

## **Humane Handling of Livestock and Good Commercial Practices in Poultry**

### **OBJECTIVES**

Upon completion of this module you will be able to accomplish the following without the aid of references:

1. Select, from a list of definitions, the one that best describes the terms:
  - a. Surgical anesthesia.
  - b. Ritual slaughter.
2. Describe the four approved methods for stunning animals as identified in the Humane Slaughter Act and the Regulations.
3. Select, from a list of general humane slaughter or handling responsibilities, those that are applicable to the establishment, to FSIS, or both.
4. Determine if a description of the way an animal is stunned is in compliance with the federal humane slaughter law.
5. Describe a method of slaughter that is exempt from stunning.
6. Select acceptable methods used to move a conscious disabled animal from one area to another area.
7. Determine if the way an animal is handled is compliant with the Humane Slaughter Act.
8. Compare a description of the way an animal is handled to the federal humane
9. Identify, from descriptions of establishment conditions in or around the livestock holding pens, those that might cause injury to animals.
10. Describe the establishment's responsibilities for animals that are withheld from slaughter for longer than 24 hours.
11. Describe the action an inspector should take when he/she observes an incident of inhumane treatment in an official establishment as a result of:
  - a. Facility deficiencies, disrepair, or equipment breakdown.
  - b. Establishment employee actions in the handling or moving of the livestock.
  - c. Improper stunning.

### **REFERENCES**

1. 9CFR 313: Humane Slaughter of Livestock
2. 9CFR 352.10: Exotic Animals; Voluntary Inspection; Ante-mortem inspection
3. Humane Methods of Slaughter Act of 1978
4. Federal Meat Inspection Act Section 603
5. FSIS Directive 6900.1 Revision 1- "Humane Handling of Disabled Livestock"
6. FSIS Directive 6900.2 Revision 1- "Humane Handling and Slaughter of Livestock"
7. FSIS Notice 16-08 - "Humane Handling and Documentation in Livestock Slaughter Establishments"
8. Federal Register Notice Docket No. 04-013N – A Systematic Approach to Humane Handling
9. Poultry Products Inspection Act Section 453(g)(5)

10. 9 CFR 381.65 (b): Poultry Products Inspection Regulations
11. Federal Register Notice, Docket No. 04-037N, Treatment of Live Poultry Before Slaughter
12. FSIS Directive 6100.3 – “Ante-mortem and Post-mortem Poultry Inspection”
13. Humane Interactive Knowledge Scenarios (livestock and poultry) at:  
[http://www.fsis.usda.gov/FSIS\\_Employees/HIKE\\_Scenarios/index.asp](http://www.fsis.usda.gov/FSIS_Employees/HIKE_Scenarios/index.asp)

## INTRODUCTION

The use of humane methods in the slaughter and handling of livestock prevents needless suffering, results in safer working conditions for packing house workers, improves the quality of meat products, and decreases a significant financial loss to meat packers. Prior to 1958 there were no laws in the United States governing humane slaughter practices. The majority of the meat industry recognized the benefits of humane slaughter practices and their use was widely accepted. Primarily there were economic incentives; humane treatment generally resulted in less bruising and therefore less trimming of the dressed carcass. Still there was concern from many Americans over isolated, but persistent reports of continued cruelty to livestock at a few plants.

The first law passed to address these concerns was the Humane Methods of Slaughter Act of 1958. This law was voluntary for meat packers who did not sell meat to the federal government. It required that livestock be rendered insensible to pain by a blow, gunshot, or electrical or chemical means that is rapid and effective before shackling, hoisting, casting, or cutting.

The law that is currently enforced by the USDA is the Humane Slaughter Act of 1978. The 1978 Act made mandatory the humane slaughter and handling of livestock in connection with slaughter of all food animals slaughtered in USDA inspected plants. This includes cattle, calves, horses, mules, sheep, goats, swine, and other livestock. Two methods of slaughter were determined to be humane. The first method requires that livestock are rendered insensible to pain on the first application of the stunning device before being shackled, hoisted, cast, or cut. This means that the animal must be unconscious and unable to feel pain before it is “stuck” (jugular veins and carotid arteries severed so it bleeds out), before it is shackled and hoisted into the air, or before it is dropped onto a table/floor.

The second method is in accordance with the ritual requirements of any religious faith that prescribes a method of slaughter where the animal suffers loss of consciousness by anemia of the brain caused by the simultaneous and instantaneous severance of the carotid arteries with a sharp instrument. This method is usually called ritual slaughter. Additionally, Section 1906 exempts the handling or other preparation of livestock for slaughter from the terms of the Act. What this means is that the statutory requirement that livestock are rendered insensible to pain prior to shackling, hoisting, casting, or cutting does not apply to the handling or restraint that is intimately associated with the ritual slaughter cut. In ritual slaughter, the animal’s throat is cut from side to side with a sharp knife, deeply enough for the major arteries and veins to be severed. Examples of ritual slaughter include Jewish (Kosher) slaughter and Islamic (Halal) slaughter.

