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HUMANE SLAUGHTER UPDATE

Federal and State Oversight of the
Welfare of Farm Animals at Slaughter

ANIMAL WELFARE INSTITUTE

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ABOUT THE RESEARCH

This report presents the findings of a survey of federal and state enforcement of the Humane Methods of Slaughter Act conducted by the Animal Welfare Institute (AWI) covering the period January 1, 2010, through December 31, 2015.

The research was undertaken as an update to two previous reviews of humane slaughter enforcement published by AWI: *Crimes Without Consequences: The Enforcement of Humane Slaughter Laws in the United States*, May 2008, and *Humane Slaughter Update: Comparing State and Federal Enforcement of Humane Slaughter Laws*, July 2010. This report does not cover the slaughter of poultry, which is addressed in another AWI publication: *The Welfare of Birds at Slaughter in the United States: The Need for Government Regulation*, April 2016.

As with the previous research, the aim of the current study is to analyze and compare the level of humane slaughter enforcement by federal and state departments of agriculture. The data used to analyze humane slaughter enforcement was obtained from numerous public record requests submitted to federal and state departments of agriculture and from records posted on the website of the US Department of Agriculture (USDA).

ABOUT THE ANIMAL WELFARE INSTITUTE

Since its founding in 1951, AWI has been alleviating suffering inflicted on animals by people. AWI works to improve conditions for the billions of animals raised and slaughtered each year for food in the United States. Major goals of the organization include eliminating factory farms, supporting higher-welfare farms, and achieving humane transport and slaughter for all farm animals.

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Summary

In 1996, animal scientist Dr. Temple Grandin conducted an audit of 24 federal slaughter plants for the USDA and found that only 30 percent of the plants were able to effectively stun cattle with one shot, as required by the federal humane slaughter law. In the late 1990s, as part of its transition to a new food safety monitoring program known as Hazard Analysis Critical Control Points, the USDA eliminated its procedural code for tracking humane slaughter violations, and consequently the number of reported plant suspensions for inhumane slaughter dropped to nearly zero.

The *Washington Post* published, in April 2001, a slaughterhouse exposé prompted by an undercover investigation of a major cattle slaughter plant in Washington state. The investigation suggested that inadequately stunned and still conscious animals were routinely being dismembered. In response, Congress passed a resolution expressing that the USDA should fully enforce the federal humane slaughter law, and enforcement increased slightly as a result.

In early 2008, another slaughterhouse investigation revealed multiple incidents of egregious cruelty to cattle at the Westland-Hallmark Meat Packing Co. in Chino, California, resulting in widespread public outrage and the largest beef recall in US history. Congress held multiple oversight hearings in the aftermath, and the USDA took several actions to step up its enforcement of the humane slaughter law.

AWI has conducted several surveys of federal and state enforcement of humane slaughter laws. A 2010 report by AWI found that both federal and state humane slaughter enforcement increased dramatically following the Westland-Hallmark investigation. The research described in this report looked at enforcement for the six-year period, 2010 through 2015. Major findings include:

- **Federal and state humane slaughter enforcement continues to rise, particularly in terms of the number of plant suspensions, and threatened suspensions, for egregious violations of the humane slaughter law.** In addition, the number of citations for less serious offenses continues to increase under state enforcement.
- **Although state enforcement is up overall, the level of enforcement varies dramatically by state.** For example, half of the states operating meat inspection programs have issued no plant suspensions for humane slaughter violations since at least 2002, when AWI began monitoring state enforcement. Moreover, one state—Louisiana—provided no evidence that it has issued any enforcement actions whatsoever for humane slaughter violations since at least 2002.
- **Repeat federal and state violators present a major enforcement problem.** Numerous examples of repeat violators were found, including a federal plant with 5 suspensions and 34 noncompliance records for inhumane slaughter in a one-year period and a state plant with 1 suspension and 13 noncompliance records within one year.
- **Federal and state inspection personnel continue to demonstrate unfamiliarity with humane slaughter enforcement by their failure to take appropriate enforcement actions.** In particular, state personnel are less likely than federal personnel to suspend a plant for egregious humane slaughter violations.
- **While humane slaughter enforcement is up at both the federal and state levels, it remains low in comparison with other aspects of food safety enforcement.** Resources devoted to humane handling at the federal level continues to constitute only 2 to 2.5 percent of total funding for food safety inspection.

Introduction to Farm Animal Slaughter in the United States

In the United States, approximately 9.1 billion animals were killed for food in 2015. More than 8.9 billion of these animals were birds: chickens, turkeys, and ducks. The remainder—approximately 150 million—were what is commonly referred to as “livestock” or “red meat” animals, including cattle, pigs, and sheep (see Figure 1).

Farm animals are generally slaughtered at three types of establishments within the United States—federally inspected for interstate commerce, state inspected for intrastate commerce, and custom exempt for personal, noncommercial use. A large majority of the animals killed for food in the United States each year are slaughtered at federally inspected plants.

As of January 1, 2016, there were 808 plants slaughtering farm animals under federal inspection (Figure 2). Of these, 641 plants slaughtered at least one head of cattle during 2015, with the 13 largest plants slaughtering 57 percent of the total cattle killed. Pigs were slaughtered at 613 plants, with the 13 largest plants accounting for 60 percent of the total. For calves, 3 of 203 plants accounted for 42 percent of the total, and 2 of the 518 plants that slaughtered sheep or lambs in 2015 were responsible for 43 percent of the total killed. Federal slaughter plants in the states of Iowa, Kansas, Nebraska, and Texas accounted for 49 percent of the total US commercial red meat production in 2015.

Currently, 27 states operate their own meat inspection programs (see Figure 2) in cooperation with the USDA, which provides up to 50 percent of the funding. These states inspect intrastate and custom slaughter plants within their state, with enforcement standards at least equal to those imposed under federal meat inspection laws, including the humane slaughter law. Producers in states that operate their own inspection programs may apply to be inspected under either federal or state inspection; however, products produced in state-inspected plants may only be sold within the state. The USDA certifies state inspection programs annually based on the state’s self-assessment, as well as USDA review.

Figure 1. Commercial Farm Animal Slaughter in the US (2015)

Species of Animal	Number Slaughtered
Cattle	28,751,600
Calves	452,600
Hogs	115,425,200
Sheep	2,223,500
TOTAL	146,852,900

Source: USDA-National Agricultural Statistics Service (NASS), *Livestock Slaughter: 2015 Summary*, April 2016.

Figure 2. Meat Inspection in the US (2016)

808	1,910
Livestock slaughter plants under federal inspection	Livestock slaughter plants under other inspection

States Operating Meat Inspection Programs

Alabama, Arizona, Delaware, Georgia,* Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Minnesota, Mississippi, Missouri, Montana, North Carolina, North Dakota, Ohio, Oklahoma, South Carolina, South Dakota,* Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Wyoming

Source: USDA-Food Safety and Inspection Service (FSIS), *States Operating Their Own MPI Programs* (last modified Mar. 23, 2015).
* State conducts meat inspection only, no poultry inspection program.

Federal-State Cooperative Inspection Agreements

Alabama, Georgia, Illinois, Mississippi, North Carolina, Oklahoma, Texas, Utah, Virginia

The designated status of an individual slaughter plant as being either federally or state inspected does not necessarily indicate what agency is responsible for conducting oversight, including matters related to humane slaughter. Some plants under federal oversight are inspected by employees of state agricultural agencies. Nine states (Figure 2) have assumed the authority to assist the USDA with administration and enforcement of federal food inspection laws. This authority is granted under the Talmadge-Aiken Act of 1962, and the slaughter plants inspected under this authority are referred to as “federal-state cooperative inspection plants” (formerly “Talmadge-Aiken plants”).

The Federal Meat Inspection Act and its regulations, including those related to humane handling and slaughter, apply to all federally inspected and state-inspected slaughter plants. On-farm slaughter by the farm owner or operator or by a commercial, mobile slaughtering operation is exempt, unless specifically covered by state law. Custom slaughter establishments are also exempt. While these operations are expected to comply with humane handling and slaughter

procedures, they are exempt from continuous inspection. Government inspectors are typically present to observe slaughter only once or twice per year.

The number of slaughter plants in the United States, both federally and state inspected, has declined continuously over the past 40 years (Figure 3). While the number of plants under federal inspection rose and then fell, the number of state plants declined steadily throughout the period.

