

Public Health
KY FACE #95KY04301
24 July 1995

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Subject: Farmer Killed After Tractor Overturns Into Creek Bed

SUMMARY

A 47-year-old farmer/chemical analyst was killed when his tractor overturned into a muddy creek bed. The victim was checking a fence line on his property, which in that area has a rough, uneven terrain and on that day was very wet from a thunderstorm the previous night. He was going up an incline when his tractor slid backwards in the mud; the back tire slipped over the edge of a steep embankment and the tractor rolled over into the creek bed, pinning him face down in the mud. The tractor was not equipped with a Roll Over Protective Structure (ROPS) or a seatbelt. There were no witnesses to the incident. The KY FACE investigators concluded that, to prevent similar occurrences, tractor operators should:

- Retrofit tractors with Roll Over Protective Structures (ROPS) and seatbelts;
- Assess terrain prior to beginning any tractor operation.

INTRODUCTION

On May 25, 1995, a 47-year-old male was killed when the tractor he was operating overturned. KY FACE was notified of the incident on May 26 by a nurse from the Occupational Health Nurses in Agricultural Communities (OHNAC) Program. An investigation was immediately initiated, although upon the advice of the nurse, who was acquainted with the victim's family, the site visit was postponed until July 17, 1995. Two FACE investigators traveled to the scene with the nurse. The investigators interviewed the widow and obtained further information from the OHNAC nurse and the coronor. Measurements and photographs of the scene were taken. Copies were obtained of photographs taken before and after the tractor was pulled out of the creek bed. During the site visit photographs were also taken of the tractor, which had already been repaired and equipped with a ROPS and seatbelt.

INVESTIGATION

The victim had been employed full-time as a chemical analyst at a nearby distillery, usually working until 2:30 pm daily. He also operated the farm on a full-time basis. His health was generally good, according to his widow. The 47-acre farm had been owned by the victim's uncle and the victim had worked on the farm since he was a boy. About 2 years prior to the incident, the victim and his wife began to take over more of the farm work when the uncle's health began to fail. The uncle died about a year later and the victim and his family moved to the farm and built a new home there. They raised hay and tobacco and about 50 head of registered Angus cattle.

On the day of the incident, the victim was operating a John Deere Model 2040 tractor (manufactured in 1980), which he used daily. Although it was not equipped with a ROPS or a seatbelt, the tractor was in good working condition. Its tires were about half filled with fluid, but there were no front-end counterweights. The area where the incident occurred was in a pasture behind the house, on rough, uneven terrain which included trees and a creek bed. The victim often went to this area to check the fence line that was important for keeping coyotes out. There had been a thunderstorm the previous night, leaving the land wet and muddy.

The victim's daughter and her baby had been out with him that afternoon after he had arrived home from his job at the distillery. The weather was hot and humid and the victim told the daughter to go back to the house about 3:45 pm because it was too hot for the baby to be out. The victim told his daughter that he was going to check the fence line and would be in shortly. When his wife arrived home from work about 4:00 pm, she walked out to the area where her husband was working, as was her habit. Her daughter's boyfriend was with her. On approach they saw that the tractor had overturned and was in the creek bed. She sent the boyfriend back to the house to call 911 while she went to the victim. She found him face down in the mud. She attempted to dig him out but there was about 10-12 inches of mud and water in the creek bed at that time, and it kept refilling as she dug.

Local EMS received the call at 4:24 pm, arrived at the scene at 4:40 and departed at 5:47. The coroner was called at 4:48 pm and he recorded the time of death as approximately 4:00 pm.

Although there were no eyewitnesses to this incident, tire tracks in the mud indicated that the victim had driven up an incline along the fence line and then began sliding back down the 16-foot hill, which had a slope of about 15 degrees. The tractor slid back and to the right, toward a 4.5-foot-high embankment which dropped straight down to the creek bed below. The rear tire went over the edge of this embankment and the tractor turned over into the creek bed, pinning the victim face down in the mud and water. It was later learned from the tractor dealership that the ignition had been turned off and the emergency brake had been applied and "burned up;" this indicated that the victim had attempted to stop the downhill slide with these measures.

CAUSE OF DEATH

The cause of death as stated on the death certificate was suffocation due to head being buried in mud by weight of tractor. No autopsy was performed.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Tractor operators and owners should contact their county extension agent, local equipment dealer or equipment manufacturer to see if retrofit rollover protection and operator restraint system are available for their equipment.

Discussion: The tractor in this incident, manufactured in 1980, was not equipped with a ROPS or a seatbelt. Had such a system been in place, it is likely that the victim would have been secured within the ROPS-protected zone, and it probably would have been possible to keep him out of the mud and water of the creek bed. The widow stated that they had planned to install a ROPS and seatbelt in July 1995; following this incident, she did have these safety features installed on the tractor.

Recommendation #2: Assess terrain prior to beginning any tractor operation, especially after having rain or snow that may cause the terrain to become hazardous.

Discussion: Although he may have driven the tractor over this same terrain many times previously, in this case the bank that sloped down toward the steep embankment over the creek bed was extremely muddy and slick. This caused the tractor to slide backward and over the bank.