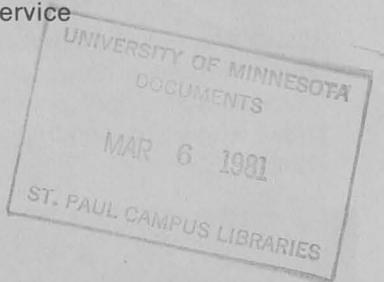


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University of Minnesota

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FARM ACCIDENTS— Reducing the Odds



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Most who live and work on farms would agree that farming is a great way of life. It allows people to live and work close to nature and produce food and fiber, not only for themselves but for other Americans and people of other countries.

But farm work has more than its share of accidents. Consider these facts:

- Farming is rated the third most hazardous industry in the United States, after mining and construction.
- Recent statistics indicate that each year in our state one farm in five experiences a lost-time work accident (an accident that keeps an individual away from work at least 1 day). These accidents range in seriousness from those causing death or permanent injury to those requiring only minor medical attention.

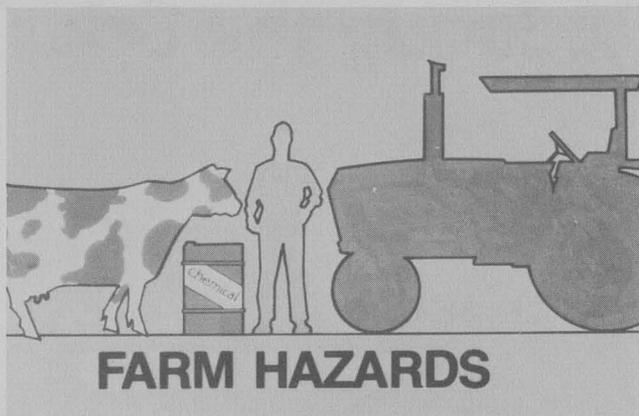
- Each year, approximately 1,800 farm workers (approximately 55 out of every 100,000) are killed in work-related accidents nationally.

What would a serious farm accident cost you—financially, physically, and emotionally? How would it affect others who depend on you? An accident can cost a farmer thousands of dollars in medical expenses, property damage, lost production, and legal fees. It could economically force you off your farm. In addition, there are consequences you cannot estimate in dollars and cents, such as pain, suffering, and grief.

Most farmers today realize they must be good managers to make decent profits in farming. Accident risk is like other management factors in that it should be approached with analysis and planning. But it is different from other factors such as weather and market fluctuations in that it *can* be controlled, reduced, or eliminated. Understanding how accidents happen and how to reduce accident risk can result in less waste of human resources, less downtime, and higher profits.

Factors Contributing to a Farm Accident

To manage accident risk, you should be aware of the following factors which contribute to farm accidents:



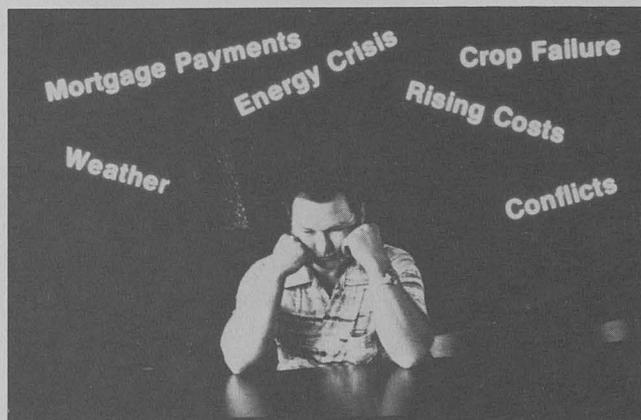
1. **DIVERSITY OF HIGH HAZARD WORK.** Farm workers come into contact with many types of potentially hazardous machinery, chemicals, and animals. You must be aware of the hazards associated with each of these areas to be capable of fully reducing the accident risks on your farm.
2. **AGE OF WORKERS.** Due to labor shortages, a high percentage of people 14 and under and 65 and older work on farms. Most studies indicate that these two age groups experience an accident rate two to three times higher than any other age group.

Youngsters often are allowed to work with only a minimum of instruction. Their inexperience and lack of training often result in tragedy.

