



# How Safe Is Farming?<sup>1</sup>

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New York Center for Agricultural Medicine and Health<sup>2</sup>

## OBJECTIVES

1. The listeners will know how farming rates among other industries in safety.
2. Listeners will be able to list several factors that effect farming's high injury and fatality rate.
3. Listeners will be familiar with the most common items involved in a farmer's injuries.

## BACKGROUND

While the number of farmers is declining, their rate of fatalities is not. Several years ago, three industries vied for the highest rate of fatalities; they were farming, mining and construction. Today, there is little competition. New regulations have been enforced in more organized industries, and there has been a definite decline in their fatality rates. Farming, on the other hand, has escaped most of these regulations, leaving it with the distinction of being the most dangerous occupation in the country. According to the National Safety Council, in 1992 37 farmers out of every 100,000 were killed on the job compared to a general industry average of 7 out of 100,000.

## MATERIALS

### Transparencies:

- A."Work Accidents, 1992"
- B."Tractor Fatality Rates on the Farm by Type of Accident, 1970-1992"
- C."Characteristics of 1993 NYS Agricultural Death Report"
- D. others as appropriate

## METHODOLOGY

Show **transparency A.** relating to worker deaths. Discuss reasons why agriculture is highest. Appropriate reasons would include such elements as: equipment size, power, speed, condition; operator level of training, skill, and physical, mental and emotional condition. Working conditions and jobs to be done could be included as well.

**Transparency C.** shows that nearly half of all farm deaths are tractor related. (Even though this is only statewide, it reflects national levels) It also shows other articles contributing to farmers' deaths in New York state.

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1. This training curriculum was developed by the New York Center for Agricultural Medicine and Health (NYCAMH).  
2. New York Center for Agricultural Medicine and Health, One Atwell Road, Cooperstown, New York 13326. Phone number: (607) 547-6023 or 1-800-343-7527 in the Northeast.

**Transparency B.** shows more specifically how the tractor related deaths happened. Most (53%) were the result of a rollover (overturn) with the majority of the tractors rolling sideways.

The second leading cause was the tractor running over a person. When the tractor is started from the ground, bypassing starting safety features, this is common. Third is Power Take-off entanglement. When guards and shields are not properly cared for and short cuts are taken, this particularly traumatic injury often results, commonly ending in death.

Such a wide variety of vehicles are used in agriculture, it is important for an operator to familiarize himself with each one - its capabilities and limitations - before using it. Even owners manuals of machines operated previously but not recently should be reviewed. Proper operation of such controls as the clutch and brakes, gear shift, differential lock, and shut-off should be a reflex.

More on proper operation will follow in another lesson.

## EVALUATION

1. Check for understanding.
2. Ask listeners to state reasons why farming is the most dangerous occupation.
3. Ask students what type of accident is most frequently involved in a farm death.
4. What other common things are related to deaths on farms?
5. Does it appear that the operator has some control over the elements that cause most farm deaths?

## EXTENSIONS

1. List a number of things you think a farmer can do to protect himself from the injuries and deaths discussed in this lesson.
2. Watch a tractor operator and discuss why he does the things he does. Is he a safe operator or an unsafe operator?
3. Investigate a farm accident to see what occurred just before, during, and after the tragedy.

## RESOURCES

*Accident Facts*  
National Safety Council  
Itasca, IL