Humane Handling of Livestock

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, from a list describing various methods used to move a disabled, yet conscious, animal from one area to another area, those methods that are acceptable according to the Humane Slaughter Act.
- Compare a description of the way an animal is handled to the federal humane slaughter law to determine if the handling is in compliance with the Humane Slaughter Act.
- 8. Identify, from descriptions of establishment conditions in or around the livestock holding pens, those that might cause injury to animals.
- 9. Describe the establishment's responsibilities for animals that are withheld from slaughter for longer than 24 hours.
- 10. 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

- 9CFR 313: Humane Slaughter of Livestock
 9CFR 352.10: Exotic Animals; Voluntary Inspection. Ante-mortem inspection
- 2. Employee Development Guide
- 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 12-05: "Documentation of Humane Handling Activities"
- 8. Federal Register Notice Docket No. 04-013N A Systematic Approach to Humane Handling
- 9. 9 CFR 352: Exotic Animals and Horses; Voluntary Inspection

- 10. Poultry Products Inspection Act Section 453(g)(5).
- 11. 9 CFR 381.65 (b): Poultry Products Inspection Regulations
- 12. Federal Register Notice, Docket No. 04-037N, Treatment of Live Poultry Before Slaughter
- 13. FSIS Directive 7000.1 Verification of Non-Food Safety Consumer Protection Regulatory Requirements

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. An important responsibility of yours is to monitor plant facilities and the activities of plant personnel to assure compliance with this law. 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. 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. 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 which is intimately associated with the ritual slaughter cut. Examples of ritual slaughter include Jewish (Kosher) slaughter and Islamic (Halal) slaughter.

Livestock pens, driveways and ramps

Establishment personnel are required to meet the regulatory requirements for humane handling and slaughter of livestock from the time the livestock are in the queue for slaughter until the point at which the animal becomes a carcass. 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. 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.

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 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 market hogs 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.

Disabled animals or those unable to move will be segregated into the covered suspect pen. The Regulations strictly prohibit the dragging of a conscious animal that is 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 but 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 methods

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 -CO₂)
- Mechanical (captive bolt)
- Mechanical (gunshot)
- Electrical (electrical current)

Carbon dioxide gas (CO2) is approved for rendering swine, sheep, and calves unconscious. 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. 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 CO2 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, CO₂ 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 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 gasproducing and control equipment must be maintained in good repair and all indicators, instruments, and measuring devices must be available for inspection by FSIS.

There are two types of mechanical captive bolt stunners that may be used to produce immediate unconsciousness in cattle, sheep, goats, swine, horses, mules, and other equines. Both types have gun-type mechanisms that fire a bolt or shaft out of a muzzle. The bolt is discharged or propelled by a measured charge of gunpowder (a blank cartridge) or by accurately controlled compressed air. 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.

Captive bolts 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. 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. The brain from animals stunned with penetration captive bolts may be saved for edible purposes provided the establishment removes the large blood clots, bone splinters, hair, and debris from the brain.

Since the finding of a Bovine Spongiform Encephalopathy (BSE) positive cow 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 utilize the non-penetration 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 intercranial pressure.

Another type of mechanical device used for stunning is the firearm. It can be used on cattle, calves, sheep, goats, swine, horses, and mules. 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, it must use one of the following types of projectiles:

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

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.

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 induces a gran mal epileptic seizure and cardiac fibrillation 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). And 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.

An important aspect of effective stunning is 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. Therefore, when verifying stunning effectiveness, it is necessary to also consider the method of restraint used during the stunning process and the effect it has on stunning accuracy.

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. Once the ritual cut is completed, the religious exemption ends. All animals must be unconscious or insensible to pain prior to any dressing procedures. It will by your responsibility to verify that ritually slaughtered animals are insensible to pain prior to any additional actions taken to process or dress the animals.

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 actions will depend on how establishment managers respond to the inhumane handling.

The regulations (9 CFR 313.50) give specific direction as to how you are to address humane handling noncompliances. You would start by notifying establishment managers of the inhumane handling noncompliance, if you hadn't already done so when addressing the needs of the animal. 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 appropriate place.

If the cause of inhumane treatment is the result of facility deficiencies, disrepair, or equipment breakdown, attach the 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 cause of inhumane treatment is the result of establishment employee actions in the handling or moving of livestock, 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 until satisfactory assurances are given by the establishment operator that there will not be a 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 cause of inhumane treatment is the result of improper stunning, attach the tag to the stunning area. Stunning procedures shall not be resumed until you receive satisfactory assurances from the establishment operator that there will not be a 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 should document the incident on a Noncompliance Record (NR), with a copy to be sent to the District Office.