While the number of federal plants has fallen, the number of larger plants has risen—a consequence of the consolidation of the meat industry. This has impacted the beef, pork, and lamb industries, as well as the poultry industry. The increase in large federal plants likely benefits animal welfare, as larger plants generally possess the resources needed to slaughter animals with a minimum of pain and distress. However, a smaller number of plants means that animals are being transported longer distances to slaughter.

Figure 3. US Livestock Slaughter Plants

Year	Plants under Federal Inspection	Plants under State/ Other Inspection	Total Plants
1970	726	7,017	7,743
1980	1,627	4,320	5,947
1990	1,268	3,281	4,549
2000	909	2,357	3,266
2010	834	1,940	2,774

Source: USDA-NASS, *Livestock Slaughter Annual Summary*, 1970 through 2010.

Overview of the Humane Slaughter Law and its Enforcement

The USDA's Food Safety and Inspection Service (FSIS) is the federal agency charged with inspecting slaughtering operations to ensure that farm animals are killed according to the Humane Methods of Slaughter Act (HMSA). The law and its regulations currently apply to the slaughter of cattle, sheep, goats, pigs, horses, mules, and other equines for human consumption. The USDA has chosen not to apply the law to birds or rabbits. The law also does not apply to the slaughter of "exotic" animals, such as reindeer, elk, deer, antelope, bison, and water buffalo. However, producers may choose to have their slaughtering and processing operations for these species inspected by federal or state inspectors under a voluntary program.

The HMSA requires that animals be made insensible to pain by "a single blow or gunshot or an electrical, chemical or other means that is rapid and effective" prior to being shackled, hoisted, or cut. Current HMSA regulations detail requirements for the stunning of animals by gunshot, captive bolt device, electrical current, and carbon dioxide gas. The law also provides for the humane handling of animals on the premises of a slaughtering establishment up to the point of slaughter. (Figure 4 illustrates key requirements of the HMSA and its regulations.)

The law allows for the shackling, hoisting, and cutting of conscious animals when performed in accordance with the ritual requirements of the Jewish or other religious faith. However, this exclusion does not exempt ritual slaughter from complying with the humane handling requirements included in the HMSA regulations (illustrated by Steps 1 through 5 of Figure 4). Currently, the USDA interprets the ritual slaughter exemption as allowing religious authorities complete autonomy in determining the humaneness of actions taken to prepare animals for ritual slaughter (such as cleaning, positioning, and restraining the animal), as well as the humaneness of the slaughter process itself.

Federal and state departments of agriculture may take enforcement actions against an individual slaughter plant because of its inhumane handling and/or slaughter of animals covered by the HMSA. These enforcement actions are spelled out in the FSIS Rules of Practice (9 C.F.R. Part 500), and are further explained in the FSIS Humane Handling and Slaughter of Livestock Directive (6900.2).

Enforcement actions available to agriculture agencies include (1) regulatory control actions, including slowing or stopping the slaughter line and the application of "reject tags" (which prevent use of specific equipment or areas of a plant until the deficiency is corrected), (2) issuance of noncompliance records (NRs) for regulatory violations, (3) issuance of notices of intended enforcement (NOIEs) or notices of suspension (NOSs) for egregious regulatory violations or repeated non-egregious regulatory violations, and (4) permanent suspension of inspection or withdrawal of inspection for repeated egregious violations.

FSIS Directive 6900.2, Humane Handling and Slaughter of Livestock, defines "egregious" inhumane treatment as any act or condition that results in severe harm to animals, and lists the following examples:

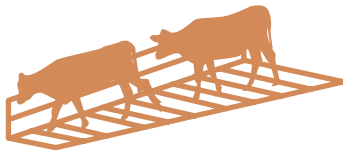
- ✎ Making cuts on or skinning conscious animals
- ✎ Excessive beating or prodding of ambulatory or nonambulatory disabled animals or dragging of conscious animals
- ✎ Driving animals off semi-trailers over a drop-off without providing adequate unloading facilities
- ✎ Running equipment over conscious animals
- ✎ Stunning animals and then allowing them to regain consciousness
- ✎ Multiple attempts, especially in the absence of immediate corrective measures, to stun an animal versus a single blow or shot that renders an animal immediately unconscious
- ✎ Dismembering conscious animals, for example, cutting off ears or removing feet
- ✎ Leaving disabled livestock exposed to adverse climate conditions while awaiting disposition
- ✎ Otherwise causing unnecessary pain and suffering to animals, including situations on trucks

Figure 4. Humane Handling and Slaughter Requirements



1. Arrival at slaughter plant

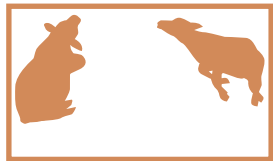
Humane regulations apply from the time a truck enters the property of a slaughter establishment. Any animal unable to walk off the truck must be moved on suitable equipment or stunned. Dragging of conscious animals is prohibited.



2. Unloading from Truck

Driving of animals off trucks and down ramps must be done with a minimum of excitement and discomfort to the animals.

Animals are not to be forced to move faster than a normal walking speed. Ramps should provide good footing so animals do not slip or fall.



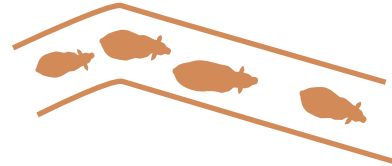
3. Handling of Disabled Animals

Disabled animals must be separated from ambulatory animals and placed in a covered pen sufficient to protect them from any adverse climatic conditions. Nonambulatory cattle (including calves) must be euthanized.



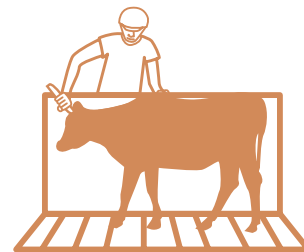
4. Condition of holding pens

Animals must have access to water and, if held over 24 hours, access to feed. Sufficient room must be provided for animals held overnight to lie down. Pens must be kept in good repair and be free from sharp corners that might cause injury or pain to the animals.



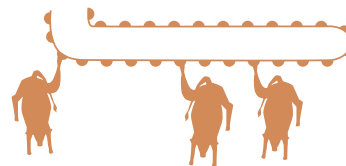
5. Moving to stunning area

Electric prods shall be used as little as possible. Pipes, sharp or pointed objects, and other items that would cause injury or pain to the animal are not to be used. Driveways must have slip resistant floors and should be arranged so that sharp corners are minimized.



6. Stunning

Regardless of the method used—gas, electrical, captive bolt, or gunshot—stunning must be applied so that the animal is rendered unconscious on the first attempt and with a minimum of excitement and discomfort.



7. Slaughter

Animals must be unconscious before they are shackled, hoisted, or cut. The animal is to remain in this condition throughout the shackling, sticking, and bleeding process. Any animal showing signs of consciousness must be immediately restunned.

Federal Enforcement

Level of Federal Humane Slaughter Enforcement

The USDA reports the number of procedures conducted at federal slaughter plants to verify compliance with the HMSA and its regulations. AWI has monitored these verification procedures since 2007. The USDA also reports the amount of time spent by federal inspectors on humane slaughter enforcement. This is referred to as the Humane Activities Tracking System (HATS), and the data is reported in hours. Additionally, the USDA reports the number of full-time equivalent (FTE) inspectors represented by the total HATS hours for all FSIS district offices combined.

The total FSIS verification procedures and humane handling FTEs, for fiscal years 2010 through 2015, are presented in Figure 5. As shown, the effort expended on humane slaughter at the federal level generally increased during the time period (with a peak in 2013).

Figure 5. Time Spent on Federal Humane Slaughter Enforcement

Fiscal Year	No. of Full-Time Inspectors	No. of Verification Procedures
2010	142	126,063
2011	153	128,064
2012	158	171,953
2013	177	183,781
2014	169	179,538
2015	170	174,570

Sources: (1) USDA-FSIS, Humane Handling Quarterly Reports for the 12-month Periods Ending Sept. 30, 2010, 2011, 2012, and 2013; (2) FSIS response to FOIA #2016-00061, submitted by AWI, Dec. 8, 2015.

Figure 6. Federal Enforcement Actions

Enforcement Action	2007 ¹	2015 ²
Verification procedures	167,000	175,000
Noncompliance Records	700	736
Notices of Suspension/Intended Enforcement	12	128

Sources: (1) Congressional Research Service, *USDA Meat Inspection and the Humane Methods of Slaughter Act*, 2008; (2) FSIS response to FOIA #2016-00061, submitted by AWI, Dec. 8, 2015.

Figure 6 above compares the number of humane slaughter verification procedures, noncompliance records, and suspensions/NOIEs for the years 2007 and 2015. While verification procedures and NRs rose slightly, suspensions/NOIEs increased tenfold.