The regulations for humane slaughter are in the Title 9 Code of Federal Regulations (CFR) Part 313, titled *Humane Slaughter of Livestock*. Additional Agency guidance is detailed in the “References” section above.

At this time, the HMSA of 1978 does not cover poultry. However, welfare practices for poultry are covered by the regulatory requirement for good commercial practices (GCP). The regulations for poultry good commercial practices are in 9 CFR Part 381. GCP for poultry will be discussed later in this material.

### **Humane Activities Tracking (HAT) System**

You may be verifying that plant facilities and the activities of plant personnel comply with humane slaughter laws. The amount of time that Agency in-plant personnel spend verifying compliance with the humane handling statutes and regulations is captured in the HAT database in the electronic Animal Disposition Reporting System database. Every day and shift that livestock slaughter occurs in federally inspected facilities, Agency in-plant personnel must perform HAT tasks.

There are nine broad categories listed in the HAT database, covering all the regulatory and statutory requirements for the humane handling and slaughter of livestock. In this material, you will get some information about performing HAT verification tasks. For a more detailed explanation, refer to FSIS Notice 16-08, “Humane Handling and Documentation in Livestock Slaughter Establishments”.

When you are verifying humane handling, make certain that you are not predictable in how, where, and when you perform your observations. You need to randomly select areas and times such that all areas are observed at different times of the day. In addition, you need to vary the route you take to get to the areas being observed. The bottom line here is that establishment personnel should not be able to anticipate when you are going to be observing their humane handling and slaughter methods because you are always in about the same place at about the same time.

Performing odd hour humane handling verification is another component of HAT. Contact your immediate supervisor and the DVMS if you think you need to perform odd hour humane handling verification. Below are some of the findings that may trigger odd hour inspection.

- A significant percentage of animals are unloaded outside normal hours of operation when Federal Inspectors are not on duty.
- Animals are frequently held over the weekend and automatic watering devices are not present in pens and/or that there is no access to food.
- Animals delivered outside the regular tour of duties are found with injuries during ante-mortem inspection.
- Down or disabled animals are being delivered to the establishment during odd-hours.
- Phone calls have been received from the public indicating that inhumane handling was witnessed during odd-hours.
- Dead animals are condemned on ante-mortem inspection and these animals were not observed at truck unloading.

## **Truck unloading**

Establishment personnel are required to meet the regulatory requirements for humane handling and slaughter of livestock from the time the livestock are in conjunction with slaughter until the point at which the animal becomes a carcass. This includes handling associated with livestock trailers. Once a vehicle has entered the official establishment premises, it is considered part of the premises and is subject to the FSIS regulations that ensure humane handling.

This is an important concept to understand because it means that your responsibility for verifying humane handling begins when the animals are coming onto the facility, not just once they reach the holding pens. If you observe a humane handling violation during truck unloading, you are to follow the same procedure as when a violation is observed elsewhere in the facility.

Truck unloading must be done in a manner that allows animals to be unloaded without injury. This includes proper positioning of the trucks, movement of animals while on the trucks, and the movement of animals off the trucks into the holding pens.

## **Livestock pens, driveways and ramps**

Personnel responsible for moving livestock from the livestock trailers to the unloading ramps to the holding pens and from the holding pens to the stunning area must do so with a minimum of excitement and discomfort to the animals. The ramps, driveways, and the floors of pens must be constructed and maintained so that the livestock have good footing. There are many ways this can be accomplished, such as using metal mesh and grooves cut or impressed into the cement. Establishments also need to consider the impact that seasonal weather conditions may have on footing. For example, it may be necessary for the plant to use sand or some other material on the floors during the winter to overcome slick conditions.

Livestock pens and driveways should be constructed so that animals are not driven around a lot of sharp corners. Pens, driveways, and ramps must be maintained in good repair. They must be kept free from sharp or protruding objects that can cause injury. Loose boards, splintered or broken planks, broken pipe rails, broken unloading ramps, and unnecessary openings where the head, feet, or legs of an animal may be injured must be repaired. Pens, alleyways, or fencing in disrepair such that an animal may be injured as a result is considered a regulatory violation of humane practices.

When observing the facilities for compliance, remember to look at the off-loading ramps, inside the holding pens, at the back of solid gates, inside the single file chute, restraint device, and stunning box. You may have to wait until the animals are out of these areas before you can complete your verification activities.

## **Handling of livestock**

Livestock must not be driven faster than a normal walking speed. When moving animals the use of electric prods, canvas slappers, or any other type of implement must be

minimized to prevent injury and excitement. The use of implements such as baseball bats, shovels, sharp prods, whips and the like, which in the opinion of the inspector can or will cause injury, are prohibited. Electric prods wired into AC current must not carry a charge higher than 50 volts.

