

February 2010

# HUMANE METHODS OF SLAUGHTER ACT

## Actions Are Needed to Strengthen Enforcement



Highlights of [GAO-10-203](#), a report to congressional requesters

# HUMANE METHODS OF SLAUGHTER ACT

## Actions Are Needed to Strengthen Enforcement

### Why GAO Did This Study

Concerns about the humane handling and slaughter of livestock have grown; for example, a 2009 video showed employees at a Vermont slaughter plant skinning and decapitating conscious 1-week old veal calves. The Humane Methods of Slaughter Act of 1978, as amended (HMSA) prohibits the inhumane treatment of livestock in connection with slaughter and requires that animals be rendered insensible to pain before being slaughtered. The U.S. Department of Agriculture's (USDA) Food Safety and Inspection Service (FSIS) is responsible for HMSA.

GAO was asked to (1) evaluate FSIS's efforts to enforce HMSA, (2) identify the extent to which FSIS tracks recent trends in resources for HMSA enforcement, and (3) evaluate FSIS's efforts to develop a strategy to guide HMSA enforcement. Among other things, GAO received survey responses from inspectors at 235 plants and examined a sample of FSIS noncompliance reports and suspension data for fiscal years 2005 through 2009.

### What GAO Recommends

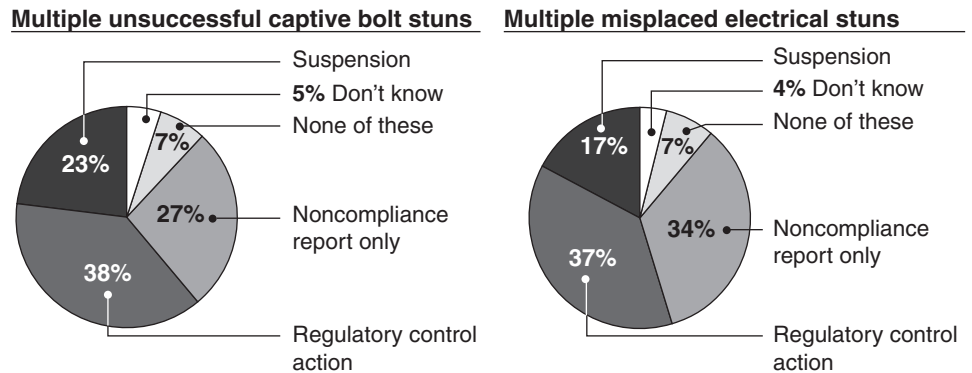
GAO is making recommendations to strengthen HMSA enforcement by, for example, establishing specific guidance on actions to take for HMSA violations. In commenting on a draft of this report, USDA did not state whether it agreed or disagreed with GAO's findings or recommendations. However, it stated that it plans to use them in improving efforts to enforce HMSA.

View [GAO-10-203](#) or [key components](#). To view survey results online click on [GAO-10-244SP](#). For more information, contact Lisa Shames at (202) 512-3841 or [shamesl@gao.gov](mailto:shamesl@gao.gov).

### What GAO Found

GAO's survey results and analysis of FSIS data suggest that inspectors have not taken consistent actions to enforce HMSA. Survey results indicate differences in the enforcement actions that inspectors would take when faced with a humane handling violation, such as when an animal was not rendered insensible through an acceptable stunning procedure by forcefully striking the animal on the forehead with a bolt gun or properly placing electrical shocks. Specifically, as shown below, 23 percent of inspectors reported they would suspend operations for multiple unsuccessful stuns with a captive bolt gun whereas 27 percent reported that they would submit a noncompliance report. GAO's review of noncompliance reports also identified incidents in which inspectors did not suspend plant operations or take regulatory actions when they appeared warranted. The lack of consistency in enforcement may be due in part to the lack of clarity in current FSIS guidance and inadequate training. The guidance does not clearly indicate when certain enforcement actions should be taken for an egregious act—one that is cruel to animals or a condition that is ignored and leads to the harming of animals. A noted humane handling expert has stated that FSIS inspectors need clear directives to improve consistency of HMSA enforcement. According to GAO's survey, FSIS's training may be insufficient. For example, inspectors at half of the plants did not correctly answer basic facts about signs of sensibility. Some private sector companies use additional tools to assess humane handling and improve performance.

Percentage of Inspectors Identifying Enforcement Actions for Stunning



Source: GAO analysis of survey results.

FSIS cannot fully identify trends in its inspection funding and staffing for HMSA, in part because it cannot track HMSA inspection funds separately from the inspection funds spent on food safety activities. FSIS also does not have a current workforce planning strategy for allocating limited staff to inspection activities, including HMSA enforcement. FSIS has strategic, operational, and performance plans for its inspection activities but does not clearly outline goals, needed resources, time frames, or performance metrics and does not have a comprehensive strategy to guide HMSA enforcement.

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## **Abbreviations**

DVMS	district veterinary medical specialist
FSIS	Food Safety and Inspection Service
FTE	full-time equivalent
HMSA	Humane Methods of Slaughter Act of 1978
USDA	U.S. Department of Agriculture

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United States Government Accountability Office  
Washington, DC 20548

February 19, 2010

The Honorable Darrell E. Issa  
Ranking Member  
Committee on Oversight and Government Reform  
House of Representatives

The Honorable Dennis J. Kucinich  
Chairman  
Subcommittee on Domestic Policy  
Committee on Oversight and Government Reform  
House of Representatives

Concerns about the humane handling and slaughter of livestock have increased in recent years, particularly after a widely publicized video in 2008 of actions at a slaughter plant in California. The 2008 video showed employees at the plant delivering electric shocks to nonambulatory cows, spraying them with high-pressure water hoses, and ramming them with a forklift to force them to rise for slaughter. The U.S. Department of Agriculture (USDA) suspended operations at the California plant, citing the egregious nature of its actions and its failure to maintain and implement controls to prevent the inhumane handling and slaughter of nonambulatory cows at the facility. More recently, in October 2009, USDA received a video recording of employees at a Vermont slaughter plant that shows employees skinning and decapitating conscious veal calves, which are about 1-week old. USDA and the state of Vermont suspended the operating licenses for this plant, effectively shutting down operations, pending the results of an ongoing investigation. Such actions may violate the Humane Methods of Slaughter Act of 1978, as amended (HMSA). HMSA prohibits the inhumane treatment of livestock in slaughter plants and generally requires that animals be rendered insensible—typically referred to as stunning—before proceeding with slaughter.

USDA's Food Safety and Inspection Service (FSIS) is responsible for ensuring the safety of meat and other products in the United States, as well as for enforcing HMSA. Since 2002, Congress has urged USDA to fully enforce HMSA, directed it to enhance staffing for HMSA-related inspections and enforcement, and designated funding to develop and maintain a system for tracking the amount of time that inspectors spend on HMSA enforcement.

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We have previously reported on weaknesses in FSIS's management of HMSA, particularly its reporting of violations and use of inconsistent criteria for enforcement.<sup>1</sup> In 2004, we recommended that FSIS take several actions to improve HMSA oversight, including providing informative data on HMSA violations and assessing whether FSIS resources are sufficient to effectively enforce the act. In 2008, USDA's Office of Inspector General reported that FSIS management controls over preslaughter activities could be strengthened to minimize the possibility of egregious humane handling events.<sup>2</sup>

In this context, you asked us to (1) evaluate FSIS's efforts to enforce HMSA, (2) identify the extent to which FSIS tracks recent trends in FSIS inspection resources for enforcing HMSA, and (3) evaluate FSIS's efforts to develop a strategy to guide HMSA enforcement.

To evaluate FSIS's efforts to enforce HMSA, we examined a sample of FSIS noncompliance reports, suspension data, and district veterinary medical specialist reports in all 15 of FSIS's district offices for fiscal years 2005 through 2009. To assess the reliability of these data, we examined the data for obvious errors in completeness and accuracy, reviewed existing documentation about the systems that produced the data, and questioned knowledgeable officials about the data and systems. We determined that the data were sufficiently reliable for the purposes of this report, with any limitations noted in the text. From May 2009 through July 2009, we also surveyed inspectors-in-charge—those responsible for reporting on humane handling enforcement in the plants—from a random sample of inspectors-in-charge at 257 livestock slaughter plants. We selected the sample of 257 plants, stratified by size, from a universe of 782 plants, and then surveyed inspectors-in-charge at the sample plants. Our sample allows us to make estimates about the observations and opinions of all inspectors-in-charge at U.S. slaughter plants. We obtained an overall

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<sup>1</sup>GAO, *Humane Methods of Slaughter Act: USDA Has Addressed Some Problems but Still Faces Enforcement Challenges*, [GAO-04-247](#) (Washington, D.C.: Jan. 30, 2004). Also, see GAO, *Humane Methods of Handling and Slaughter: Public Reporting on Violations Can Identify Enforcement Challenges and Enhance Transparency*, [GAO-08-686T](#) (Washington, D.C.: Apr. 17, 2008).

<sup>2</sup>U.S. Department of Agriculture, Office of Inspector General, Great Plains Region, *Audit Report: Evaluation of FSIS Management Controls Over Pre-Slaughter Activities*, Report No. 24601-0007KC (November 2008).

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survey response rate of 93 percent.<sup>3</sup> This report does not contain all of the results from our survey. The survey can be viewed at [GAO-10-244SP](#). We also met with key officials from FSIS's Office of Field Operations who are responsible for implementing HMSA at the headquarters level. To understand district officials' perspectives on HMSA enforcement, we conducted semistructured interviews with each of FSIS's 15 district veterinary medical specialists (DVMS) and 15 district managers. We also obtained the views of experts in humane handling to understand key principles of humane handling techniques and enforcement. In particular, we consulted with Dr. Temple Grandin, a world-renowned expert on animal welfare, who provided her expert opinion on particular humane handling incidents we identified as possible HMSA violations.<sup>4</sup> To identify the extent to which FSIS tracks recent trends in inspection resources for enforcing HMSA, we reviewed FSIS funding and staffing data for each district. We also conducted semi-structured interviews with resource management analysts in each of FSIS's 15 district offices and interviewed key officials in the Resource Management and Planning Office within the Office of Field Operations. To assess FSIS's efforts to develop a strategy to enforce HMSA, we reviewed relevant FSIS strategies, including the most recent *FSIS Strategic Plan FY 2008 through FY 2013*, the *Office of Field Operations' Workforce Plan*, and other relevant planning documents. A more detailed description of our objectives, scope, and methodology is presented in appendix I.

We conducted this performance audit from October 2008 to February 2010, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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<sup>3</sup>All full sample percentage estimates from the survey have margins of error at the 95 percent confidence level of plus or minus 7 percentage points or less, unless otherwise noted. Percentage estimates by plant size have margins of error at the 95 percent confidence level of plus or minus 10 percentage points or less, unless otherwise noted.

<sup>4</sup>Dr. Grandin has served as a consultant to industry and FSIS, written extensively on modern methods of livestock handling, and has designed slaughter facilities that have helped improve animal welfare in the United States.



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## Background

In 2008, the most recently available data, more than 153 million cattle, sheep, hogs, and other animals ultimately destined to provide meat for human consumption were slaughtered at about 800 slaughter plants throughout the United States that engage in interstate commerce. Under federal law, meat-processing facilities that engage in interstate commerce must have federal inspectors on site. FSIS classifies plants according to size and the number of employees. Specifically, large plants have 500 or more employees; small plants have from 10 to 499 employees; and very small plants have fewer than 10 employees, or annual sales of less than \$2.5 million. Under HMSA, FSIS inspectors are to ensure that animals are humanely treated from the moment they arrive at a plant until they are slaughtered. FSIS deploys these inspectors from 15 district offices nationwide. Figure 1 shows the states and territories in each FSIS district.

**Figure 1: States and Territories Covered by FSIS District Offices**



Sources: GAO analysis of FSIS data; Map Resources (map).

After livestock arrive at a slaughter plant, plant employees monitor their movements as they are unloaded from trucks to holding pens and eventually led into the stunning chute. Plant employees typically restrain an animal in the chute and stun it by using one of several devices—carbon dioxide gas, an electrical current, a captive bolt gun,<sup>5</sup> or a gunshot—that, as required by HMSA regulations, is rapid and effective in rendering the

<sup>5</sup>A captive bolt gun contains a steel bolt—powered by either compressed air or a blank cartridge—that is driven into an animal’s brain and then retracted into the gun, which resets the bolt for the next animal. This gun has the same effect as a gun with live bullets but is safer than a firearm.

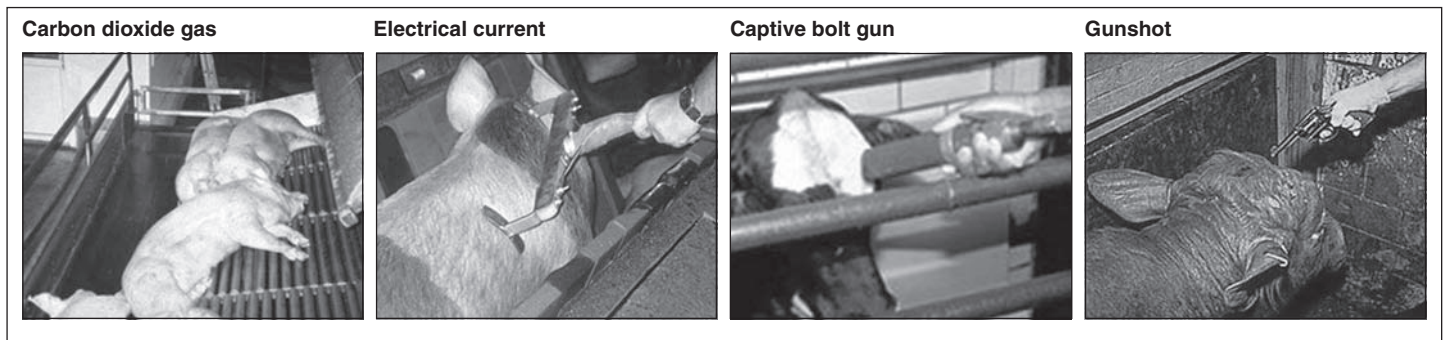
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animal insensible. (See fig. 2.) Under HMSA, animals must be rendered insensible—that is, unable to feel pain—on the first stun before being shackled, hoisted on the bleed rail, thrown, cast, or cut. According to the expert we consulted, animals on the bleed rail that exhibit any of the following signs are considered sensible and would therefore be need to be restunned:

- natural blinking,
- lifting head straight up and keeping it up (righting reflex),
- rhythmic breathing, and
- vocalizing.

Figure 2 shows stunning methods consistent with HMSA.

**Figure 2: Stunning Methods Consistent with HMSA**



Source: FSIS "Humane Handling Basics."

Once the animals are considered stunned, they are shackled and hoisted onto a processing line, where their throats are cut, and they are fully bled before processing continues. HMSA exempts only ritual slaughter, such as kosher and halal slaughter, from the HMSA requirement that animals be rendered insensible on the first blow. See appendix II for a more detailed description of the movement of livestock through the plant.

FSIS has issued a variety of regulations and directives instructing FSIS inspectors on how to enforce HMSA. Overall, the regulations emphasize the minimization of "excitement and discomfort" to the animals and require that they are effectively stunned before being slaughtered. In 2003, FSIS guidance on humane handling enforcement stated that inspectors

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were to determine whether a humane handling incident does, or will immediately lead to, an injured animal or inhumane treatment. The guidance also specified the types of actions inspectors should take when these situations occur. Also in 2003, FSIS began providing “humane interactive knowledge exchange” scenarios as an educational tool to enhance inspectors’ understanding of appropriate enforcement actions. These eight written scenarios, available on FSIS’s Web site, provide examples of inhumane incidents and suggest enforcement actions.

