

Livestock Safety

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Most Kansas farms are home to livestock of some type and those animals are involved in a high percentage of farm injuries. The cattle industry alone involves nearly 40,000 farms with more than 6 million cattle. Several thousand horses are used for work and recreational purposes. Another 20,000 or so sheep and 1.5 million hogs are distributed on farms all across the state. Farm fatalities involving livestock are not as common as deaths involving tractors or machinery; however, animals are involved in more total accidents and account for more lost work time from injury.

Livestock safety practices involve the animal and the animal handler. Safety means much more than simply “being careful.” This publication covers the topics of livestock and livestock handler safety. For the experienced livestock handler, the information here should serve as a reminder. For an inexperienced livestock handler or someone new to the business, this information can be used as training material.

The better a handler understands livestock, the less risk animals will cause damage. Broken bones, crushed limbs, cuts, bruises, missed days of work, and unnecessary medical expenses are the results of animal related incidents. Most farm livestock injuries are caused by large animals — horses and cattle — although animal bites (primarily dog and cat) account for a fair number of farm injuries.

People tend to give animals human qualities and forget that animals quickly revert to primal reactions when threatened or stressed. Animals will fiercely defend their food, shelter, territory, and young. When frightened or in pain, an animal may react in ways that threaten its own or its handler’s health and safety.

Injuries caused by livestock range from cuts and sprains to falls, broken bones, and whole body injuries. Causes include being kicked, pushed, shoved, or run over by the animal. Observing an animal to determine its temperament can alert the handler to possible dangers. Signs of an irritated animal include:

- Raised or pinned ears

- Raised tail or hair on the back
- Bared teeth
- Pawing the ground
- Snorting

Male animals and females that have just given birth are potentially dangerous. Males of some breeds are more aggressive than others. Often injuries occur from animals that do not regularly exhibit aggression or fear. A violent reaction may be triggered by excitement caused by a new experience or being moved to a different, unfamiliar pen. Injuries from episodic aggression are usually a result of being kicked, bitten, stepped on, or squeezed between the animal and something solid as the animal tries to flee.



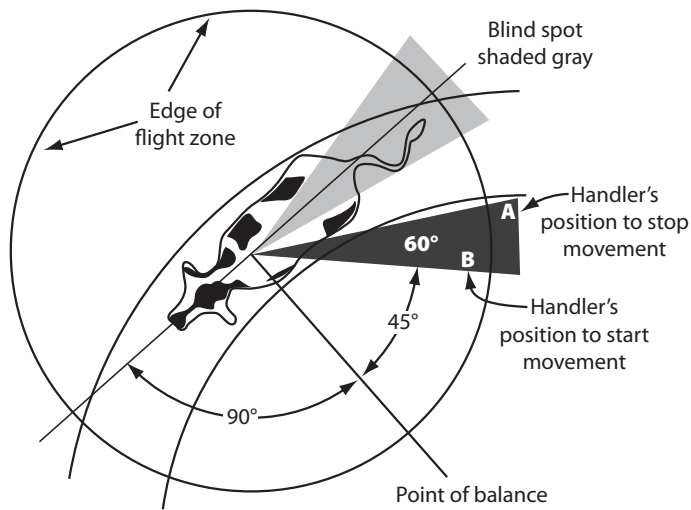
Sow and pigs.

USDA-ARS

Livestock can also be the source of illness in humans. Zoonoses are diseases that can be transmitted between humans and animals. Examples of such diseases are: rabies, brucellosis, campylobacter infection, *E. coli* O157:H7, and ringworm. Preventative measures, such as keeping animal facilities and equipment clean and sanitized, proper immunizations, and proper personal hygiene can help eliminate the danger of zoonoses.

Safe Handling

Treat livestock with respect. Always know where you are and where the animal is in relation to you when you are working with livestock. Never overlook warning signs exhibited by the animal(s) being



Flight zone.

Temple Grandin, Colorado State University

handled. Take time to understand how animals respond to various situations. Understanding animal behavior will help reduce the potential for accidents.

