

Fatality Assessment and Control Evaluation Project

Public Health

KY FACE #96KY085

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and Research Center

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Subject: Retired Farmer Thrown From and Run Over by Tractor

SUMMARY

A 67-year-old retired farmer (the victim) was killed while mowing a field of the family farm. He had made several passes around the field using a rotary mower recently equipped with new blades by his son. At one end of the field was an approximate 20-foot hill of 15-degree slope. The top of this hill was a plateau across which the tractor could be driven in order to ascend at the end which was less steep. The victim had come close to rolling the tractor over in the past, and so it was never his practice to mow across the hillside. Normally the tractor would be in low gear when descending the 15-degree slope at the other end of the plateau. On this day, however, the tractor did not go into low gear and the victim lost control going down the hill. He was thrown off the tractor when it hit some ruts at the bottom of the hill. The right rear wheel then ran over the victim as the tractor continued to roll for about 80 feet before coming to a stop. The FACE investigator concluded that, to prevent similar incidents, the following precautions should be taken:

- Tractors should be retrofitted with rollover protective structures (ROPS) and seatbelts.
- Machinery should be kept in good working condition.

INTRODUCTION

On August 11, 1996, FACE investigators received notification of the August 9 death of a 67-year-old retired farmer. An investigation was initiated, and a site visit was made on September 17. The deputy coroner who had handled this case was not available on the day of the visit, but had previously been interviewed by telephone. The FACE investigator met with the victim's son and daughter-in-law, both of whom had been present at the scene immediately after the incident. There were no eyewitnesses. Photographs and measurements of the scene and the equipment were taken.

The victim was a retired route salesman for a snack company. He had inherited the approximately 80-acre farm from his parents, and had divided it among himself, his mother, and his son. In previous years he had grown a small amount of tobacco, but had not farmed for several years. He did, however, continue to mow the fields in accordance with his agreement with his father. He also collected and worked on old tractors. The victim had been in good health prior to this incident and was on no medications.

The tractor involved in this incident was a John Deere 620, manufactured about 1958. It was a 2-cylinder, 45-horsepower tricycle tractor weighing about 4800 pounds. The wheels contained no fluid. It was not equipped with a rollover protective structure (ROPS) or a seatbelt. The rotary mower was an old Allis-Chalmers of the "pull-behind" type.

INVESTIGATION

On the morning of the incident, the victim had made several passes across the plateau, going up the less steep end, coming across the top, and coming down the 15-degree slope. Although there were no eyewitnesses to this incident, the victim's son and daughter-in-law, familiar with his habits and with the equipment, surmised the following chain of events. The victim attempted to put the tractor into low gear before descending the hill, but it did not go into gear; he was therefore unable to control the tractor's speed. The mower was disengaged 7-8 feet from the top of the hill, indicating that he turned off the ignition at that point. (It was the victim's habit to turn off the ignition when a problem occurred.) The tractor was equipped with a drum-type "pulley brake," which he apparently tried to use, but which did not work because the transmission was not engaged. The tractor's regular brakes worked, but he must have been thrown off before he had a chance to use them. At the bottom of the 20-25-foot hill are a small dip and some rutted areas; when the tractor reached this point, both the victim and the seat were thrown off. The seat went to the left of the tractor, the victim to its right. The tractor continued to roll another 20 feet, across a small ditch, and then another 60 feet before coming to a halt. The victim's wife, noticing that the engine noise had stopped, went to check on her husband. She found him face down. The tractor's right rear wheel had rolled over the left side of his body, and the rotary mower had apparently rolled over his left arm, as there was a deep cut on it. She ran to her son's home and told her granddaughter to call 911. Emergency medical services (EMS) personnel arrived within minutes, but could detect no vital signs. The coroner's office was called,

and the victim was pronounced dead at approximately 11:45 am.

CAUSE OF DEATH

According to the autopsy report, the cause of death was "multiple blunt force injuries secondary to bushog mishap."

RECOMMENDATIONS/DISCUSSION

Recommendation #1: To provide protection for operators, tractors should be retrofitted with Rollover Protective Structures (ROPS) and seatbelts. Tractor owners should contact their county extension agent, equipment dealer or equipment manufacturer to see if retrofit rollover protection and operator restraint systems are available for their equipment. Such systems should be installed by the manufacturer or an authorized dealer.

Discussion: The tractor involved in this incident was not equipped with ROPS or a seatbelt. A seatbelt might have prevented the victim from being thrown from the tractor seat. In this case, however, the seat also was thrown off, so it must have been in need of repairs, which probably would have been done in the course of seatbelt installation.

Recommendation #2: Machinery should be kept in good working condition.

Discussion: In this case, the old tractor, which was thought to have been in good working order, for an unknown reason did not go into gear. And although it was equipped with two sets of brakes, the one the victim first tried did not work.