In 2005, the agency issued additional guidance specifying egregious humane handling situations.<sup>6</sup> This guidance defines egregious as any act that is cruel to animals or a condition that is ignored and leads to the harming of animals. The guidance provided the following examples of egregious acts:

- making cuts on or skinning conscious animals,
- excessively beating or prodding ambulatory or nonambulatory disabled animals,
- dragging conscious animals,
- driving animals off semitrailers over a drop-off without providing adequate unloading facilities so that animals fall to the ground,
- running equipment over animals,
- stunning animals and then allowing them to regain consciousness,
- leaving disabled livestock exposed to adverse climate conditions while awaiting disposition, or
- otherwise intentionally causing unnecessary pain and suffering to animals.

If inspectors determine that an egregious humane handling incident has occurred, they may suspend inspection at the plant immediately, effectively shutting down the plant’s entire operation, and determine corrective actions with plant management and the district office.

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<sup>6</sup>U.S. Department of Agriculture, Food Safety and Inspection Service, FSIS Notice 12-05, *Documentation of Humane Handling Activities* (Feb. 18, 2005).

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In 2008, after the reported inhumane handling incident in California, which was at the Westland/Hallmark plant, FSIS expanded its guidance to include two more examples of egregious actions for which inspectors may suspend a plant: (1) multiple failed stuns, especially in the absence of corrective actions, and (2) dismemberment of live animals.

According to FSIS guidance, when FSIS inspectors observe a violation of HMSA or its implementing regulations and determine that animals are being injured or treated inhumanely, they are to take both of the following enforcement actions, which may restrict a facility's ability to operate:

- *Issue a noncompliance report.* This report documents the humane handling violation and the actions needed to correct the deficiency in cases where the animal may be injured or harmed. Inspectors are also directed to notify plant management when issuing a noncompliance report.
- *Issue a regulatory control action.* Inspectors place a regulatory control action or a reject tag on a piece of equipment or an area of the plant that was involved in harming or inhumanely treating an animal. This tag is used to alert plant management to the need to quickly respond to violations that they can readily address. The tag prohibits the use of a particular piece of equipment or area of the facility until the equipment is made acceptable to the inspector.

When inspectors determine that an egregious humane handling incident has occurred, in addition to issuing a noncompliance report and regulatory control action, FSIS may also take the following actions:

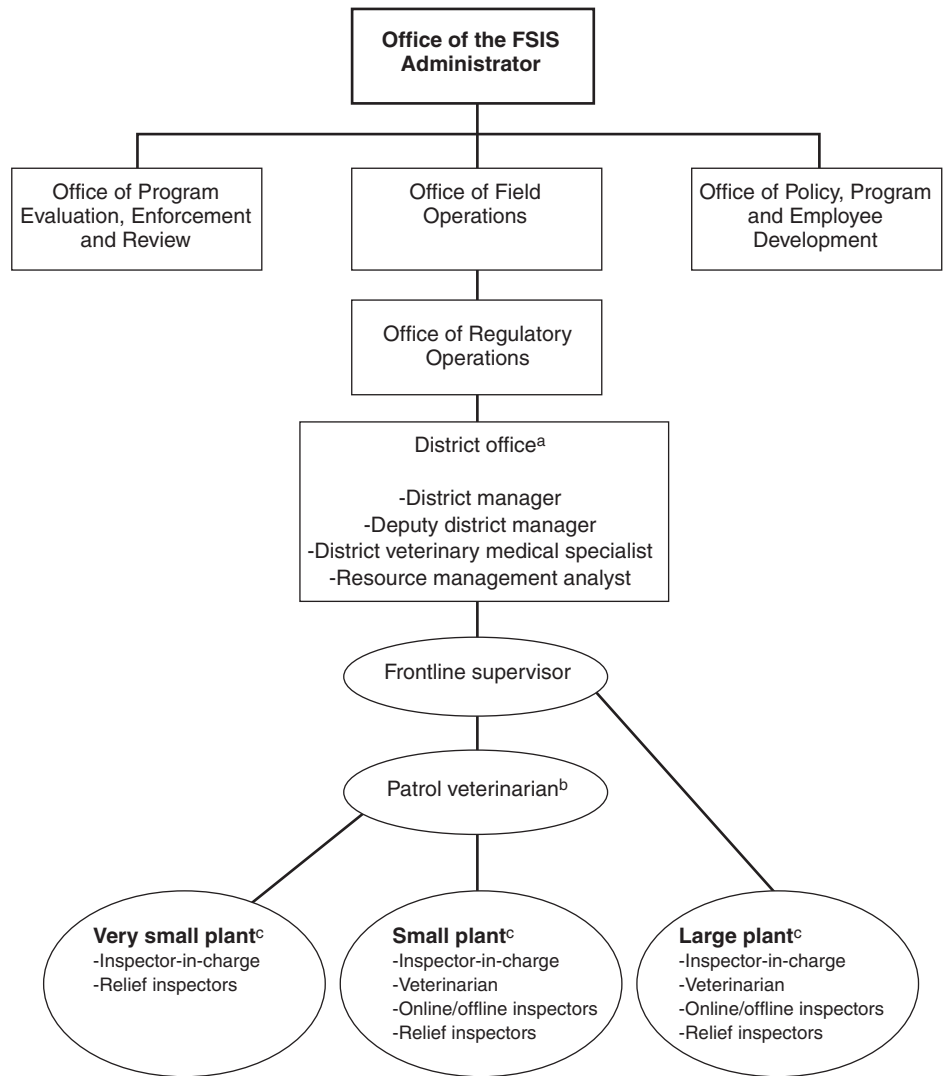
- *Suspend plant operations.* An on-site FSIS supervisor—known as an inspector-in-charge—can initiate an action to suspend plant operations when an inspector observes egregious abuse to the animals. The inspector must document the facts that serve as the basis of the suspension action in a written memorandum of interview and promptly provide that information electronically to district officials. Ultimately, district officials assess the facts supporting the suspension, take any final action, and notify officials in headquarters.
- *Withdraw the plant's grant of inspection.* If the plant fails to respond to FSIS's concerns about repeated and/or serious violations, the district offices may decide to withdraw all inspectors. Without FSIS inspectors on site, the plant's products cannot enter interstate or foreign commerce. The FSIS Administrator may file a complaint to withdraw the plant's grant of inspection and if the grant of inspection is withdrawn, the plant must then

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reapply for and be awarded a grant of inspection before it may resume operations.

FSIS employs inspectors at plants and in FSIS districts to help enforce HMSA and its food safety inspections. In the plant, FSIS employs inspectors-in-charge, online and offline inspectors, and relief inspectors. Inspectors-in-charge are the chief inspectors in the plant and may or may not be veterinarians. These inspectors are responsible for reporting humane handling activities for each shift, as well as carrying out food safety responsibilities, and making enforcement decisions in consultation with district officials when necessary. Online inspectors are typically assigned specific duties on the slaughter line, such as inspecting carcasses and animal heads; however, they may also perform some humane handling inspection duties as well. Offline inspectors conduct a variety of inspection activities throughout the plant and may also perform some humane handling inspection activities. FSIS also employs permanent relief inspectors, who step in for plant inspectors who are absent for a period of time, and may also observe humane handling. The plant inspectors and the inspectors-in-charge are supervised by frontline supervisors, who oversee multiple plants. Each plant has at least one FSIS veterinarian who is responsible for examining livestock prior to slaughter and performing humane handling activities. Some plants may require two veterinarians, depending on the volume of animals slaughtered at the plant and the number of operating shifts. Figure 3 provides an overview of FSIS personnel involved in the enforcement of HMSA.

**Figure 3: Key FSIS Inspection Personnel Involved in HMSA Enforcement**



Source: GAO analysis of FSIS data.

<sup>a</sup>FSIS has a total of 15 district offices.

<sup>b</sup>Patrol veterinarians typically perform veterinarian duties at small and very small plants that do not have veterinarians.

<sup>c</sup>Three plants are shown for illustrative purposes only. A frontline supervisor may supervise more than one plant. According to FSIS documents, a very small plant has fewer than 10 employees; a small plant has 10 to 499 employees; and a large plant has 500 or more employees.

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Although FSIS does not require inspectors to observe the entire handling and slaughter process during a shift, it requires inspectors-in-charge to record the amount of time that the FSIS inspectors collectively devoted to observing humane handling during one shift. The inspectors-in-charge enter this information into a data tracking system known as the Humane Activities Tracking System.

At the district level, the DVMS in each of FSIS's 15 districts serves as the liaison between the district office and headquarters on all humane handling matters. These employees are directed to visit each plant within their district over a 12- to 18-month period and review the humane handling practices at each plant. DVMSs may also coordinate the verification of humane handling activities and educate plant inspectors on relevant humane handling information in directives, notices, and other information from headquarters through the district office to inspectors in the field.

Industry groups and animal welfare organizations have recently recommended actions to improve HMSA enforcement. As an expert witness, in 2008 testimony, Dr. Grandin proposed that FSIS guidance on humane handling be clearer—especially in determining when humane handling incidents at slaughter plants should be considered egregious violations of the HMSA.<sup>7</sup> She has also suggested that FSIS adopt a numerical scoring system—which has been adopted by the American Meat Institute—to determine how well animals were being stunned and handled at the plants. The system has different standards for different species of animal and can be adjusted to fit plants that slaughter fewer animals. Overall, the system seeks to reduce the subjective nature of inspections by using objective measures to help slaughter plants improve their humane handling performance. In addition, the Humane Society of the United States has proposed a variety of reforms to strengthen HMSA enforcement, including requiring FSIS inspectors to observe the entire humane handling and slaughter process during a shift.

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<sup>7</sup>Dr. Temple Grandin, testimony before the Domestic Policy Subcommittee, House Committee on Oversight and Government Reform, *“After the Beef Recall: Exploring Greater Transparency in the Meat Industry”* (Washington, D.C: Apr. 17, 2008).



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## Weaknesses Persist in FSIS's Enforcement, Training and Guidance, and Data Management

According to our survey results and analysis of FSIS data, inspectors have not taken consistent actions to enforce HMSA once they have identified a violation. These inconsistencies may be due, in part, to weaknesses in FSIS's guidance and training for key inspection staff. While FSIS expects its inspectors to use their professional judgment based on the guidance in deciding enforcement actions, industry and others are using other tools to assist their efforts to improve humane handling performance. Furthermore, although FSIS has taken steps to correct data weaknesses in HMSA reporting that we noted in 2004, it has not used these data to analyze HMSA enforcement across districts and plants to identify inconsistent enforcement. For these reasons, FSIS cannot ensure that it is preventing the abuse of livestock at slaughter plants or that it is meeting its responsibility to fully enforce HMSA.

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## GAO Survey Results and FSIS Data Indicate Inconsistent Enforcement

According to FSIS officials, inspectors are to use their judgment in deciding whether to suspend a plant's operations or take the less stringent enforcement action (that is, issue a noncompliance report and a regulatory control action) when a humane handling violation occurs. For example, FSIS guidance is unclear on what constitutes excessive electrical prodding, such as the number of times an animal can be prodded before the inspector should consider the prodding to be excessive and therefore egregious. According to FSIS's guidance, if the inspector determines that the action was egregious, the inspector may also choose to suspend plant operations but is not required to do so.

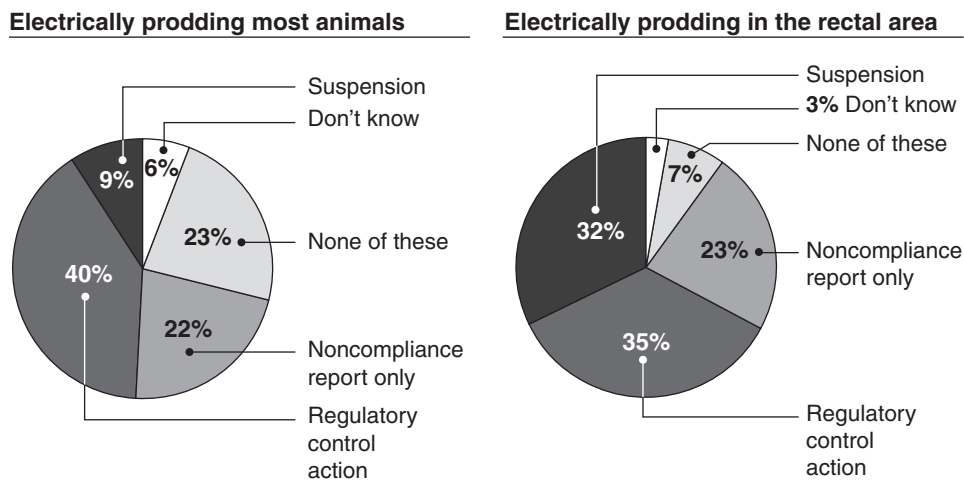
U.S. meat industry representatives have expressed concerns in interviews about the inconsistency of HMSA enforcement across districts. For example, according to American Meat Institute officials, the inconsistency in HMSA enforcement is the single most critical issue for the industry; furthermore, one official noted that a number of the differences in interpretation of HMSA compliance are related to determining whether or not an animal is sensible after stunning. In addition, the expert we consulted testified in April 2008 that FSIS inspectors need better training and clear directives to improve consistency of HMSA enforcement.<sup>8</sup>

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<sup>8</sup>Dr. Temple Grandin, testimony before the Domestic Policy Subcommittee, House Committee on Oversight and Government Reform, "After the Beef Recall: Exploring Greater Transparency in the Meat Industry" (Washington, D.C. Apr. 17, 2008).

Our survey results indicate differences in the enforcement actions that inspectors reported they would take when faced with a humane handling violation. In our survey, we asked inspectors their views on electrically prodding over 50 out of 100 animals. Figure 4 shows the inspectors' responses to questions concerning electrical prodding. Under FSIS's guidance, inspectors are directed to issue a noncompliance report and take a regulatory control action in cases of excessive electrical prodding, but suspension is not required. However, the expert we consulted told us that she considers these cases to be egregious humane handling violations that should result in suspensions. In addition, according to an FSIS training scenario, electrical prods are never to be used on the anus, eyes, or other sensitive parts of the animal.

**Figure 4: Percentage of Inspectors Identifying Which Enforcement Action They Would Take for Electrical Prodding**



Source: GAO analysis of survey results.

Notes: This figure is based on the following survey question: "Do you believe that each of the following factors alone generally indicates that an establishment's action should result in a (1) suspension, (2) regulatory control action, (3) noncompliance report, or (4) none of these?" These factors included electrically prodding over 50 of 100 animals within acceptable voltage and electrically prodding one animal deliberately in the rectal area.

Percentages may not total 100 percent due to rounding.

As figure 4 shows, 49 percent of the inspectors surveyed reported that they would either take a regulatory control action, such as placing a reject tag on a piece of equipment or suspending a plant's operations for electrical prodding of most animals, and 29 percent reported that they would take none of these actions or did not know what action to take for electrical prodding most animals. Furthermore, 67 percent of the inspectors

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surveyed reported that they would either take a regulatory control action or suspend operations for electrical prodding in the rectal area, and 10 percent reported that they would take none of these actions or did not know what action to take for electrical prodding in the rectal area. FSIS regulations prohibit electrical prodding that the inspector considers to be excessive.<sup>9</sup> FSIS guidance also states that excessive beating or prodding of ambulatory or nonambulatory disabled animals is egregious abuse—and may therefore warrant suspension of plant operations. From inspectors' compliance reports, we identified several specific incidents in which inspectors did not either take a regulatory control action or suspend plant operations. For example:

- In 2008, in the Denver district, the FSIS inspector reported observing a plant employee excessively using an electrical prod as his primary method to move the cattle—using the prod approximately 55 times to move about 46 head of cattle into the stun box. Cattle vocalized at least 15 times, which the inspector believed indicated a high level of stress. The FSIS inspector stated that this incident constituted excessive use of the electrical prod. As stated in FSIS guidance, excessive use of an electrical prod is an egregious violation that calls for the issuance of both a noncompliance report and a regulatory control action and for which an inspector may suspend plant operations. In this instance, the inspector stated that he had issued a noncompliance report. The inspector did not state that he took a regulatory control action and did not suspend operations at the plant, as the guidance allows. In the opinion of the expert we consulted, this was an egregious instance that should have resulted in a suspension.
- In 2007, in the Minneapolis district, an FSIS inspector reported observing plant employees using the electrical prods excessively to move hogs into the stunning chute. The animals became excited, jumping on top of one another, and vocalizing excessively. From the noncompliance report, it is unclear what, if any, regulatory actions were taken. According to FSIS regulations, electrical prods are to be used as little as possible in order to minimize excitement and injury; any use of such implements that an inspector considers excessive is prohibited.
- In 2008, in the Dallas district, the FSIS inspector reported that a plant employee used an electrical prod to repeatedly shock cows in the face and neck in an effort to turn them around in an overcrowded area. The

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<sup>9</sup>C.F.R. § 313.2(b).