Livestock must have access to water at all times while in holding pens. If they are held longer than 24 hours, they must also have access to feed. Agency policy is that feed must be of appropriate for the age and species of animal being fed. So, for example, feeding hay to bob veal calves held more than 24 hours would not meet the regulatory requirement for access to feed. If held overnight, they must have enough room in the holding pen to lie down, without being forced to lie on top of one another.

Animals that are disabled, non-ambulatory, or designated as U.S. Suspects must be segregated into a separate pen. This pen must be covered and sufficient to protect the animals from adverse climatic conditions while awaiting disposition. This is because the weakened state of these animals renders them less resistant to even "normal" weather conditions.

The Regulations strictly prohibit dragging a conscious animal that is disabled or unable to walk. Establishment personnel must either stun these non-ambulatory disabled animals before dragging them or move the animals by placing them on a skid, stone boat, bucket lift, or some other type of equipment that is suitable for moving a conscious disabled animal.

FSIS Directive 6900.1, Revision 1 permits inspection program personnel to either be outside transport vehicles or enter onto transport vehicles to conduct antemortem inspection if disabled livestock cannot be humanely removed from the vehicles by establishment employees. The decision to enter a transport vehicle to conduct antemortem inspection or to conduct antemortem inspection from outside the vehicle is to be made by each inspector individually and is completely voluntary. Inspection personnel may enter onto the transport vehicle or perform antemortem inspection from outside the transport vehicle if, in his or her professional opinion, he or she can safely and adequately conduct the antemortem inspection. No adverse or disciplinary action can or will be taken against any inspection program personnel choosing not to conduct antemortem inspection of disabled livestock on or from outside of a transport vehicle.

## **Stunning**

To meet the statutory requirements in the HMSA, all animals must be rendered insensible to pain by a single blow or gunshot or an electrical, chemical or other means that is rapid and effective, before being shackled, hoisted, thrown, cast, or cut. This requirement includes cattle, calves, horses, mules, sheep, swine, and other livestock.

There are some general principles that apply to all stunning methods

1. Stunning equipment must be maintained in good repair. Equipment in poor repair can interfere with the rapid and effective application of the stunning blow. This can result in an incomplete or unsuccessful stun.
2. Effective stunning requires effective restraint. If an animal is not effectively restrained, it will be much more difficult to locate the stunning blow with a high

degree of accuracy. The stunning area should be designed and constructed to limit the free movement of animals.

3. A well-trained and experienced establishment employee must operate stunning devices. The employee must be able to accurately and consistently position the stunning devices so that the animal is rendered immediately unconscious.
4. Animals need to be delivered to the stunning area with a minimum of excitement or discomfort. It is more difficult to place the stunning device accurately, and the method of stunning may not work as effectively, on an excited or injured animal,

With any stunning method, it is important to observe the amount of time it takes for the animal to begin bleeding out (“sticking”) after being stunned. Although there is no regulatory requirement for this time period, if the “stun to stick” interval is prolonged, it could result in animals regaining or beginning to regain sensibility on the bleed rail.

It is also important to perform HAT verification at different times of the day. Equipment that may be working well in the morning can malfunction later in the day. Personnel get fatigued, may feel pressure to get a certain number of animals stunned by a particular time, or may be focusing on after work activities. Animals that have been standing around all day can get restless and more difficult to handle quietly and calmly. All these things can contribute to careless handling and/or stunning techniques, resulting in ineffective stuns.

The regulations describe four acceptable methods for producing a state of surgical anesthesia (surgical anesthesia is defined as a state where the animal feels no painful sensations). The four acceptable methods are:

- Chemical (Carbon Dioxide -CO<sub>2</sub>)
- Mechanical (captive bolt)
- Mechanical (gunshot)
- Electrical (electrical current)

#### Carbon Dioxide

Carbon dioxide gas (CO<sub>2</sub>) is approved for rendering swine, sheep, and calves unconscious. A carbon dioxide gas chamber is designed on the principle that carbon dioxide is heavier than normal atmospheric air. The chamber is open at both ends for the entry and exit of the animals to anesthetizing CO<sub>2</sub> concentrations, or can be a pit structure where animals are lowered into the pit then brought out after inducing insensibility to pain. For swine only, CO<sub>2</sub> can be administered to induce death. Once anesthesia has occurred, the animals are removed from the chamber and are ready to be shackled, hoisted, or placed on a table for bleeding.

The gas must be administered in a way that produces surgical anesthesia quickly and calmly, with a minimum of excitement and discomfort to the animals. The establishment must maintain a uniform carbon dioxide concentration in the chamber so that the degree of anesthesia in exposed animals will be constant. The gas concentration and exposure time, also known as the dwell time, must be recorded graphically throughout each day's operation. All gas-producing and control equipment must be maintained in good repair

and all indicators, instruments, and measuring devices must be available for inspection by FSIS.

