













When a ditch/ravine depth is unknown, if possible, make a best effort to have marking posts several feet away from the edge of ditch when equipment movement occurs between the crop field edge and the ditch/ravine edge. It is unknown how well the ditch was defined at the time of the incident. The path, as shown in Photo 4 (taken at the time of the MIFACE site visit) has tall grass and shrubbery at the very edge of the ditch and growing up from the sides of the ditch, making it difficult to determine the ditch edge.

It does not appear that the ditch bank caved in, but the victim was operating the tractor too close to the ditch according to the police report, thus allowing the tractor to enter the ditch.

Consideration should be given to field edge clearing and maintenance timing. Factors to consider include but are not limited to:

- Are there hidden hazards at the time of activity?
- Are control practices required when crops are present or can they be completed when the field is fallow, pre-plant or post-harvest?
- Can specific hazards, such as ravine edges, be effectively marked for growing season passage?



*Photo 4. Field edge close to ravine edge. Arrow shows direction of travel*

***Recommendation #3: When working alone, establish a check-in procedure with another individual to help assure changing weather conditions can be communicated and prompt emergency assistance provided.***

Discussion: Agricultural workers, including farmers, regularly work alone on the farmstead. Therefore, it is important to establish an effective communication system for the individual who is working alone to contact other individuals who can provide weather updates and/or emergency assistance. The frequency of communication between individuals should be based on the hazards to which the isolated worker is exposed. The check-in procedure could be initiated by a family member or the individual who is working alone and should be established based upon what is practical for the worksite circumstances. In this incident, the family member knew it was going to rain. The decedent and the family member could have discussed having the family member watch the weather radar and when the storm was close, call the decedent on his cell phone to alert him of the impending storm, since the decedent's cell phone was not a model capable of monitoring weather patterns.

The decedent was, most likely, hurrying home to get out of the rain. The speed at which he was driving his tractor could have led to the tractor "bouncing" which also has a tendency to cause "oversteer" due to no suspension on the tractor.

The decedent did not share with his family members where he was going to be hand spraying the weeds, which made it difficult for other family members to find him. The individual working alone should share where he/she will be working, and call in if changing work locations. Additionally, the decedent did not call his family member when he was leaving the field in which he was working and heading home. If he had notified the family member, an expected time of arrival home

would have been known, and when that time passed and he was not home, more timely response would have been initiated.

In agricultural settings, the availability of cell phone coverage should be established if that is the means of communication selected. Although a check-in procedure would not have prevented the tractor rollover, a scheduled time to check in with someone when an individual is working alone could prevent an injury from becoming a fatality.

***Recommendation #4: Be aware of the dangers of fatigue and weariness when operating tractors and take frequent breaks.***

Discussion: The decedent was in his mid-80s and had begun work early that day, laying tile, which could be considered a strenuous activity. He then went out to work in the field for a few hours. It is unknown how many breaks from work the decedent took during his workday or the duration of those breaks. The decedent was described as a hard worker, and in good health. It was, most likely, raining heavily when he was returning home. He may have been anxious to get home and out of the rain. He may also have been fatigued after a long day's work. If the decedent was tired, he may not have been holding onto the wheel as tightly. If it was heavily raining, and the decedent was driving at a higher rate of speed, the potential of the decedent to lose grip on the wheel if the front tire(s) caught a rut, pulling the wheel free from his grip. Effects of fatigue can include reduced alertness, slower reaction time, impaired decision making and concentration which can increase the risk of injury. MIFACE encourages both employers and employees to consider fatigue as a potential safety issue and implement strategies to manage fatigue.

#### **ADDITIONAL RESOURCES**

- University of Kentucky College of Agriculture, Food, and Environment. *Kentucky ROPS Guide*. [http://rops.ca.uky.edu/?utm\\_medium=301&utm\\_source=www](http://rops.ca.uky.edu/?utm_medium=301&utm_source=www)
- MIFACE Investigation Report #11MI115: *Farmer Run Over and Pinned Under Tractor Tire*. <https://oem.msu.edu/images/MiFACE/11MI115.pdf>
- National Institute for Occupational Safety and Health (NIOSH). *Work Schedules: Shift Work and Long Hours*. <https://www.cdc.gov/niosh/topics/workschedules/default.html>

#### **DISCLAIMER**

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#### **RESOURCES**

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