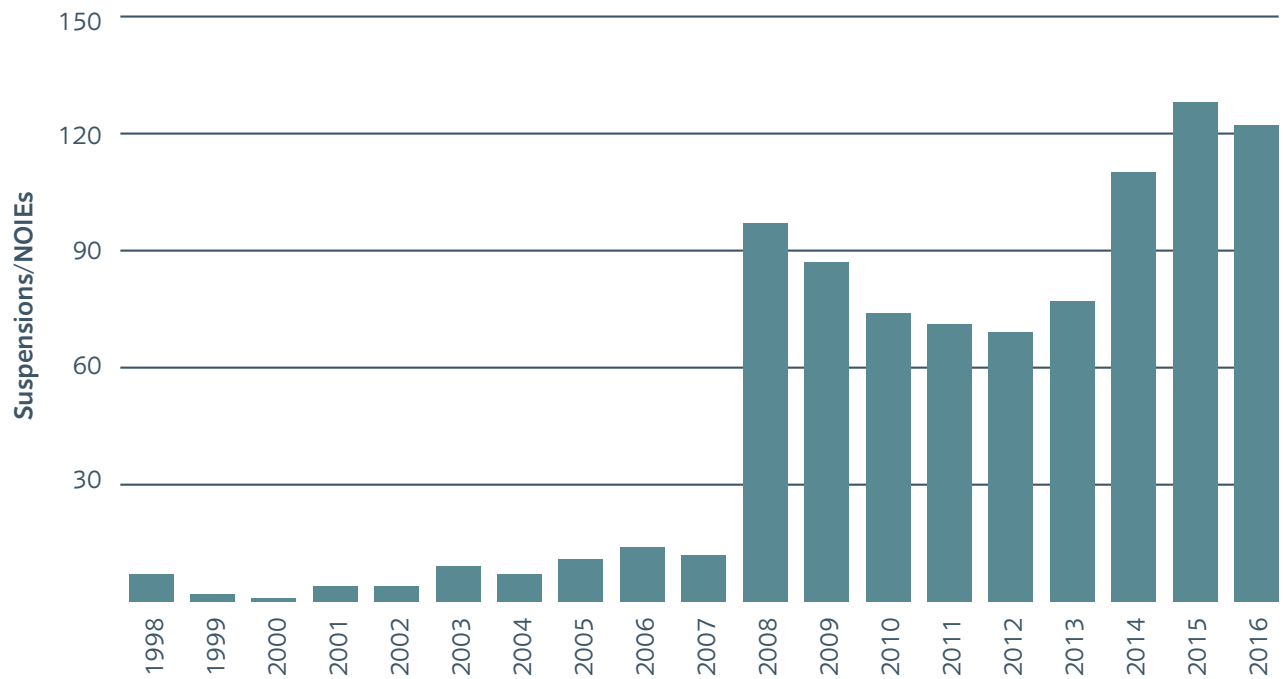
Comparing Federal Enforcement over Time

Federal suspensions increased dramatically in 2008 (Figure 7) as a result of increased enforcement by the USDA in response to an egregious incident of inhumane handling captured on video at the Westland-Hallmark plant in Chino, California, which resulted in the largest beef recall in US history. As illustrated in Figure 7, the number of suspensions (including NOIEs, or threatened suspensions) gradually declined from 2009 through 2012, and then increased again from 2013 through 2015.

Violations Cited at Federally Inspected Plants

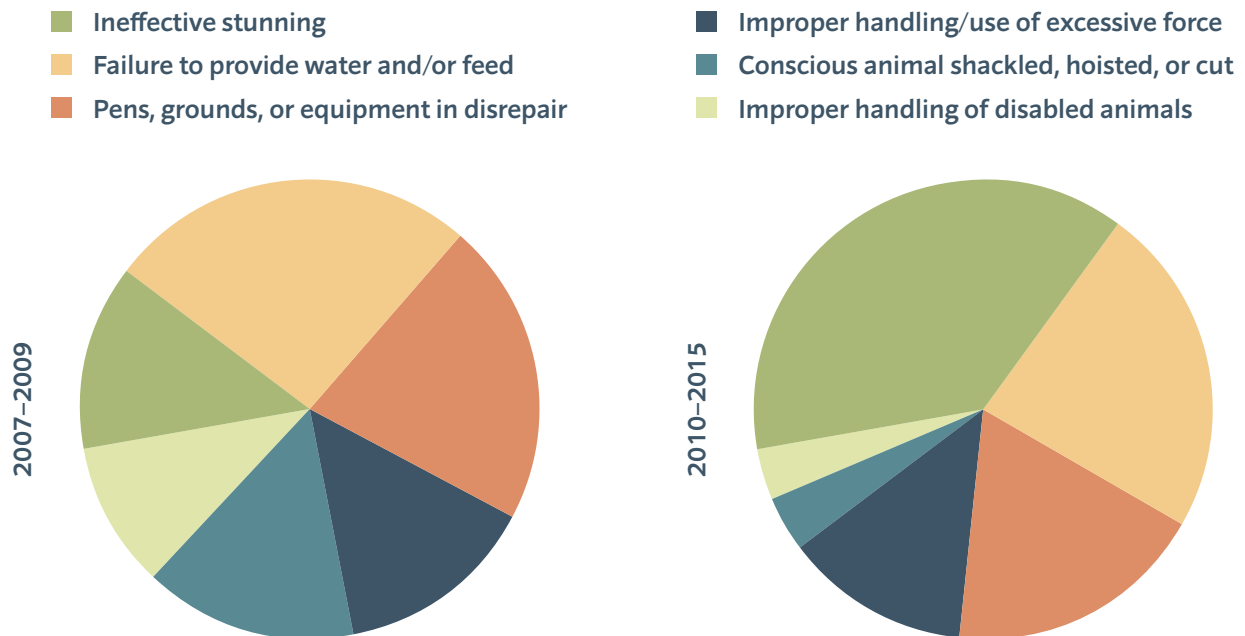
In its previous surveys of humane slaughter, AWI reported on the types of humane violations cited at both federally inspected and state-inspected plants. AWI again analyzed types of noncompliances cited for the years 2010 through 2015, and compared those results with the previous results for 2007–2009. As illustrated in Figure 8, the proportion of citations for failure to provide water and/or feed; failure to maintain pens, grounds, or equipment; and improper handling

Figure 7. Federal Enforcement Actions for Egregious Violations



Source: USDA-FSIS Quarterly Enforcement Reports.

Figure 8. Types of Violations at Federal Plants



has remained relatively stable. However, the percentage of violations for ineffective stunning nearly tripled, from 13 percent to 38 percent. At the same time, the percentage of violations for conscious shackling, hoisting, or cutting decreased significantly, from 15 percent to 4 percent, possibly because inspection personnel were intervening earlier in the process at the stunning stage. The percentage of violations for improper handling of disabled (or “downed”) animals also decreased significantly, a likely result of a prohibition on slaughtering downed cattle.

Repeat Violators Continue to Present a Serious Enforcement Problem

Each of AWI’s surveys have identified repeat violators as a significant problem at both federal and state plants. These are cases where individual slaughter plants are cited for multiple violations in a relatively short period of time. Several examples follow. (It should be noted that some of the enforcement actions cited below may have been successfully appealed by the establishment. Information regarding the disposition of appeals is typically not provided by the USDA in response to FOIA requests.)

- ✎ Brooksville Meat Fabrication (M9173), in Brooksville, KY, was suspended four times during a six-month period in 2013.
- ✎ Matkins Meat Processors (M795), in Gibsonville, NC, was suspended three times during a two-month period in 2013.
- ✎ Triple J Family Farms (M17466), in Buffalo Lake, MN, was issued four suspensions and 16 noncompliance records in 2013.
- ✎ VPP Group (M1361), in Norwalk, WI, was issued one suspension, four notices of intended enforcement, and eight NRs in 2013.
- ✎ Dakota Premium Foods (M357), in St. Paul, MN, was issued 14 NRs in 2013.
- ✎ Gold Medal Packing (M17965), in Rome, NY, was issued two suspensions and 18 NRs in 2013–2014.
- ✎ New York Custom Processing (M17965A), in Bridgewater, NY, was issued one notice of intended enforcement and 16 NRs in 2013–2014.
- ✎ Cherry Meat Company (M40106), in Chapel Hill, TN, was suspended three times in 2015.
- ✎ JH Routh Packing Company (M818), in Sandusky, OH, was issued three suspensions and nine NRs in 2015.
- ✎ Kleemeyer & Merkel Inc. (M5439), in Green Village, NJ, was suspended four times within a four-month period in 2015.
- ✎ C and F Meat Company (M8330), in College Grove, TN, was issued three suspensions and four NRs in 2015.
- ✎ Tyson Fresh Meats Inc. (M244I), in Logansport, IN, was issued five suspensions and 34 NRs in 2015.
- ✎ Tyson Fresh Meats Inc. (M245L), in Lexington, NE, was issued two suspensions, one notice of intended enforcement, and two NRs in 2015.