Mechanical – captive bolt

There are two types of mechanical captive bolt stunners—penetrating and non-penetrating—used to produce immediate unconsciousness in cattle, sheep, goats, and swine. Both types have gun-type mechanisms that fire a bolt or shaft out of a muzzle. A measured charge of gunpowder (a blank cartridge) or accurately controlled compressed air propels the stunning bolt. Both types must be operated by a well-trained and experienced establishment employee. The employee must be able to accurately and consistently position the stunning devices so that the bolt hits the skull at the right location to produce immediate unconsciousness. The employee must also be able to adjust the air pressure or detonation charge when the sex, the breed, or the size of the animal changes.

Some establishments have adopted a practice of “double knocking”—that is, the animals are stunned with two blows delivered in very rapid succession. The rationale behind this procedure is that the consequences of an animal regaining consciousness are so severe that company managers want to make certain that it will not happen. Therefore, there is a second blow as a “security stun” only. The important point to consider here is that to meet the statutory and regulatory requirements, the first stun must be effective at rendering the animal insensible to pain.

When fired, the bolt in the penetrating type of captive bolt stunner penetrates the skull and enters the brain. Unconsciousness is caused by physical brain damage, sudden changes in intracranial pressure, and concussion. Penetrating captive bolt devices powered by compressed air must have accurate, constantly operating air pressure gauges. The gauges must be easily read and conveniently located for inspection by FSIS. The brain from animals stunned with penetrating captive bolts may be saved for edible purposes provided the establishment removes the large blood clots, bone splinters, hair, and debris from the brain.

After a Bovine Spongiform Encephalopathy (BSE) positive cow was found in Washington State on December 2003, a number of policies were issued to protect the public health against BSE. One of these policies involved the prohibition of air-injection stunning of cattle. Air-injection stunning is a method of deliberately injecting compressed air into the cranial cavity as a part of the stunning process. Therefore, 9 CFR 315.15(b)(2)(ii) states *“Captive bolt stunners that deliberately inject compressed air into the cranium at the end of the penetration cycle shall not be used to stun cattle.”* to ensure that portions of the brain are not dislocated into the tissues of the carcass as a consequence of humanely stunning cattle during the slaughter process.

Many plants will use the non-penetrating type captive bolt in order to avoid the time-consuming task of physically removing large blood clots, hair, bone, splinters, and debris from the brain. The non-penetration (concussion) bolt is similar to the penetrating bolt except that it has a bolt with a flattened circular head (mushroom head). When fired, the mushroom head meets the skull, but does not penetrate the brain. The animal becomes insensible from acceleration concussion and sudden changes in intracranial pressure.

Accurate placement of the stunning blow is very important when a non-penetrating captive bolt stunner. The amount of hair on the animal's head will also have an impact on the effectiveness of the stunning blow.

#### Mechanical – gunshot

Another type of mechanical device used for stunning is the firearm. It can be used on cattle, calves, sheep, goats, and swine. The caliber of the firearm must be such that a single shot of a bullet or projectile into the animal must produce immediate unconsciousness. If a small-bore firearm is used, the regulations identify the following types of projectiles as acceptable:

- hollow pointed bullets
- frangible iron/plastic composition bullets
- powdered iron missiles

Remember that the standard is that every animal is rendered insensible to pain (unconscious) by a single gunshot, regardless of the type of projectile used.

Always consider your safety when observing stunning done with firearms. Ensure that you are out of the way of ricochet and standing away from the direction of fire.

Regardless of the type of projectile, a large percentage of the brain, cheek meat, and head trimmings may contain whole or fragmented bullets. Therefore, 310.18(B) of the Regulations states that after the head is inspected, the brains, cheek meat, and head trimmings may not be saved for human food. The only portion of the head that can be salvaged for human food is the tongue.

Always consider your safety when observing stunning done with firearms. Ensure that you are out of the way of ricochet and standing away from the direction of fire.

#### Electrical

The final method approved for stunning animals is electric current. Electrical stunning is used for hogs, calves, sheep, and goats. While approved for use in cattle, this is not a common practice. It is most widely used for hogs. The animal is physically restrained so that the electric current can be applied with a minimum of excitement and discomfort to the animal. There are two types of electrical stunning, head only and cardiac arrest. Head only stunning induces a gran mal epileptic seizure, resulting in insensibility to pain. Cardiac arrest stunning will induce a gran mal epileptic seizure and cardiac fibrillation—essentially inducing a heart attack. This means that the head must be stunned first (or simultaneously with the heart) because to stun the chest first would cause pain not insensibility, which is a violation of the humane handling requirements.

The placement of the electrodes varies from plant to plant. It can be across the head only (head only stunning); on the head and thoracic region (cardiac arrest stunning); or across the head only then thoracic region only (two phase stunning). The design of the stunning wand can vary considerably (one or two pieces). Which ever way is used, the current passing through the animal must be enough to ensure surgical anesthesia throughout the bleeding operation. The operator must control the timing, voltage, and current so that each animal is properly stunned. If too much current is applied in the stunning process, hemorrhages or other tissue changes can occur that could interfere with the inspection procedure. Too high an electrical current can damage capillaries,

resulting in multiple pin-point hemorrhages in the muscle tissue. This is commonly referred to as "splashing" or "speckling". If this condition is seen on the postmortem disposition rail, it would be prudent to investigate the stunning process and discuss the findings with establishment managers.

