

August 10, 1998

Nebraska FACE Investigation 98NE012

SUBJECT:

Farmer Killed in Tractor Rollover

SUMMARY:

An 86-year-old farmer was killed when the tractor he was operating rolled down a 20 foot embankment. The tractor did not have a Rollover Protective Structure (ROPS) and the tractor crushed the victim as it rolled over him. The victim had been building a dam of soil and rocks. He was leveling the top of the dam with a blade attached to the back of the tractor. One of the rear wheels of the tractor apparently slipped over the edge of the dam causing the tractor to roll over. It appeared the tractor rolled over once and crushed the farmer as it rolled over him. The victim was found lying face down at the edge of a pond at the base of the embankment.

The Nebraska Department of Labor investigator concluded that to prevent future similar occurrences:

- * Tractors should be equipped with rollover protective structures and operator restraint systems.
- * Tractor operators should ensure they are using the proper implement for the job being performed.

PROGRAM OBJECTIVE:

The goal of the Fatality Assessment and Control Evaluation (FACE) workplace investigation is to prevent work-related deaths or injuries in the future by a study of the working environment, the worker, the task the worker was performing, the tools the worker was using, and the role of management in controlling how these factors interact.

This report is generated and distributed **solely** for the purpose of providing current, relevant education to employers, their employees and the community on methods to prevent occupational fatalities and injuries.

INTRODUCTION:

On May 13, 1998, at approximately 12:30 p.m., an 86-year-old farmer was killed when the tractor he was operating rolled down a 20-foot embankment and crushed him as it rolled over him. The Nebraska Department of Labor became aware of the fatality via the news media on May 14, 1998. The Nebraska FACE Investigator conducted a site visit on June 17, 1998. An interview was also conducted with the victim's widow at her home. Photographs and the accident report were also provided by the Sheriff's Department. The incident occurred on land owned by the victim, which he rented out.

The victim had been farming for over 60 years. He retired from active farming approximately ten years ago but still did some work occasionally on the land that he rented out.

INVESTIGATION:

On the day of the incident, the victim went to the job site around 8 a.m. He was in the process of building a dam. According to a friend the victim had been working on the dam since the fall of 1997. The dam was constructed of soil and rock with a culvert through the middle. The victim's wife said he usually came home for lunch everyday around 12:30 p.m. and the day of the incident he had not arrived as of 1:30 p.m. She was concerned that something had happened and drove to the site where he was working. She discovered his body and the tractor at the foot of the dam, approximately 20 feet below the top of the dam. Because of the rugged terrain at the incident site, she did not attempt to walk down to the victim. She immediately drove to a nearby farmhouse and had neighbors there call rescue personnel. The call was received at 1:52 p.m. and rescue personnel responded immediately. Upon arriving they found the victim lying face down in the pond. They checked for signs of life and found none. The victim was pronounced dead at the scene at 2:15 p.m.

At the time of the incident the victim was dragging soil and rocks with the blade of his tractor. The blade was attached to the rear of the tractor. It appeared the tractor's left rear wheel got too close to the edge of the dam and the soil and dirt gave way, causing the tractor to overturn to the left. The

tractor appeared to have rolled completely one time and landed on its wheels in the pond at the foot of the dam. The distance from the top of the dam to the bottom was approximately 20 feet.

The tractor involved in this incident was a 1948 Ford, model 8N.

CAUSE OF DEATH:

The cause of death, as stated on the Death Certificate was severe head and chest trauma as a consequence of being crushed by a tractor.

RECOMMENDATIONS/DISCUSSION:

Recommendation #1: **Tractors should be equipped with rollover protective structures and operator restraint systems.**

Discussion: The tractor involved in this incident was manufactured in 1948 and at that time rollover protective structures (ROPS) were not required. These safety features were not required on new tractors until 1976, when OSHA standard 1928.51 went into effect. Although not required on tractors manufactured before 1976, it would enhance safety of the operator to install ROPS and seat belts on these older tractors. For a ROPS system to be effective, a seat belt must always be used in conjunction with the ROPS. If a seat belt is not worn, the operator could be crushed by the ROPS. If a tractor is **NOT ROPS equipped**, a seat belt should **NOT** be worn.

Recommendation #2: **Tractor operators should ensure they are using the proper implement for the job being performed.**

Discussion: The victim, in this incident, was using a rear-mounted blade to pull rocks and dirt along the top of the dam. It is possible he was looking behind to see how the blade was working and veered to the left side of the dam, which resulted in the tractor overturning to the left. A front-mounted blade would probably have been a better choice for this task.

NOTE: *A Guide to Agricultural Tractor Rollover Protective Structures*, published by the National

Farm Medicine Center in Marshfield, Wisconsin, lists most ROPS retrofit kits available from various manufacturers. In many cases it also gives a suggested retail price for the retrofit kit. The kit for the Ford 8N is listed at \$490. For information on obtaining a copy of this publication, call the National Farm Medicine Center at (715) 387-9298. For information on a kit for a specific tractor, you may also call the Nebraska FACE office at (402) 595-2960 outside Nebraska, or 1-800-627-3611 in Nebraska.