In theory, the economic consequences of a plant being suspended should serve as a deterrent to future offenses. Unfortunately, that does not appear to always be the case, perhaps in part because plants—particularly large ones—are typically shut down for only short periods of time, often less than one day. It is the USDA’s position that the agency may only suspend inspection for as long as it takes for the plant to provide an acceptable plan for corrective actions and preventive measures, and that the agency may not issue punitive suspensions, even when plants have committed repeated egregious violations within a short period of time.

Although the USDA has declined to issue punitive suspensions, it has initiated stronger administrative actions against some repeat violators. In March 2014, a USDA administrative law judge entered a default decision and order against Brooksville Meat Fabrication (M9173), indefinitely suspending the assignment of inspectors based upon “repetitive, egregious humane

handling and slaughter violations.” In December 2015, the USDA filed a complaint to indefinitely suspend slaughter inspection at Mountainair Heritage Meat Processing, Inc. (M34427) based on the establishment’s “repetitive, egregious humane handling and slaughter violations and inability to provide assurances that all slaughtering and handling of livestock will be conducted humanely.” The USDA also filed complaints to withdraw federal inspection services from Lemay and Sons Beef Company (M9542) in February 2015, and from MSM Meat Company (M1052) in August 2016, for repeated humane slaughter violations.

Lack of Criminal Prosecutions

Criminal prosecution should be considered one approach to deterring repeat violators, or those who commit egregious, willful acts of animal cruelty during handling or slaughter. Unfortunately, according to FSIS Quarterly Enforcement Reports, the USDA has not initiated any civil or criminal prosecutions for inhumane slaughter at licensed federal plants since at least 2007. However, the agency has pursued criminal humane slaughter cases against establishments found to be operating illegally (including three small “backyard” operations in Florida).

Humane Slaughter Remains a Low Priority Within the USDA

At the federal level, the amount of time spent on humane activities, as well as the number of humane verification procedures, increased slightly from 2009 to 2015 (refer to Figures 5 and 6). As a percent of all meat inspection actions, however, the number of humane slaughter actions remains extremely low (Figure 9). For example, between 2010 and 2015, only 2.4 percent of all food safety verification procedures were conducted for humane handling/slaughter (compared to 1.5 percent in 2009). Moreover, less than 1 percent of all food safety NRs were issued for humane handling violations (the same as in 2009). The exception was suspensions and NOIEs, where nearly one-third of all of these food safety administrative actions were taken for egregious humane handling violations.

Figure 9. Humane Slaughter as a Food Inspection Priority (2010–2015)

Type of Enforcement Action	Humane Slaughter Actions (as a percent of all meat inspection actions)
Verification Procedures	2.4%
Noncompliance Records	0.6%
Plant Suspensions/NOIEs	31.3%

Sources: (1) USDA-FSIS Humane Handling Quarterly Reports; (2) FSIS response to FOIA #2016-00061, submitted by AWI, Dec. 8, 2015; (3) USDA-FSIS Quarterly Enforcement Reports.

State Enforcement

Most state plants, which are limited to selling products intrastate, are typically small or very small establishments. They often do not operate on a daily basis and slaughter a very small number of animals when they do operate. The turnover among these plants is extremely high; few survive long-term. According to an analysis conducted by the USDA's Economic Research Service, only about 10 percent of very small plants last 10 years. Those that do usually do so by meeting local or special demands, such as for the organic, grass-fed, or pasture-raised meat markets. They tend to slaughter multiple animal species and different animal types within a species. For example, while the large federal plants often slaughter steers or heifers or market-weight hogs only, smaller plants are more likely to slaughter mature animals such as culled dairy cows and breeding sows.

While AWI monitors federal enforcement continuously, it surveys state enforcement at intervals of 1–2 years. Since the publication of its last report in 2010, AWI has requested state enforcement records on three occasions, for the periods 2010–2012, 2013–2014, and 2015.

All states operating meat inspection programs eventually responded to each open records request from AWI. Delaware indicated it had no licensed state-inspected plants for the period 2010–2015. Alabama indicated that it had records but refused to supply them via mail. South Carolina provided a summary of enforcement actions but declined to provide the records, citing a state law prohibiting the release of information that may be used to identify a person or private business activity subject to regulation by the state meat inspection program. Louisiana was the only state to indicate that it had no humane slaughter enforcement records for the entire six-year period. (Louisiana had also stated that it had no records for the period 2007–2009, and it did not respond to a records request for the period 2002–2004.)

Level of State Humane Slaughter Enforcement

State inspection programs also report the amount of time spent tracking humane activities (HATS) in a manner similar to the federal program. Of the 26 states with licensed state-level slaughter plants, only 5 did not provide AWI with any HATS data for 2010–2015. Unfortunately, HATS data is of limited value unless the number of days the slaughter plant was operating and the number of animals slaughtered during the time period are known. Without this information, comparisons among the states cannot be made. Figure 10 presents HATS data for those states providing data that allowed AWI to determine the amount of time spent per day and the amount of time spent per animal at each slaughter plant included in HATS reporting. According to the data provided, Mississippi, Oklahoma, and West Virginia spent the most time on humane activities per animal slaughtered.

Comparing State Enforcement Over Time, 2002–2015

The number of enforcement actions taken at state-inspected plants has increased significantly since AWI's first survey, which was conducted for the years 2002–2004 (see Figure 11). Both NRs and suspensions are up dramatically over the past decade. The issuance of NRs at state plants has increased tenfold, and the number of suspensions was nearly 18 times higher in 2013–2015 than in 2002–2004.

Figure 10. Time Spent on State Humane Slaughter Enforcement

State	# of Plants*	Time Period**	Animals Slaughtered***	Avg. HATS/Day (& Range)	Avg. HATS/Animal (& Range)
Arizona	5	9/13–12/14	8,181	2.08 (1.39–2.32)	0.20 (0.02–0.58)
Georgia	24	7/12–12/14	75,347	1.63 (0.75–3.23)	0.24 (0.01–1.71)
Illinois	57	7/12–12/14	238,382	1.04 (0.44–3.46)	0.12 (0.01–0.50)
Maine	5	7/12–12/14	1,506	1.52 (1.29–1.76)	0.27 (0.13–0.46)
Mississippi	10	7/12–12/14	8,639	4.51 (2.29–6.94)	0.75 (0.19–2.06)
Missouri	25	6/12–12/14	13,038	1.15 (0.26–5.83)	0.24 (0.02–0.87)
North Carolina	16	8/13–12/14	72,645	1.78 (0.70–7.74)	0.17 (0.02–0.75)
Ohio	77	10/13–12/14	148,696	2.00 (0.25–4.04)	0.08 (0.01–0.53)
Oklahoma	14	7/12–12/14	8,130	2.76 (0.27–8.74)	0.55 (0.03–1.23)
South Dakota	32	7/12–12/14	9,477	1.56 (0.50–3.18)	0.42 (0.06–1.66)
Utah	11	7/12–12/14	22,338	2.91 (1.40–5.72)	0.25 (0.03–0.53)
Vermont	3	5/13–12/14	4,307	1.09 (0.98–1.19)	0.16 (0.02–0.31)
Virginia	5	6/13–12/14	2,105	1.17 (0.82–1.64)	0.29 (0.10–0.49)
West Virginia	6	7/12–12/14	4,053	2.22 (1.15–3.19)	0.44 (0.10–0.80)

* Represents the number of plants included in the HATS reporting and not necessarily the total number of inspected plants in the state.

** Most states did not adopt electronic reporting of HATS data until 2012–2013. AWI did not request state HATS data for 2015.

*** Represents the number of animals included in the HATS reporting and not necessarily the total number of animals slaughtered in the state.

Figure 11. State Enforcement Actions (All States)

Type of Action	2002–2004	2007–2009	2010–2012	2013–2015
Noncompliance Records*	72	410	456	735
Suspensions/Warnings**	4	12	22	71

* Includes memorandums of interview.

