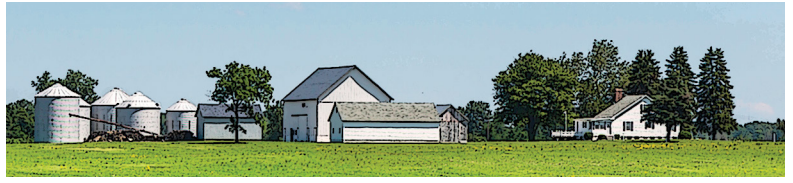


# SAFE FARM

Promoting Agricultural Health and Safety



## Keep active farmers safe in later life

Agriculture, one of the nation's most dangerous occupations, holds an even greater risk for senior farmers. In Iowa, 30 percent of agriculture-related deaths involve a farmer 65 years of age or older. In fact, agricultural injury data over the last several decades consistently shows a high proportion of cases that involve farmers in this age group.

The physical capabilities of older farmers vary by individual. While some people maintain good strength, flexibility, eyesight, and hearing well beyond age 65, others do not. In addition, these physical changes may occur gradually over the years, or in a relatively short period of time.

Older farmers, however, can continue to be safe and productive members of agricultural operations. Key factors include both the farmer and the farmer's family recognizing age-related risks, as well as having the willingness to modify expectations and physical activity accordingly.

### Age-related risk factors

**Strength and flexibility:** Even with powerful tractors and machinery, farmers need adequate muscle strength and mobility to safely complete a task. Both muscle strength and mobility decrease with age, but are important in many agricultural tasks. For example, strength and flexibility are needed to lift, carry, and load objects; feed and care for livestock; mount and dismount tractors and machinery; and climb ladders and stairs. Reduced strength and flexibility can result in changes in posture that increase the likelihood of sprains and strains. Farmers also may compensate for decreased physical capabilities by adopting unsafe work practices or taking shortcuts in established safe procedures.

Reduced strength and joint flexibility can increase reaction time by decreasing physical responses during an unexpected work situation. Quick reaction does not eliminate hazards that already exist, but a slow reaction can intensify the hazards and cause injuries that might not otherwise occur.

**Vision:** To safely interact with their environment, farmers must have good visual acuity, that is, the ability to recognize objects clearly at a variety of distances and in changing light conditions. This capability, however, tends to gradually decline with age. Objects must be closer and more light is needed to recognize an object. Farmers routinely work in situations that do not have adequate light, such as in fields at dusk or at night, or inside dimly lit barns and sheds.

**Hearing:** Everyone suffers some hearing loss as a result of aging. In addition to this normal hearing loss, farmers of all ages suffer from more noise-induced hearing loss than the general population. After years of exposure to tractors, farm machinery, and confined livestock, an older farmer may not be able to hear the warning signs of an approaching hazard.

**Illness and disease:** Age-related medical conditions also determine how safely an older farmer can complete work tasks. Some conditions, such as arthritis and rheumatism, affect joints. If the knees or hips are involved, a farmer will have reduced mobility, making it harder to climb on and off machinery and get out of the way to avoid potential livestock-related injuries. If the fingers, hands, or arms are involved, reaction time also may be decreased by making it more difficult to manipulate tractor and machinery controls.

## Safety for older farmers

### How much do you know?

1. Everyone ages at the same rate. True or false?
  - a) falls
  - b) being run over by a tractor
  - c) operating a tractor that rolls over
  - d) livestock
2. What is the leading cause of work-related fatalities for older Iowa farmers?
  - a) taking prescription medications
  - b) being overweight
  - c) hearing loss
  - d) reduced muscle strength
  - e) all of the above
3. Which of the following increase the risk of injury for older farmers?
  - a) taking prescription medications
  - b) being overweight
  - c) hearing loss
  - d) reduced muscle strength
  - e) all of the above
4. Depression is a normal part of aging. True or false?
5. Older farmers can safely continue to be productive members of agricultural operations. True or false?

See answers on back.

In addition to these illnesses, older farmers also are at increased risk for developing cardiovascular disease, cancer, and other conditions such as obesity. These conditions reduce strength and endurance, putting older farmers at risk when they attempt physically demanding tasks that they may have been able to safely handle in the past. Prescription medications often taken for these conditions, along with pain relievers, may further slow reaction time.

## Depression

It has been estimated that 15 percent of adults over age 65 suffer from depression, a condition that may be especially true in rural populations. A number of situations could lead to an older farmer's feelings of sadness, grief, or hopelessness: an uncertain economy, loss of a spouse and work partner, the inability to handle physically demanding tasks as well as one used to, lack of family members interested in continuing the operation, and declining health.

Learn to recognize symptoms of depression and seek medical help if symptoms last longer than two weeks. Everyone has occasional feelings of sadness, but depression is not a normal part of aging. Depression is an illness that responds well to a number of treatments. If untreated, depression will make other health problems worse and harm overall quality of life. Depression also increases the risk of work-related injuries to older farmers by distracting them from the tasks at hand.

## Tractor risks

Tractor overturns are the leading cause of work-related deaths among older Iowa farmers. An analysis of five years of data collected by the Iowa Department of Public Health showed that 67 percent of the deaths to farmers over age 65 involved tractors. Only 39 percent of the deaths of younger farmers involved tractors. Of the tractor-related fatalities among older farmers, 61 percent (involving 19 people) happened after a tractor had overturned.

Of additional concern is the fact that farmers may take on maintenance and out-of-season tasks, such as mowing, as they get older and move away from day-to-day farm operations. In the past, these tasks may have been done with smaller and perhaps older utility tractors not equipped with rollover protective structures (ROPS). Newer tractors, with enclosed cabs and ROPS, are much safer to operate. At minimum, retrofit older tractors with ROPS. It also is important that all safety shields are in place and function properly.

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Prepared by Steven Freeman, professor of Agriculture and Biosystems Engineering, and Charles Schwab, extension safety specialist.

## Safety for older farmers

### What can you do?

You can decrease risks around the farm by following these simple steps:

- Increase light levels in the shop, barns, and other buildings to accommodate changing vision needs.
- Decrease the chance of falls by adding nonslip surfaces on walkways and steps, and adding secure handrails to steps and stairs.
- Monitor over-the-counter and prescription medications that may affect the ability to safely operate tractors.
- Limit tractor operation to daylight hours.
- Use tractors with rollover protection.

Answers to quiz:

1-False; 2-c; 3-e; 4-False; 5-True

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## For more information

For information and services related to Iowa, contact the Iowa Department on Aging, Jessie M. Parker Building, 510 E. 12th Street, Suite 2, Des Moines, Iowa 50309; 800-532-3213 [TTY for hearing impaired, 515-725-3333]; and online at [www.aging.iowa.gov](http://www.aging.iowa.gov). For general

information, contact the American Association of Retired Persons (AARP) National Headquarters, 601 E. Street NW, Washington, DC 20049; 800-687-2277 [TTY for hearing impaired, 877-434-7598]; and online at: [www.aarp.org](http://www.aarp.org).

## SAFE FARM

Safe Farm is an Iowa State University Extension and Outreach project helping to make Iowa farms a safer place to work and live.

For more safety information, check the web at [www.abe.iastate.edu](http://www.abe.iastate.edu).

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