To meet the statutory requirements, animals must be stunned to being shackled, hoisted, thrown, cast, or cut. With head only stunning the bleed to stun interval should not exceed 30 seconds. This is not a regulatory timeframe, but if the "stun to stick" interval is prolonged, it could result in animals regaining or beginning to regain sensibility on the bleed rail. In cardiac arrest stunning, the stun to stick interval is not as critical because the animal is much less likely to regain sensibility. However, some plants have had problems with cardiac arrest stunned animals regaining consciousness so don't assume that stunning effectiveness doesn't need to be verified on a regular basis.

### **Ritual Slaughter**

As previously mentioned, slaughtering is permitted without a stunning device in accordance with ritual requirements. An example would be kosher slaughter. In common practice, each animal is shackled by a hind leg and hoisted into the air or the animal is cut while restrained in a special pen prior to hoisting. The animal is fully conscious when the stick or cut takes place. The sticking is done by a Shochet (slaughterer) chosen from the community, trained in the laws of the orthodox religion, and supervised by a rabbi in his area. The cut is made with a razor sharp knife called a Chalef that is honed after each cut.

In Halal slaughter, a person of the Islamic faith does the ritual cut. A prayer to Allah is recited during the procedure. You may see a lot of variation in how Halal slaughter is done. Many religious authorities will accept stunning either before or after the ritual slaughter cut.

The ritual slaughter cut and the handling and restraint that immediately precedes that cut is often called the "ritual bubble". The activities that occur within that "ritual bubble" fall under Section 1906 of the HMSA, and are protected as part of the Constitutional right of religious freedom. This does not mean that Agency personnel are to ignore completely what happens within in the "ritual bubble"—what it means is that Agency personnel don't enforce humane handling regulations within that "ritual bubble". That said, if you see something during the "ritual bubble" that concerns you, contact your immediate supervisor and the District Veterinary Medical Specialist (DVMS) for guidance on what action can be initiated.

It is important to understand that ritual slaughter establishments are required to meet all the humane handling regulatory requirements except stunning prior to shackling, hoisting, throwing, cutting, or casting. All animals must be unconscious or insensible to pain prior to any dressing procedures.

When you perform your HAT verification activities, you will observe all HAT categories except stunning effectiveness. For example you will verify the availability of water, check the condition of pens and ramps and that there is no excessive prodding in any part of the establishment when moving animals. You will also verify that after the ritual cut (and any additional cuts to facilitate bleeding) no dressing procedure (e.g. head

skinning, leg removal, ear removal, horn removal, opening the hide) is performed until the animal is insensible to pain.

### **Assessing Unconsciousness**

Livestock must remain insensible to pain (unconscious) from the time they are stunned until they are dead. You can use the following signs to verify that animals are insensible to pain (unconscious):

1. The head dangles from a flaccid (limp and flexible) neck. If the animals are suspended from an overhead rail, the head should hang straight down. This can be difficult to see if the animal is lying on its side.
2. The tongue may hang straight down and out of the mouth.
3. The eyelids should be wide open and the pupils fully dilated so, at a distance, the eyes appear black.
4. There is no vocalization—mooring, bellowing, baaing, or squealing.

You may observe movement of the head and neck. This movement can be because of involuntary reflexes caused by random firing of damaged muscle neurons. It can be associated with movement of equipment. It may also be voluntary movement because the animal is regaining consciousness.

A previously stunned animal that has regained sensibility (consciousness) may vocalize. It may also show a “righting reflex”. The term “righting reflex” is used to describe the physical actions taken by an animal to move itself into a normal lying, sitting or standing posture. For example, a conscious cow hanging from a bleed rail will show a contracted back, stiff extended neck and rigid extended forelegs as it tries to pull itself into a normal upright position. An animal lying flat on its side may try to lift its head, and may try to roll up onto its chest or stand. On occasion, you may see an animal’s neck flex laterally—that is, to one side —after it’s been stunned and hoisted. Don’t mistake this sideways spasm for a “righting reflex”; make sure you look at the head to determine if the animal is unconscious.

When assessing unconsciousness, you need to observe the animals at different places along the bleed rail. For example, you could perform verification just after stunning when the animal is in the shackle pit. Then, you could observe animals after they have been hanging on the bleed rail for several minutes. Always be aware of your safety when performing verification of unconsciousness.

If you observe an animal regain consciousness after stunning, you must contact your supervisor immediately, and take the actions described in the “Enforcement” section below.

### **Enforcement**

If you observe a humane handling noncompliance, you must take immediate action. The specific action that you take will depend on the nature of the noncompliance and the response of establishment managers. The first thing to think about when a humane handling violation is observed is whether or not the animal is being immediately harmed.

