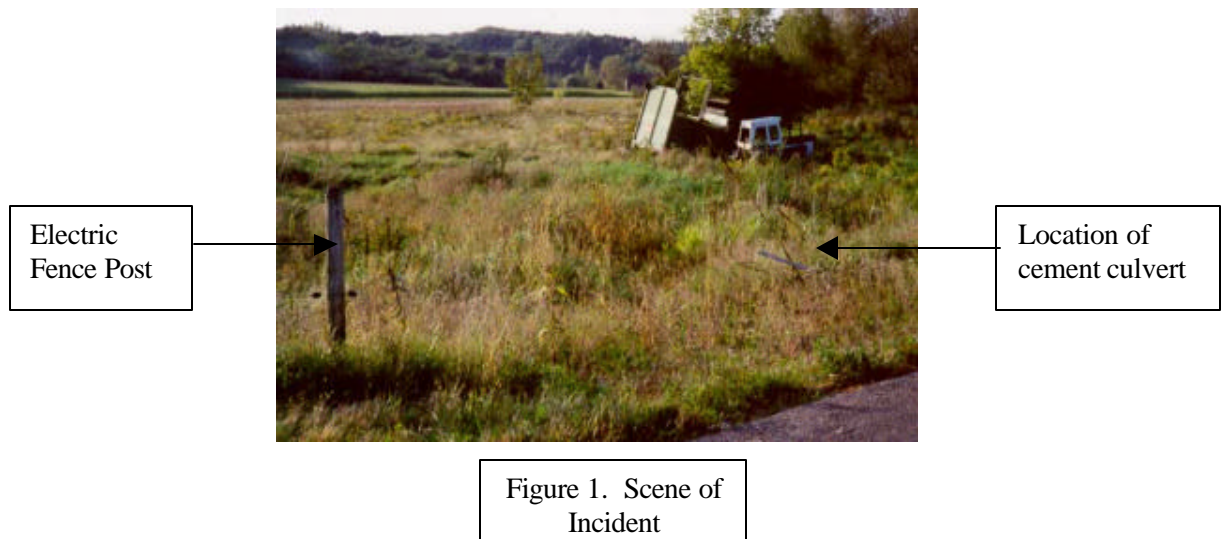


## FACE INVESTIGATION

### SUBJECT: Farmer Thrown from Tractor and Run Over by Hay Baler

**SUMMARY:** A 57-year-old male farmer (the victim) died when he was thrown from a tractor and run over by a hay baler. The incident occurred after the hay baler struck a cement culvert hidden in the tall grass while he was pulling the baler to a field across the road from the farmyard driveway.

The tractor had an enclosed cab and a bucket seat without seatbelts. The force of the impact apparently caused the farmer to be ejected from the tractor seat through a door opening in the cab. The tractor continued to move forward, and a baler wheel ran over the victim in the field. The farmer was found by a neighbor who was passing by and saw the scene. Emergency services were summoned, and were onsite



within eighteen minutes. The coroner pronounced the victim dead at the scene. The FACE investigator concluded that, to prevent similar occurrences, farm tractor operators should:

- ! **select tractors that are equipped with rollover protection structures (ROPS) and an operator restraint system**
- ! **conduct a thorough evaluation of the terrain to identify hazards in the pathway prior to beginning an operation with an off-road vehicle**

### INTRODUCTION:

On September 18, 1999, a 57-year-old male dairy farmer died when he was run over by a baler he was towing with a tractor. The Wisconsin FACE field investigator learned of the incident from the death certificate December 1, 1999. On May 3, 2000, the field investigator viewed the scene and met with the victim's family. The FACE investigator also reviewed the death certificate and the sheriff's reports and photos.

The victim and his family had owned and operated the dairy farm where the incident occurred for about

four years, although he had about thirty years experience in dairy farming. The farm business had no employees outside of the family members. The victim also was a part time milk truck driver. He was described as a careful and safe worker, and had not had been seriously injured before the incident.

### **INVESTIGATION:**

On the day of the incident, the farmer completed his farm chores as usual from morning through mid-afternoon. He then hooked a baler to a tractor, and was apparently preparing to travel to a rented field about 3/4 mile from the farmyard to produce hay bales for animal bedding. The tractor had an enclosed cab and a bucket seat without seatbelts. A trucker delivered a load of lumber from a lumberyard, and spoke with the farmer while the lumber was unloaded. After the lumber truck left, the farmer made a left turn with the tractor out of the farm driveway and almost immediately turned right off the road toward the hayfield. During this turn, the hay baler struck a cement culvert hidden in the tall grass. The force of the impact apparently caused the farmer to be ejected from the tractor seat through a door opening in the cab. The tractor continued to move forward, and a baler wheel ran over the victim in the field. The farmer was found by a neighbor who was passing by and saw the scene. Emergency services were summoned, and were onsite within eighteen minutes. The coroner pronounced the victim dead at the scene.



Figure 2. Tractor Cab

**CAUSE OF DEATH:** The death certificate listed the cause of death as ruptured thoracic aorta.

### **RECOMMENDATIONS/DISCUSSION**

**Recommendation #1: Farm tractor operators should drive tractors that have been equipped with rollover protection structures (ROPS) and an operator restraint system**

Discussion: Operator restraint systems along with rollover protection structures will prevent tractor operators from serious injury and death when the tractor strikes an object that could cause the operator to be thrown from the seat. In this case, the tractor was equipped with a cab that was not designed to be a ROPS, and the operator's seat did not have seatbelts. OSHA standards require ROPS and seatbelts on agricultural tractors manufactured after October 25, 1976. Older tractors should be retrofitted with ROPS and seatbelts properly designed, manufactured and installed to meet the OSHA standards. OSHA requirements do not apply to family farms like the one in this incident, however all tractor operators should be protected from serious injury and death by fitting their tractors with the protective equipment.

**Recommendation #2: Farm tractor operators should conduct a thorough evaluation of the terrain to identify hazards in the pathway.**

Discussion: Farm tractor operators have access to terrain that may be laden with unseen hazards. Before driving through uneven, grassy or snow-covered terrain, the operator should view the pathway

carefully to ensure that no hidden hazards are present. These could include solid objects, deep holes or fissures, water-filled depressions, biological hazards (e.g. stinging insects), etc. Even if an operator has traveled through the area before, the hazard may not have been present, or the operator's pathway may change to place him/her in line with an unsafe situation. In this case, the victim had driven the tractor alongside the culvert before the day of the incident, but may have not seen the culvert on his final trip when it was hidden in taller grass.

## **REFERENCES**

29CFR 1928.51 (b) Code of Federal Regulations, U.S. Government Printing Office, Office of the Federal Register.