Most individuals at age 65 no longer have the physical stamina they once had. Normally, they tire more easily and require more rest at this age. Also, in many instances, eyesight, hearing, and physical strength become weaker. If these human limitations are not taken into account, the potential for a serious injury to occur is greatly increased.
3. **EXTREME ENVIRONMENTAL CONDITIONS.** A farm worker often has to cope with extreme environmental elements. Heat, cold, wind, rain, dust, noise, and poor lighting conditions are environmental factors that can contribute to an accident, if you are not fully aware of how to deal with these conditions.
4. **PHYSICAL STRESS.** A farm worker is exposed to various types of physical stress, such as working long hours, heavy lifting, exposure to vibration, working in extremely hot and cold temperatures, exposure to high noise levels, and working in atmospheres that contain airborne contaminants. If not properly controlled, these stresses can play

a major part in the potential of the farm worker to experience a farm accident.

5. **WORKING ALONE.** Farm work often is done alone. Serious injuries and deaths have occurred because no one periodically checked up on those who were working out of the sight of others.

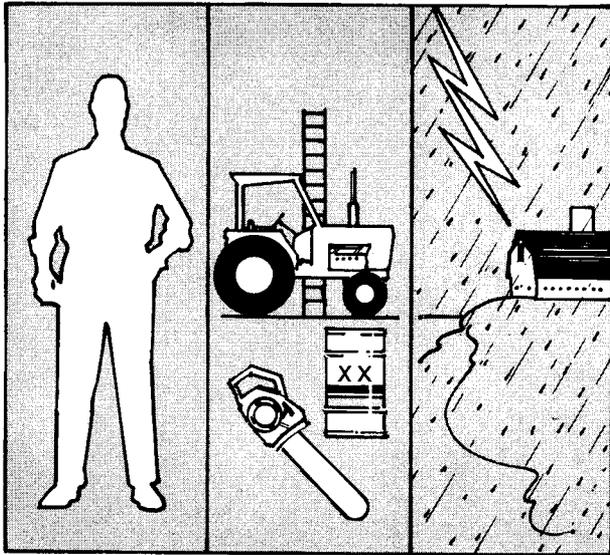


6. **EMOTIONAL STRESS.** Today's farm operator is often under emotional strain brought on by heavy financial burdens, worry over economic conditions, uncertain weather conditions, and family conflicts. If a farm worker does not know how to deal with mental stress, it can increase accident potential. If you allow your mind to be preoccupied with other thoughts while you are working around the farm, it could cost you a limb or your life.
7. **PROXIMITY TO HOSPITAL.** Many farms are isolated from medical help when an emergency does strike. It is important that farm family members and workers are trained to deal with severe injuries and emergencies until additional help can be obtained. Otherwise, the injury or illness can be more severe than necessary and could result in death.

Components of an Accident

For any accident to occur, the following three components are necessary:

1. **HUMAN.** This includes such factors as a person's age, sex, physical condition, emotional state, and knowledge of work being performed.
2. **AGENT OR SOURCE OF INJURY.** This includes chemicals, farm machinery, toxic gases, power tools, ladders, and slippery walking and working surfaces. An agent is anything that can inflict an injury or an illness—by striking, cutting, or burning, for example.
3. **ENVIRONMENT.** This includes factors such as weather conditions, surface conditions, lighting, the color of objects, and the terrain.



Every accident involves the interaction of these three factors—human, agent, and environment; therefore, these factors must be managed or controlled to reduce risk.

Using Management Principles to Reduce Accident Odds

The National Safety Council recommends several practical and economical management principles that can be applied to almost any farm operation to reduce accident risk. Carefully review the following management principles, and see how they may apply to you:

1. **MAKE ACCIDENT PREVENTION A PERSONAL GOAL.** Whether you are a farm operator, a farm worker, or a farm family member, make farm accident prevention a personal goal. Being "safe" means reducing the accident risk in whatever you do, so you can reach the goals in life you have set for yourself.
2. **GET A HANDLE ON HAZARDS.** Know what hazards exist around your farm. Routinely evaluate equipment, work areas, and the way work is being done. Note potential hazards that may need to be corrected, avoided, or dealt with in a safe manner. This can be done by simply noting those hazards that may exist before beginning any work operation. You could make a list of particular hazards in a pocket notebook as you go about your normal, everyday work activities.

In addition, there are detailed farm hazard surveys available that can be used for a more comprehensive evaluation of the potential dangers around your farm. Other industries use this type of hazard analysis system effectively. Farm hazard checklists are available from your

county extension office (see Extension Bulletin 452, *Farm Hazard Survey*), the National Safety Council, and various farm organizations.