** Includes notices of intended enforcement, letters of warning, letters of concern.

Figure 12. Enforcement Actions by State (2010–2015)

State	NRs/MOIs	Suspensions/Warnings*	No. of Plants**
Alabama***	N/A	N/A	28
Arizona	11	0	29
Delaware****	0	0	0
Georgia	8	3	43
Illinois	131	9	145
Indiana	8	0	79
Iowa	41	2	71
Kansas	113	0	53
Louisiana	0	0	49
Maine	31	6	6
Minnesota	64	0	55
Mississippi	18	1	18
Missouri	4	0	38
Montana	3	0	39
North Carolina	56	12	57
North Dakota	9	0	13
Ohio	136	11	227
Oklahoma	9	0	30
South Carolina	46	8	67
South Dakota	33	1	46
Texas	160	5	213
Utah	6	0	19
Vermont	4	0	14
Virginia	3	0	11
West Virginia	28	0	17
Wisconsin	221	35	282
Wyoming	48	0	16
TOTAL	1191	93	1665

* Includes notices of intended enforcement, letters of warning, letters of concern, and letters of extreme concern.

** Number does not include plants under custom inspection. Source is *Fiscal Year 2015 Comprehensive Review and Determination Report* produced by the USDA-FSIS Office of Investigation, Enforcement and Audit, Federal-State Audit Branch, Dec. 2015.

*** Alabama refused to provide records through the mail.

**** Although Delaware is accredited by the FSIS to operate a meat inspection program, the state had no state-inspected plants during the period 2010–2015.

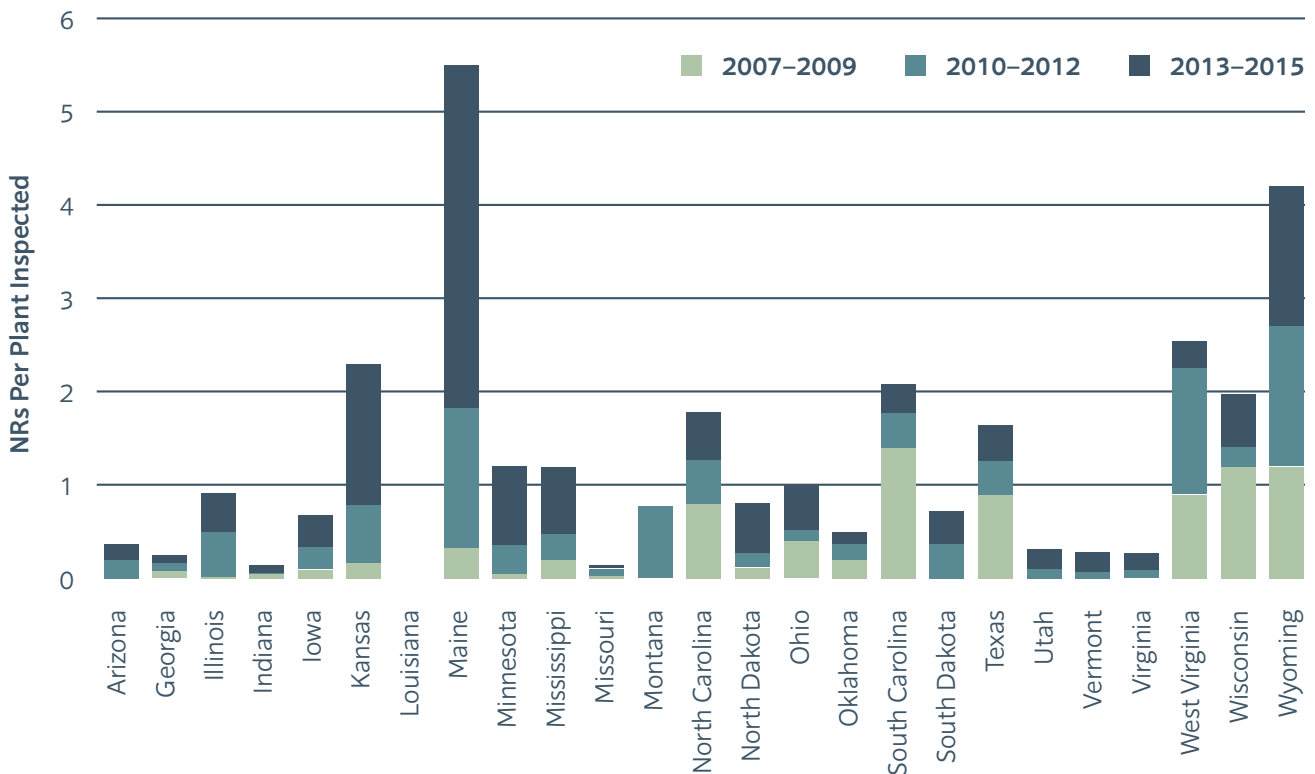
Although all state inspection programs are expected to meet the minimum standards of the federal meat inspection program, states vary considerably in terms of the types of reporting forms that they use and the types of enforcement actions taken. For example, several states issued memorandums of interview (MOIs) for regulatory violations, despite the fact that federal food safety directives confine the use of MOIs to discussions of nonregulatory concerns or description of egregious incidents resulting in plant suspension. In addition, a few states issued documents other than notices of suspension or notices of intended enforcement in response to egregious violations. AWI has reviewed documents titled “Letter of Concern,” “Letter of Extreme Concern,” and “Letter of Warning” that have been issued for this purpose. Figure 12 presents the number of enforcement actions reported for each of the 27 states operating a meat inspection program.

Some states took a significantly greater number of enforcement actions than others. This has been

found in each survey conducted by AWI, dating back to 2002. As illustrated in Figure 12, several states, including Missouri, Montana, Utah, Vermont, and Virginia, reported very few NRs and no suspensions or threatened suspensions during the six-year period 2010–2015. On the other hand, four states provided a relatively large number of records: Illinois with 131 NRs/MOIs and 9 suspensions, Ohio with 136 NRs/MOIs and 11 suspensions, Texas with 160 NRs/MOIs and 5 suspensions, and Wisconsin with 221 NRs/MOIs and 35 suspensions and warnings.

However, because the number of plants inspected varies widely by state, the number of enforcement actions per plant inspected must be calculated in order to compare enforcement rates. Figure 13 identifies Kansas, Maine, West Virginia, and Wyoming as the states with the highest rate of noncompliance records for humane violations. (For the period 2007–2009, South Carolina, Wisconsin, and Wyoming had the highest noncompliance rates, followed by Texas, West Virginia, and North Carolina.)

Figure 13. Noncompliance Record Rate by State

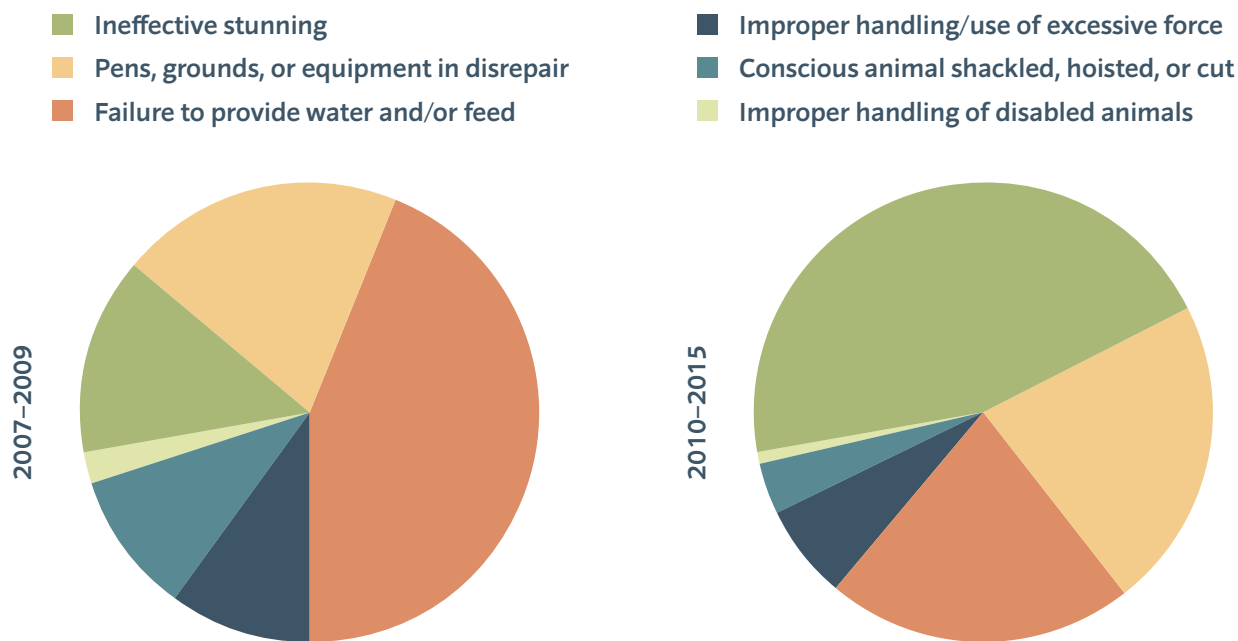


Violations Cited at State-Inspected Plants

As with its previous surveys of humane slaughter, AWI analyzed types of noncompliances cited at state-inspected plants for the years 2010 through 2015, and compared those results with the previous results for 2007–2009. As illustrated in Figure 14, the proportion of citations for failure to maintain pens, grounds, or

equipment; and improper handling has remained relatively stable. However, the percentage of violations for ineffective stunning tripled, from 14 percent to 46 percent, while the percentage of violations for failure to provide water and/or feed dropped by half. The breakdown of violations for federal and state plants has become more similar over the past decade.

