



**Fact Sheet**  
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**Farm Safety Association**

## **SAFETY WITH FARM ANIMALS**

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Few farm people look upon their livestock as a source of danger. However, a number of serious injuries and deaths occur every year as a result of animal-related accidents.

Agricultural specialization has changed animal handling methods in recent years. The large size of many herds makes safety awareness imperative to efficient farm operation.

### **Animals: How well do you know them?**

Anyone who has worked with livestock realizes that each animal has its own personality. Farm animals' senses differ a great deal from those of humans. Cattle, swine and horses see things very differently! For example, cattle have close to 360 degree panoramic vision. A quick movement behind them may 'spook' these animals.

Farm animals see things in black and white, not in colour. They also have difficulty judging distance. These factors explain why animals are often balky and skittish, particularly in unfamiliar surroundings.

Animals have extremely sensitive hearing and can detect sounds that our ears cannot hear. Loud noise frightens animals, and research has shown that high frequency sounds actually hurt their ears.

An appreciation of animals' characteristics is crucial to working safely with livestock. These traits should also be considered when designing livestock facilities.

### **Livestock facilities**

Many livestock handling injuries are directly related to equipment or building structures. Such mishaps are not restricted to people; poor facilities and

equipment can also cause injuries to animals. This can mean considerable economic loss at market time.

Considerable planning should precede capital investment in new facilities. Building design should take present circumstances into account and provide for any future expansion. County agricultural engineers can assist with the planning of new buildings or extensive renovations.

Following are a few areas that deserve special attention when designing animal facilities:

### **Floors**

Poor flooring is a major cause of livestock and human falls. A recent U.S. study found that falls accounted for 18 percent of all animal-related accidents. Floors should be of an impervious material, preferably concrete. The finish on concrete floors should be roughened to prevent slips under wet conditions. High traffic areas, such as passageways, should be grooved.

Floors should be constructed in such a manner that water will drain away readily. Slatted floors are commonly used to keep animals dry in a confinement system.

An appreciation of animals' characteristics is essential to working safely with livestock.

**Fencing and gates** are extremely important in any livestock facility, and should be strong enough to withstand animal crowding. A variety of materials are available; remember that the key is strength and durability. Fences and gates should also be free of any sharp projections, such as nails or wire, that could injure animals.

**Alley and loading chutes** should be wide enough to allow an animal to **pass**, but not wide enough to allow it to turn around. Use solid-walled **chutes**, not open fencing. This will greatly reduce animal balking in the chute. The loading chute floor should be kept clean to prevent falls.

**Lighting** in a livestock facility should be even and diffused. Bright spots and shadows tend to make animals more skittish, particularly in crowding or loading areas. Avoid layouts that make animals look into the sun; this is particularly important with loading areas. Animals will move more easily from a dark area to a light area than the reverse. Type and duration of lighting may play a role in the productivity of some animals.

**Restraining equipment** is an important part of any beef or dairy operation. A fixed restraining chute should be free from any obstacle that could hurt an animal, while allowing a handler free access to any part of the animal without having to reach over or through the chute. Use anti-kick and back-up bars to prevent balking in the chute.

Owing to the extreme stress put on restraining equipment, it should be checked regularly for loose or worn latches, pinch points, and broken railings or head gates. Portable squeeze chutes should be securely anchored to the ground before use.

### **Human factors in handling animals**

Practical experience is the best teacher for safe handling of livestock. Farmers who have handled animals over a long period of time develop a 'feel' for, or understanding of, animals and their habits. Although handling methods may vary greatly for different types of livestock, there are some generally accepted rules for working with any animal:

- Most animals will respond to routine; be calm and deliberate.
- Announce your presence well in advance of getting close to an animal, to avoid startling it.
- Avoid quick movements or loud noises.
- Be patient; never prod an animal when it has nowhere to go.

- Respect livestock -- don't fear it!
- Move slowly and deliberately around livestock; gently touch animals rather than shoving or bumping them.
- Always provide yourself with an escape route when working with an animal in close quarters.

### **Animal health and hygiene**

Animal health is a vital part of good livestock management, particularly in confinement systems where diseases can quickly affect all animals. Maintenance of a clean, dry environment is obviously important, but a number of other factors are also crucial to animal health.

Ventilation should keep dust to a minimum. Various molds may be present in feed; these can cause respiratory as well as digestive problems. All feeds should be carefully checked before being given to animals. Deal only with reliable feed dealers, and have suspect feed tested.

Restraining equipment should be checked regularly for wear or breakage.