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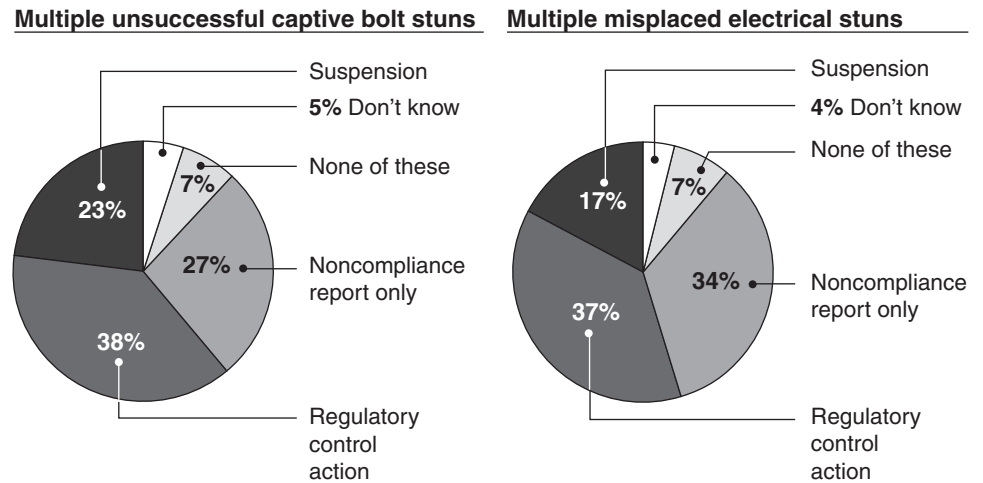
inspector deemed the use of the electrical prod excessive, but the report does not indicate whether any regulatory control action was taken.

With regard to stunning, our survey results and review of noncompliance records also show inconsistent enforcement actions when humane handling violations occurred. As figure 5 shows, 23 percent of inspectors reported they would suspend operations, while 38 percent would issue a regulatory control action for multiple unsuccessful captive bolt gun stuns. Similarly, 17 percent reported they would suspend operations for multiple misplaced electrical stuns, and 37 percent would issue a regulatory control action. According to FSIS guidance, egregious abuses that could result in a plant suspension include stunning animals and allowing them to regain consciousness and multiple attempts to stun an animal, especially in the absence of immediate corrective measures. However, it is unclear when a suspension is warranted, even if the acts are deemed to be egregious. FSIS's guidance simply states that an inspector-in-charge may immediately suspend the plant if there is an egregious humane handling violation—however, there is no clear directive to do so in guidance. In the opinion of the expert we consulted, if over 10 percent of the animals require a second shot or if over 5 percent of pigs had experienced an improperly placed electrical stun,<sup>10</sup> plant operations should be suspended. FSIS agreed that these incidents are troubling, and possibly egregious, but did not comment further. Figure 5 shows our survey results on stunning.

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<sup>10</sup>Electrical stuns must be properly placed on the animal to ensure effective stunning; that is, the current must go through the brain.

**Figure 5: Percentage of Inspectors Identifying Which Enforcement Action They Would Take for Stunning**



Source: GAO analysis of survey results.

Notes: This figure is based on survey question 11: “Do you believe that each of the following factors alone generally indicates that an establishment’s action should result in a (1) suspension, (2) regulatory control action, (3) noncompliance report, or (4) none of these?”

Percentages may not total 100 percent due to rounding.

We also identified several incidents in FSIS’s noncompliance reports in which inspectors did not suspend plant operations or take a regulatory control action. For example,

- In 2009, in the Raleigh district, a plant employee stunned a bull twice in the head with a captive bolt, but the bull remained sensible. Instead of restunning the animal with the captive bolt gun, the employee then drove a steel instrument used to sharpen knives into the open hole in the bull’s head in an attempt to make the animal insensible. The bull rose to its feet and vocalized in apparent pain until it was eventually rendered insensible with a bullet to the head. FSIS regulations do not recognize this steel instrument as an acceptable stunning method.<sup>11</sup> However the inspector placed a reject tag on the stun box and cited the incident as egregious in

<sup>11</sup>See 9 C.F.R. §§ 313.5, 313.15, 313.16, 313.30.

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the noncompliance report but did not suspend operations. In the opinion of the expert we consulted, this incident was an example of an egregious HMSA violation that should have resulted in a suspension.

- In 2008, in the Denver district, the inspector reported that the first attempt to stun a bull with a captive bolt stunner appeared to misfire, resulting in smoke and the smell of powder and no response by the bull.<sup>12</sup> A second stunning attempt appeared to render the bull unconscious in the stun box. However, it was followed by a third stunning attempt while the bull was still in the stun box. The employee then allowed the bull to roll out into the pit for shackling. The bull appeared unconscious but still was breathing rhythmically, indicating that the animal was still sensible. The employee then entered the pit and stunned the bull again and started conversing with another employee. The bull once again started breathing rhythmically while being shackled, a sign that the bull still had not been rendered insensible to pain as the law requires. In response, the DVMS asked the employee to stun the bull again, and this stun rendered the bull unconscious and no longer breathing rhythmically. According to the report, the plant received a noncompliance report, but no regulatory control action was taken, as called for by guidance. In the opinion of our expert consultant, a regulatory control action should have been taken in this case because of multiple stuns that left the animal breathing rhythmically.

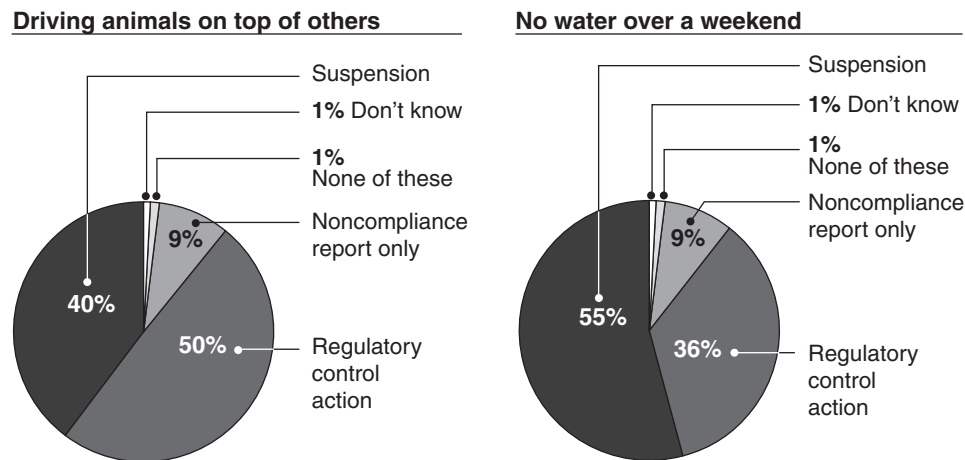
We also identified several other types of humane handling violations for which inspectors took inconsistent enforcement actions. For example, according to FSIS's regulations, animals are not to be moved from one area to another faster than a normal walking speed, with minimum excitement and discomfort. A faster speed could result in animals being driven over each other. Furthermore, animals in a holding pen are to have access to water and, if held longer than 24 hours, access to food. According to the expert we consulted, deliberately driving animals over the top of other others and failing to provide water for animals held over a weekend are egregious humane handling violations and, in her opinion, these actions should result in plant suspensions. However, as figure 6 shows, although most inspectors would take an enforcement action, including a regulatory control action, for these violations, 40 percent of inspectors surveyed would suspend plant operations for driving animals

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<sup>12</sup>The inspector's report did not indicate whether the original captive bolt stun gun was functioning properly.

over each other, and 55 percent would suspend plant operations for failing to provide water over a weekend.

**Figure 6: Percentage of Inspectors Identifying Which Enforcement Action They Would Take for Other Violations**



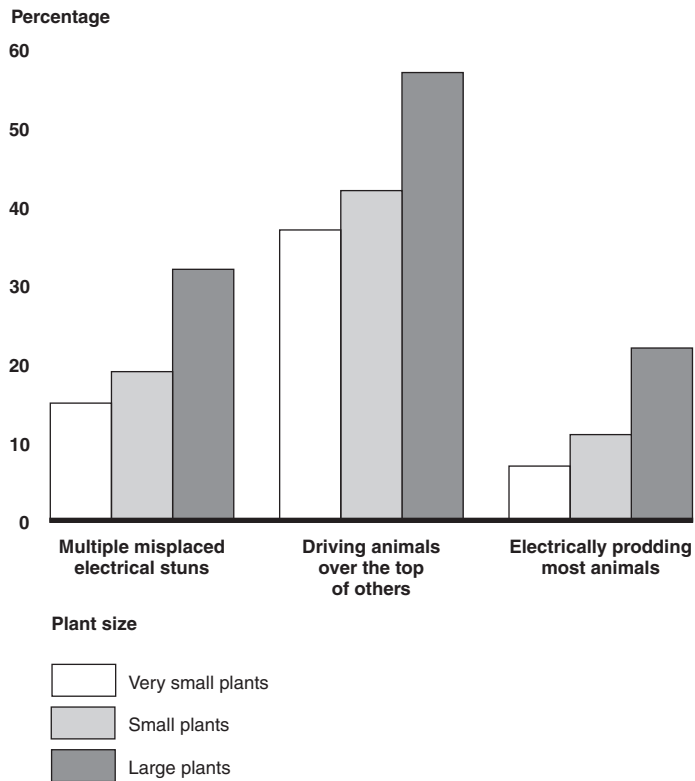
Source: GAO analysis of survey results.

Notes: This figure is based on survey question 11: "Do you believe that each of the following factors alone generally indicates that an establishment's action should result in a (1) suspension, (2) regulatory control action, (3) noncompliance report, or (4) none of these?"

Percentages may not total 100 due to rounding.

The lack of consistency in enforcement actions is highlighted by inspectors' responses to our question about when they would suspend plant operations. According to our survey results, less than one-third of the inspectors-in-charge in the very small and small plants reported that they would be likely to suspend plant operations for multiple incorrect placements of electrical stunners and electrical prodding of most animals. Inspectors-in-charge at large plants with more frequently reported plant suspensions had more stringent views on enforcement actions than those at very small plants. For example, inspectors-in-charge at large plants more frequently reported suspensions as the enforcement actions that should be taken compared with inspectors-in-charge at very small plants. Figure 7 illustrates three humane handling scenarios in which significant differences were observed between large and very small plants. For example, large plants were more likely than very small plants to suspend plant operations for multiple incorrect electrical stuns, driving animals over the top of others, and electrically prodding most animals.

**Figure 7: Percentage of Inspectors-in-Charge Identifying Suspension as the Appropriate Enforcement Action, by Plant Size**



Source: GAO analysis of survey results.

Notes: Inspectors-in-charge at large plants more frequently reported suspensions than inspectors-in-charge at very small plants for 6 out of the 14 humane handling scenarios presented in our survey. Estimates by plant size have a margin of error of less than 15 percentage points.

This figure is based on survey question 11: “Do you believe that each of the following factors alone generally indicates that an establishment’s action should result in a (1) suspension, (2) regulatory control action, (3) noncompliance report, or (4) none of these?”

We found similar indications of inconsistent enforcement across districts. According to our analysis of FSIS data, from calendar years 2005 through 2007, 10 districts of 15 FSIS districts—responsible for overseeing 44 percent of all animals slaughtered nationwide—suspended 35 plants for HMSA violations. The remaining 5 districts—responsible for overseeing 56 percent of all livestock slaughtered nationwide—did not suspend any plants.<sup>13</sup> For example, the Des Moines and the Chicago districts, which

<sup>13</sup>These five FSIS districts are Albany, Beltsville, Chicago, Des Moines, and Lawrence.



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oversee the first and second highest volume of livestock slaughtered nationwide, respectively, were among the 5 districts that had never issued a suspension until February 2008, according to our analysis.

Before 2008, these five districts issued noncompliance reports, sometimes with regulatory control actions, such as a reject tag on a piece of equipment, rather than suspending an entire plant's operations. For example, in 2007, in the Lawrence district, a hog was observed walking around the stunning chute grunting and bleeding from the mouth and forehead. The animal had been stunned improperly, and plant personnel stated that both stun guns were not working and were being repaired. Because the plant did not have an operable stun device, the animal suffered for at least 10 minutes while the plant repaired the gun. The FSIS inspector applied a reject tag to the stunning box; stunning operations in the area were halted until the plant had taken corrective actions, but the record did not state the amount of time that stunning was stopped. According to FSIS's guidance, however, stunning animals and then allowing them to regain consciousness is considered egregious.

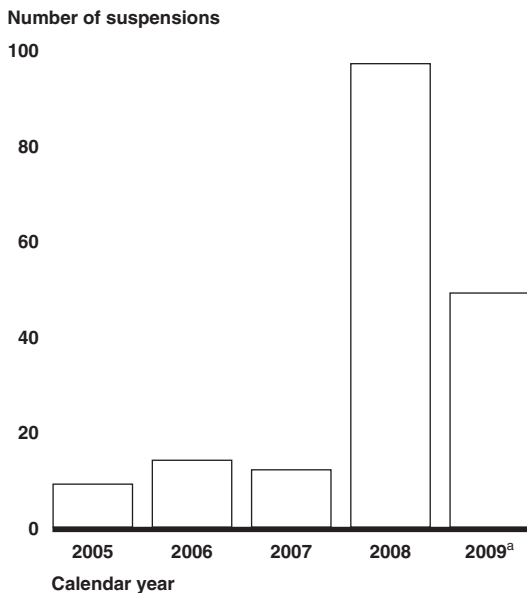
Suspensions increased overall following the February 2008 Westland/Hallmark incident in California. For calendar years 2007 and 2008, more than three-quarters of all suspensions were for stun-related violations for all districts. In the 10 districts that suspended operations for calendar years 2005 and 2006, over 40 percent of those suspensions were for stunning violations. (See app. III for detailed information on the number of HMSA enforcement actions over the period we reviewed.) Furthermore, following that incident, FSIS directed the inspectors to increase the amount of time they devoted to humane handling by 50 to 100 percent for March through May 2008. FSIS found that, when the amount of time spent on humane handling was increased, the number of noncompliance reports increased as well.

The Westland/Hallmark incident highlighted the problems that could occur when inspection staff inconsistently apply their discretion in determining which enforcement actions to take for humane handling violations. According to the USDA Inspector General's 2008 report that followed the Westland/Hallmark incident, between December 2004 and February 2008, FSIS inspectors did not write any noncompliance reports or suspend operations for humane handling violations at the Westland/Hallmark plant. Nevertheless, FSIS personnel acknowledged that at least two incidents of humane handling violations had occurred at the Westland/Hallmark plant during this period, both of which involved active abuse of animals. Instead of taking an enforcement action, the inspectors verbally instructed plant

personnel to discontinue the action or practice in question. The report also stated that Westland/Hallmark had an unusual lack of noncompliance reports and that inspectors did not believe they should write a noncompliance report if an observed violation was immediately resolved.

