenever workers are required to walk, stand or climb on surfaces where there may be an increased danger of slipping and falling.