3. **MAINTAIN EQUIPMENT.** Keeping your equipment in good working order can do more than extend its life. It can help head off accidents, too. See that all safety shields and guards are securely in place and equipment is maintained, so that clogging or serious breakdowns do not occur during a very busy time and injuries are prevented.
4. **KNOW YOUR PHYSICAL AND EMOTIONAL LIMITATIONS.** When not feeling your best, either physically or mentally, do not attempt stressful or potentially hazardous farm work; or, at least, slow down and try to concentrate on your work rather than emotional problems that may be pressing you. Fatigue and a preoccupied mind are the cause of many serious farm accidents.
5. **BE PREPARED FOR EMERGENCIES.** Every farm should be prepared for medical, accident, fire, and weather emergencies. Farms often are located several miles away from emergency services. Many lives have been lost and injuries made more severe because no one at the scene of an accident knew how to assist the injured person or deal with emergency situations.

Minutes count when a serious injury occurs. The devastating effects of the trauma that accompanies an injury often can be averted by the quick action of those near the scene. At least one adult and preferably all members of the family should receive training in first-aid procedures and cardiac pulmonary resuscitation (CPR).

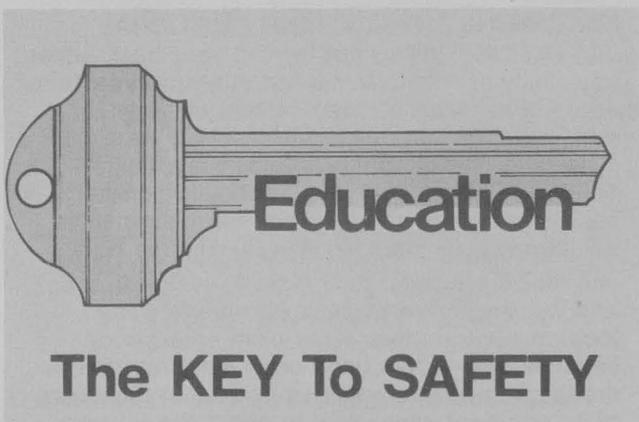
Emergency supplies should be kept handy to work areas around the farm, and emergency phone numbers should be posted by each phone. Adequate supplies of food and emergency equipment should be readily available on the farm. Fire extinguishers should be located in each major building and on all self-propelled farm equipment. In addition, family members and workers should be trained in how to deal with these types of emergencies until professional assistance arrives.

6. **WARN OTHERS TO STAY OUT OF WORK AREAS.** Warn children, the elderly, the handicapped, and visitors of potentially dangerous areas around the farm. If necessary, keep them out of these areas. The non-worker—for example, a rider on farm equipment—is often the accident victim. Most equipment is designed for only the operator. Many serious injuries and fatalities occur because an extra rider on a piece of farm equipment falls off and is run over.
7. **BE FAMILIAR WITH SAFETY AND HEALTH LAWS.** To avoid legal problems, be aware of local, state, and federal safety and health requirements that may apply to your farming operation. By understanding your rights and obligations under these laws, many accidents and legal complications can be averted.

8. **EDUCATE YOURSELF, YOUR FAMILY, YOUR WORKERS.** Education is the "key" to preventing most farm accidents. Knowing how to recognize farm hazards, how to correct them, and understanding safe work procedures are basic to eliminating the accident risk of farming. Accident prevention education is a continuing process but is particularly important as new techniques, equipment, and changing conditions are brought to your farm or applied to your operation.

Farm Accident Prevention Pays _____

If you make a real effort to reduce the risk of accidents and you put hazard control on an equal footing with other farm management factors, accidents will go down, and profits will go up. In addition, you'll be reducing the potential of



With each change in the farming operation, the farmer should become familiar with associated hazards and take the necessary steps to train himself, family members, and other farm workers. All new or inexperienced farm workers should receive thorough training of safe work procedures and of how to deal with farm hazards to which they are exposed.

- There are several educational resources available:
- Training materials and programs are available through the Agricultural Extension Service, vocational-agricultural programs, farm organizations, insurance companies, and various other professional and civic organizations.
 - Safety articles often appear in farm publications and local newspapers.
 - Hazard warnings and safe operating instructions are in farm machinery operator manuals, on chemical containers, and on other items commonly purchased for use on the farm.
 - Special warning decals are placed on most farm machinery and equipment by manufacturers.

Keeping up to date on the hazards associated with farming is one of the most potent weapons against the reduction of accident risk on any farm.



experiencing the suffering and grief associated with many farm accidents or injuries. In a large sense, your life and the lives of your family and workers are in your hands, and *only you can manage to do better.*

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