Finally, our analysis of FSIS enforcement data for calendar years 2005 through August 2009 shows that suspensions were not consistently used to enforce HMSA. Figure 8 shows the total number of suspensions over the period and reveals that suspensions spiked from a low of 9 in calendar year 2005 to a high of 98 in 2008—a nearly 11-fold increase overall—and, as of August 2009, FSIS had suspended operations at 50 plants. Based on our review of the suspension records, it appears that this spike followed the February 2008 Westland/Hallmark incident. Also, more than three-quarters of these suspensions resulted from failure to render at least one animal insensible on the first stun. From calendar year 2005 through 2008, the number of noncompliance reports issued for humane handling decreased overall, while the number of animals slaughtered increased from about 128 million in 2004 to about 153 million in 2008.

**Figure 8: Number of Plant Suspensions Nationwide, Calendar Years 2005 through August 2009**



Source: GAO analysis of FSIS data.

<sup>a</sup>Calendar year 2009 data are as of August 2009.

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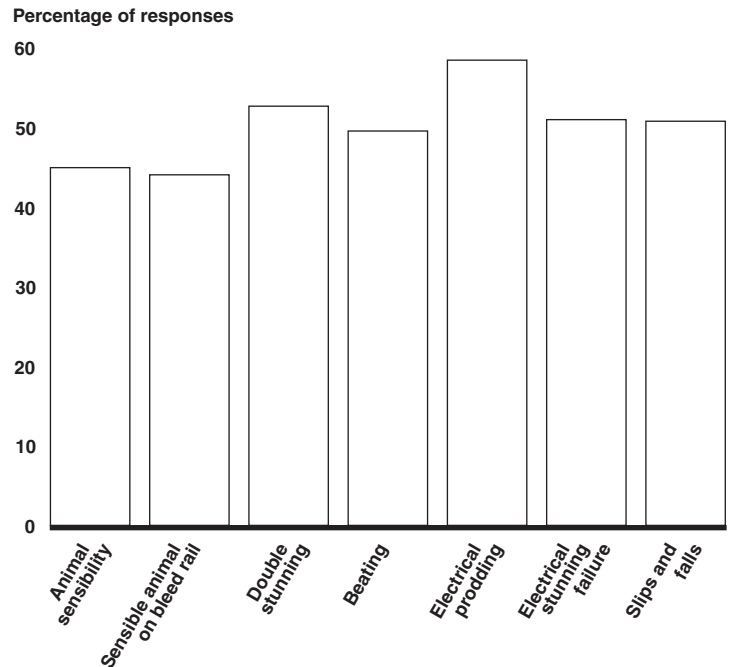
While we cannot determine the extent to which HMSA violations were overlooked from FSIS data and inspection reports, we attempted to determine whether a much higher rate of enforcement actions were taken on the days that DVMSs conducted their audits for humane handling. However, according to FSIS officials, the records of DVMS audit visits are incomplete, and we were therefore unable to conduct a complete analysis. As a result, we could not fully determine how often DVMSs conducted humane handling audit visits nor whether there is a higher rate of enforcement actions on the days that DVMSs conducted their audits for humane handling. Furthermore, our survey found that 85 to 95 percent of inspectors-in-charge who had taken some type of enforcement action reported that their immediate supervisor, the DVMS, and other district management personnel were moderately or very supportive of their actions.

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**Weaknesses in Guidance and Training May Contribute to Inconsistent Enforcement**

We found that incomplete guidance and inadequate training may contribute to the inconsistent enforcement of HMSA. Specifically, according to our survey results, inspectors at the plants we surveyed would like more guidance and training in seven key areas, as figure 9 shows.

**Figure 9: Inspectors Identified the Need for Additional Guidance and/or Training in Seven Key Areas of Humane Handling Enforcement**



Source: GAO analysis of survey results.

Note: This figure is based on survey question 12: “Would additional guidance and/or training be helpful in the following areas? (1) determining when an animal is sensible or returning to sensibility; (2) determining what, if any, action to take for a sensible animal on the rail; (3) determining what, if any, action to take for double stunning; (4) determining when the use of a driving instrument or tool becomes beating; (5) determining whether a specific incidence of electric prodding requires a suspension, regulatory control action, or noncompliance report; (6) determining whether electrical stunning of an animal fails to render and maintain insensibility; and (7) assessing situations involving slipping and falling.”

Furthermore, an estimated 457 inspectors-in-charge, or those at more than half the plants surveyed, reported that additional FSIS guidance or training is needed on whether a specific incident of electrical prodding requires an enforcement action. In addition, of the 80 inspectors who provided detailed responses to our survey, 15 noted the need for additional guidance, including clarification on what actions constitute egregious actions. Similarly, 25 of the 80 inspectors who provided written comments identified a need for additional training in several key areas.

With respect to guidance, in 2004, we had recommended that FSIS establish additional clear, specific, and consistent criteria for district offices to use when considering whether to take enforcement actions

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because of repeat violations.<sup>14</sup> FSIS agreed with this recommendation and delegated to the districts the responsibility for determining how many repeat violations should result in a suspension. However, incidents such as those at the Bushway Packing plant in Vermont suggest that this delegation was not successful. To date, FSIS has not issued additional guidance.

Operations at this Vermont plant were suspended three times in May, June, and July 2009 for egregious humane handling violations. Two of the suspensions were for dragging nonambulatory conscious veal calves that were about 1-week old. According to a document describing the third incident, an employee threw a calf from the second tier of a truck to the first so that the calf landed on its head and side. FSIS has not issued any guidance to the district offices on how many suspensions should result in a request for a withdrawal of a grant of inspection. If specific guidance had been available on when to request a withdrawal of grant of inspection, the district office might have decided to request such a withdrawal before the October 2009 incident. If FSIS ultimately withdrew the grant, it would have required the plant to reapply for, and be awarded, a grant of inspection license before it could resume operations.

Regarding training, FSIS relies primarily on “on-the-job” training by DVMSs—who are directed to visit each plant within their district over a 12- to 18-month period. In addition, supervisory veterinarians and inspectors-in-charge provide on-the-job training. FSIS officials we spoke with said that the on-the-job training needs to be integrated into a formal training program and that efforts are under way to do so. FSIS also provides some humane handling training electronically. For example, in February 2009, all inspectors assigned to slaughter plants were required to complete a mandatory 1-hour basic humane handling course online, which the agency can track centrally. FSIS officials also stated that, since 2005, incoming inspectors have been required to complete some humane handling training during orientation. According to FSIS officials we spoke with, the agency has asked the districts to begin entering data on the completion of other humane handling courses so that this information can also be tracked centrally.

Our survey results suggest, however, that even inspectors-in-charge who had to complete mandatory humane handling training in February 2009

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<sup>14</sup>[GAO-04-247](#).

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may not have been sufficiently trained. For example, an estimated 449, or 57 percent, of the inspectors-in-charge at the plants we surveyed from May through July 2009, reported incorrect answers on at least one of six possible signs of sensibility.<sup>15</sup> Specifically, an estimated 133, or 18 percent, of the inspectors-in-charge, failed to identify rhythmic breathing as a sign of sensibility. In addition, in 2004, we had reported that inspectors did not have the knowledge they needed to take enforcement actions when appropriate.<sup>16</sup> At that time, most of the deputy district managers, and about one-half of the DVMSs, noted that an overall lack of knowledge among inspectors about how they should respond to an observed noncompliance had been a problem in enforcing the HMSA.

Several outside observers have also commented on the need for better FSIS training.<sup>17</sup> Specifically:

- In November 2008, USDA’s Office of Inspector General found that FSIS does not have a formal, structured developmental program and system in place to ensure that all of its inspection and supervisory staff receive both formal and on-the-job training to demonstrate that they possess the competencies essential for FSIS’s mission-critical functions. The Inspector General recommended a structured training and development program that includes continuing education to provide the organizational control needed to demonstrate the competency of the inspection workforce. The Inspector General also stated that the workforce needs to be certified annually.
- In 2009, the National Academies’ Institute of Medicine recommended testing and improved training, with special emphasis on the quality and

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<sup>15</sup>Our survey presented the four signs of sensibility—natural blinking, lifting head straight up and keeping it up (righting reflex), rhythmic breathing, and vocalizing—and added two that, alone, do not generally indicate sensibility—rear leg(s) kicking and tail moving. In our assessment, if the respondent selected at least one of the two signs that do not indicate sensibility or if he or she indicated that they did not know the answer, the respondent’s answer was considered to be incorrect in our calculation.

<sup>16</sup>[GAO-04-247](#).

<sup>17</sup>In addition, we identified a set of principles to help federal agencies improve the effectiveness of their training efforts. See GAO, *Human Capital: A Guide for Assessing Strategic Training and Development Efforts in the Federal Government*, [GAO-04-546G](#) (Washington, D.C.: Mar. 1, 2004).

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consistency of noncompliance reports for food safety issues.<sup>18</sup> The institute noted that the decision to issue a noncompliance report is subjective and inspectors' experience levels and training differ. Supervisory review by inspectors-in-charge may likewise be variable or subject to bias and, therefore, unreliable.

- In 2009, representatives of the three major industry associations—the American Meat Institute, the American Association of Meat Processors, and the National Meat Association—told us that more training on humane handling is needed for FSIS inspectors. Specifically, the American Meat Institute identified insensibility as a critical issue in enforcement and noted that additional training on the signs of insensibility, such as blinking and the righting reflex, would be helpful.
- In 2009, the Humane Society of the United States recommended that FSIS inspectors receive adequate in-person, on-the-ground training so they can properly assess the conditions and treatment of animals.

FSIS officials stated that it launched a voluntary HMSA training program for plant employees at small slaughter plants in 2009. These plants represent the highest humane handling risk, according to FSIS officials, because plant management may not have sufficient resources to fully train plant employees on HMSA practices.

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## FSIS Has Only Recently Begun to Consider Using Additional Tools to Evaluate HMSA Performance

In recent years, the meat industry has adopted numerical scoring and video surveillance to improve plants' humane handling performance overall. According to FSIS officials, the agency does not require the use of such objective measures or scoring to aid judgment for enforcement purposes because situations are highly variable, and inspectors and higher-level officials are to use their judgment in conjunction with FSIS guidance. However, in December 2009, FSIS provided DVMSs with guidance on what it characterized as, an objective system to facilitate determinations of the problems that plants in their districts need to address.<sup>19</sup> Several of the DVMSs we interviewed acknowledged that they

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<sup>18</sup>Institute of Medicine of the National Academies, *Review of the Use of Process Control Indicators in the FSIS Public Health Risk-Based Inspection System* (Washington, D.C.: Mar. 3, 2009).

<sup>19</sup>U.S. Department of Agriculture, Food Safety and Inspection Service, FSIS Directive 6910.1, Rev. 1, *District Veterinary Medical Specialist Work Methods* (Dec. 7, 2009).

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have been using a form of numerical scoring on their own to assist their efforts in evaluating HSMA enforcement at the plants.

The numerical scoring system was developed in 1996 by Dr. Grandin to determine how well animals were being stunned and handled at the plants. The system has different standards for different species of animal and can be adjusted to fit plants that slaughter fewer animals. This system seeks to reduce the subjective nature of inspections and uses the scoring system to help identify areas in need of improvement. For example, in a large plant, if more than 5 out of 100 animals were not rendered insensible on the first stun, the plant would fail the evaluation. Other standards include the percentage rates for slips and falls and the number of animals moved by an electrical prod. Once the plant is aware of the weaknesses, it can consider its options to improve its humane handling performance, such as repairing equipment and floors to provide better footing for the animals and targeting employee training in those specific areas.

The numerical scoring system has been adopted by industry and animal welfare organizations, as well as one federal agency. At the federal level, according to agency officials, USDA's Agricultural Marketing Service uses this system to rate slaughter plants to determine whether to approve or deny them to provide meat to the National School Lunch Program. In addition, the American Meat Institute and independent audit firms employed by restaurant chains, such as Burger King and McDonald's, have adopted this numerical scoring system to evaluate humane handling at their associated slaughter plants. According to industry experts, a publicized humane handling incident at their plants would potentially damage their business interests. Recently, the Canadian Food Inspection Agency proposed adoption of numerical scoring for federally inspected plants in Canada.

FSIS officials have stated that while the numerical scoring system may be useful in helping plants determine their humane handling performance; it should not be used to assess compliance with HMSA. Because the numerical scoring system allows for a certain percentage of stunning failures, using it would be inconsistent with the HMSA requirement that all animals must be rendered insensible on the first blow. However, as we noted earlier, this requirement has not been met consistently by slaughter plants because of human error, equipment failures, and animal movement, leaving FSIS to exercise its discretion in determining which violations require enforcement action.



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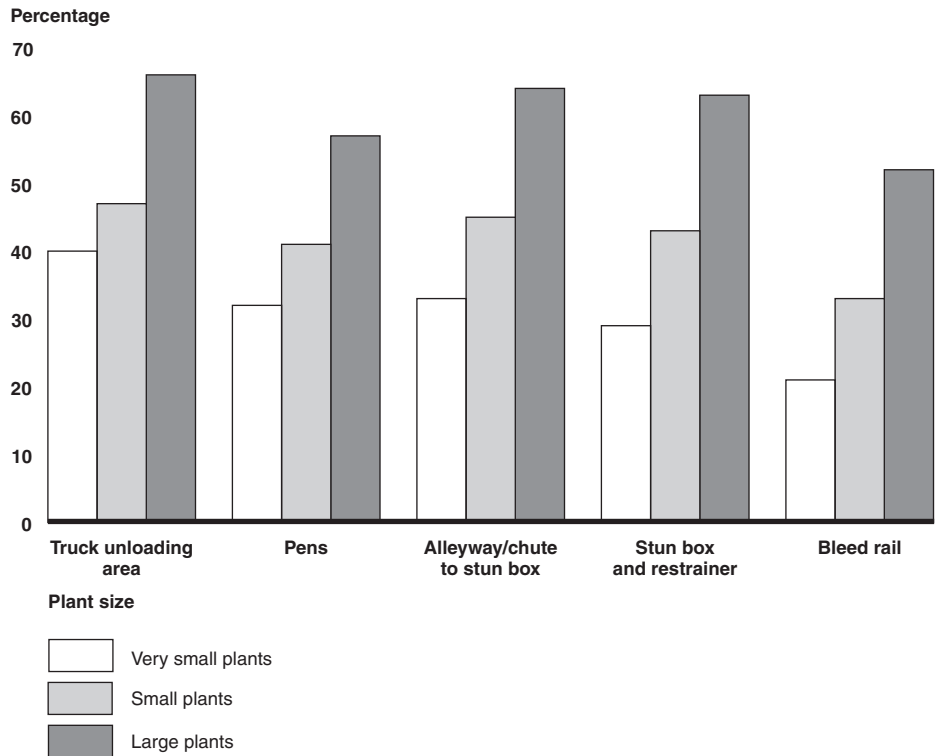
Video surveillance is another tool being increasingly used by slaughter plants. Specifically, slaughter plants can hire specialized video technology companies to record plant operations and audit plant performance through remote video surveillance and the use of the American Meat Institute numerical scoring system to assess humane handling performance at the plant. These video technology companies can also provide slaughter plant management with continuous feedback and customized progress reports documenting humane handling performance at their plants. According to the testimony of one video surveillance company, this technology helps plant management provide positive reinforcement to the workers who are performing well and helps identify workers who may need further training.

In November 2008, the Office of the Inspector General recommended that FSIS determine whether FSIS-controlled, in-plant video monitoring would be beneficial in preventing and detecting animal abuses. However, FSIS officials responded that FSIS-controlled video cameras would not provide the definitive data needed to support enforcement of humane handling requirements, as compared with the direct, ongoing and random verification of humane handling practices at the plants.<sup>20</sup> According to the Humane Society of the United States, while video surveillance might serve as a supplemental tool, it does not negate the need for real-time inspectors' observations. According to our survey results, between 52 to 66 percent of inspectors-in-charge at large plants reported that video surveillance would be moderately or very useful in each of the five plant areas. Figure 10 illustrates our survey results on the usefulness of video surveillance for all plants. FSIS officials recently told us that they are exploring potential uses of video surveillance, but the agency had not released any official policy change, as of November 2009.

