



## **Chapter 4: Safety Recommendations for Handling Livestock**



## **TABLE OF CONTENTS**

- 1.0 General Safety Rules**
- 2.0 Instructions for Working with Specific Animals**
  - 2.1 Beef Cattle**
  - 2.2 Dairy Cattle**
  - 2.3 Swine**
  - 2.4 Sheep**
- 3.0 Other Considerations when Working with Animals**
  - 3.1 Observation Before Transport**
  - 3.2 Flight Zone of Animals**
  - 3.3 Noise Control**
  - 3.4 Sight Perception**
  - 3.5 Point of Balance**
  - 3.6 Disease, Allergies and Other Risk Factors**

**Appendix A - CALS Agricultural Animal Worker and Researcher Site-Dedicated Clothing Policy**

**Appendix B - West Madison Site-Dedicated Clothing Policy**

## 1.0 General Safety Rules

Farm animals are responsible for many disabling injuries. To reduce the possibility of injury, talk to the animals as you approach them. Approach slowly, and do not approach an animal directly from behind. Livestock (cattle, sheep, swine, and horses) have broad, panoramic vision, except for small blind-spots at the nose and in the rear, and very limited depth perception. Panoramic vision also means they are easily frightened by shadows or moving distractions outside chutes and handling areas.

The following guidelines offer general safety instructions for working with any animals:

- Treat animals with respect.
- Use adequate restraining and handling facilities when working with animals.
- Always leave yourself an escape route when working with animals (i.e., do not work in small, confined areas or back yourself into a corner).
- Do not put your hands, legs, or feet in gate or chute closures where you may become pinned or crushed by a large animal.
- Reduce the chance for slips and falls by keeping handling areas free from debris.
- Avoid frightened, sick, or hurt animals whenever possible. Take care around animals with young offspring.
- Wear protective clothing around animals, as designated in CALS Agricultural Animal Worker and Researcher Site-Dedicated Clothing Policy (*Appendix A*). A site-specific clothing policy for the West Madison ARS has also been written. (*Appendix B*)
- When possible, avoid handling livestock when you are alone.

## 2.0 Instructions for Working with Specific Animals

### 2.1 Beef Cattle

Ordinary beef cattle generally have a calm disposition; however, they are easily startled. Because cattle can see almost 360 degrees without moving their heads, a quick movement from behind can scare them just as easily as a sudden movement from the front. Loud, sudden noises and small dogs tend to upset cattle.

Although cattle are not likely to attack humans, their size and weight can make them dangerous. Always leave yourself an escape route when working with cattle. Cattle tend to kick forward and then backward with their back legs; leave room for clearance.

### 2.2 Dairy Cattle

Dairy cattle tend to be more nervous than other domestic animals. Always announce your presence to a cow by speaking calmly or touching the animal gently. When moving cows into a confined place such as a trailer, give them time to adjust.

## **2.3 Swine**

Swine can be dangerous because they can bite with enough force to cause serious injury. Likewise, a hog's size and weight can easily harm a person if the animal steps on, lies on, or charges a person. Guiding hogs for sorting or movement to a new pen requires lots of patience and adequate facilities. As with cattle, you should announce your presence to a hog by speaking calmly.

A normal behavior for pigs is the "rooting" movement, wherein pigs tuck their heads low and then quickly lift their head, trying to "root up" whatever they are pushing with their snout. They will do this with their food and water buckets, along the bottom edges of the pen, and they may do this to human handlers. Pigs have strong jaws and sharp teeth. Often the incisor teeth are snipped off, but the remaining teeth can still inflict serious damage when they root up the leg.

## **2.4 Sheep**

Sheep are flock animals. Isolation of an individual sheep may cause anxiety. This anxiety and separation can cause sheep to try and escape. Also, take care when working around sheep to avoid being butted by a ram.

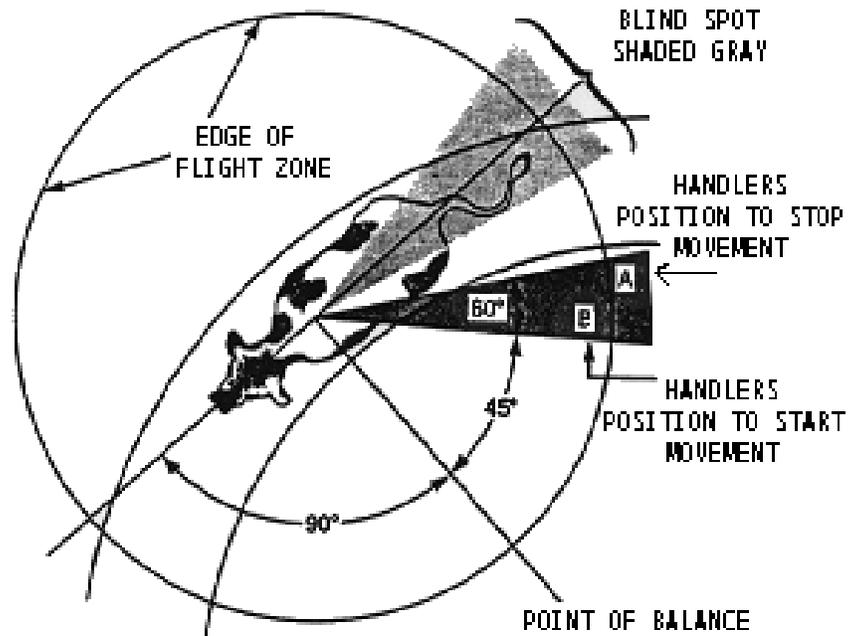
## **3.0 Other Considerations when Working with Animals**