Animals that are handled gently and are allowed to become accustomed to handling procedures and facilities will generally experience less stress when worked. Animal stress is important in livestock production because stress reduces an animal's ability to fight disease and gain weight. Stress also increases shrink, damages rumen function, and can interfere with reproduction. Reducing stress on livestock will also reduce stress on the handler.

Approach livestock slowly from an angle — not directly from behind. Livestock (cattle, sheep, swine, and horses) have broad, panoramic vision and very limited depth perception. It means that the animals are able to see all the way around them, except for small blind-spots at the nose and in the rear. Poor depth perception means livestock can be easily frightened by shadows or surface changes. Shadows may appear as “holes.”

Handling facilities ideally should have solid side walls to prevent animals from seeing outside distractions with their wide-angle vision. Blocking vision will also help stop escape attempts. This is why a solid panel is so effective for handling pigs. Sight reduction also lowers stress levels, having a calming effect on the animal.

Pigs, sheep, and cattle have a tendency to move from a dimly lit area to a more brightly lit area, provided the light does not hit them directly in the eyes. A spotlight directed on the ramp will often help

keep the animals moving. Even a change in shadows from morning to afternoon can cause livestock to balk at moving up a chute or into a working pen.



Moving from light to dark.

KSRE file photo

Moving or flapping objects can disrupt handling. A cloth or coat swinging in the wind or turning

fan blades can cause animals to balk. Movement at the end of a chute can cause them to refuse to be herded. Handlers should be aware of these potential problems when working with animals.

Livestock move and react more predictably when they are calm and feel secure. They are also more sensitive than people to high frequency noises. Excessive yelling and hollering while handling and herding livestock can cause a great deal of stress. Temple Grandin, associate professor of animal science at Colorado State University and manager of an independent consulting business, Grandin Livestock Handling Systems, suggests shouting be kept to a minimum when working with livestock. She says you would be amazed at how well round-up goes with very little “hooting-it-up.”

Excited, aggressive handling causes animals to watch the activity rather than move in the intended direction. Loud, abrupt noises, such as the sound of banging metal, can cause distress. Therefore it is wise to install rubber bumpers on gates and squeeze chutes.

Animals will, however, readily adapt to reasonable levels of continuous sound, such as white noise or instrumental music. Producers and researchers agree that continuous radio play with a variety of talk and music can actually have a calming effect on livestock and in many cases can actually improve weight gain and prevent weight losses caused by stress-inducing loud noises.

The sense of smell is extremely important to animals, especially between females and newborns. Often animals react to odors we do not detect. For example, sheep may be lured by the smell of freshly mown hay



Working chute.

KSRE file photo

or a bull may become aggressive when he detects a cow in heat.

Facilities and Equipment

Two important components of developing and maintaining a good working relationship with livestock are good equipment and good facilities. Even such subtleties as color and lighting can have adverse effects on animals being worked.

When evaluating equipment and facilities ask these two questions:

- Is the equipment/facility designed for what you're trying to make it do?
- Is the equipment or facility free of hazards?

Housekeeping and regular maintenance are important for keeping animals and handlers safe. Deferring maintenance, modifications, or necessary adjustments that will make equipment safer is a bad idea. Sometimes there are economic reasons for delayed maintenance, but in the long run, regular routine maintenance of facilities and equipment will save money by decreasing the likelihood of a breakdown and injuries to handlers and livestock.

Because livestock are able to perceive colors, handling facilities should be painted in one color only. All species of livestock are likely to balk at a sudden change in color or texture. This is also true with respect to texture changes at ground level. To judge depth at ground level the animal must stop and lower its head. This explains why animals make a complete stop to look at something strange on the ground. All livestock tend to refuse to walk over a drain grate, hose, puddle, shadow, or any change in flooring texture or surface. All these factors need to be considered when evaluating or planning livestock handling facilities.

For facilities to be functional they should be well maintained and free of clutter. Not only is maintenance necessary for the safety of the animal, but poorly kept facilities are havens for accidents that happen to the handler as well.

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