If it is being harmed, your first duty should be to ensure that the animal doesn't continue to be harmed. For example, if you observe an employee driving livestock with an instrument (the edge of a shovel, a pointed metal prod) that can cause injury, you must stop that action from continuing. Your action or inaction should not result in further or continued inhumane treatment to the animal. So, take care of the animal first.

Once that's done, your next step is to decide if the noncompliance is egregious or non-egregious because the actions you take will be dictated by that determination. An egregious humane handling violation is so serious that it warrants an immediate suspension of the assignment of inspectors under the authority of the Rules of Practice (9 CFR 500.3(b)). Egregious violations are discussed in a separate section below.

The regulations (9 CFR 313.50) and FSIS Directive 6200.2, Rev. 1 give specific direction as to how you are to address humane handling noncompliances. You start by notifying establishment managers of the inhumane handling noncompliance, if you hadn't already done so when addressing the needs of the animal. If the noncompliance is the result of facility deficiencies, disrepair, or equipment breakdown, but is not immediately causing injury or inhumane treatment of animals, request that establishment managers immediately correct the situation and take the necessary steps to prevent recurrence. If establishment managers fail to take such action or fail to promptly provide you with satisfactory assurances that such action will be taken, you are to attach a U.S. Retain/Reject tag to the noncompliant equipment/pen/etc. No equipment, alleyway, pen or compartment so tagged shall be used until it is brought back into regulatory compliance.

If the noncompliance is the result of establishment employee actions in the handling or moving of livestock and animals are being injured or treated inhumanely, attach the tag to the alleyways leading to the stunning area. After the tagging of the alleyway, no more livestock shall be moved to the stunning area and the tag will remain in place until the establishment operator implements appropriate immediate actions and measures to prevent recurrence. The tag shall not be removed by anyone other than an inspector. All livestock slaughtered prior to the tagging may be dressed, processed, or prepared under inspection.

If the noncompliance is the result of improper stunning, attach the tag to the stunning area. Stunning procedures shall not be resumed until the establishment operator implements appropriate immediate actions and measures to prevent recurrence. The tag shall not be removed by anyone other than an inspector. All livestock slaughtered prior to such tagging may be dressed, processed, or prepared under inspection.

Whenever a violation of the humane slaughter requirements is observed, inspection personnel must document the incident on a NR and send a copy to the DVMS at the District Office. It's important that it clearly and specifically describe exactly what was observed, including any response by the animal (if the noncompliance involved animal discomfort or injury).

If there are multiple non-egregious humane handling noncompliances, you or your immediate supervisor need to contact the DVMS to determine if additional enforcement actions are warranted. The DVMS and District Office staff will work with the IIC to develop the appropriate course of action.

The exception to documenting an NR is if the violation is determined to be egregious. For an egregious humane handling violation, a memorandum of interview (MOI) is documented.

### Egregious Violations

Under the Rules of Practice, 9 CFR 500.3(b), FSIS can suspend assignment of inspectors at an establishment without prior notification for humane handling violations. Humane handling violations for which immediate suspension is warranted are termed egregious.

So, what is an egregious violation? The Webster dictionary defines egregious as conspicuously bad or flagrant. The Agency defines it as any act that is cruel to animal or a condition that is ignored and leads to the harm of animals, such as:

1. making cuts on or skinning conscious animals,
2. excessive beating or prodding of ambulatory or non-ambulatory disabled animals,
3. dragging conscious animals,
4. driving animals off semi-trailers over a drop off without providing adequate unloading facilities (animals are falling to the ground),
5. running equipment over animals,
6. stunning of animals and then allowing them to regain consciousness,
7. multiple attempts, especially in the absence of immediate corrective measures, to stun an animal versus a single blow or shot,
8. dismembering live animals, such as removing feet from livestock,
9. leaving disabled livestock exposed to adverse climate conditions while awaiting disposition, or
10. otherwise causing unnecessary pain and suffering to animals, including situations on trucks.

This is a list of some actions that are considered egregious, but is not is exhaustive. Each inhumane activity needs to be assessed individually by the in-plant Agency personnel. The IIC can impose an immediate suspension if the situation warrants it, according to FSIS Directive 6900.2 Rev. 1.

If you observe a violation that you believe is egregious, your next set of actions will depend on whether or not you are the IIC. If you are the IIC, place a U.S. Retain/Reject tag at the appropriate place and inform establishment managers that you are suspending without prior notification per 9 CFR 500.3(b). The IIC is authorized to take the immediate suspension if the situation warrants it, according to FSIS Directive 6900.2 Rev. 1. If you are not the IIC, attach a U.S. Retain/Reject tag at the appropriate place, and inform establishment managers that you are taking a regulatory control action and that no more animals can be slaughtered until you contact the IIC. Whichever action is

taken, a suspension by the IIC or a RCA by other inspection personnel, all livestock slaughtered before the action may be dressed, processed, or prepared under inspection.

