

FACE INVESTIGATION

SUBJECT: Farmer Dies After Tractor Overturns and Pins Him Beneath Tractor Seat

SUMMARY: An 49-year-old male part-time farmer (the victim) died when the tractor he was using to uproot a small tree overturned on him. The victim was clearing an old cherry orchard that was no longer used for commercial purposes, to prepare the property for other uses. He had previously removed trees with a chain saw, and dug out the stumps afterward. His 1942 Ford 9N tractor was not fitted with ROPS. The victim attached a chain to the base of a small cherry tree, and the other end to the base of the operator's seat. He was in the operator's seat, and apparently accelerated the tractor to pull on the tree. The tractor flipped over backwards, and the farmer was pinned between the seat and the ground. His wife had been waiting for him to join the family for supper, and went to the field when he failed to return. She found him beneath the tractor, and called for emergency services. The victim was pronounced dead at the scene by the medical examiner. The FACE investigator concluded that, to prevent similar occurrences, farm tractor operators should:

- ! follow proper hitching techniques when using a tractor for pulling objects**
- ! use tractors that are fully equipped with an operator restraint system and rollover protective structures (ROPS)**

INTRODUCTION:

On June 9, 1999, a 49-year-old male farmer died when the tractor he was using to pull up a tree overturned on him. The Wisconsin FACE field investigator learned of the incident through the farmer's death certificate. On September 9, 1999, the field investigator visited the site with the sheriff. The FACE investigator also obtained the death certificate and the sheriff's reports. A telephone interview were held with the victim's wife.

The 50 acre cherry orchard property had been owned by the victim's parents for 35 years. About a year before the incident, the victim purchased a bout 40 acres with intentions to clear the dead trees and brush to prepare for forest plantation or other development. He was an environmentalist, and had experience with operating tractors for over 25 years. There was no written safety program to cover activities conducted on the farm. Most safety information was gained by on-the-job training. Additional information was obtained at equipment dealers and farm magazines.

INVESTIGATION:

The victim was clearing an old cherry orchard that was no longer used for commercial purposes, to prepare the property for other uses. He had been working for several months at this activity, previously using a chain saw to cut down trees, and digging out the stumps afterward. The area that he was working in on the afternoon of the incident was across the road from the family's residence, at the end of a farm lane approximately 250 yards from the road. The farmer was using a 1942 Ford 9N tractor that was not fitted with ROPS. It is unknown if the tires were fluid-filled.

He attached a chain to the base of a small cherry tree, and the other end to the base of the operator's seat. The victim was in the operator's seat, and apparently accelerated the tractor to pull on the tree. The tractor flipped over backwards, and the farmer was pinned between the seat and the ground. His wife had been waiting for him to join the family for supper, and went to the field when he failed to return to the house as expected. She found him beneath the tractor, and called for emergency services. The victim was pronounced dead at the scene.

CAUSE OF DEATH: The death certificate listed the cause of death as craniocerebral trauma.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Farm tractor operators should follow recommended hitching techniques when using a tractor for pulling objects.

Discussion: Rear rollovers of tractors are sudden events that may involve improper hitching of a load. A rollover will occur when a tractor's center of gravity shifts beyond the rear stability baseline. An excessive load that is correctly attached to a drawbar set at the recommended height will cause slipping of the rear wheels or stalling of the tractor's engine before a rollover is induced. However, when a load is hitched high on the tractor or attached directly to the rear axle, less power is required to lift the front end of the tractor than to move the load or slip the wheels, which may result in a rollover through rearward rotation. For proper hitching to a tractor, the drawbar on a tractor should not be altered by raising or shortening it, and the load should only be attached directly to the drawbar. Farm tractors are not designed for logging and other non-farming activities; therefore, it is particularly important to observe these prevention strategies during such activities.

Recommendation #2: Farmers should only use tractors that are fully equipped with an operator restraint system and rollover protective structures (ROPS)

Discussion: The tractor in this incident was not equipped with a seatbelt or ROPS when it was manufactured in 1942. A retrofit system for the tractor in this incident is available from equipment dealers for about \$500. ROPS should always be used with an operator restraint system to keep the operator within the zone of protection in case of an overturn.

References

A Guide to Agricultural Rollover Protective Structures. 1997, National Farm Medicine Center, Marshfield, WI. Available at www.marshfieldclinic.org/nfmc/rops .