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<sup>20</sup>U.S. Department of Agriculture, Office of Inspector General, Great Plains Region, *Evaluation of FSIS Management Controls Over Pre-Slaughter Activities*, Report No. 24601-0007KC (November 2008).

**Figure 10: Percentage of Inspectors-in-Charge Reporting Video Surveillance as Very or Moderately Useful in Five Plant Areas**



Source: GAO analysis of survey results.

Notes: This figure is based on survey question 31: "If FSIS were to issue regulations addressing the use of video surveillance, how useful would it be for you to have access to video of each of the following areas at this establishment (1) stun box and restrainer; (2) the bleed rail; (4) pens; (5) alleyway/chute to the stun box; and (6) area where the trucks are unloaded?"

Estimates by plant size have a margin of error of less than 9 percentage points.

In addition, of 96 inspectors who provided written comments on the usefulness of video surveillance in our survey, most frequently reported that video surveillance would facilitate more inspections in different plant locations and provide a true picture of animal handling while plant staff do not know that the inspector is watching. Since video surveillance can provide continuous footage of ongoing activities in the plant, it may provide evidence regarding alleged violations when inspectors do not directly observe humane handling. For example, according to 39 percent of inspectors-in-charge at large plants, plant staff improved their handling behavior upon the inspectors' arrival. Furthermore, 25 percent of inspectors-in-charge at the large plants in our survey reported that plant

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staff often, or always, alert each other about inspectors' movements between areas by radio or whistle, for example.

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## FSIS Has Not Fully Analyzed Humane Handling Data to Consistently Enforce HMSA

Although FSIS collects humane handling data, we found that it is not fully analyzing and using these data to help ensure more consistent HMSA enforcement. For example, we found substantial differences in the range of time devoted to humane handling for large plants that slaughter market swine when we compared the amount of time devoted to humane handling activities for plants of similar size and species in an effort to determine if there were any inconsistencies among districts. Specifically, out of the six slaughter plants that kill between 700,000 to 900,000 market swine, the average time that a plant would devote to humane handling ranged from 1.8 to 9.7 hours per shift in 2008. For the nine plants that slaughter between 2 and 3 million market swine, we found that the average amount of time per shift ranged from 2.7 to 5.2 hours per shift in 2008.

In January 2004, we also reported that FSIS was not adequately analyzing the narrative found in noncompliance reports. As of November 2009, FSIS headquarters officials told us that they had not begun an effort to analyze the narratives in noncompliance reports. Instead, they told us, they rely on district officials to monitor whether plant inspectors have taken consistent enforcement action for each incident. Headquarters officials also stated that they only review the percentage of humane handling activities that are recorded as noncompliant in an FSIS database, known as the Performance-Based Inspection System. However, without analyzing the narrative, FSIS cannot readily provide the reasons for the noncompliance reports—for example, whether these reports were issued for one or two failed stuns, which is not uncommon, rather than three or four failed stuns, which might be considered an egregious violation. Thus, FSIS cannot easily analyze noncompliance reports across the districts to identify trends or patterns in plant violations or potential enforcement inconsistencies across districts.

Also in 2004, we reported that FSIS was not tracking humane handling activities. In response to the tracking issue, FSIS created the Humane Activities Tracking System, a database that inspectors use to record the amount of time they devote to humane handling activities in each plant. Inspectors are directed to record the total amount of time devoted to humane handling activities for each plant shift in 15-minute increments. According to our survey results, inspectors have differing views on the accuracy of the amount of time recorded in the tracking system. Specifically, 19 percent reported that the time recorded in this system was

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slightly or not at all accurate. However, 45 percent of the inspectors reported that the time was very accurate, and 36 percent reported that the time was moderately accurate.

Furthermore, of the 93 inspectors who provided written responses detailing inspectors' views of the reasons for the tracking database's inaccuracies, 56 pointed out that breaking out activities into 15-minute increments limited their ability to record their actual time spent, and 29 stated that humane handling activities are concurrent with other inspection activities. In addition, 14 responses noted that supervisors or district offices had placed either a minimum or maximum on the amount of time that could be charged to humane handling. Also, several of the DVMSs we interviewed reported that the Humane Activities Tracking System does not readily produce the types of reports that are needed to oversee and manage humane handling activities in their districts. For example, they reported that the system lacked the capability to readily produce comparative analyses of similar plants to help identify trends or anomalies across districts.

FSIS began analyzing data across districts from the Humane Activities Tracking System in 2008—4 years after it developed the system. Also in 2008, FSIS established the Data Analysis Integration Group in headquarters, with staff in the regional field offices to support district offices' data needs. The group began reporting quarterly on HMSA enforcement, including the amount of time inspectors have devoted to HMSA, the number of plants suspended, and the number of noncompliance reports issued in 2009, although FSIS has not analyzed the narrative in the noncompliance reports.

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## FSIS Cannot Fully Identify and Plan Resource Needs for HMSA Enforcement

FSIS cannot fully identify trends in its inspection resources—specifically, funding and staffing—for HMSA enforcement, in part because it cannot track humane handling inspection funds separately from the inspection funds spent on other food safety activities. Furthermore, FSIS does not have a current workforce planning strategy to guide its efforts to allocate staff to inspection activities, including humane handling.

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## FSIS Does Not Track HMSA Enforcement and Other Inspection Funds Separately

According to FSIS officials, funds for humane handling come primarily from two sources: (1) FSIS's general inspection account and (2) the account used to support the Humane Activities Tracking System. The general inspection account supports all FSIS inspection activities, both food safety and other activities, including humane handling enforcement.

Because the same inspectors may carry out these tasks concurrently, FSIS cannot track humane handling funds separately, according to FSIS officials.

According to FSIS officials, for the most part, inspectors are to devote 80 percent of their time to food safety inspection activities and 20 percent of their time to humane handling inspection and other activities. However, our analysis of resources shows that this is not the case. As table 1 shows, we estimated that the percentage of funds dedicated to HMSA enforcement has been above 1 percent of FSIS’s total annual inspection appropriation, although it rose slightly in 2008, the year in which suspensions spiked following the 2008 Westland/Hallmark incident in California. While FSIS does not track humane handling inspection activities separately, FSIS’s budget office estimates the funds needed to carry out these activities. Using FSIS’s budget estimate for HMSA enforcement for fiscal years 2005 through 2008, we estimated the percentage of FSIS’s total annual appropriation for its federal food safety inspection account that would have gone to HMSA enforcement.<sup>21</sup>

**Table 1: Total Specified in Annual Appropriations for FSIS Inspections, Estimated Amount FSIS Dedicated for Humane Handling Enforcement, and Estimated Percentage of FSIS Annual Inspection Appropriation for Humane Handling, Fiscal Years 2005 through 2008**

Dollars in millions

Fiscal year	Total amount specified for FSIS inspection in the agency annual appropriation <sup>a</sup>	Estimated amount of FSIS funds dedicated to humane handling enforcement	Percentage of FSIS annual appropriation for inspection devoted to humane handling
2005	\$742.3	\$9.1	1.23%
2006	753.3	10.9	1.45%
2007	<sup>a</sup>	10.0	<sup>b</sup>
2008	829.8	\$12.1	1.46%

Sources: GAO’s analysis of the Budget of the United States and FSIS data.

<sup>a</sup>The FSIS inspection fund includes other activities, such as livestock slaughter, poultry slaughter, processing inspection, egg inspection, import inspection, in-commerce compliance, district office activities, and food safety enforcement activities. Congress did not designate an amount from FSIS’s general appropriation for federal food safety inspection in fiscal year 2007.

<sup>b</sup>Because Congress did not specify an amount for federal food safety inspection in fiscal year 2007, no percentage of total inspection activities devoted to humane handling was calculated. Appropriation amounts come from federal food safety inspection activities specified in FSIS annual appropriations and do not consider rescissions or supplemental appropriations.

<sup>21</sup>Fiscal year 2008 data were the latest available at the time of our review.

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In contrast to FSIS's inability to track humane handling in its general inspection fund, FSIS officials noted, the DVMSs—whose primary responsibility is humane handling activities—have a special activity code that enables FSIS to track their portion of expenses, including salaries and travel; however, these expenses represent only a small portion of the total amount FSIS spends on humane handling inspection activities.

Although FSIS does not track funds spent on humane handling inspection activities separately from other inspection activities, it does track the funds specifically dedicated to supporting the Humane Activities Tracking System. For fiscal years 2005 through 2009, Congress designated a total of nearly \$13 million specifically for the Humane Activities Tracking System, and FSIS has spent roughly that amount on the system, according to our review of FSIS budget data. For fiscal year 2005 and for fiscal year 2006, FSIS was required to spend the funding designated for the Humane Activities Tracking System within 2 years of the appropriation. However, beginning with fiscal year 2008, Congress folded the funding for the Humane Activities Tracking System into a larger FSIS information technology initiative, and the funding is available to FSIS until it is expended. As of November 2009, FSIS had not completed integrating the Humane Activities Tracking System into the information technology initiative, and FSIS officials could not provide an estimate of when the agency expected to do so.

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### FSIS Does Not Have a Long-term Plan for Addressing HMSA Staffing

Although FSIS cannot directly account for the funding designated for humane handling activities, Congress in recent years has required FSIS to devote a minimum amount of full-time equivalent (FTE) staff to humane handling.<sup>22</sup> Accordingly, FSIS estimates the total number of FTEs devoted to humane handling and reports this information to Congress every year. FSIS develops this estimate using Humane Activities Tracking System data on time spent on humane handling inspection activities and average inspector and veterinarian salaries. Table 2 shows that FSIS has reported exceeding Congress's minimum FTE requirements for humane handling enforcement, according to FSIS's calculation.

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<sup>22</sup>An FTE generally consists of one or more employed individuals who collectively complete 2,080 work hours in a given year. Therefore, either one full-time employee or two half-time employees equal one FTE.

**Table 2: Minimum Number of FTEs Required by Congress for Humane Handling Compared with the FTEs Reported by FSIS, Fiscal Years 2005 through 2009**

Fiscal year	Minimum congressionally required FTEs for humane handling	FTEs reported by FSIS
2005	63	110
2006	63	124
2007	<sup>a</sup>	121
2008	83	157
2009	120	157

Sources: GAO's analysis of appropriation acts and FSIS data.

<sup>a</sup>Congress did not specify any FTEs for humane handling enforcement in fiscal year 2007.

For fiscal year 2010, FSIS officials told us, they planned to use \$2 million of their inspection funds to enhance oversight of humane handling enforcement by hiring 24 inspectors, including both public health veterinarians and inspectors. FSIS officials planned to strategically place these additional inspectors at locations where they are most needed to support humane handling enforcement in addition to their other food safety responsibilities. FSIS officials stated that the agency determined staffing needs on the basis of such factors as the highest number of animals condemned on postmortem, the number of animals inspected and passed for human consumption, and the amount of time spent conducting humane handling inspection activities. In addition, FSIS officials stated that the agency intends to establish a headquarters-based humane handling coordinator position. This coordinator will be primarily responsible for consistently overseeing humane handling activities.

While FSIS has increased its hiring, it has not done so in the context of an updated strategic workforce plan. Such a plan would help FSIS align its workforce with its mission and ensure that the agency has the right people in the right place performing the right work to achieve the agency's goals. In February 2009, we reported that the FSIS veterinarian workforce had decreased by nearly 10 percent since fiscal year 2003 and that the agency had not been fully staffed over the past decade.<sup>23</sup> We reported that, as of fiscal year 2008, FSIS had a 15 percent shortage of veterinarians and the majority of these veterinarians work for slaughter plants. The FSIS 2007

<sup>23</sup>GAO, *Veterinarian Workforce: Actions Are Needed to Ensure Sufficient Capacity for Protecting Public and Animal Health*, [GAO-09-178](#) (Washington, D.C.: Feb. 4, 2009).

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strategic workforce plan—the most recently available—identifies specific actions to help the agency address some of the gaps in recruiting and retaining these mission-critical occupations over time. However, it does not address specific workforce needs for HMSA enforcement activities.

FSIS officials stated that workforce planning occurs at the district level and is determined using regulations that govern the number of inspectors required at each slaughter plant. According to district officials, they have discretion in deciding where to deploy relief inspectors. Therefore, they can deploy these inspectors at plants that they believe may require more HMSA oversight. However, more than one-third of the inspectors, who provided written comments in our survey, noted the need for additional staff or the lack of time to perform humane handling activities. Furthermore, inspectors at 80 percent of large plants stated that covering for others' responsibilities because of leave or vacancies has reduced the time spent on humane handling activities in those plants. While FSIS officials may need flexibility at the district level to allocate inspection resources, without an updated strategic workforce plan, the agency cannot effectively determine inspection needs across districts and adjust the inspection workforce to reflect changes in the industry and in FSIS resources.

Although the strategic workforce plan indicates that the agency performs this assessment annually, FSIS officials acknowledged that the agency has not updated its strategic workforce plan since 2007. We recommended in January 2004 that FSIS periodically reassess whether the level of inspection resources is sufficient to effectively enforce HMSA. As of November 2009, FSIS officials had told us that they were in the process of developing a workforce strategy but could not provide an estimated completion date.

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## FSIS Does Not Have a Comprehensive Strategy for Enforcing HMSA

Our body of work on results-oriented management calls for organizations to identify clearly defined goals that are aligned to available resources, develop time frames for achieving these goals, and develop performance metrics for measuring progress in meeting their goals.

We have recommended that all agencies adopt strategies that include these key elements. By implementing results-oriented management principles, agencies demonstrate their efforts to resolve long-standing management problems that undermine program efficiency and effectiveness, provide greater accountability for results, and enhance



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congressional decision making by providing more objective information on program performance.<sup>24</sup>

Although FSIS has strategic, operational, and performance plans for its inspection activities, these plans do not specifically address HMSA enforcement. That is, they do not clearly outline the agency's goals for enforcing HMSA, identify expected resource needs, specify time frames, or lay out performance metrics. Specifically, *FSIS Strategic Plan FY 2008 through FY 2013* provides an overview of the agency's major strategic goals and the means to achieve those goals. However, this plan does not clearly articulate or list goals related to HMSA enforcement. Instead, the plan generally addresses agency goals, such as improving data collection and analysis, maintaining information technology infrastructure to support agency programs, and enhancing inspection and enforcement systems overall to protect public health.

FSIS Office of Field Operations officials agreed that the plan does not specifically address humane handling, but they explained, the operational plans and policy performance plans contain the details concerning humane handling performance. However, as we indicate below, we did not find that these two plans provide a comprehensive strategy for HMSA enforcement:

- *Office of Field Operations' Operational Plan* identifies specific FSIS projects or initiatives and aligns them with the appropriate strategic goal identified in the *FSIS Strategic Plan for FY 2008 through FY 2013*. It also specifies the estimated dates for completion and recent information on the status of the project or initiative. According to our analysis of the July 2009 version of the operational plan, the most recent version available, humane handling activities fall under FSIS's first strategic goal—enhance inspection and enforcement systems and operations to protect public health. While the plan identifies tasks related to humane handling inspection activities, it does not identify any humane handling program goals linked to these tasks or explain how these tasks can be completed. For example, one of the plan's listed tasks is conducting humane handling information outreach, but the plan neither indicates how this task aligns with HMSA enforcement-related goals, nor does it specify resources

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<sup>24</sup>See GAO, *Agency Performance Plans: Examples of Practices that Can Improve Usefulness to Decisionmakers*, GAO/GGD/AIMD-99-69 (Washington, D.C.: Feb. 26, 1999) and GAO, *Agencies Strategic Plans Under GPRA: Key Questions to Facilitate Congressional Review*, GAO/GGD-10.1.16 (Washington, D.C.: May 1997).