The IIC will immediately notify the District Office and the DVMS of the suspension action. The IIC will also document the facts that serve as the basis of the suspension action on a memorandum of interview and promptly provide that information electronically to the DO and the DVMS for their use. The MOI will form the basis of the Notice of Suspension documented by the DVMS and DO staff and of the Administrative Enforcement Report.

In 2003, the Agency began to incorporate the new Administrative Enforcement Reports (AER). The AER applies in all situations including humane handling. It is a reporting method that demonstrates that FSIS has an effective and efficient means to document and maintain administrative enforcement actions taken under the Rules of Practice.

An AER is started when the Agency initiates further enforcement actions, such as a Notice of Intended Enforcement (NOIE) or a Suspension without Prior Notification. Although in-plant PHVs are not responsible for maintaining the AER, documentation developed by in-plant PHVs is integral to the successful management and effective outcomes of those further enforcement actions. This means that in-plant documentation, including NRs, notes of weekly USDA/Company meetings, memoranda of conversations/interviews, needs to be complete, accurate, and clear.

### **Exotic species**

Exotic animals (voluntary inspection) are covered under 9 CFR 352.10. This section includes regulations that address humane handling during antemortem inspection and stunning practices to render the animals unconscious. The regulation states, "Humane handling of an exotic animal during antemortem inspection shall be in accordance with the provisions contained in 9 CFR 313.2". This covers unloading procedures, methods of moving exotics through the holding facility, handling of disabled animals, access to water and feed if held over 24 hours, and the effective application of stunning methods. 9 CFR Part 352.10 (a)(5) states that "Stunning to render the animals unconscious shall be in accordance with 313.15 or 313.16.", which are the stunning by captive bolt and by gunshot sections of the humane handling regulations

Livestock specified by 9 CFR 352 include antelope, bison, buffalo, catalo (cattalo), and deer. Additionally, exotic animals are defined by 9 CFR 352.1(k) as any reindeer, elk, deer, antelope, water buffalo or bison.

If you have questions or concerns about repetitive noncompliances or egregious violations with exotic animal humane handling and slaughter, contact the DVMS. Although we cannot take action under the Rules of Practice, 9 CFR 500.3(b), these issues can be effectively addressed.

## **Poultry**

At this time, there is no humane handling statute requiring humane handling in poultry. However, there is a regulatory requirement that poultry are slaughtered using good commercial practices (GCP).

### **Introduction**

In the PPIA Section 453(g)(5), a poultry product is adulterated if, among other circumstances, it is in whole, or in part, the product of any poultry which has died otherwise than by slaughter. The regulations require that poultry be slaughtered in accordance with good commercial practices, in a manner that will result in thorough bleeding of the poultry carcass and will ensure that breathing has stopped before scalding (9 CFR 381.65 (b)). Poultry that are still breathing on entering the scald die from drowning not from slaughter and are, therefore, considered adulterated and unfit for human food. These cadavers are automatically condemned on postmortem inspection per 9 CFR 381.90.

On September 28, 2005, the Agency published a Federal Register Notice, Docket No. 04-037N, Treatment of Live Poultry Before Slaughter. In that FR Notice, humane handling terminology was used for the first time by the Agency when describing the live poultry being handled in a way consistent with good commercial practices. FSIS went on to describe a systematic approach for industry to use. The Agency defined a “systematic approach” as one in which establishments focus on treating poultry in such a manner as to minimize excitement, discomfort, and accidental injury the entire time that live poultry is held in connection with slaughter. Recognize that this approach is voluntary on the part of industry; also recognize that it signals a change by the Agency to a more assertive approach to the handling of live poultry.

FSIS Directive 6100.3 “Ante-Mortem and Post-Mortem Poultry Inspection” provides guidance on performing GCP verification activities. Additional information is available in a Humane Interactive Knowledge Exchange—01-05—addressing the issue of humane handling of poultry. It discusses the observation of still breathing chickens entering the scald tank and identifies the enforcement actions that taken by in-plant personnel when noncompliance with regulatory requirements is observed.

### **GCP verification activities**

IPP assigned to poultry slaughter facilities are expected on a daily, per shift basis when the establishment slaughters, to perform an unscheduled 04C04 (GCP) verification procedure. You should visit the receiving through pre-scald areas to observe whether establishment employees are mistreating birds or handling them in a way that will cause death or injury or prevent thorough bleeding or result in excessive bruising. Some things to look for include:

- establishment employees breaking the bird's legs to hold them in the shackles
- birds frozen inside cages or frozen to the cages in cold weather
- birds dead from heat exhaustion—you would primarily see heavy panting in poultry suffering from heat stress.

- establishment employees driving over live birds with equipment or trucks in the unloading or live hang area

If the poultry is stunned prior to bleeding, check the stunning equipment to ensure it's functioning properly. Poultry that have been effectively stunned will have an arched neck and tucked-in wings posture.

