

*Farm Safety Series*

# Coping with Slips, Trips, and Falls in Farming Enterprises

ANR-1269

Slips and falls are among the most frequent types of incidents and second only to motor-vehicle incidents as a cause of death. There are more than a million people that suffer from a fall each year. An estimated 300,000 disabling injuries from falls in the American work force result in 1,400 worker deaths annually. Data released by the National Institute for Occupational Safety and Health showed that falls were the second most prevalent injury nursery workers sustained in the South.

Safety professionals recognize two categories of falls:

1. Elevated falls, which occur less often but are more severe than same-level falls.
2. Same-level falls occur more frequently but are generally less severe than elevated falls.

### **Same Level Falls**

A slippery footing surface can cause slips that can be compounded by wearing the wrong footwear. Working on dry walking and work surfaces and using slip-resistant footwear can greatly reduce the incidence of slips and associated injuries. Shoes with cleats and soft rubber soles and heels will be least likely to slip, but if the walking surface is very slippery, no footwear will provide a safe condition against slips. Fresh oil spills and ice are examples of this.

Trips involve stepping on an object that the victim did not see, stubbing a toe on an unexpected rise in the walkway, which can be as little as 3/8-inch, or climbing or descending stairs with only a slight difference in the height of the steps.

### **Factors That Contribute to Falls**

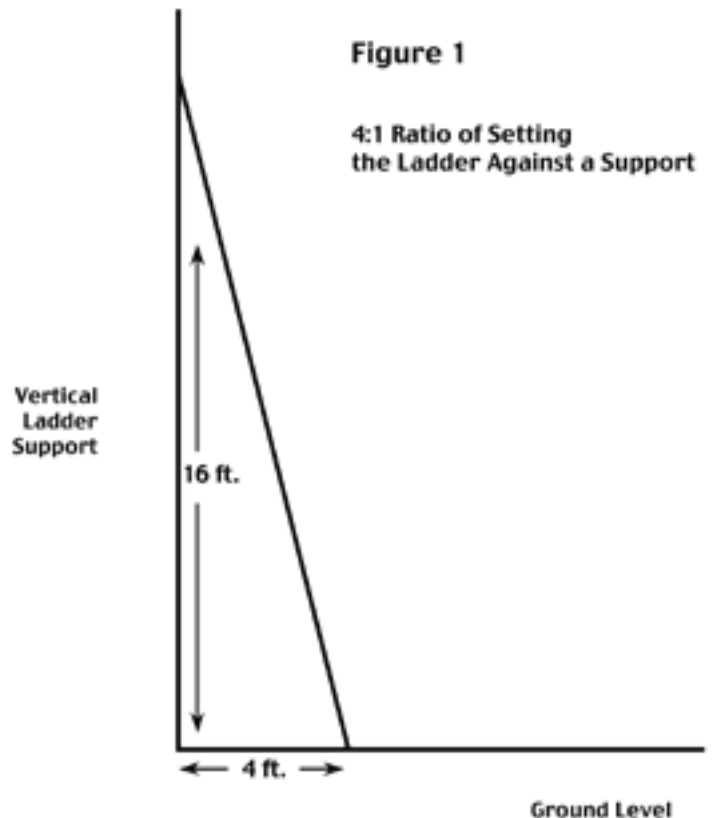
1. Poor housekeeping in work and walking areas with clutter that must be stepped over
2. Poor lighting in walking areas
3. Carrying an oversized object that obstructs vision
4. Wearing the wrong footwear
5. Walking too fast or running
6. Distractions
7. Not paying attention
8. Wearing sunglasses in low-light areas
9. Failure to use handrails

### **Elevated Falls**

In general, there are fewer elevated falls, but they usually result in more serious injuries. More than 60 percent of all elevated falls occur at 10 feet or less above the walking surface. Falls from vehicles and equipment, loading docks, ladders, buildings, and other structures are examples of elevated falls.

### **Safety Considerations Using a Ladder**

1. Use only American National Standard Institute-approved ladders.
2. Metal ladders should never be used in locations in which the ladder or its user could come in contact with electricity.
3. The top three rungs of a straight ladder or the top two steps of a stepladder should never be used for the feet.
4. Straight ladders should be set at or near a 4:1 distance ratio between the ladder height and distance from the support as shown in Figure 1.



5. Make sure the ladder does not slip where it is setting on the ground or where it leans against the support.
6. Always check the ladder for damage as well as contamination from oil, grease, mud, or water to be sure of sound footing. Be sure the ladder will not break due to prior damage.
7. Wear shoes with heels and soft rubber cleats that are not slick. Other types, such as leather sole shoes, are to be avoided.
8. Climb the ladder holding the vertical rails with both hands and the heel of your shoe just in front of the rung with the toe extending beyond the rung.
9. Always follow the three-point rule: two hands and one foot touching the ladder or one hand and two feet touching the ladder at all times.
10. Always climb and descend the ladder facing it.
11. Do not reach too far to the right or left of the ladder. Keep your belt buckle inside the side rails at all times.
12. Raise tools and equipment to the worker on the ladder with a rope and pulley; never allow the worker to carry anything up.

### ***Preventing Falls from Vehicles and Equipment***

1. Never allow riders on tractors, equipment, or the bed of a truck. The equipment operator should be the only one on board.
2. Keep entry and exit steps of tractors, trucks, wagons, trailers, and truck beds clean and dry.
3. Establish a good handhold before stepping onto equipment steps.
4. Never jump over steps; walk down facing the equipment while securely holding the side rails.

### ***Preventing Falls from Loading Docks***

1. Proper housekeeping, well-designed traffic patterns, and the use of abrasive, skid-resistant surface coatings will reduce the risk of slips, trips, and falls.
2. Be aware of metal plates and uneven terrain that pose an increased hazard to trips and slips.
3. Approach the dock edge with caution, especially when wet, to avoid disaster.

### ***Fall Protection Devices***

1. Workers at high elevations, such as ladders, platforms, or catwalks, should be protected from falling by some type of protective device.
2. The device may be a protective cage, a lifeline, lanyard, or safety belt or harness.
3. The device must provide maximum protection without restricting workers' necessary work activity and should be reasonably comfortable.

All falls should be reported to your supervisor to avoid a repeat performance.

### ***Summary***

Know that slips, trips, and falls are one of the leading hazards to the farming enterprise. Some falls result in little more than embarrassment while others have been fatal. Falling from an elevated height generally results in more devastating injury but same-level falls are more common. Know that slips occur on slick surfaces and trips occur because of clutter, uneven footing, and unknown obstacles. Always use handrails to step on and off tractors and equipment, and use the three-point system when climbing ladders. Never step on the top three rungs of a straight ladder or the top two steps of a stepladder. All slips and trips should be reported to your supervisor whether an injury resulted.

**Jesse LaPrade, Ph.D.**, *Alabama Cooperative Extension System Environmental Specialist*, Auburn University

Special thanks to **William J. Becker**, The University of Florida, Extension Safety Specialist, for access to the article "Preventing Injuries from Slips, Trips, and Falls." This reference is available on the National AG Safety Database (NASD).

For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

Issued in furtherance of Cooperative Extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, and other related acts, in cooperation with the U.S. Department of Agriculture. The Alabama Cooperative Extension System (Alabama A&M University and Auburn University) offers educational programs, materials, and equal opportunity employment to all people without regard to race, color, national origin, religion, sex, age, veteran status, or disability.

**New Feb 2005**, ANR-1269

© 2005 by the Alabama Cooperative Extension System. All rights reserved

