

September 5, 1997

Nebraska FACE Investigation 97NE010

SUBJECT:

Tractor Overturn

SUMMARY:

A 23-year-old farmer was killed when the tractor he was operating overturned on him. The victim had been trimming trees on an access road to a farm. He had a grapple fork and bucket on the tractor and it had trimmings from the trees in it. He was backing the tractor down a dirt/gravel road and the left rear wheel went off the road down an embankment angled at approximately 40 degrees. The tractor rolled over trapping the victim underneath. This tractor was not equipped with a rollover protective structure (ROPS). The victim was pronounced dead at the scene.

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.
- * Manufacturers of tractors should actively publicize retro-fit ROPS kits for tractors and make them readily available at or near their cost.

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 17, 1997, at approximately 3:00 p.m., a 23-year-old farmer was killed when the tractor he was operating overturned, pinning him underneath. On August 14, 1997, the Nebraska FACE investigator visited the scene of the incident. Information for this report was obtained from the Sheriff's report and a meeting with the victim's uncle who was working with him at the time of the incident.

The victim was one of nine members of a family corporation involved in agriculture production. He had grown up on the farm and had operated tractors since approximately age 10. This was the first fatality in the history of the corporation.

INVESTIGATION:

On the day of the incident, the victim had been helping his uncle clear trees from the road leading to the farm. They were clearing the road to facilitate access for a cattle truck which was coming in to load cattle. The victim had only been working about one and a half hours when the incident occurred. The bucket was loaded with cuttings from the trees and the victim was going to dump them. He was backing the tractor down the road, probably because his forward view was obstructed by the load. While backing, he veered to the left side of the road and the left rear wheel of the tractor left the roadway and the tractor went down an embankment angled at approximately 40 degrees (see figure 1). He apparently applied the brakes and the tractor rolled over on its left side trapping the victim underneath. The victim's uncle found him right after the overturn and immediately called for medical help. He got a front end loader and lifted the tractor off of the victim. His uncle said there were no signs of life when he found him. He was pronounced dead at the scene by the county attorney at 4:55 p.m.

The tractor involved in the incident was a 1968 International Farmall, model 1256D.

CAUSE OF DEATH:

The cause of death as stated on the death certificate was multiple internal injuries.

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 1968 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 the safety of the operator to install ROPS and seatbelts on these older tractors. For a ROPS system to be effective a seatbelt must always be used in conjunction with the ROPS. If a seatbelt is not worn, the operator could be crushed by the ROPS. If a tractor is not ROPS equipped a seatbelt should **NOT** be worn.

Recommendation #2: Manufacturers of tractors should actively publicize retro-fit ROPS kits for tractors and make them readily available at or near their cost.

Discussion: Many tractor manufacturers have retro-fit ROPS and operator restraint systems available for older model tractors. This information should be widely disseminated to encourage owners of older tractors to install ROPS and seatbelts. Some manufacturers offer these kits at or near their cost.

REFERENCES:

Office of the Federal Register, National Archives and Records Administration, Code of Federal Regulations, Labor, CFR 1928, Occupational Safety and Health Standards for Agriculture, Subpart C.