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needed. The plan also does not set priorities for proposed activities or identify milestones that could be used to measure progress or make improvements. Additionally, the document does not match the activities with resources needed to accomplish those tasks. According to FSIS officials, the Office of Field Operations' operational plan is an evolving document that is continually updated throughout the course of the year.

- *Office of Policy and Program Development Strategic Plan Fiscal Years 2008-2013* identifies policy goals that support the overall FSIS Strategic Plan. However, this plan does not clearly articulate or list goals related to HMSA enforcement.

Furthermore, FSIS does not have a set of performance measures for assessing the overall performance of humane handling enforcement across the districts. For example, FSIS is unable to determine whether the districts have improved their ability to enforce humane handling or may be weak in their enforcement. Although FSIS officials stated that the agency collects information such as the number of noncompliance reports, the number of egregious humane handling violations, and the number of humane handling activities performed on a routine basis by the DVMS, there is no indication of how these activities demonstrate improved enforcement of HMSA. Collecting and analyzing this type of information could be useful in identifying gaps or anomalies in performance and then developing a strategy to address them.

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## Conclusions

It is difficult to know whether the reported incidents of egregious animal handling at the slaughter plants in California and Vermont are isolated cases or indicative of a more widespread problem. Either way, it is evident from our survey results and our analysis of HMSA enforcement data that inspectors did not consistently identify and take enforcement action for humane handling violations for the period we reviewed. Furthermore, our survey results suggest that inspectors are not consistently applying their discretion as to which actions to take when egregious humane handling incidents occur, or when they are repeated, in part because the guidance is unclear. That is, the guidance states that inspectors-in-charge "may" suspend plant operations. Consequently, plants cited for the same type of humane handling incident may be subject to different enforcement actions. In January 2004, we recommended that FSIS establish additional clear, specific, and consistent criteria for enforcement actions to take when faced with repeat violations. FSIS responded by delegating this responsibility to the districts. However, incidents such as those at the Vermont plant suggest that this delegation has not been effective. While

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FSIS has stated that inspectors require discretion in enforcement, that discretion needs to be informed by an agency policy that ensures a consistent level of enforcement within plants and across districts. Without consistent enforcement actions, FSIS does not clearly signal its commitment to fully enforce HMSA. In addition, to improve plants' humane handling performance, the Agricultural Marketing Service, DVMSs, and others have adopted objective industry tools, such as numerical scoring, to help identify weaknesses. However, inspectors-in-charge, who are responsible for assessing daily HMSA performance at the plants, are not directed to use such scoring tools.

Effective oversight of HMSA enforcement also requires FSIS to use available data to effectively manage the program, including allocating resources. FSIS has only recently begun to do so. Until 2009, FSIS did not routinely track and evaluate HMSA enforcement data—by geographic location, species, plant size, and history of compliance across districts. Although these analyses will be useful, FSIS has yet to analyze the narratives of humane handling incidents found in noncompliance reports, which would also help the agency identify weaknesses and trends in enforcement and develop appropriate strategies. Furthermore, we reiterate our January 2004 recommendation, which FSIS has not yet acted on, to periodically reassess whether its estimates still accurately reflect the resources necessary to effectively enforce the act. Finally, because FSIS does not have a comprehensive strategy for enforcing HMSA that aligns the agency's available resources with its mission and goals, and that identifies time frames for achieving these goals and performance metrics for meeting its goals, it is not well positioned to improve its ability to enforce HMSA.

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## Recommendations for Executive Action

We are making the following four recommendations to the Secretary of Agriculture to strengthen the agency's oversight of humane handling and slaughter methods at federally inspected facilities.

To ensure that FSIS strengthens its enforcement of the Humane Methods of Slaughter Act of 1978, as amended, we recommend that the Secretary of Agriculture direct the Administrator of FSIS to take the following three actions:

- establish clear and specific criteria for when inspectors-in-charge should suspend plant operations for an egregious HMSA violation and when they should take enforcement actions because of repeat violations;

- 
- identify some type of objective tool, such as a numerical scoring mechanism, and instruct all inspectors-in-charge at plants to use this measure to assist them in evaluating the plants' HMSA performance and determining what, if any, enforcement actions are warranted; and
  - strengthen the analysis of humane handling data by analyzing the narrative in noncompliance reports to identify areas that need improvement.

To ensure that FSIS can demonstrate how efficiently and effectively it is enforcing HMSA, we recommend that the Secretary of Agriculture direct the Administrator of FSIS to develop an integrated strategy that clearly defines goals, identifies resources needed, and establishes time frames and performance metrics specifically for enforcing HMSA.

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## Agency Comments and Our Evaluation

We provided USDA with a draft of this report for review and comment. USDA did not state whether it agreed or disagreed with our findings and recommendations. However, it stated that it plans to use both our findings and recommendations to help improve efforts to ensure that establishments comply with HMSA and humane handling regulations. USDA also recognized the need to improve the inspectors' ability to identify trends in humane handling violations and work with academia, industry, and others to identify practices that will achieve more consistent HMSA enforcement.

USDA commented that the report contained some misstatements of fact that present a false picture of FSIS's humane handling verification and enforcement program and policies. We believe that we have fairly described FSIS policy and guidance on HMSA enforcement. In response to updated information that FSIS provided, we made appropriate revisions to clarify certain points. For example, we revised our report by deleting the portion of our analysis related to suspension data that occurred on the days that DVMSs conducted humane handling audits because on the basis of new information provided we believe that FSIS records of DVMS audit visits are incomplete.

USDA also questioned whether the results of our survey of FSIS inspectors provide evidence of systemic inconsistencies in enforcement. We believe they do, and would encourage USDA to consider the views of inspectors at the plants who are responsible for daily HMSA enforcement. Our survey results are based on strict adherence to GAO standards and methodology to ensure the most accurate results possible. Furthermore, our efforts were fully coordinated with FSIS before we distributed the survey.

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Specifically, we vetted all of the questions with FSIS management in advance to ensure that these questions elicit responses that would reveal whether or not inspectors-in-charge understand how to fully enforce HMSA. In addition, we conducted numerous pre-tests of the survey with inspectors to ensure that we would receive the most accurate responses possible. We also coordinated with several humane handling experts who serve as FSIS consultants on training and enforcement issues to ensure that our questions would elicit the most accurate responses.

USDA also provided technical comments, which we have incorporated into this report as appropriate. USDA's written comments and our responses are presented in appendix IV.

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As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to appropriate congressional committees; the Secretary of Agriculture; the Director, Office of Management and Budget; and other interested parties. The report also will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff members have any questions about this report, please contact me at (202) 512-3841 or [shamesl@gao.gov](mailto:shamesl@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix V.



Lisa Shames  
Director, Natural Resources  
and Environment

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# Appendix I: Objectives, Scope, and Methodology

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This report examines (1) U.S. Department of Agriculture Food Safety and Inspection Service's (FSIS) efforts to enforce the Humane Methods of Slaughter Act of 1978, as amended (HMSA); (2) the extent to which FSIS tracks recent trends in FSIS inspection resources for enforcing HMSA; and (3) FSIS's efforts to develop a strategy to guide HMSA enforcement.

To evaluate FSIS's efforts to enforce HMSA, we interviewed officials and collected documents from FSIS's Office of Field Operations; Office of Policy and Program Development; Office of Program Evaluation, Enforcement and Review; and the 15 district offices. We examined a nonprobability sample of FSIS noncompliance reports to provide illustrative examples of humane handling violations. In doing so, we searched for the words "prod" and "stun" in 533 noncompliance reports for 2007 and 589 noncompliance reports for 2008. Of these 1,122 reports, 272 reports included either the word "stun" or "prod" in reference to a violation. We then selected several of the reports that described violations appearing to be egregious and provided these reports to the expert we consulted for her assessment. This expert determined that the violations described in some of these reports were not sufficiently clear or detailed to determine whether they represented egregious violations, while others were clearly egregious in her judgment.

We also reviewed FSIS suspension data, data from the humane handling tracking system and district veterinary medical specialist reports in all 15 of FSIS's district offices for fiscal years 2005 through 2009. To assess the reliability of these data, we examined them for obvious errors in completeness and accuracy, reviewed existing documentation about the systems that produced the data, and questioned knowledgeable officials about the data and systems. We determined that the data were sufficiently reliable for the purposes of our review, with any limitations noted in the text. We also reviewed the HMSA enforcement reports produced by FSIS's Office of Data Analysis and Integration Group, as well as meeting minutes from the monthly district veterinary medical conferences. To understand FSIS policy and guidance on humane slaughter enforcement, we reviewed relevant regulations and FSIS instructions. From May 2009 through July 2009, we also surveyed inspectors-in-charge—those responsible for reporting on humane handling enforcement in the plants—from a random sample of inspectors at 257 livestock slaughter plants that were stratified by size—very small, small, and large. We adopted FSIS definition for small,

very small, and large plants. We obtained an overall survey response rate of 93 percent.<sup>1</sup>

Table 3 shows the population and sample size distribution of slaughter plants by large, small and very small plant size. Each of the inspectors-in-charge had a nonzero probability of being included, and that probability could be computed for any inspector-in-charge. Each inspector-in-charge was subsequently weighted in the analysis to account statistically for all the members of the population, including those who were not selected.

**Table 3: Universe of Plants and Sample Description**

Plant size	Number of plants in universe	Number of plants in sample	Number of plants with inspectors-in-charge responding	Percentage response rate
Large	63	63	56	89%
Small	188	85	75	89%
Very small	531	109	104	95%
<b>Total</b>	<b>782</b>	<b>257</b>	<b>235</b>	<b>93%</b>

Source: GAO analysis of survey data.

We analyzed all responses, including the written responses that we received from the survey by conducting a content analysis and categorizing the responses accordingly. The results of our survey are presented in a special publication titled *Humane Methods of Slaughter Act: USDA Inspectors' Views on Enforcement* that can be viewed at [GAO-10-244SP](#).

We met with key officials from FSIS's Office of Field Operations who are responsible for implementing HMSA at the headquarters level. To understand district officials' perspectives on HMSA enforcement, we conducted semistructured interviews with each of FSIS's 15 district veterinary medical specialists (DVMS), 15 district managers, and 15 resource management analysts. We also performed a content analysis on all semistructured interviews to determine the districts' perspective on training, guidance, and resources available for humane handling

<sup>1</sup>All full sample percentage estimates from the survey have margins of error at the 95 percent confidence level of plus or minus 7 percentage points or less, unless otherwise noted. Percentage estimates by plant size have margins of error at the 95 percent confidence level of plus or minus 10 percentage points or less, unless otherwise noted.

enforcement. To understand the perspective of animal welfare groups and the meat industry, we met with representatives from the Humane Society of the United States, the Animal Welfare Institute, the American Meat Institute, the National Meat Association, and the American Association of Meat Processors. We reviewed these organizations' proposed reforms for HMSA enforcement. We also attended the 2009 American Meat Institute Humane Handling Conference in Kansas City, Missouri. To gain a better understanding of how the industry evaluates HMSA performance, we attended the Professional Animal Auditor Certification Organization training for meat plants in Denison, Iowa, in November 2008 and visited pork and beef slaughter plants that use a numerical scoring system. We also consulted animal handling expert Dr. Temple Grandin, who is a world-renowned expert on animal welfare who has served as a consultant to industry and FSIS, written extensively on modern methods of livestock handling, and designed slaughter facilities that have helped improve animal welfare in the United States and in other countries. Dr. Grandin provided her expert opinion on select humane handling incidents that we identified as possible HMSA violations. In addition to Dr. Grandin, we also spoke with animal welfare and food safety consultants to understand key principles of humane handling techniques and enforcement. We also met with representatives of the U.S. Department of Agriculture's Agricultural Marketing Service to understand how the agency uses numerical scoring to evaluate humane handling at the plants that provide meat to the National School Lunch Program. In order to understand FSIS training efforts, we attended an FSIS training seminar for small and very small plants held in Dallas, Texas, in February 2009, and met with FSIS officials at the agency's Center for Learning in Washington, D.C., as well as with FSIS consultants who provide training in HMSA enforcement.

To identify the extent to which FSIS tracks recent trends in inspection resources for enforcing HMSA, we reviewed FSIS funding and staffing data for each district. We also conducted semistructured interviews with resource management analysts in each of FSIS's 15 district offices and interviewed key officials in the Resource Management and Planning Office within the Office of Field Operations. We performed a content analysis on all semistructured interviews to determine each districts' perspective on inspection resources available for humane handling enforcement. In order to understand how FSIS reports its annual full-time equivalent staff for humane handling to Congress, we collected funding and other relevant data and met with key officials in FSIS's Office of Field Operations and Office of Management and Office of the General Counsel, as well as the U.S. Department of Agriculture's Office of Budget and Program Analysis.



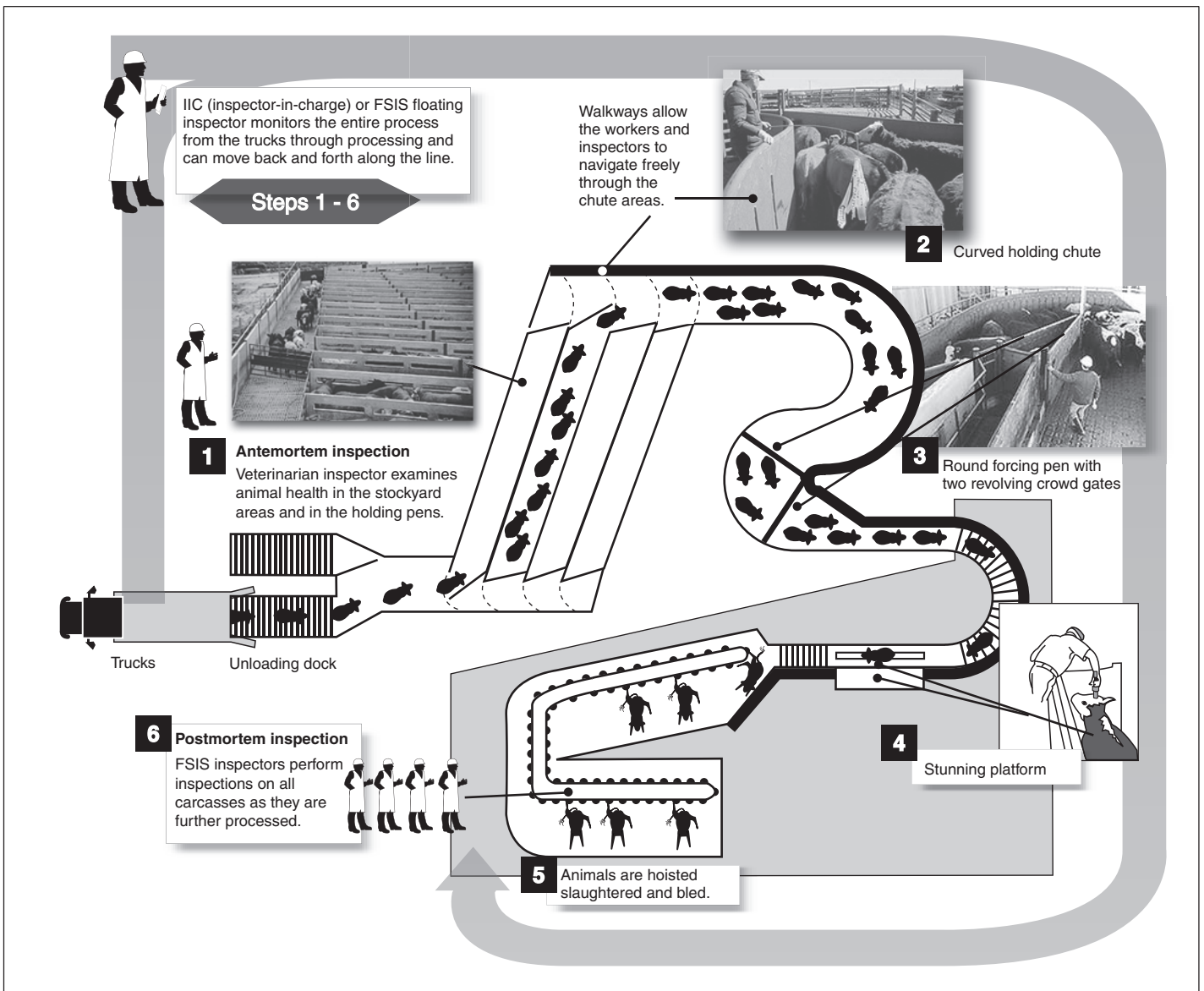
To assess FSIS's efforts to develop a strategy to enforce HMSA, we reviewed relevant FSIS strategies, including the *FSIS Strategic Plan FY 2008 through FY 2013*, and the *FSIS 2007 Strategic Workforce Plan*. We also reviewed the July 2009 version of the *Office of Field Operations' Operational Plan and the Office of Policy and Program Development Strategic Plan Fiscal Years 2008-2013*. Furthermore, we reviewed humane handling performance data from the Office of Policy and Program Development. We met with representatives of the FSIS Office of Management on human capital issues and officials from the Office of Personnel Management in Washington, D.C. To identify the key elements of a strategic plan, we reviewed the Government Performance and Results Act of 1993, as well as past GAO reports.

