



United States Department of Agriculture

Humane Handling

of Livestock and Poultry



Food Safety and Inspection Service

An Educational Guidebook
Based on FSIS Policies



Introduction

This booklet is an easy-to-read guide reviewing regulatory requirements for humane handling of livestock. This guide also reviews FSIS policies on good manufacturing processes for poultry. Proper training and supervision will do a lot to ensure humane handling at your establishment. Following the principles in this guidebook will help you improve humane handling practices in order to better comply with the Federal Humane Methods of Slaughter Act. The content of this guidebook is based on FSIS statutes, regulations, and policies concerning humane handling.

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Background:

Humane Methods of Slaughter Act

All FSIS inspected livestock slaughter establishments are required to meet the requirements of the Humane Methods of Slaughter Act. Inspectors from the United States Department of Agriculture (USDA), Food Safety and Inspection Service (FSIS) are responsible for verifying that livestock establishments are complying with the Act. FSIS will respect the ritual requirements of religion.

The following are some examples of types of observations FSIS inspectors make to ensure that the Humane Methods of Slaughter Act is being followed at livestock slaughter establishments.

- **Adequate measures for inclement weather:** How does the establishment adapt its facilities and handling practices to inclement weather to ensure the humane handling of animals? When the weather conditions warrant concern (e.g., extreme cold, heat, humidity, heavy rains, or high winds), inspectors are to assess what effect these conditions have on the establishment's humane handling of animals.
- **Truck unloading:** What is the condition of vehicles, ramps, and driveways? Do they permit the unloading of animals without injury? Are animals unloaded and driven to pens with a minimum of excitement and use of prods?
- **Water and feed availability:** Is water available to animals at all

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times? Do animals held longer than 24 hours have access to feed?

■ **Handling during ante mortem inspection:**

Are livestock pens, floors, driveways, etc., maintained in good condition? Are animals being moved with a minimum of excitement? How often and in what manner are prods being used by the establishment to move animals?

■ **Handling of suspect animals:** Are establishments taking steps to ensure that livestock designated “U.S. Suspect” are handled humanely? Are they held in covered pens during inclement weather?

■ **Electric prod/alternative object use:** Are establishments humanely and effectively moving livestock without excessive prodding or use of sharp objects after

ante mortem inspection has been completed? This includes observation involving animal movement between pens, in alleyways, and in areas up to the knock box or stunning area. The reasons for excessive implement use may include poorly trained employees, animals balking because of distractions, or some other issue. It is expected that establishments train their employees adequately in the proper use of these implements, ensure that only objects designed for the intended purpose are being used, and maintain facilities in a manner that prevents excessive prodding.

■ **Slips and falls:** Are animals slipping and falling? Does the establishment have flooring that provides adequate footing for animals? Are animals being driven with a minimum of excitement and discomfort? Are livestock



being forced to move faster than a normal walking speed?

■ **Stunning effectiveness:**

Does the establishment appropriately and effectively administer stunning methods that produce unconsciousness in the animal before the animal is shackled, hoisted, thrown, cast, or cut? Are animals rendered insensible by a single blow or gun shot, or an appropriate electrical, chemical or other means that is rapid and effective? Is the stunning area designed and constructed to limit the free movement of animals to allow the stunning blow to have a high degree of accuracy?

Failure to properly stun animals is a serious violation of the Humane Methods of Slaughter Act, and represents a deficiency in training, equipment design, maintenance, or application. Is the stunning equipment in good repair? If carbon

dioxide is used, do records show that the gas is used in the correct concentration? Are animals properly restrained so that stunning is accurate?

■ **Animals on the rail:**

Are animals regaining consciousness during the shackling, sticking, and bleeding process? If so, they have not been rendered insensible as required.

If inspectors observe animals being injured or treated inhumanely, they must take immediate enforcement action.

Establishment Responsibilities:

A Systematic Approach to Humane Handling

FSIS recommends that you use a systematic approach to humane handling and slaughter. With a systematic approach, establishments focus on treating



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livestock in a way that minimizes excitement, discomfort, and accidental injury the entire time livestock is held in connection with slaughter.