Check in the bleeding area to determine if the bleeding equipment is functioning properly. One way that you might be alerted to problems with the bleeding equipment is if the line inspectors report increased number or clusters of cadavers at inspection stations or increased numbers of bruised wings or legs.

Once a week, in-plant personnel are to randomly select a day to review establishment records documenting adherence to good commercial practices. This review takes the place of observation in the receiving through pre-scald areas. Recognize that establishments are not required to maintain written records of good commercial practices. If records are not kept, IPP are to visit the receiving through pre-scald areas as above.

If such records are kept and made available, in-plant personnel are to assess whether there is evidence that the establishment is monitoring its GCPs in the receiving through pre-scald areas. IPP are also to determine if there is enough information in the records to judge that the establishment is following good commercial practices. If there isn't enough information to make that judgment, IPP are to visit the receiving through pre-scald areas to verify compliance with the statute and regulations.

### **Enforcement**

If the establishment is not following good commercial practices, and birds are dying other than by slaughter, you are to document a noncompliance record citing 9 CFR 381.65(b), using procedure code 04C04 with the economic trend indicator.

If birds are being mistreated, but can still be fully bled and not breathing when they enter the scald, you must discuss the mistreatment with establishment managers at the next weekly meeting. In addition, you are to document the discussion and any planned actions on the part of the establishment in a MOI. Give a copy of the MOI to establishment managers, keep a copy in the inspection file, and send a copy to the DVMS. The DVMS will review the MOI and determine if additional action is warranted.

If you have questions or concerns about what you're seeing during poultry slaughter, contact the DVMS for guidance.

## WORKSHOP

Mark your choice(s) with an "X" in the space provided.

1. Which of the following could be noncompliances that could cause injury or discomfort to animals during unloading, weighing, or driving to the stunning area?

\_\_\_\_\_ an unloading ramp with a 2-inch section of the planking missing

\_\_\_\_\_ several bolts protruding from the pen posts

\_\_\_\_\_ ante-mortem pens not covered

\_\_\_\_\_ icy runways

\_\_\_\_\_ floors in the pens are smooth concrete

2. "Surgical Anesthesia" is best described as:

\_\_\_\_\_ Drug or implement used to render the animal unconscious.

\_\_\_\_\_ A state where the animal feels no painful sensations

3. "Ritual Slaughter" is best described as:

\_\_\_\_\_ A method of slaughter dictated by a religious group

\_\_\_\_\_ A method of slaughter that requires the animal to be bled prior to loss of consciousness

\_\_\_\_\_ Both of the above

4. In your opinion, which implements or methods if not used in excess could be used to drive or move livestock and be acceptable to Part 313 of the Regulations?

\_\_\_\_\_ Canvas slapper

\_\_\_\_\_ Wooden club

\_\_\_\_\_ Battery- operated prod

\_\_\_\_\_ Bull whip

\_\_\_\_\_ Electric prod attached to AC current (transformer available)

\_\_\_\_\_ Whistle

\_\_\_\_\_ Electric prod attached to AC current (no transformer available)

\_\_\_\_\_ Flat- blade shovel

- Light leather strap, 2 inches wide
- Hand- held metal prod
- Lead goat
5. List the four approved methods for humanely stunning animals.
6. Animals that are delivered to the slaughter plant at 3:30 p.m. on Monday are intended to be slaughtered no later than noon on Tuesday would require both water and feed.
- True
- False
7. From the following list of responsibilities write the letter "I" opposite those that are inspector's responsibilities and the letter "E" opposite those that are the establishment's responsibilities.
- Provide adequate pens in good repair
- Adhere to all humane slaughter requirements
- Frequently observe stunning procedures to determine whether livestock are insensible to pain before shackling and bleeding
- Provide water and feed when necessary for animals
- Report any noncompliance of humane handling regulatory requirements.
- Provide acceptable means to move disabled animals
- Reject areas/ equipment when inhumane treatment is observed
8. You are performing the antemortem assignment and you observe a plant employee driving animals with a sharp pointed implement. Which of the following statements best describes the action you should take as identified in the Regulations?
- Tell the plant employee to stop using the pointed implement
- Inform the plant management of the incident and request that they take the necessary steps to prevent a recurrence

- Notify the district manager and the Humane Society
9. An animal that is conscious, but not able to stand or walk, should be moved by which of the following methods?
- Loading the animal onto a skid, stone boat, bucket lift, or any other method that will not, in your opinion, cause undue excitement and/ or pain
- Allow the establishment to stun the animal then allow it to be dragged
- Either of the above
- None of the above
10. An injured but alert U.S. suspect may be dragged from the suspect pen to the knocking box.
- True
- False
11. The plant is using firearms to stun livestock. Which of the following is a true statement?
- Condemn both the heads and the tongues if hollow-pointed bullets are used
- Condemn the tongues but save the heads if frangible bullets are used
- Condemn the heads but may save the tongues regardless of the type of bullets used
12. Can an establishment's inspection service be suspended if it has a history of treating livestock inhumanely?
- Yes
- No