Figure 14. Types of Violations Cited at State-Inspected Plants*



*Data for the state of South Carolina not included.

Repeat Violators Continue to Present a Serious Enforcement Problem

As with federal inspection, repeat violations have been shown to be a problem at state-inspected plants in each enforcement survey conducted by AWI. Although repeated suspensions at state plants are observed less frequently than with the federal inspection program, the issuance of numerous NRs to a single plant is not unusual. Several examples follow. (It should be noted that it is possible that some of the enforcement actions cited below were successfully appealed by the establishment. Information regarding the disposition

of appeals is typically not provided in response to state open records requests.)

- An Arizona plant (AZ64) received 7 of the 11 total noncompliance records issued to all state-inspected slaughter plants in Arizona between 2010 and 2015.
- An Illinois plant (IL60) was issued 2 suspensions and 7 NRs in one 16-month period (August 2014 through December 2015).
- A Kansas plant (KS82) received 21 NRs between February 2012 and October 2013.

- ✎ Another Kansas plant (KS457) was issued 15 NRs between January 2013 and July 2014.
- ✎ A Maine plant (ME72) received 10 NRs during 2012 and 2013.
- ✎ A North Carolina plant (NC318) received 4 suspensions and 19 NRs between 2012 and 2015.
- ✎ A Texas plant (TX470) was issued 18 NRs and memorandums of interview between February 2013 and May 2015.
- ✎ Another Texas plant (TX546) was issued 1 suspension and 17 NRs during 2011 and 2012.
- ✎ A Wisconsin plant (WI251) was issued 1 suspension and 13 NRs in 2014.
- ✎ Another Wisconsin plant (WI293) received 21 NRs during 2013 and 2014.
- ✎ A West Virginia plant (WV31) received 15 NRs between March 2010 and February 2012. This plant and one other (WV2) received 23 of the 28 total NRs issued to all state-inspected slaughter plants in West Virginia between 2010 and 2015.
- ✎ A Wyoming plant (WY11860) received 11 of the total 13 NRs issued to all state-inspected plants in Wyoming in 2015.

Lack of Criminal Prosecutions

As mentioned above, criminal prosecution should be considered one approach to deterring repeat violators, or those who commit egregious, willful acts of animal cruelty during handling or slaughter. At the state level, criminal prosecution is possible under state humane slaughter laws, as well as under state anti-cruelty laws. Eighteen of the 27 states with state meat inspection programs have state-level humane slaughter laws on the books. In addition, the animal cruelty laws of 24 of the 27 states theoretically allow for the prosecution of inhumane slaughter cases. (See AWI's report, *Legal Protections for Farm Animals at Slaughter*, for additional information.) Unfortunately, AWI has received no information indicating that any state

has pursued criminal prosecution of an individual or company committing inhumane slaughter since at least 2007. (Minnesota prosecuted a criminal case against a custom slaughter operation for inhumane slaughter of a pig by use of an axe in 2004.)

Grading of State Enforcement Programs

In AWI's first survey of state enforcement, for the period 2002–2004, only 3 of 27 states (Minnesota, Ohio, and South Carolina) provided evidence of having suspended inspection at a plant for inhumane slaughter, and only 10 states had issued any type of humane slaughter enforcement action. In AWI's most recent survey, however, the number of states that have suspended inspection rose to 11, and every state except Louisiana indicated that it had issued some type of enforcement action for inhumane slaughter. While some differences remain, the level of consistency among state programs has increased steadily over the past decade.

AWI has graded the state enforcement programs based on the following criteria: 1) rate of issuing NRs per plant inspected, 2) rate of issuing suspensions per NR issued, 3) issuing of MOIs for discussions of humane handling issues, 4) instances of inadequate enforcement, 5) evidence of humane handling verification visits, and 6) humane handling enforcement records provided, including those related to HATS, corrective action plans (in response to NRs), or verification plans (in response to suspensions).

Figure 15. Summary of State Programs

State	Summary of Program (and Grade)
Alabama	No records provided since the 2007–2009 survey. Grade: inadequate information to determine
Arizona	Avg. NR rate; no suspensions issued; no examples of inadequate enforcement; avg. HATS. Grade: C-
Delaware	No state-inspected plants. Grade: not applicable
Georgia	Low NR rate, but high suspension rate; suspensions included verification plans; evidence of humane handling verification visits; avg. HATS. Grade: C+
Illinois	High NR rate; suspensions issued; MOIs issued for regulatory discussions; 1 of only 2 states to submit records for humane handling of poultry; some cases of inadequate enforcement; evidence of verification visits; low HATS. Grade: B+
Indiana	Very low NR rate; no suspensions issued; evidence of humane handling audits; 1 of only 2 states to submit records for humane handling of poultry. Grade: D
Iowa	Avg. NR rate; suspensions issued; no cases of inadequate enforcement; no HATS data provided. Grade: C+
Kansas	High NR rate; no suspensions issued; MOIs issued for regulatory discussions; many examples of inadequate enforcement; evidence of humane handling verification visits. Grade: C
Louisiana	No NR or suspensions issued in 12 years; evidence of humane handling verification visits; no HATS data provided. Grade: F
Maine	Very high NR and suspension rates; MOIs issued for regulatory discussions; suspensions included verification plans; avg. HATS. Grade: A
Minnesota	High NR rate; no suspensions issued; several cases of inadequate enforcement; evidence of humane handling audits. Grade: C
Mississippi	High NR rate; 1 suspension issued; no cases of inadequate enforcement; no evidence of humane handling verification visits; high HATS. Grade: B
Missouri	Very low NR rate; some NRs with corrective action plans; no suspensions issued; no evidence of humane handling verification visits; avg. HATS. Grade: D+
Montana	Very low NR rate; no suspensions issued; no evidence of verification visits; no HATS data. Grade: D
North Carolina	Avg. NR rate; high suspension rate; suspensions included verification plans; MOIs issued for regulatory discussions; no examples of inadequate enforcement; evidence of humane handling verification visits; low HATS. Grade A-
North Dakota	Avg. NR rate; no suspensions issued; no examples of inadequate enforcement; no evidence of humane handling verification visits; no HATS provided. Grade: C-
Ohio	Avg. NR rate; some NRs with corrective action plans; MOIs issued for regulatory discussions; a number of suspensions but also some cases of inadequate enforcement; withdrew inspection of custom plant; low HATS. Grade: B

Oklahoma	Low NR rate; no suspensions issued; MOIs issued for various humane handling concerns; no evidence provided of humane handling verification visits; high HATS. Grade: D+
South Carolina	Avg. NR rate; NRs with corrective action plans; high suspension rate; no examples of inadequate enforcement. Grade: A-
South Dakota	Avg. NR rate; 1 threatened suspension; a few examples of inadequate enforcement; no evidence of humane handling audits; avg. HATS. Grade: C
Texas	Avg. NR rate; a few suspensions issued; “letters of concern” issued instead of suspensions for egregious violations; some MOIs issued for regulatory violations; a few examples of inadequate enforcement; no evidence of humane handling visits. Grade: C+
Utah	Low NR rate; no suspensions issued; no evidence of humane handling verification visits; avg. HATS. Grade: D
Vermont	Low NR rate; some NRs with corrective action plan; no suspensions issued; evidence of humane handling visits; low HATS. Grade D+
Virginia	Low NR rate; no suspensions or MOIs issued; evidence of humane handling verification visits; avg. HATS. Grade: D+
West Virginia	Higher NR rate; no suspensions or MOIs issued; evidence of humane handling verification visits; high HATS. Grade: C
Wisconsin	Avg. NR rate; issued 1 suspension and 1 notice of intended enforcement, but also dozens of warning letters for egregious violations; several examples of inadequate enforcement; no evidence of humane handling verification visits. Grade: B-
Wyoming	High NR rate; only state not using standard NR form; no suspensions issued; no examples of inadequate enforcement; no evidence of verification visits. Grade: C

Comparing Federal and State Enforcement

To compare federal and state humane slaughter enforcement efforts, AWI attempted to answer the following questions: (1) do federal or state inspectors spend more time on humane slaughter oversight, (2) are violations more likely to be observed by federal or state inspectors, (3) are violations more likely to be reported by federal or state inspectors, and (4) when violations are reported, are federal or state inspectors more likely to take the most appropriate enforcement action?