To develop and maintain a systematic approach to meet the humane handling requirements, FSIS has stated that establishments should follow four steps:

1. Conduct an initial assessment of where and under what circumstances livestock may experience excitement, discomfort, or accidental injury while being handled in connection with slaughter, and, except for establishments conducting ritual slaughter, where and under what circumstances stunning problems may occur.
2. Design facilities and implement practices that will minimize excitement, discomfort, and accidental injury to livestock.
3. Evaluate handling methods periodically to ensure they minimize excitement, discomfort, and accidental injury, and, except for establishments conducting ritual slaughter, evaluate stunning methods periodically to ensure that all livestock is rendered insensible to pain by a single blow.
4. Improve handling practices and modify facilities when necessary to minimize excitement, discomfort, and accidental injury to livestock.

Identify where problems occur

In the first step of a systematic approach, establishments should conduct an assessment of where handling and stunning problems occur. Establishments should consider such factors as whether (1) the movement of livestock is done with a minimum of excitement and discomfort to the animal and

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at a suitable pace; (2) the particular livestock's genetics, instincts, and behavior are taken into account in the handling of livestock in the establishment; (3) electric prods and other implements are used as little as possible to move animals; (4) animals have access to water; (5) there is sufficient room in the holding pens for animals that are held overnight; (6) training is provided for establishment personnel in the appropriate and proper use of restraints and prods; and (7) potential weather and climatic conditions of the locale, especially for non-ambulatory(not for slaughter) livestock in the establishment, will lead to the inhumane treatment.

In addition, establishments should also assess the stunning method used for its effectiveness in rendering animals immediately unconscious and to ensure that animals are being properly stunned before being slaughtered.

Establishments should also assess the training for establishment personnel in the appropriate use of stunning and slaughtering equipment.

Adequate footing

In the second step of a systematic approach, establishments should determine whether the plant is in compliance with regulatory requirements by analyzing whether (1) the pens, driveways, and ramps are designed and maintained to prevent injury or pain to the animals; (2) the pens are free of loose boards or openings, so that the head, feet, or legs of an animal will not be injured; (3) the floors of pens, ramps, and driveways are constructed so that an animal is not likely to fall (e.g., using cleated or waffled floors or sand on the floors); and (4) driveways are designed so that sharp turns or sudden reversals of direction are minimized, so that they are



not likely to cause injury to animals.

It is essential to have non-slip flooring. There are many easy-to-implement and low-cost methods of ensuring that floors provide adequate traction for moving animals. An animal must have adequate traction with the floor for proper movement, particularly in the stunning box. If an animal is slipping or falling, it will be difficult to properly stun and ensure a humane process.

Minimize excitement

In the third step of a systematic approach, establishments should evaluate periodically their handling methods to ensure that their employees are, in fact, minimizing excitement, discomfort, or accidental injury to livestock.

Electric prods should be used rarely, if ever. If an animal balks,

try using a stick with a piece of plastic on the end, a plastic paddle stick, a plastic bag, or something similar to encourage the animal to move.

Why do animals balk? Usually, they balk because they are distracted. If you find your animals balking, take a look up the chute to see if there is a reflection, water dripping, a shadow, air blowing, or some other distraction causing animals to balk.

To minimize animal discomfort, do not overload or overcrowd animals in pens. The pen that leads up to the chute should only be filled about half or three quarters full.

Establishments should also periodically evaluate their stunning methods to ensure that they are working effectively to render all animals insensible to pain by a single blow.



Indications that an animal is properly stunned:

- Animal has a straight back and floppy head.
- Absence of righting reflex, including an arched back.
- Tongue is hanging out—NOT curled.
- Absolutely no vocalization of any kind.

Indications that an animal is NOT properly stunned:

- Vocalization.
- Eye blinks.
- Eye reflexes in response to touch.
- Rhythmic breathing.
- Curled tongue.



USE PLASTIC BAG INSTEAD OF CATTLE PROD.

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Make sure employees who operate stunning equipment are properly trained. Also, make sure stunning equipment is maintained in good repair. If firearms are used, be sure the correct caliber is used for the animal.

If an establishment finds evidence of a problem during the first three steps of the evaluation process, it should follow step 4 of the systematic approach and improve its

handling practices or modify its facilities to minimize the excitement, discomfort, or accidental injury to livestock.