FSIS Directive 6900.2 Revision 1: Humane Handling and Slaughter of Livestock was issued in November 2003. This directive informs inspection program personnel of the requirements, verification activities, and enforcement actions for ensuring that the handling and slaughter of livestock, including the slaughter of livestock by religious ritual methods, is humane. This directive explains how inspection program personnel should approach these activities.

A recent Agency issuance addressing humane handling and slaughter of livestock is Federal Register (FR) Docket No 04-013N Humane Handling and Slaughter Requirements and the Merits of a Systematic Approach to Meet Such Requirements, issued on September 9, 2004. This FR notice describes current Agency thinking about a systematic approach to humane handling and slaughter of livestock. It provides company managers with a step by step procedure that can be used to best assure compliance with the HMSA, FMIA and implementing regulations. Recognize that industry implementation of this systematic approach is voluntary, not mandatory, at this time.

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. Examples of egregious humane handling violations could include:

- making cuts on or skinning conscious animals,
- excessive beating or prodding of ambulatory or non-ambulatory disabled animals,
- dragging conscious animals,

- driving animals off semi-trailers over a drop off without providing adequate unloading facilities (animals are falling to the ground),
- running equipment over animals,
- stunning of animals and then allowing them to regain consciousness, or
- disabled livestock left exposed to adverse climate conditions while awaiting disposition.
- Any other condition or action that intentionally causes unnecessary pain and suffering to animals, including situations on trucks.

This list is just an example of some activities that could be considered egregious, but by no means is exhaustive. Each inhumane activity needs to be assessed individually by the IIC. Although the IIC is authorized to take the immediate suspension if the situation warrants it, according to FSIS Directive 6900.2 Rev. 1, Agency policy is that you should initiate a regulatory control action (RCA) by placing a U.S. Retain/Reject tag on the alleyways leading to the stunning area or on stunning box, as appropriate, inform establishment managers that you need to contact the District Office, and that animals cannot be stunned until further notice. Immediately contact the District Office, either the District Veterinary Medical Specialist (DVMS) or Deputy District Manager/District Manager, for further direction. Make certain that you also keep the Frontline Supervisor informed of the situation. District Office personnel, in consultation with you, will determine if a Suspension without Prior Notification is warranted. You will be responsible for informing establishment managers of the suspension and District Office personnel will generate the suspension documentation.

You will also be responsible for documenting a NR for the egregious humane handling violation. This NR will form the basis of the Suspension documentation 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.

Although the Rules of Practice, 9 CFR 500.4, do not provide for suspension with prior notification for inhumane handling or slaughter, it is possible for a Notice Of Intended Enforcement to be issued for repetitive non-egregious humane handling noncompliances. Should you or other in-plant personnel document repetitive humane handling noncompliances, contact your immediate supervisor and the DVMS. They will work with you to develop the documentation for issuance of a NOIE, if that action is determined to be appropriate, or to work for an effective resolution of the humane handling issues.

Exotic species

Exotic animals (voluntary inspection) are covered under 9 CFR 352.10. This section includes regulatory guidance that addresses humane handling during antemortem inspection and stunning practices to render the animals unconscious. 9 CFR Part 352.10 states that "Humane handling of an exotic animal during antemortem inspection shall be in accordance with the provisions contained in 9 CFR 313.2", and 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."

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).

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 scalder die from suffocation, not from slaughter and are therefore considered to be adulterated and unfit for human food. These cadavers are automatically condemned on postmortem inspection per 9 CFR 381.90.

As stated above, live poultry should be treated in a manner that is consistent with good commercial practices. Historically, the Agency has accepted the industry's determination of good commercial practices. Some of the most commonly used are the National Chicken Council's "Animal Welfare Guidelines" and the National Turkey Federation's "Animal Care Best Management Practices for the Production of Turkeys". Current Agency policy is that these guidelines are so well established within the poultry industry that they accepted as GCPs for all federally inspected poultry establishments.

IPP assigned to poultry slaughter facilities are expected to randomly and regularly observe the live hang and bleed areas to verify compliance with 9 CFR 381.65(b). A Humane Interactive Knowledge Exchange—01-05—has been issued 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 must be taken by in-plant personnel when noncompliance with regulatory requirements is observed. Directive 7000.1 Verification of Non-Food Safety Consumer Protection Regulatory Requirements was issued. As part of that Directive, ISP task code 04C04

was assigned to verification of poultry GCPs (among other tasks). In-plant personnel were directed to verify conformance with good commercial practices for poultry slaughter that comply with 9 CFR 381.65 (b), (i.e., thorough bleeding of the carcasses, ensuring that breathing has stopped prior to scalding, and that blood from the killing operation is confined to a relatively small area). Violations of the poultry GCP regulatory requirements must be documented on a NR using ISP task code 04C04 with the "economic" trend indicator.

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.

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.
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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