### **3.1 Observation Before Transport**

Observing animals to determine their temperament can alert the handler to possible danger. These signs include raised or pinned ears, raised tail or hair on the animal's back, bared teeth, pawing the ground, and snorting. Often injuries occur from animals that do not openly exhibit aggression or fear. This reaction may be triggered by excitement caused, for example, by a person walking nearby. Typical injuries from this type of situation are usually a result of being kicked, bitten, stepped on, or squeezed between the animal and a solid structure as the animal tries to flee.

### 3.2 Flight Zone of Animals

The better we understand livestock, the less risk of animals harming us or themselves. Understanding an animals' flight zone is one tool to better understanding of animals' movement. This diagram illustrates the general flight zone of an animal. The actual flight zone of an individual animal will vary. The flight zone increases when the animal becomes excited. The flight zone also increases when you approach from the front. Calm cattle tend to be easier to move. If cattle become excited, it could take as long as 20 to 30 minutes for them to calm back down.



### 3.3 Noise Control

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, Professor of Animal Science at Colorado State University, suggests that yelling be kept to a minimum when working with livestock.

Excited, aggressive handling causes animals to watch the activity rather than move in the right direction. Loud, abrupt noises, such as the sound of banging metal can cause distress in livestock.

### 3.4 Sight Perception

Because livestock can perceive colors, handling facilities should be painted in one color only. A sudden change in color or texture could excite livestock. 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. Be patient when moving animals until they become familiar with a new environment.

### 3.5 Point of Balance

The point of balance is at the animal's shoulder. All species of livestock will move forward if the handler stands behind the point of balance. They will back up if the handler stands in front of the point of balance. Many handlers make the mistake of standing in front of the point of balance while attempting to make an animal move forward in a chute. Groups of cattle or pigs in a chute will often move forward without

prodding when the handler walks past the point of balance in the opposite direction of each animal in the chute. It is not necessary to prod every animal. If the animals are moving through the chute by themselves, leave them alone. Often, they can be moved by tapping the side of the chute.

If an animal balks and will not move forward, place the tail up and over the midline of the back, and apply moderate pressure. The most common mistake you see is a handler standing at the front of the animal yelling, poking and/or using an electric prod on the animal's head or neck. Get behind the animal and then if needed, apply gentle persuasion with the tail jack.

### **3.6 Disease, Allergies and Other Risk Factors**

People handling animals can develop allergies to animal hair, dander, or secretions such as saliva, urine, and secretions of various glands associated with the skin. Wearing the proper protective clothing and personal protective equipment is important when handling animals to eliminate the danger of developing allergies or other illness. A dedicated clothing policy is in effect. (*Appendices A & B*)

Zoonoses are diseases that can be transmitted between humans and animals. Examples of such diseases are rabies, brucellosis, trichinosis, salmonellosis, and ringworm. Preventive measures, such as sanitary practices in handling animals and their products will help to eliminate the danger of zoonoses.

## **Appendix A**

### **CALS Agricultural Animal Worker and Researcher Site-Dedicated Clothing Policy**

Policy Principles to Comply with Agricultural Animal Care and Use Guide

- Provision of well-described garbing standards for each area.
- Identification of designated locations for putting on and removing required apparel.
- Maintenance of adequate stocks of required clothing items.
- Provision of training for all those with access to the facility.
- Definition of situations that require re-garbing.
- Inclusion of consequences for non-compliance.

The purpose of this policy is to ensure that clothing items are not vectors of disease transmission into or out of university animal facilities and that animal caretakers have safe, functional clothing with a professional, well-kept appearance. This policy applies to faculty, staff, postdoctoral and graduate students, and student employees who enter CALS' animal facilities (termed "working visitors"), as well as to the animal caretakers who regularly work in these facilities. Personnel are required to change clothes worn while working with animals before leaving the workplace and prior to entering the public or private sector.

Clothing items that come into direct contact with university animals are to be stored and worn in work areas as stipulated by the animal unit's biosecurity policy. Employees whose homes are located on an Agricultural Research Station should consider their home to be a component of the station, and degarbing and garbing is expected to occur outside of the family living area of the home. Employees who live off-station are expected to garb upon arriving at their work area and before beginning to work. Degarbing must occur before an employee leaves their work area or travels beyond the bounds of the areas encompassed by the biosecurity policy (e.g., specific buildings, barns, pastures within a unit). Employees will be aware of a designated onsite area for garbing and degarbing; working visitors to animal units will also use site-designated areas for garbing and degarbing. For service-provided clothing, each animal unit will have specified areas for storage of clean clothes and collection of dirty clothes. Each employee will have a locker for storage of personal items during the workday, and additional space will be available for working visitors.