We conducted this performance audit for our work from October 2008 to February 2010, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# Appendix II: Location of Inspectors Observing HMSA Compliance at Typical Mid-Sized Plant

Figure 11 illustrates the areas in a typical, mid-sized plant from which inspectors can observe HMSA compliance, although inspectors are not always present in all areas.

**Figure 11: Location of Inspectors Observing Compliance with the HMSA at a Typical Mid-Sized Plant**

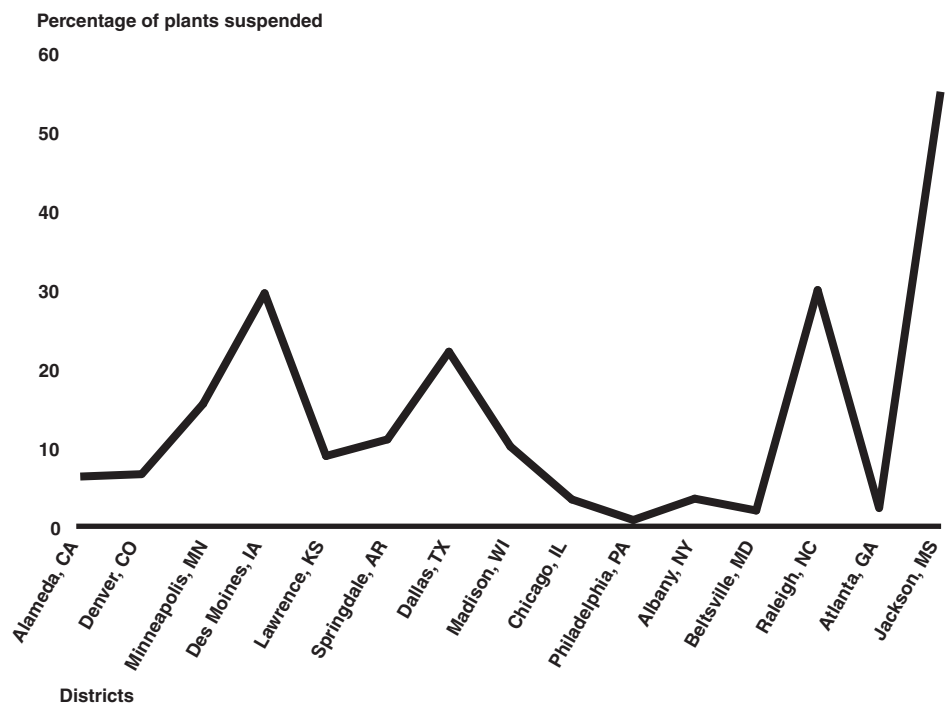


Sources: GAO graphic based on GAO analysis of information provided by FSIS and Dr. Temple Grandin, a humane handling expert. Photographs in this figure are used by permission of Dr. Temple Grandin.

# Appendix III: HMSA Suspensions for FSIS Districts

Figure 12 provides an overview of the percentage of plant suspensions for HMSA enforcement that occurred in each district for calendar year 2008. The percentages were determined based on the total number of plants in each districts and the number of reported suspensions. As the figure illustrates, the Jackson district had the highest percentage of suspensions.

**Figure 12: Percentage of Suspensions by District, Calendar Year 2008**



Source: GAO analysis of FSIS data.

# Appendix IV: Comments from the U.S. Department of Agriculture

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



United States Department of Agriculture

Office of the Secretary  
Washington, D.C. 20250

Lisa Shames  
Director, Natural Resources and Environment  
United States Government Accountability Office  
441 G Street, NW  
Washington, DC 20548

JAN 22 2010

Dear Ms. Shames:

USDA appreciates the opportunity to comment on the GAO draft report, "Humane Methods of Slaughter Act: Actions are Needed to Strengthen Enforcement." We will be providing responses to the audit recommendations within 60 days of the publication of the report, as is required by 31 U.S.C. 720.

USDA's Food Safety and Inspection Service (FSIS) enforces the Humane Methods of Livestock Slaughter Act (HMSA), authorizing the agency to regulate the handling of livestock prior to slaughter, as well as the method of slaughter, at establishments. I want to be clear that this mandate is a high priority for FSIS. Ensuring that livestock are handled and slaughtered humanely is a responsibility FSIS is committed to, along with our mission to protect public health. When Congress passed the HMSA, it found that humane slaughter prevented needless suffering, resulted in safer and better working conditions for employees at slaughter establishments, and provided benefits to producer and consumers through better products and improved flow of livestock and livestock products. FSIS inspectors are in plants every day, working to ensure that Congressional intent to require humane slaughter at every slaughter plant is a priority and is carried out effectively.

FSIS has worked with the Government Accountability Office (GAO) during this audit to provide an accurate picture of how the agency enforces the HMSA. We appreciate this collaboration, and we plan to use both GAO's findings and recommendations as we improve our efforts to ensure that establishments comply with this law and our humane handling regulations. For example, FSIS recognizes the need to improve our inspectors' ability to identify trends in humane handling violations. The agency also needs to work with academia, industry, the non-profit sector, and animal health experts to identify practices that will achieve more consistent enforcement of the HMSA.

Actions that FSIS will take in response to this report will build on the considerable work already being done by FSIS to improve our performance in verifying humane handling at slaughter establishments. For example, as highlighted in the GAO report, FSIS will soon fill a humane handling coordinator position. This senior employee will provide oversight of inspectors' enforcement and strengthen our comprehensive strategy for enforcing HMSA, areas that GAO highlights in this report as needing improvement. In February 2009, FSIS inspection program personnel assigned to livestock slaughter establishments were required to complete refresher training on the Agency's humane handling policies. This training included information on how

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to determine insensibility, documenting noncompliance, and suspending inspection for egregious situations. This training is in addition to the classroom instruction provided to entry level employees. FSIS is planning further workforce training activities related to humane handling for fiscal year 2010.

See comment 1.

Recent enforcement also demonstrates the Agency's strong commitment to enforcing the HMSA. In 2008, FSIS issued a total of 178 suspensions to federally inspected establishments, 54 percent (97 suspensions) of which were for humane handling violations witnessed by inspection personnel. Of these 97 inhumane handling suspensions, 75 were initial suspensions and 22 were repeat suspensions. In 2009, FSIS issued a total of 164 suspensions to federally inspected establishments, 53 percent (87 suspensions) of which were for humane handling violations witnessed by inspection personnel. Of these 87 inhumane handling suspensions, 71 were initial suspensions and 16 were repeat suspensions. As noted by GAO in this report, both of these figures show a significant increase in humane handling enforcement (pages 21 and 22) since the events at Hallmark/Westland.

See comment 2.

While GAO has provided the agency with useful information on how we might improve our oversight of humane handling and slaughter, this report also contains numerous substantive misstatements of fact that we believe warrant your further attention. We believe that these inaccuracies present a false picture of FSIS humane handling verification and enforcement programs and policies. In order to appropriately and accurately identify areas where improvements are needed in FSIS's oversight of humane handling, we ask that our general and specific comments below be published in the report.

**General Comments on Themes in the Report Findings**

These are FSIS's comments on themes in findings from the report, presented roughly in the order the findings first appear. In some cases, misstatements corrected in FSIS' specific comments are referenced.

See comment 3.

Suspension of Inspection and District Veterinary Medical Specialist (DVMS) visits

In the initial summary of findings, on page 22 of the report and elsewhere, GAO states that 61% of suspensions of inspection related to humane handling "occurred during DVMSs humane handling audit visits," implying that FSIS verification of humane handling is deficient since DVMSs are directing the majority of suspensions, while spending so little time in individual establishments themselves. This is incorrect. Of the 97 suspensions related to humane handling violations in CY 2008, 84.5% (82 suspensions) were initiated by in-plant veterinarians or inspection personnel. Only 15.5% (15 suspensions) occurred during DVMS visits.

See comment 4.

Withdrawal and Suspension of Inspection and the Incident at Bushway Packing

The description on page 9 of the process to "withdraw the plant's grant of inspection" is incorrect. A District office may not simply decide to withdraw a grant of inspection by withdrawing inspection program personnel. Although the district manager recommends the filing of a complaint for withdrawal, per the regulations in 9 CFR 500.6, if an establishment handles or slaughters livestock inhumanely, only the FSIS Administrator may file a complaint to

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withdraw a grant of Federal inspection in accordance with the Uniform Rules of Practice, 7 CFR Subtitle A, part 1, subpart H. This correction is included in our specific comments, but it also informs our following comment on GAO's discussion of events at Bushway Packing on page 24 of the audit report.

On page 24, GAO criticizes FSIS for not issuing "any guidance to the district offices on how many suspensions should result in a withdrawal of inspectors" and claims that had the Agency done so, the November 2009 incident of inhumane handling at Bushway might have been prevented. FSIS does not agree that a fixed number of suspensions should necessitate a request for withdrawal of the grant of inspection. The decision to suspend inspection, as well as to request a withdrawal of the grant of inspection, is based on numerous qualitative factors and can be made only by weighing all of the evidence for a specific case. But even if there were such a threshold for requesting withdrawal, given the legal requirements cited above, it is not certain that a withdrawal of Bushway's grant of inspection would have occurred prior to November 2009.

See comment 5.

Also on page 24, on page 40, and elsewhere in the report, GAO references the Bushway situation in concluding that FSIS's delegation of humane handling enforcement procedures to district offices "has not been effective." However, as stated above, suspensions for humane handling effected by Districts significantly increased during 2008 and 2009; they were in fact approximately twice the number of suspensions effected for other food safety related reasons.

Adoption of a Scoring System

On page 11, pages 27-29, and elsewhere in the document, GAO criticizes FSIS for not adopting a numerical scoring system for verification of compliance with humane handling requirements. FSIS has, in fact, provided a scoring tool to its DVMSs, the "Humane Handling and Slaughter Verification Tool," which was included in FSIS Directive 6910.1, Revision 1, published on December 7, 2009. FSIS has already conducted DVMS training on the scoring tool in August 2009. FSIS provided a draft of the tool to GAO during the audit.

The scores in the tool concern various indicators of humane handling, including stunning efficacy, and are based on industry standards. It is correct, as GAO points out on page 28 of the report, that the scoring is not regulatory in nature. Rather, the scores are used as guidance by the DVMS for discussions with the establishment. FSIS does not use the scoring alone for enforcement because the scoring, which allows for stunning failures, is inconsistent with the HMSA requirements for rendering livestock insensible to pain prior to slaughter "with a single blow or gunshot" (7 USC 1902(a)). Although it is true that establishments sometimes fail to stun livestock effectively with a single blow, FSIS does not enforce requirements less stringent than those mandated by the HMSA. Instead, FSIS uses its discretion to enforce in different ways, depending on the severity of and factors surrounding the stunning violation. In the case of an observed stunning failure, FSIS inspection program personnel are, at a minimum, to issue a noncompliance record (FSIS Directive 6900.2, Revision 2, Parts IV (C) and VI (A) and (B)).

See comment 6.

Strengthen the analysis of humane handling data

See comment 7.

FSIS will be significantly strengthening its analysis of humane handling data later this year. In an effort to dramatically improve its data collection and analysis, FSIS will launch the Public Health Information System (PHIS) later this year. PHIS will enhance FSIS's data infrastructure through integration of all data streams, including data collected in the Humane Activities Tracking System (HATS), a system that FSIS currently uses to document humane handling verification activities. PHIS will allow us to provide ongoing, real-time assessment, analysis and surveillance of public health, food defense, and humane handling data. Once PHIS is implemented, FSIS will have a critical tool to carry out more effective oversight of humane handling at livestock slaughter establishments.

See comment 8.

GAO Survey of FSIS Inspection Program Personnel

GAO draws many of its audit findings from the results of its survey of FSIS inspection program personnel. FSIS has acknowledged inconsistencies in enforcement of the humane handling requirements and plans to examine the GAO survey results as it continues to improve its humane handling verification and enforcement training and policies. But, for a number of reasons, FSIS questions whether the survey results provide evidence of systemic inconsistencies in enforcement, as suggested by the report.

See comment 8.

Owing to the language of the HMSA and the nature of livestock slaughter operations, verification and enforcement of humane handling requirements are activities that require qualitative judgments. The HMSA does not establish quantitative standards for humane handling and every livestock slaughter operation is different - in size, construction, layout, and staffing. Some of the survey questions however, as well as some of GAO's conclusions based on the survey results, seem to presuppose and depend on a necessary correlation between frequencies of events and specific regulatory responses.

See comment 9.

For example, questions 11 and 12 ask inspection program personnel to state what specific regulatory action they would take (suspension, regulatory control action, noncompliance record only) in response to specific frequencies of events, e.g. "Electrically prodding between 26 to 50 of 100 animals within acceptable voltage." Because inspection program personnel answered these types of questions differently, GAO concludes that HMSA enforcement is inconsistent. FSIS counters, though, that because there are no quantitative statutory requirements for humane handling and because each livestock slaughter establishment is unique, the responses show only that inspection program personnel were answering in the context of their experiences with specific establishments and livestock slaughter scenarios. Depending on the situation, any of the three regulatory responses often could be correct. Additionally, FSIS had not previously provided the potential frequencies of noncompliance found in the survey to in-plant personnel. This fact also likely contributed to the highly variable results.

See comment 9.

Finally, in regard to the GAO survey, it is important to note that the results show that there is overwhelming consistency among inspection program personnel responses concerning certain humane handling situations that require action. The questionnaire shows that significant percentages of employees consider action necessary in response to these problem situations. We

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see this as a starting point for using the GAO survey results in our efforts to improve HMSA verification and enforcement.

**Specific Comments**

Although some of our specific comments correct simple misstatements of fact, many address what FSIS sees as substantive misstatements of FSIS programs and policies. We believe that these misstatements, when taken together, create an inaccurate picture of FSIS humane handling verification and enforcement.

See comment 10.

- Page 6 – The report states that “HMSA exempts only ritual slaughter, such as kosher and halal slaughter, from the HMSA requirements.” This is incorrect. Under 7 U.S.C. 1902(b), kosher and halal slaughter are defined as “humane,” not exempted from the requirements of the Act.

See comment 11.

- Page 8 – The report states that when inspection program personnel observe a violation of the HMSA they are *both* to issue a noncompliance record (NR) and a regulatory control action. This is incorrect. FSIS Directive 6900.2, Rev 1, section VI (A) (3) directs inspection program personnel to take a regulatory control action only if “an establishment fails to adequately respond to an NR or fails to take its immediate and further preventive actions ...”

See comment 4.

