

DATE: January 28, 1998

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

SUBJECT: MN FACE Investigation 97MN049
Farm Worker Dies After Falling From 12 Foot High Step Ladder

SUMMARY

A 60-year-old farm worker (victim) died of injuries sustained when he fell while attaching plastic sheathing across the inside of a 15 foot high door opening of a turkey confinement building. Inside the building at the base of the door was a concrete pad. The victim began attaching the sheathing along the right side of the door and used a 12 foot high aluminum step ladder to reach the top of the door. He placed the step ladder on the concrete pad and began securing the sheathing across the top of the door. Apparently while securing the plastic, the victim either slipped or lost his balance and fell to the concrete pad. The ladder tipped toward the inside of the building and was found tipped on it's side. The victim fell to the concrete pad in the location between the legs of the ladder. When the victim didn't return to a general purpose office building for an afternoon work break, other workers became concerned. They went to the barn where the victim had been working and found him lying on the concrete pad. A call was placed to emergency medical personnel. They arrived shortly after being notified and pronounced the victim dead at the scene. MN FACE investigators concluded that to reduce the likelihood of similar occurrences, the following guidelines should be followed:

- the top platform and the top step of step ladders should not be used as steps;

- employers should ensure that all employees are provided periodic safety training reviews of established safety programs; and

- employers should design, develop, and implement a comprehensive safety program.

INTRODUCTION

On November 25, 1997, MN FACE investigators were notified of a farm work-related fatality that occurred on November 24, 1997. A site investigation was conducted by a MN FACE investigator on December 12, 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 employer is a large commercial turkey farm that employs approximately 12 full-time and 4-5 part-time workers. The turkey farm has been in business for ten years. Approximately 1.2 million turkeys are raised annually on the farm. The turkeys are received at the farm when they are one day old and are grown to market size in 13-15 weeks. The farm has two brooder buildings where the young turkeys spend their first several weeks. It also has eight additional buildings that are used as finishing buildings. Four of these buildings are where the birds are transferred to when they leave the brooder buildings. Each of these buildings is connected to a larger finishing building where the turkeys are raised during the final weeks before they are shipped to slaughter facilities. This was the first work-related fatality to occur at the farm. General worker safety issues are discussed at informal weekly employee meetings that are held each Friday. Employee training is informally conducted on-the-job as needed for all employees.

INVESTIGATION

On the day of the incident, the victim worked alone in one of the barns that the turkeys were moved into from the brooder barns. The building was 80 feet wide and 400 feet long and did not contain any turkeys at the time of the incident. It had large doors located at the center of each end of the building. The doors were 15 feet wide by 15 feet high and were fitted with a single track mounted sliding exterior door and with two hinged interior wire mesh doors. All of the doors were closed at the time of the incident. Inside the building, at the base of the door on the east end of the building was a level concrete pad. The pad was 6 feet wide by 15 feet long.

The victim was attaching plastic sheathing across the inside of the door opening on the east end of the building. The plastic sheathing was being installed to reduce heat loss during the winter through cracks and spaces between the exterior door and the side of the building. The sheathing was secured in place with thin wooden strips that were approximately 2 inches wide by 8 feet long. The victim began attaching the sheathing along the right (south) side of the door and used an aluminum step ladder that was 12 feet high to reach the top of the door. He placed the step ladder

on the concrete pad and began securing the sheathing across the top of the door. The ladder was positioned parallel to the door opening such that as he climbed the ladder steps he was facing north. He attached the sheathing approximately 12 inches above the door and had secured it to a point near the middle of the door opening. While securing the sheathing at a height of approximately 16 feet, the victim may have had to stand on one of the upper most steps of the ladder. The ladder had a warning label on the first step below the top platform that read: DANGER-DO NOT STAND ON OR ABOVE THIS STEP-YOU CAN LOSE YOUR BALANCE.

Apparently while securing the plastic, the victim either slipped or lost his balance and fell to the concrete pad. The ladder tipped toward the inside of the building and was found completely tipped on its side inside the building. The victim fell to the concrete pad in the location between the legs of the ladder with his head toward the door. When the victim didn't return to a general purpose office building for an afternoon work break, other workers became concerned. They went to the barn where the victim had been working and found him lying on the concrete pad. A call was placed to emergency medical personnel. They arrived shortly after being notified and pronounced the victim dead at the scene.

CAUSE OF DEATH

The cause of death listed on the death certificate was not available when this report was completed.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: The top platform and the top step of step ladders should not be used as steps.

Discussion: The height of the ladder and the height at which the victim was attaching the plastic sheathing indicate that he may have been standing on either the top platform or the top step of the step ladder. Working from either position would have increased the risk of the ladder tipping or the victim falling from the ladder. OSHA Standard 29 CFR 1926.1053 (b)(13) requires that "the top or top step of a step-ladder shall not be used as a step." The ladder involved in this incident was clearly marked with a warning label on the first step below the top platform that read: DANGER-DO NOT STAND ON OR ABOVE THIS STEP-YOU CAN LOSE YOUR BALANCE. Since the victim was working alone, it is not known at what height the victim was positioned on the ladder. However, in accordance with existing OSHA standards and as a general safe work

practice to reduce the risk of falling, workers should never stand on either the top platform and the top step of step ladders.

Recommendation #2: Employers should ensure that all employees are provided periodic safety training reviews of established safety programs.

Discussion: Employers should ensure that all employees maintain an understanding of current company safety programs and procedures. Employers should provide periodic safety reviews in the recognition, control, and avoidance of unsafe conditions to which employees might be exposed while performing assigned work tasks. These reviews should also ensure that employees are provided review training in the proper use of all tools and equipment required to perform assigned tasks. They should include reviews of the safe usage of routinely used equipment such as ladders as well as infrequently used tools and equipment. Periodic safety review sessions for all employees would be helpful in reducing the future occurrence of occupational fatalities.

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

Discussion: In this case, general worker safety issues were discussed with employees at informal weekly meetings each Friday. In addition, employee training was informally conducted on-the-job as needed for all employees. As a general safety recommendation to reduce the risk of injury, 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 29 CFR 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."

REFERENCES

1. Office of the Federal Register: Code of Federal Regulations, Labor, 29 CFR 1926.1053 (b)(13), U.S. Department of Labor, Occupational Safety and Health Administration, Washington, D.C., July 1, 1997.

2. Office of the Federal Register: Code of Federal Regulations, Labor, 29 CFR 1926.21(b)(2), U.S. Department of Labor, Occupational Safety and Health Administration, Washington, D.C., July 1, 1997.

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