Departments will provide animal caretaker employees with the major clothing items (shirts, pants, scrubs, or coveralls) that come into contact with animals. A sufficient number of changes of shirts, pants, and outerwear will be provided so that each employee can maintain a well-kept appearance. Employees are expected to exercise good judgment in determining the frequency of their clothing changes to control laundry service expense, which will be monitored by the supervising manager in each work area. Any personal clothing used at the work site can either be laundered at on-site facilities or should be transported from the work site in provided plastic bags for home

laundering (in loads separate from other personal clothes). Undergarments such as t-shirts, long underwear, socks and clothing worn under coveralls are to be provided by the employee, and since they do not come into direct contact with animals, are to be laundered by the employee.

Site-dedicated footwear such as overshoes or rubber boots will be accessible to be worn over employee footwear. If an individual chooses to use his/her own footwear without use of the provided overshoes/boots, that footwear must remain at the work site at the end of the workday.

Working visitors are to provide all of their clothing items. (Note that coveralls or lab coats may be provided at some facilities, where they are either laundered on-site or by a contracted service.) When arriving at the animal unit working area, working visitors are to be wearing clean clothes that have been laundered following their last contact with animals. When working visitors are involved in work episodes that last longer than a day, they may leave their animal contact clothing accessible at the appropriate animal unit in areas designated for their use. As necessary to maintain a high standard of personal cleanliness, these clothes must be laundered; clothing worn by working visitors in direct contact with animals should be transported from the worksite in provided plastic bags and should be laundered at home in a load separate from other personal clothing. Working visitors may provide their own washable footwear; e.g. rubber boots or must use disposable plastic boots. Working visitors in their garb will be allowed to move about as prescribed by a unit's biosecurity policy.

Animal caretaker employee clothing provided to the employee by his/her department through a uniform service will generally be laundered and maintained by that contracted service. Standard warm-weather or indoor clothing, such as shirts and pants, will be provided by the laundry service. Cold-weather wear for animal caretakers with outdoor duties may be provided as specified by respective departments and will be laundered by the uniform service if service-provided or laundered on-site if department-owned. Clothing items purchased by a department are not eligible for use away from departmental work areas.

The supervising manager in each animal unit will be responsible for informing and training employees and working visitors regarding work clothing. The cleanliness of employees and working visitors will comply with the standards of the supervising manager in the respective work area, and the supervising manager may insist on compliance before their animal work begins. Issues arising with interpretation or enforcement of this policy should be brought to the CALS Compliance Specialist, who will consult with the CALS Animal Care and Use Committee or other appropriate committees as necessary.

Professionals visiting facilities to service machinery, to address building maintenance and physical plant needs, etc., are deemed exempt from clothing policy directives, though disposable plastic boots are still required.

## Appendix B

### West Madison Site-Dedicated Clothing Policy

- A. WMARS staff that come into direct contact with university animals or animal manure must change into site-dedicated clothes upon arrival and remove them before leaving the workplace.
- B. Coveralls, nitrile type protective gloves, and overshoes will be provided for WMARS staff. Footwear coming in contact with animals or animal manure without provided overshoes must either be sanitized before and after working or must remain at the work site.
- C. All WMARS staff must wear overshoes and coveralls when hauling animals or working with animal manure; this includes manure hauling and spreading of manure on station fields.
- D. A locker room for storage of all clothing and overshoes is located in the Shop of WMARS headquarters. A bathroom for changing clothes is located in this same facility.
- E. WMARS employees will be given 5 minutes for changing into site-dedicated clothes before beginning their work assignment, and 5 minutes upon completion of any of the following activities: hauling animals, hauling manure and spreading manure on station fields. Changing time cannot result in the accrual of overtime.
- F. Clean clothing and storage for soiled clothing will be housed in the locker room.
- G. Locker space will be assigned to each WMARS employee and can be locked with a padlock provided by WMARS if the employee wishes.
- H. All West Madison-provided clothing must remain at the station and may not be worn or carried home.
- I. A washer and dryer for laundering clothing items not handled by the uniform services are located in the Shop at WMARS.
- J. The above policy applies to faculty, other university staff, and students who may work with animal manure at the WMARS.
- K. Working visitors are to provide all of their own clothing items and must change their clothes before they leave the station. Plastic bags to transport these clothes will be available at the WMARS Main Office. The changing facilities specified above will be available to working visitors for their use.
- L. The University of Wisconsin West Madison ARS believes compliance to this clothing policy is a top priority. We also believe adherence to this policy will help to keep our employees and animals in the healthiest possible environment by ensuring that our clothing items are not vectors of disease. For this reason, we must enforce this policy and state that failure to follow the policy could result in discipline.