\* Farm Safety Association fact sheets on silage gas and manure gas, plus a booklet titled 'Gas Poisoning on the Farm', are available from the Association's Guelph office.

Proper ventilation plays an important role in herd health.

A number of gases associated with confinement systems can affect the health of animals. Manure gases can be detrimental to animal health if adequate ventilation is not provided. Gases associated with liquid manure systems (H<sub>2</sub>S) and silos (NO<sub>2</sub>) have been responsible for many animal deaths.\*

Many farm people have become amateur veterinarians, and regularly administer antibiotics and other drugs to their animals. In general, medications should not be given to animals unless under the supervision of a qualified veterinarian. Animal drugs should be kept under lock and key,

and instruments such as syringes and needles kept absolutely sterile.

## **Animal diseases that threaten man**

All animals, domesticated or wild, can be sources of human illness and parasitic infestation. Diseases that can be transmitted between animals and man are referred to as zoonoses.

### **Rabies**

This deadly virus affects the central nervous system, and can be transmitted by the saliva of an infected animal through a bite, open wound, or sore. Widespread inoculation of pets has greatly reduced the danger of rabies. However, rural people face a greater risk owing to their proximity to wild animals. A veterinarian should be called to examine an animal that is acting abnormally. If bitten by an animal that you suspect is rabid, seek immediate medical attention.

**Brucellosis (Bang's Disease)** affects cattle, goats and swine and can be transmitted to man in raw (unprocessed) milk, infected carcasses, or by an aborted fetus or afterbirth from an infected animal. Good sanitation practices reduce the chances of brucellosis infecting a herd. Animals should be periodically tested for this disease.

**Trichinosis**, caused by tiny parasites, can be painful and is sometimes fatal to man. It can be transmitted by consumption of uncooked or partially cooked pork. Trichinosis has largely been eradicated from North America. Thorough cooking of pork is the best prevention.

**Salmonella** organisms can be found in poultry and wild and domestic animals. They can be transmitted to man through contaminated food or water. The disease can cause severe gastro-intestinal distress and fever. Prevention includes proper storage and cooking of animal-derived foods. People handling food should use good sanitation procedures to reduce the risk of salmonella poisoning.

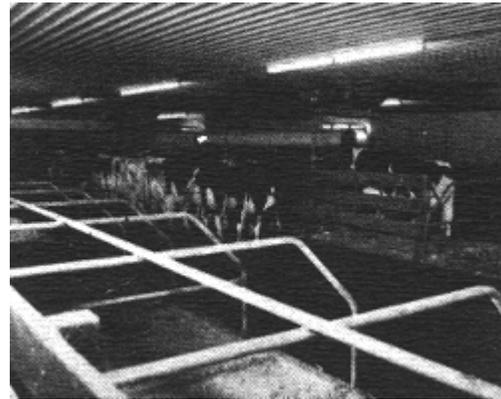
### **Other diseases**

There are other zoonoses that affect man. However, preventive measures, such as keeping animal facilities clean, testing and immunization, and sanitary practices in handling animals and their products, will do much to eliminate the danger.

## **Personal protective equipment**

Foot injuries commonly occur in all types of livestock enterprises. For this reason, safety shoes or boots should be worn. Composition and type of sole configuration is also important to combat the problems of uneven and wet footing.

A good particle respirator will remove most dusts and particles associated with animal feeds. Sturdy leather gloves will help eliminate most of the nicks and bruises that can often result when handling livestock. Disposable rubber gloves should be worn when treating animals or assisting with a birth.



Good housekeeping protects you and your stock.

## **Safety reminders for livestock handling**

- Good housekeeping is essential, not only for your personal safety, but also for the health and well-being of your stock.
- Respect all animals. They may not purposely hurt you, but their size and bulk make them potentially dangerous.
- Keep children away from animals, particularly in livestock handling areas.
- In the interest of animal health, restrict or regulate entry into your operation. Sales and service personnel could bring diseases from other farms.
- Be calm and deliberate when working with animals. Always leave yourself an 'out' when working in close quarters.
- Most male animals can be dangerous. There should be special facilities for these animals, and extreme caution should be practiced

when handling them.

- Most animals tend to be aggressive when protecting their young; be extra careful around newborn animals.
- Keep facilities in good repair. Chutes, stalls, fences and ramps should be regularly maintained.
- Liquid manure holding facilities should be secured against entry. Outdoor lagoons and ponds should be fenced.
- Stay clear of animals that are frightened or 'spooked'. Be extra careful around strange animals.

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