Who Spends More Time on Humane Handling?

Although it is possible to determine how much time is spent by federal and state inspection personnel on humane activities, interpreting and comparing the data is difficult. That is primarily because the amount of time spent per animal varies widely depending on the size of the slaughter establishment. Inspectors stationed at larger slaughter plants are able to readily observe far more animals at once. For example, according to the FSIS Humane Handling Quarterly Reports, federal inspectors observe nearly 1,000 animals per hour (spending about 4 seconds per animal) in slaughter plants classified as “large,” but they observe only about 30 animals per hour (spending about 2 minutes per animal) in slaughter plants classified as “very small.” The HATS records supplied to AWI by several states suggest that inspectors at state plants spend even more time on each animal slaughtered, between 7 and 45 minutes per animal (see Figure 10). While federal inspectors may spend a greater total amount of time on humane activities, inspectors at state plants and smaller federal plants spend more time per animal.

Who Observes More Violations?

Given the size of the slaughter plant, and the proximity of inspectors to the areas of the plant where animals are handled and slaughtered, there is no question that inspectors at state plants have greater opportunity to observe the treatment of individual animals. However, as mentioned above, inspectors at federal plants—particularly large ones—witness the handling and slaughter of many more animals in an average shift.

Figure 16. Federal vs. State Humane Slaughter Enforcement (2015)

Enforcement Action	State	Federal
Noncompliance Records	253	736
Suspensions/NOIEs	16	128
Suspension/NOIE rate	6.3%	17.4%
Letters of Warning (LOW)*	17	—
Suspension/NOIE rate (with LOWs)	13.4%	—

* Wisconsin is the only state using LOWs to cite egregious violations.

Who Reports More Violations?

In 2015, inspectors at federal plants issued nearly three times the number of noncompliance records and more than seven times the number of suspensions as inspectors at state plants (Figure 16). Again, however, the differences in plant size for federal and state inspection render a direct comparison inappropriate. Given that more than 90 percent of animals are slaughtered at federally inspected establishments, the citation rate is actually considerably higher at state plants.

Who is More Consistent in Taking Appropriate Enforcement Actions?

Figure 16 above illustrates one area where federal inspection exceeds state. State inspection programs issue fewer suspensions in proportion to the number of noncompliance records. However, the suspension rate for state programs increased from 4 percent in 2009 to 6 percent in 2015, while the federal rate was 17 percent for both years. The lower suspension rate for state programs indicates that state inspectors either witness less serious humane slaughter offenses, generally, or they issue a lower penalty than what is called for in the FSIS humane handling and slaughter directive. From reviewing state enforcement records, AWI has determined that the

latter is true: state inspection programs take inadequate enforcement actions more frequently than the federal inspection program.

AWI has identified hundreds of instances where state inspectors responded inadequately after observing a humane handling violation, such as issuing a memorandum of interview instead of an NR for a regulatory violation, or issuing an NR instead of a suspension or NOIE for an egregious regulatory violation. Several of these instances are described below:

Examples of Inadequate Enforcement at State Plants

- ✎ In December 2014, an Illinois meat inspector at plant IL161 heard a total of six gunshots in less than one minute. When the inspector asked the kill floor plant manager how many times he had shot the hog, the reply was “until I ran out of bullets.” After the incident the plant manager sent an employee out to his personal vehicle to retrieve a larger caliber pistol (357 magnum). Three hours later, however, five shots were needed to render either one or two hogs insensible. Again, the plant manager needed to leave the stunning area to retrieve the larger caliber weapon. Two separate NRs were issued for the incidents, but no further regulatory actions were taken.
- ✎ In November 2014, an Illinois meat inspector at plant IL145 observed plant workers shoot a hog four times before rendering the animal insensible to pain. While the NR states that the plant initiated corrective actions, it does not detail what those corrective actions were, and no suspension was issued.
- ✎ In September 2012, a Kansas meat inspector at plant KS202 observed a steer being shot “several times” with a rifle. The inspector noted that the employee in charge stated he had a higher caliber rifle in his personal vehicle, and the employee retrieved the gun to use on the remaining animals. No suspension was issued.
- ✎ In September 2013, a Kansas meat inspector at plant KS202 issued an NR for an incident in which a steer was shot and then regained consciousness. The plant worker was unable to shoot the animal again because his gun was out of bullets. The steer then escaped the building and was eventually shot outside the plant.
- ✎ In June 2011, a Minnesota meat inspector issued an NR for overcrowding in a pen holding cattle, sheep, and goats at plant MN1241. The overcrowding was so severe that three mature sheep died as a result of being trampled.
- ✎ In October 2014, a Minnesota meat inspector at plant MN205 observed a pig stunned by electrical means, shackled and hoisted, bled, and inserted into a barrel for blood collection. After the pig was removed from the barrel, signs that the animal was regaining consciousness were observed. Instead of restunning the pig, the employee reinserted a knife to sever the blood vessels. The animal responded by kicking and moving his head and was heard squealing “from the pain of the knife being reinserted.” An NR was written but no suspension was issued.
- ✎ In December 2013, a Minnesota meat inspector at plant MN789 observed an employee fail to render a steer unconscious with the first attempt. The animal, who was bleeding from the head, then stuck his head through the kill gate. An employee shocked the steer in the head to force the animal to back out. However, the steer was not able to extricate himself from the gate, and several minutes passed before the employee opened the gate to allow the animal to back up. The steer was vocalizing throughout the process. Although this meets the definition of an “egregious” incident, no suspension was issued.
- ✎ In January 2010, an Ohio meat inspector observed personnel at plant OH36 shoot a bull a total of eight times before rendering the animal unconscious. Upon examination of the head, it was noted that “not all of the bullet holes were observed as being in the kill zone.” An NR was written, but no further regulatory actions were taken.

Examples of Inadequate Enforcement at Federal Plants

In 2014, AWI and the farm animal protection organization Farm Sanctuary reviewed all NRs issued by inspectors at federal plants during the previous year (2013). Approximately two dozen instances of inadequate enforcement action being taken were identified. A few of these cases are described below:

- ✎ In February 2013, a USDA inspector at plant M548 issued an NR for a miss-stun where immediate corrective action was not taken. A market hog was electrically stunned and shackled, but the animal slipped off the chain and onto a metal pan below the restrainer. No captive bolt device was available in the area; the holder for the captive bolts was empty. A plant worker went to the maintenance shop and returned approximately two minutes later with a captive bolt, and then rendered the hog insensible.
- ✎ In March 2013, a USDA inspector at plant M1311 observed repeated attempts to place a hand-held captive bolt stunner on the head of a disabled dairy cow, using a makeshift animal restrainer. The first attempt at stunning failed with the animal trying to right herself and back out of the restrainer. A worker picked up a second hand-held bolt gun and attempted to stun the animal again, but she remained conscious and standing, now with two round defects in the hide of her forehead where the captive bolt attempts landed. A third attempt to stun the cow was successful. An NR was issued, but the plant was not suspended despite the egregious nature of the violation.
- ✎ In March 2013, a USDA inspector at plant M21069 issued an NR in response to observing a total of four hogs on the shackle line with signs of sensibility after being stuck. Slaughter production was stopped after the first three animals were seen showing signs of sensibility. Approximately 30 minutes after slaughter operations were resumed, a fourth animal was seen displaying neck arching, flexion of the front legs, and breathing as the animal approached the steam scald tunnel.
- ✎ In September 2013, a USDA inspector issued an NR to plant M527 for shackling and hoisting a conscious animal. Although the animal had been stunned, she vocalized and thrashed about in pain, according to the inspector. A plant worker stuck a hook in the animal's eye to test for sensibility. The plant eventually made a second stunning attempt, but the animal continued to display signs of sensibility. (The NR does not explain what happened next.)
- ✎ In September 2013, a USDA inspector issued an NR to plant M17466 due to an egregious stunning failure. A small bovine was knocked with a captive bolt gun that did not render the animal insensible. The inspector observed that the animal had blood coming from a penetrating wound and was vocalizing and foaming at the mouth. Approximately two minutes passed before the animal was restunned and rendered insensible.
- ✎ In 2013, the FSIS issued four notices of intended enforcement for egregious inhumane slaughter to plant M1361, on April 25, May 14, September 24, and October 10, before finally issuing a suspension to the plant on October 22. All of the enforcement actions were for the same cause—improper stunning. According to the FSIS humane handling and slaughter directive, the plant should have received a suspension upon the second, not the fifth, incident.

