Fatality **A**ssessment and **C**ontrol **E**valuation Project

Public Health

KY FACE #97KY080

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TO: Carl Spurlock, Ph.D., Director, Kentucky Injury Prevention and Research Center, and Epidemiologist, Kentucky Department for Public Health

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SUBJECT: Farmer Run Over by Rotary Mower

SUMMARY

A 43-year-old male farmer (the "victim") was killed when he fell or jumped from the tractor he was driving and was run over by the attached rotary mower. There were no witnesses to the incident, but it is believed by relatives and friends that the victim lost control of the tractor on the steep hillside he was mowing and jumped off. The tractor continued down the hill and into a drainage ditch where it was found out of gear. The rotary mower ran over the victim's legs, and evidence at the scene indicated that he crawled a short distance from the tractor and then came back and attempted to operate it before he died. In order to prevent similar occurrences, the KY FACE investigator recommends that:

- *older tractors be retrofitted with rollover protective structures (ROPS) and seatbelts.*

INTRODUCTION

On August 16, 1997, a 43-year-old farmer was killed when he was run over by a rotary mower. On August 18 the KY FACE field investigator was notified of this fatality and began an investigation. On September 4, 1997, the FACE investigator interviewed the county coroner, who was also a lifetime friend and neighbor of the victim.

The victim had worked on this 262-acre family farm all his life, and during his adult life had also

worked as a mail carrier. He raised tobacco, corn, and cattle on the farm. His health was good, and he had no history of prior injuries.

The 7-foot rotary mower was attached to a Massey-Ferguson 4-wheel-drive tractor manufactured in the early to mid-1980s. The tractor was not equipped with a rollover protective structure (ROPS) or a seatbelt. The equipment was in good working condition.

INVESTIGATION

On the day of the incident the weather was warm and clear. The ground was dry. The victim had been mowing a steep hillside that evening, a job he had performed many times in the past. Although there were no witnesses to the incident, it is believed by relatives and friends that the victim lost control of the tractor on the steep hillside and jumped off. The tractor then continued down the hill and into a drainage ditch where it was later found out of gear. The rotary mower had run over the victim's legs, and evidence at the scene indicated that he crawled a short distance from the tractor and then came back and attempted to operate it before he died. Family members found the victim around 3:00 a.m. and placed a call to 911. An ambulance was sent to the scene, but emergency medical services (EMS) personnel could detect no signs of life. They sent for the coroner, who estimated the time of death to be 9:00 p.m.

CAUSE OF DEATH

The cause of death was listed as shock. No autopsy was performed.

RECOMMENDATION/DISCUSSION

Recommendation: *Older tractors should be retrofitted with rollover protective structures (ROPS) and seatbelts.*

Discussion: *Although no rollover occurred in this incident, it is believed that the victim jumped from the tractor because he thought it was going to roll over. Had he been belted in the "zone of protection" created by a ROPS, the possibility of his being injured or killed in a rollover would have been minimized and perhaps he would not have felt the necessity to jump. Alternatively, if the victim fell, the incident could have been prevented had he been wearing a seatbelt. The Massey-Ferguson tractor was manufactured in the early 1980s, just prior to the time that ROPS and seatbelts became standard equipment on American-made tractors. Since 1985, as a result of voluntary agreements by tractor manufacturers, virtually all new tractors sold in the United States have been equipped with ROPS and seatbelts. For those not so equipped, many dealers are now offering ROPS-retrofit kits at cost. A retrofit kit is available for this particular tractor.*

REFERENCES

Centers for Disease Control and Prevention. Public health focus: Effectiveness of rollover protective structures for preventing injuries associated with agricultural tractors. *MMWR* 42(03), 57-59, 1/29/93.

Centers for Disease Control and Prevention. Use of rollover protective structures — Iowa, Kentucky, New York and Ohio, 1992-1997. *MMWR* 46(36), 842-845, 9/12/97.

Endnote

Agricultural fatalities are a critical issue in the Commonwealth of Kentucky, where the rate is three times the national rate[1]. Contributing factors are complex. Perhaps most important, the mean farm income is less than $14,000[2]. As a consequence many farms are unable to purchase new equipment and/or upgrade or maintain their old equipment. Additionally, Kentucky's hilly terrain creates hazardous situations for farmers, increasing the need for ROPS- and seatbelt-equipped tractors. Also, it is not unusual for Kentucky farmers to continue farming into their 80s and 90s; operating tractors and other heavy equipment is a particularly hazardous activity for older persons. The same is true for adolescents, who often help out on farms by driving tractors, employment that is specifically prohibited by Child Labor Laws, although family farms are exempt. Moreover, economics is the compelling factor when farmers must work other, often full-time, jobs in order to make ends meet. This results in time constraints and higher levels of stress and fatigue. Compounding these problems, because farmers usually work alone most injury events are unwitnessed, making it less likely that victims will receive the immediate medical attention that could save their lives.

[1]*US Dept of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 1994.*
[2]*KY Department of Agriculture, unpublished data, 1997.*