Date: 2 May 1995

Subject: Retiree/Part-time Farmer Killed When Run Over by Bush Hog

SUMMARY

A 64-year-old male retiree and part-time farmer was killed when he fell from his tractor and was run over by the edge of the bush-hog attachment. The victim had been repairing a tractor tire earlier in the day. He was apparently trying to drive the tractor into a garage when he lost control and fell or was knocked from the tractor seat to the ground, falling between the tractor and the bush hog. The KY FACE investigator concluded that, in order to prevent similar occurrences, tractor operators should:

- Retrofit tractors with operator restraint systems (seatbelts) and Roll Over Protective Structures (ROPS).

Additionally, it is recommended that older operators of farm equipment have regular medical examinations by a qualified physician.

INTRODUCTION

On March 24, 1995, KY FACE received notification of the March 16 death of a retiree/part-time farmer. An investigation was immediately initiated. On Wednesday, April 26, a KY FACE investigator, accompanied by a registered nurse from the Occupational Health Nurses in Agricultural Communities (OHNAC) Program, traveled to the scene to continue the investigation. Interviews were conducted with the chief deputy coroner and the widow of the victim. Photographs of the scene and the tractor were made. Copies of the Coroner's Authorization for Post-Mortem Examination, the Post-Mortem Examination report itself, the Death Certificate, and the coroner's photographs were obtained and reviewed.

INVESTIGATION

The victim was a retired maintenance worker who had lived in this area for 27 years. He had retired four years earlier from the local branch of a large national manufacturing company. He spent his time repairing things, working on his sawmill, and raising small crops of tobacco and corn. He was a large man, approximately 6’4” and 225 pounds, with a history of heart problems (enlarged heart), although he was not on any medications. His last medical examination had been six years earlier, when a physical was required for his job. He had not felt well for several days, and had reported to friends (though not to his family) that he had been experiencing blackouts. (This information was reported by the victim's wife, who learned of the blackouts after his death.) On Thursday, March 16, 1995, a warm, sunny day, he was alone, working outdoors.

The Massey-Ferguson Super-90 tractor, manufactured sometime in the 1970s, was in fair condition for its age. It had been used by the victim primarily for sawmill work. Routine maintenance had always been done by the victim. Except for having to be started with a screwdriver, the tractor worked properly. Brakes and clutch seemed to be in good working order when the tractor was examined. The driver's seat had a small padded back, about ten inches tall. The tractor was not equipped with a rollover protective structure (ROPS), operator restraint system, slow-moving vehicle (SMV) emblem, or a pto guard. It was equipped with...
100-pound front-end weights. The bottom edge of the bush hog was about four inches above the ground. The combined length of the tractor and bush hog was approximately 21 feet. Following the incident, the victim's son-in-law had examined the tractor and found it to be working properly.

Although there were no eyewitnesses to the incident, at approximately 11:30 am, neighbors directly across the road and further down the road heard a loud crash, but thought nothing of it at the time. At approximately 4:30 pm, the victim's wife arrived home from her errands to find him trapped beneath the bush hog just inside the garage attached to their home. The garage door opening is on the front of the house, on the right side, so that the victim was immediately visible to her when she drove up. The wall on the right side of the garage door was ripped apart, where the tractor, and possibly the victim, had gone through it. The tractor had traveled into and across the garage and its right front tire had crashed through the outside wall (the end wall of the house) before its left front tire was stopped by a vertical steel I-beam. Thus the tractor stopped inside the garage and finally "choked itself out." This was evidenced by the skid marks on the tires caused by the concrete floor of the garage.

The victim's wife used a single-lever hydraulic jack to lift the bush hog so that she could pull him out. She called the emergency medical service (EMS) at 4:38 pm; they were dispatched at 4:39 and arrived at 5:09 pm. EMS personnel checked for pulse and respiration but found none. A deputy sheriff and the chief deputy coroner were then called, and the victim was pronounced dead at the scene.

**CAUSE OF DEATH**

The chief deputy coroner listed the cause of death as traumatic asphyxia. An autopsy was later performed, confirming cause of death as "traumatic asphyxia secondary to chest compression by farm vehicle." Blood and urine toxicology were negative.

**RECOMMENDATIONS/DISCUSSION**

**Recommendation:** Tractor owner/operators should contact their county extension agent, local equipment dealer or equipment manufacturer to see if retrofit operator restraint systems and Roll Over Protective Structures (ROPS) are available for their equipment.

**Discussion:** The tractor in this incident, manufactured approximately 20 years ago, was not equipped with ROPS or an operator restraint system. Had such a system been in place, it is likely that the victim would not have fallen from the tractor and subsequently been run over by the attached bush hog. We cannot say, however, in this particular case, that the victim's life would have been saved had he been wearing a seatbelt, since the reason for his fall is unknown. The consensus of opinion is that the victim suffered a blackout which caused him to lose control of the tractor and fall from it. However, it is possible that the victim died before falling (although autopsy ruled out cardiac arrest as cause of death).

Additionally, it is recommended that operators of farm equipment and machinery should have regular physical examinations by a qualified physician. Had the victim in this case reported his blackouts to a physician and submitted to an examination, it is possible that medication could have been prescribed to prevent such occurrences.