- Page 8, bottom -- The sentence above the last bullet incorrectly describes the regulatory response to an egregious incident of humane handling. When the inspectors-in-charge (IIC) determines that an egregious incident has occurred, he or she applies the regulations at 9 CFR 500.3(b) in accordance with the instructions in FSIS Notice 21-09: “the IIC is to take an appropriate regulatory control action to prevent continued egregious inhumane handling and orally notify plant management of an immediate suspension action.”

See comment 4.

- Page 9, bullet – The description of the process for withdrawing a grant of inspection is incorrect and misleading. A District office may not simply “decide” to withdraw a grant of inspection by withdrawing inspection program personnel. Although the district manager recommends the filing of a complaint for withdrawal, per the regulations in 9 CFR 500.6, if an establishment handles or slaughters livestock inhumanely, only “The FSIS Administrator may file a complaint to withdraw a grant of Federal inspection in accordance with the Uniform Rules of Practice, 7 CFR Subtitle A, part 1, subpart H.”

See comment 12.

- Page 9 – In the second sentence, GAO states that IICs “may or may not be vets.” IICs typically are veterinarians, i.e. in all but the smallest slaughter facilities. Additionally, FSIS does not “certify” livestock prior to slaughter, as stated in the third to last sentence.

See comment 13.

- Page 10 -- The chart references a “patrol veterinarian”, which is only applicable to multi-IPPS (in-plant performance system) assignments. The term is not applicable, as shown, to large plants or most small plants.



See comment 14.

- Page 12 – In the incomplete paragraph at the top of the page, GAO states that FSIS has not used “data to analyze HMSA enforcement across districts and plants to identify inconsistent enforcement.” FSIS disagrees. In FY09, FSIS issued four quarterly reports on HMSA enforcement, analyzing FY09 data across Districts. These have been made available to and discussed with the District Offices during the monthly DVMS calls.

See comment 15.

- Page 15 -- In the second to last sentence, GAO states that in regard to suspension of inspection in response to egregious inhumane handling, “there is no directive to do so in guidance.” This is misleading. FSIS Notice 21-09, which has the same force as an FSIS Directive and provides specific examples of egregious inhumane handling, states:

However, if the observed inhumane treatment is of an egregious nature, the regulations at 9 CFR 500.3(b) apply. The regulations state, ‘FSIS also may impose a suspension without providing the establishment prior notification because the establishment is handling or slaughtering animals inhumanely.’ Therefore, the IIC is to take an appropriate regulatory control action to prevent continued egregious inhumane handling and orally notify plant management of an immediate suspension action. Next, the IIC is to immediately notify the District Office (DO) and the DVMS for prompt documentation of the suspension action. The IIC is also to document the facts that serve as the basis of the suspension action on a memorandum of interview (MOI) (see Attachment 1) and promptly provide that information electronically to the DO and the DVMS for their use in documenting the Notice of Suspension. The DO and the DMVS will make an official assessment of the facts supporting the suspension, take any final action with respect to it, and notify the Executive Associate for Regulatory Operations designated for the District.

See comment 3.

- Page 22 -- GAO states that 61% of suspensions of inspection related to humane handling “occurred during DVMSs humane handling audit visits.” This is incorrect. Of the 97 suspensions related to humane handling violations in CY 2008, 84.5% (82 suspensions) were initiated by in-plant veterinarians or inspection personnel. Only 15.5% (15 suspensions) occurred during DVMS visits.

See comment 16.

- Page 25 – In the first full paragraph, discussing the survey results concerning training, GAO states that 57% of IICs reported incorrect answers on “at least one of six possible signs of sensibility.” However, footnote 17 on the same page 25 states that when GAO queried the inspection program personnel they “added two [signs] that, alone, do not generally indicate sensibility.” It is unclear, therefore, what percentage of respondents in fact gave “incorrect answers.” GAO’s finding here that inspectors-in-charge “may not have been sufficiently trained” is thus called into question.

See comment 17.

- Page 26 – The second bullet concerns a National Academies’ Institute of Medicine study recommending “testing and improved training” for inspection program personnel. This study was requested by FSIS and concerned the use of pathogen control indicators in

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food safety verification. It is unclear how it is applicable to humane handling verification activities.

See comment 18.

- Page 31 -- In the first full paragraph, GAO implies that FSIS applies inconsistent amounts of time to humane handling verification in light of differing slaughter volumes at individual establishments. HMSA verification is independent of slaughter volume. Compliance is a function of an establishment's controls and the intensity of verification corresponds to establishment performance over time.

See comment 19.

- Pages 33 and 34 – The table and the narrative reference the “total amount specified for FSIS inspection in the agency annual appropriation,” and go on to imply that too small a percentage is used for humane handling verification. The referenced funding for “FSIS inspection” included livestock slaughter, poultry slaughter, and processing inspection; egg inspection; import inspection; in-commerce compliance; district office activities; and food safety enforcement activities. Since only the portions of the appropriation related to livestock slaughter inspection would be relevant to humane handling activity, the GAO conclusion that only “slightly above 1 percent of FSIS’ total inspection appropriations” is related to humane handling is very misleading.

See comment 20.

- Page 40 – The first sentence is contrary to the USDA Office of Inspector General’s (OIG) finding concerning the events at Hallmark/Westland. GAO concludes that it is “difficult to know whether the reported incidents of egregious animal handling at the slaughter plants in California and Vermont are isolated cases or indicative of a more widespread problem.” OIG found that “the events that occurred at Hallmark were not a systemic failure of the inspection processes/system as designed by FSIS.” Given this finding, and the increased scrutiny paid to humane handling compliance by FSIS since Hallmark/Westland, it seems unlikely that there is a significant volume of egregious humane handling violations undetected by FSIS.

Sincerely,



Jerold R. Mande  
Deputy Under Secretary for Food Safety

The following are GAO's comments on the U.S. Department of Agriculture's letter dated January 22, 2010.

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## GAO Comments

1. Our report acknowledges FSIS's efforts to increase its humane handling enforcement efforts since the events at Westland/Hallmark. However, FSIS did not provide source material for some of the data in its comments, making it difficult to determine the completeness and reliability of the data provided. Therefore we could not include in the report the data that FSIS provides in its comments.
2. We believe our report provides an accurate picture of FSIS's humane handling enforcement activities. However, we have modified text in response to FSIS's technical comments as appropriate or have explained why we disagree with FSIS's comments, as noted below.
3. We revised the report to reflect the agency's comments by deleting the portion of our analysis in our draft report that related to the suspension data that occurred on the days that DVMSs conducted humane handling audits. The report now states that the records of DVMS audit visits are incomplete and that we were unable to conduct the complete analysis. As a result, we could not fully determine how often DVMSs conducted humane handling audit visits nor whether there is a higher rate of enforcement actions on the days that DVMSs conducted their audits for humane handling. Specifically, our original analysis of the DVMS visits was based on data that FSIS provided to us during the course of our review. Based on the information originally provided to us by FSIS during our audit, these data met all of GAO's data reliability standards. In January 2010, after receiving a draft copy of this report for comment, FSIS provided us with revised suspension data and informed us that the original data it had provided were incomplete. However, after reviewing the January 2010 data, we believe the revised data contain incomplete information, and we are therefore unable to corroborate the DVMS humane handling audit visit data.
4. We modified the report to clarify that the FSIS Administrator may file a complaint to withdraw a grant of federal inspection.
5. We modified the report to clarify the difference between a withdrawal of inspectors and a withdrawal of the grant of inspection. We added that only the FSIS Administrator may file a complaint to withdraw a grant of federal inspection. However, the district office can still request such a withdrawal. In 2004, we recommended that FSIS

establish additional, clear, specific and consistent criteria for district offices to use when considering whether to take enforcement actions because of repeat violations.<sup>1</sup> We continue to believe that more specific guidance would be valuable to better address situations such as the one at the Bushway Packing plant in Vermont. It is also important to note that inspectors need to be trained to identify what actions may warrant such a request to ensure that FSIS is fully enforcing HMSA.

6. Although we did not state that numerical scoring is not regulatory in nature, we did state that using it to measure compliance would be inconsistent with the HMSA requirement that animals be rendered insensible to pain on the first blow. However, we believe that FSIS, in using its enforcement discretion, should identify some type of objective tool, such as a numerical scoring mechanism, and instruct all inspectors-in-charge at plants to use this measure to assist them in evaluating their plants' HMSA performance and determining what, if any, enforcement actions are necessary in the agency's exercise of its enforcement discretion.
7. We acknowledge in the report FSIS's efforts to strengthen its analysis of humane handling data later this year. Although FSIS officials informed us of plans to implement the Public Health Information System, we found that those plans have experienced delays, and the system has yet to be implemented. For example, Public Health Information System was originally scheduled to be fully functional in the fall 2009—we now understand that the expected date has shifted to the end of 2010. Without the availability of this system, we analyzed the humane handling data that FSIS made available to us during the course of our review.
8. FSIS questioned whether our survey results provide evidence of systemic inconsistencies in enforcement. Our survey results are based on strict adherence to GAO standards and methodology to ensure the most accurate results possible, as summarized in appendix I of this report. From May 2009 through July 2009, we surveyed inspectors-in-charge—those responsible for reporting on humane handling enforcement in the plants—from a random sample of inspectors at 257

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<sup>1</sup>[GAO-04-247](#).

livestock slaughter plants that were stratified by size—very small, small, and large. We obtained an overall survey response rate of 93 percent.<sup>2</sup>

9. Concerning FSIS's comment on two of our survey questions, our survey results showed that 29 percent of the inspectors reported that they would not take any enforcement action or did not know what enforcement action to take for electrical prodding of most animals. Ten percent of the inspectors reported that they would take no enforcement action or did not know what action to take for electrical prodding in the rectal area. These figures suggest that FSIS may not be fully enforcing HMSA. While FSIS states that HMSA enforcement requires that inspectors make qualitative judgments since each livestock slaughter operation is unique, we found that humane handling experts in academia and industry firmly believe that such judgments need to be based on some type of objective standards, regardless of the size, construction, layout and staffing at the plants. We appreciate FSIS's statement that it plans to examine the GAO survey results as it continues to improve its enforcement training and policies and urge FSIS to fully use the information in the survey results to identify practices that may achieve more consistent enforcement of HMSA.
10. We modified the report to clarify that HMSA exempts ritual slaughter from the requirement we discuss in the sentences immediately preceding the text in that section of the report—that an animal be rendered insensible to pain on the first blow—not to the general HMSA requirements.
11. Our report is correct as stated. FSIS refers to FSIS Directive 6900.2, Rev. 1, section VI (A) but FSIS does not refer to section VI (B), which states that if an inspector determines that “a noncompliance with humane slaughter and handling requirements has occurred and animals are being injured or treated inhumanely,” the inspector is to take two specific actions: (1) document the noncompliance on a noncompliance record and (2) take a regulatory control action. FSIS's misapplication of the directive may further illustrate the lack of clarity

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<sup>2</sup>All full sample percentage estimates from the survey have margins of error at the 95 percent confidence level of +/- 7 percentage points or less, unless otherwise noted. Percentage estimates by plant size have margins of error at the 95 percent confidence level of +/- 10 percentage points or less, unless otherwise noted.

in FSIS policy on humane handling enforcement, which may contribute to the lack of a clear understanding at the inspector level.

12. Nearly three-quarters of the inspectors-in-charge responding in our survey reported that they were not veterinarians. While 100 percent of the IICs at the large plants that we surveyed were veterinarians, 88 percent of those at very small plants in our representative survey were not veterinarians, and 57 percent of IICs at small plants were not veterinarians. In addition, we modified the text to clarify the responsibility of FSIS veterinarians prior to slaughter.
13. We modified figure 3 to show that patrol veterinarian only applies to some small and very small plants.
14. On page 31 of this report, we state that “FSIS began analyzing data across districts from the Humane Activities Tracking System in 2008—4 years after it developed the system.” We also recognize that the Data Analysis Integration Group began “reporting quarterly on HMSA enforcement, including the amount of time inspectors have devoted to HMSA, the number of plants suspended, and the number of noncompliance reports issued in 2009.” In reviewing these reports, however, we found no analysis indicating that FSIS used these data to evaluate HSMA enforcement across the districts and plants to identify inconsistent enforcement. Also, FSIS officials acknowledged in our final meeting in November 2009, that it has never conducted any analysis of the noncompliance reports to determine patterns or trends in HMSA enforcement. Furthermore, although FSIS provided us with its monthly minutes of its DVMS conference calls from March through September 2009, these minutes did not identify any FSIS analysis of HMSA enforcement across the districts and possible inconsistent patterns. FSIS did not grant our request to attend the monthly DVMS conference calls in order to better understand the nature of the DVMS discussion and attempt to determine if such analysis was under way.
15. We modified the text to indicate that there is “no clear directive to do so in guidance.” Although regulations and policy documents describe when suspensions may take place, the agency has offered no clear directive as to when they should take place.
16. We changed the text to state “six possible signs of sensibility” to clarify, as noted in footnote 17 (now footnote 15), that the list of signs included two that, alone, do not generally indicate sensibility. In addition, we re-checked the coding used in our analysis to ensure that the calculations were correct. We found no discrepancies or errors.

Therefore, these results clearly demonstrate that inspectors-in-charge may not have been sufficiently trained.

17. The National Academies' Institute of Medicine study found weaknesses in the noncompliance reports, and as we stated, the institute recommended testing and improved training with special emphasis on the quality and consistency of noncompliance reports for food safety issues. Because FSIS's inspection personnel are responsible for completing noncompliance reports for both food safety and humane handling violations, it is evident that improving training on the quality and consistency of those reports would be useful in supporting FSIS humane handling compliance efforts.
18. Our analysis of similar sized plants with similar slaughter volumes revealed substantial differences in the amount of time devoted to humane handling in different districts. This information might better inform FSIS officials to manage resources and/or training to help improve performance.
19. We disagree. We conducted this analysis in an effort to gain some perspective on the percent of FSIS annual appropriation for inspection devoted to humane handling and estimated that it has been above 1 percent of FSIS's total annual inspection appropriation. FSIS officials informed us that 80 percent of their time should be devoted to food safety and 20 percent to humane handling inspection and other activities. Because FSIS cannot track humane handling funds separately, the agency was unable to provide the amount of funds that it devotes to humane handling activities. To provide context for the reader, we estimated the percentage of the total annual inspection appropriations dedicated to HMSA enforcement. We modified the text to expand the definition of FSIS inspection fund to include other activities such as livestock slaughter, poultry slaughter, processing inspection, egg inspection, import inspection, in-commerce compliance, district office activities and food safety enforcement activities. However, this clarification does not change the calculation.
20. We disagree. While the OIG report states that "events that occurred at Hallmark were not a systemic failure of the inspection processes/system as designed by FSIS," it is important to note that its scope was based on observations at 10 cull cow (older and weaker) slaughter facilities. Nevertheless, the OIG report presented 25 recommendations to strengthen FSIS activities, and FSIS accepted all of these recommendations. Specifically, OIG recommended that FSIS needs to "reassess the inhumane handling risks associated with cull

slaughter establishments and determine if more frequent or in-depth reviews need to be conducted.” The report also recommended “that a structured training and development program, with a continuing education component, be developed for both its inspection and management resources.” Furthermore, our survey results and analysis of HMSA enforcement data—that inspectors did not consistently identify and take enforcement action for humane handling violations for the period we reviewed—indicate a more widespread problem. Therefore, we continue to believe that it is difficult to know whether these incidents are isolated or not, and the extent of such incidents is difficult to determine because FSIS does not evaluate the narrative in noncompliance reports.



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# Appendix V: GAO Contact and Staff Acknowledgments

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## GAO Contact

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## Staff Acknowledgments

In addition to the individual named above, other key contributors to this report were Thomas M. Cook, Assistant Director; Nanette J. Barton; Michele E. Lockhart; Beverly A. Peterson; Carol Herrstadt Shulman; and Tyra J. Thompson. Important contributions were also made by Kevin S. Bray, Michele C. Fejfar, Justin Fisher, Carol Henn, Kirsten Lauber, and Ying Long.

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