When conducting the four recommended steps outlined previously, establishments should consider all factors relevant to the humane handling and slaughter requirements for the entire time that livestock is held in connection with slaughter.

SHADOWS CAN CAUSE ANIMALS TO BECOME SPOOKED.



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Benefits of humane handling

Following the principles in this guidebook will not only help you make sure that the establishment complies with Federal regulations, but also will improve animal welfare, make handling of animals easier and more efficient, and improve the quality of your product.

Good Commercial Practices for Poultry

Poultry slaughter establishments are responsible for ensuring that good commercial practices are followed. In poultry operations, following humane methods of handling and slaughter that are consistent with good commercial practices increases the likelihood of

producing unadulterated product. FSIS regulations provide that poultry carcasses that show evidence of having died from causes other than slaughter are considered to be adulterated, and must therefore be condemned. The regulations also require that poultry be slaughtered in accordance with good commercial practices in a manner that results in thorough bleeding of the poultry carcass and ensures that breathing has stopped before scalding, so that birds do not drown. Compliance with these requirements ensures that poultry are treated humanely.

FSIS inspectors will verify that poultry slaughter operations are following good commercial practices. They will do this by observing conditions in the receiving to prescald areas in the plant.



Following are steps to take to ensure that good commercial practices are followed:

- Ensure that employees are trained in handling birds, and that they are aware that mistreating birds, or handling birds in a way that causes injury or death, prevents thorough bleeding and is not permitted. Examples of inhumane treatment include employees breaking the legs of birds to hold them in shackles, or throwing live birds into a discard barrel so that they suffocate, or otherwise mishandling the bird while transferring it from the coop to the shackle.
- Make sure that in cold weather, birds are not allowed to freeze inside cages or become frozen to cages.

Also, make sure that in warm weather, birds are not dying from heat exhaustion. Heavy panting is a symptom of heat stress in birds.

- Employees should be trained on the handling and treatment of loose birds in unloading and live hang areas. For example, employees are not to drive over live birds with equipment or trucks.
- Employees should be trained in the proper use of stunning equipment. Post-stunned birds with a posture that includes an arched neck and wings tucked is visual evidence of an effective stun. Evidence of improper stunning may include birds entering the scalders that are still breathing, or an increased number of cadavers at the inspection station.



Inspection Resources

Following are the directives that provide instruction to inspectors for verifying that humane handling requirements are being followed by establishments:

- Directive 6100.3, Ante Mortem and Post Mortem Poultry Inspection
- Directive 6900.1, Humane Handling of Disabled Livestock
- Directive 6900.2, Humane Handling of Livestock
- 9 CFR 313: Humane Slaughter of Livestock
- Federal Register Notice, Docket No. 04-013N, Humane Handling and Slaughter Requirements and the Merits of a Systematic Approach to Meet Such Requirements
- Federal Register Notice, Docket No. 04-037N, Treatment of Live Poultry Before Slaughter

Sample Self-Evaluation Form for Humane Handling of Livestock

Date _____

Evaluator _____

Stunning

- Equipment is functioning properly.
- Operators are following proper stunning procedures.
- Procedures to maintain stunning equipment are followed.

Insensibility

- No evidence of righting reflex for animals on the rail.
- No evidence of animal returning to consciousness (e.g., no blinking, rhythmic breathing, vocalization) after stunning.

Animal movement

- No vocalization from animals as they move to the stunning box.
- Minimal slipping or falling of animals in the pen, chute, or stunning box.
- No abusive methods used to move animals.
- No distractions causing animals to balk.
- No over-crowding of animals in pens.
- Animals moved at a walk or trot to avoid slipping and falling.
- Animals unloaded from trucks without injuries or inhumane treatment.

Food and water

- Animals have access to water.
- Animals held longer than 24 hours have access to feed.

Pens, chutes, and floors

- Pens and chutes in good repair and free of sharp edges or other conditions that cause injuries to animals.
- Suspect animals receive humane treatment (e.g., in covered area during inclement weather).
- Animals are not slipping or falling or being injured because of floor conditions.

Employee training

- Employees are trained in proper humane handling and stunning methods.

Corrective Actions: *(for any box that is not checked)*



**United States
Department of
Agriculture**

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