

SAFE FARM

Promoting Agricultural Health and Safety



Know your livestock and be safe

Farm operators know the dangers of working with machinery, the leading cause of death and injury in the nation's most hazardous occupation. However, many fail to perceive the dangers of working with farm animals.

About one out of every four injuries on the farm involves animals. Animals are typically the second or third leading cause of farm injuries in Iowa.

Injuries identified with animals include bites, kicks, or situations in which the worker gets pinned between the animal and a farm building, implement, or other fixed object. The best way to avoid livestock injuries is to understand animal behavior. Only by knowing their animals, and what to expect in certain situations, can farm workers protect themselves and others from injury.

Animals without proper care pose more danger to humans than ones that are fed and sheltered. This publication, however, deals with animal behavior related to habits, social relationships, maternal instincts, and territorial behavior.

Animal habits

Domesticated animals living under fairly uniform conditions often do the same thing each day at a specific time. Part of this is caused by habit formation, such as when cows gather around the barn just before milking time. Habits also are caused by regular changes in environmental conditions, such as the temperature or humidity fluctuations when daylight turns to darkness.

Animals are most active at the time of greatest change, such as at dawn or dusk. They will be least active either in the middle of the day or the middle of the night.

Learned behavior patterns enable animals to adjust to changes in their environment. Most animals have a variety of established behavior patterns that can be expressed when their environment changes. Animals learn to apply one behavior over another according to which one produces the most comfortable situation.

For example, a cow placed in a milking stanchion can react in several ways. The animal could try to break loose or stand quietly until released. Since only the latter behavior produces comfort, most animals will adopt that behavior pattern.

Social relationships

Any animal that normally lives in a flock or herd can become lonely, depressed, frightened, or agitated if separated from other animals. An animal that normally would not become frightened when the caretaker enters would become upset easily when left in isolation.

This poses a special problem for people who work with dairy cattle or horses. Cows left by themselves during the milking procedure can overreact to sudden movements or situations that normally would not frighten them. Likewise, an individual who rides a horse used to being with other horses may notice the animal becoming excited or frightened as time away from other animals increases.

Animals form social relationships with caretakers, too. Caretakers normally form a care-dependency relationship with animals under their charge. To feed and provide shelter for livestock, a caretaker must have the dominant role.

In caring for a dog, an individual may form a leader-follower relationship in which the human's actions are repeated by the animal. This is sometimes difficult to accomplish in other species, such as cattle

Livestock safety

How much do you know?

Test your skill with this quick quiz.

1. Which action is involved in more agricultural injuries?
 - a) applying pesticides
 - b) handling livestock
 - c) using farm shop tools
2. Animals are more content when isolated from the rest of the flock or herd. True or false?
3. Sows are likely to be aggressive after the birth of piglets. True or false?
4. Livestock exhibit more territorial behavior when feed is distributed in large, unpredictable patches than in smaller, predictable locations in the trough. True or false?

See answers on back.

or pigs, because of the innate behavior pattern of that species.

Maternal instincts

All domesticated animals have strong maternal instincts. Most animals show few, if any, maternal instincts during the initial part of the pregnancy, but change abruptly after giving birth.

For example, sows may appear docile during pregnancy. Their reduction of physical activity is influenced by the animal's increased body weight. But when nesting begins, or after giving birth, sows will exhibit maternal tendencies. This is shown by signs of excitement, and biting walls, fences, or people to seek an outlet. The sow's voice is lower, and when startled or crowded into a small area, the sow becomes aggressive.

Experienced farm workers may recognize these aggressive behaviors as maternal tendencies, even before nest-building begins. However, persons new to a livestock operation may not be able to identify and anticipate the animal's aggressive behavior.

Territorial protection

Domesticated animals try to protect territories as do animals in the wild. Caretakers may see this by an animal's aggressive behavior during feeding.

However, studies have shown that feed distributed in large, unpredictable patches will not result in territorial behavior among livestock. Feed distributed uniformly or in predictable patterns often results in territorial behavior, that is, the animal decides the area may be worth defending to secure access to the feed and exclude others.

To keep livestock from fighting at the feed trough, distribute feed in large, unpredictable patches. Avoid uniform distribution, or placing specified amounts in areas for certain animals.

Animals can adapt to farm environments but there are many factors that influence behavior. Study livestock and take note of individual tendencies. Understand which factors influence animal behavior and know what to expect. Only then can farm workers reduce the risk of injuries associated with farm animals.

Prepared by Tom J. Baas, animal science professor, and Charles V. Schwab, extension safety specialist, with Iowa State University.

Livestock safety

What can you do?

Handling livestock can be dangerous. Animals can be unpredictable. Practice these guidelines when you work with livestock.

- Avoid dramatic changes of an animal's habits.
- Be alert when handling animals during their most active time at dawn and dusk.
- Keep groups of animals together for better control.
- Maintain a dominant role with farm animals.
- Place food in irregular patches and volumes to avoid fighting.

Answers to quiz:
1-b; 2-False; 3-True; 4-False

For more information

Other ISU Extension and Outreach publications may help you develop guidelines for working with animals, or address other related issues. Go to <https://store.extension.iastate.edu>.

[Manure Storage Poses Invisible Risks](#)

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.

This institution is an equal opportunity provider. For the full non-discrimination statement or accommodation inquiries, go to www.extension.iastate.edu/diversity/ext.