After bringing the issue of inadequate enforcement to the attention of USDA officials, AWI and Farm Sanctuary were informed that the agency would be instituting a new procedure that requires each humane handling NR and the associated corrective action to be reviewed by higher level supervisory management. In 2016, AWI again reviewed all NRs issued in the previous year and found that the number of inadequate enforcement cases declined 84 percent between 2013 and 2015.

In conclusion, while state inspection personnel spend more time on humane activities—and likely observe and report more violations per animal slaughtered—federal inspectors are more consistent in responding to violations with appropriate enforcement actions.

Need for Updated Regulations

In 1979, the USDA adopted the current HMSA regulations in an attempt to address humane handling and slaughter at US slaughter establishments. Since that time there have been numerous advances in the humane slaughter of livestock, including a greater understanding of the pain and stress experienced by animals at slaughter and wide recognition within the animal agriculture and slaughter industries of techniques to reduce animal suffering at slaughter. Nevertheless, in nearly 40 years, the USDA has not once amended the regulations for the purpose of preventing inhumane handling and/or slaughter.

This compares unfavorably with the history of other regulations related to animal welfare, such as those adopted under the Animal Welfare Act, Horse Protection Act, and Organic Food Production Act, which have all been amended on multiple occasions following passage of the associated legislation.

Since the HMSA regulations were adopted in 1979, tens of thousands of incidents of inhumane handling at slaughter have been observed and documented by inspection personnel at federal and state slaughter plants. In 2013, AWI analyzed a sample of more than 1,000 of these incidents to identify the most common causes of inhumane slaughter. This review found that the most frequent causes of inhumane incidents (not adequately addressed by the HMSA regulations) are:

- ✎ Lack of worker training in humane handling techniques
- ✎ Use of inappropriate stunning devices
- ✎ Improper shot placement, often in connection with inadequate restraint
- ✎ Lack of routine testing and maintenance of stunning equipment
- ✎ Lack of functional backup stunning devices

AWI estimates that roughly half of all humane slaughter violations are associated with one or more of these deficiencies. Following are examples of incidents reported by federal and state inspection personnel that are related to these limitations of the current HMSA regulations:

Lack of Worker Training

A North Carolina state inspector at plant NC265 observed an establishment employee inexperienced with handling animals attempt to cut out one mature sow from a group of three in a pen. The employee was shouting and chasing the sows, causing them to run around the pen. He sometimes slapped the sows on the back with the side of the electric prod even when the animals were moving forward.

A federal inspector at plant M818 observed that a hog had entered the alley leading to the stunner backwards while additional animals continued to enter facing forwards. An employee placed an electric prod between the eyes of a forward facing animal to get him to back up. The same employee placed the electric prod under the tail (genital area) of the animal that was backward in the alley.

A federal inspector at plant M17D observed excessive use of a rattle paddle in the unloading of pigs from the nose of a trailer. As the pigs approached the ramp they appeared to balk and stopped moving, at which point the operator escalated use of the rattle paddle with all of the hits landing on the backs of the hogs. He then started swearing and choked down on the paddle with both hands so that he could make a complete swing and repeatedly (15 to 20 times) hit the back of the hog directly in front of him. This was an overhead chopping action with as much force as the operator could muster.

Use of Inappropriate Stunning Devices

An Illinois state inspector at plant IL145 observed that a plant employee was unable to render a hog unconscious with three gunshot attempts. The employee was instructed to use a heavier load round, which was successful. It was noted that all four shots penetrated the skull in the correct location.

An Illinois state inspector at plant IL171 observed that three different hogs were not rendered unconscious with the first shot. After this, the owner decided to use a different firearm and ammunition, which was successful in stunning the remainder of the animals.

An Iowa state inspector at plant IA653 observed a plant employee unable to stun a hog in two attempts. After that the employee switched to a larger caliber rifle and dispatched the hog with one shot.

A Wisconsin state inspector at plant WI183 observed a plant employee use four shots from a .22 rifle to kill a bull. The inspector informed the employee that he needed to have a larger firearm on hand to effectively stun larger animals in order to prevent a similar incident in the future.

Improper Shot Placement and/or Inadequate Restraint

A North Carolina state inspector observed an employee at plant NC318 discharge a .22 caliber rifle into the left center of the forehead of a veal calf. The calf immediately went down, but within approximately 10 seconds, the calf stood up on all four legs and started to walk around the knock box. The inspector observed a tremendous amount of blood coming from the left nostril of the calf. The second shot was discharged and the calf immediately fell to the ground. Later, the inspector observed the calf's head and found two bullet holes. The first bullet hole was approximately three inches to the left of the middle of the forehead and the second bullet hole was placed in the middle of the head.

A federal inspector at plant M4499 observed a pig being shot twice with a captive bolt. The first shot left the animal sensible but injured, while the second shot became stuck in the animal's forehead. A firearm was then brought and the animal was shot two more times before being rendered insensible. The first ineffective shot was with a .22 caliber firearm and was not properly placed while the second shot entered the cranial cavity.

A federal inspector at plant M9814 witnessed a steer being stunned with a captive bolt in the nasal cavity. The animal was injured, stressed, and vocalizing. Approximately a minute later the second shot was administered that rendered the animal unconscious.

A federal inspector at plant M7644 witnessed a plant worker shoot an adult bull with A22 magnum ammunition. The animal remained standing, and the same result was seen after a second shot with the same

gun. The employee was then instructed to use the .30-30 gun as a backup. After the .30-30 was used, the bull slumped down on his belly but was still holding his head off the floor, bobbing. A fourth shot was finally effective in rendering the animal insensible. The skinned head revealed two small holes located centrally in the forehead, just above and just below the ideal spot. A larger hole (the third shot) was central directly between the eyes, penetrating the nasal cavity. The other hole (fourth shot) was two inches above and one inch to the right of the smaller holes.

Lack of Routine Equipment Testing and Maintenance

A Minnesota state inspector at plant MN789 observed that the plant was unable to render multiple animals unconscious with a single stun. Most cattle were rendered unconscious after multiple attempts. The inspector noted that the facility uses a captive bolt that appeared to be malfunctioning consistently.

A federal inspector at plant M17965 observed an employee attempting to stun a lamb using both a captive bolt and electric stun of the head, followed by a cardiac electric stun. The lamb was unconscious but regained consciousness after being shackled and hoisted. The employee performing the stunning stated that the device had not been working, nor had the portable backup device. It took over 10 minutes for the employee to bring another portable captive bolt gun with extra charges (employee stated the gun typically misfires due to the cartridges being wet) to the stunning area. The device misfired twice, and was successful on the third try, although it did not appear to fire completely.

A Wyoming state inspector at plant WY2121 observed that two shots were needed to stun two animals. Plant management indicated it was ordering a longer bolt for the gun and larger charges, which should fix the problem. Plant manager called the company about getting new parts for his stun gun and was told that the expanded bolt would not work for his particular gun, but he did order some new parts and larger loads. He also found out that he had been cleaning the guns wrong. He read the directions and is now cleaning the guns correctly.

An Ohio state inspector at plant OH21 observed an employee fail to stun a hog in one attempt using an electric stunner. This caused six hogs to escape the stunning area and run loose around the slaughter floor. The employee said the stunner was malfunctioning last week, and the establishment had failed to correct the problem before that day's slaughter.

Lack of Backup Stunning Devices

A North Carolina state inspector at plant NC318 observed a plant employee discharge a .22 caliber rifle into the center of a cow's forehead. The cow did not go down. A second shot from the .22 rifle was discharged into the forehead. The cow, once again, did not go down. Both shots to the forehead did not penetrate the skull and one of the bullets was found lying on the floor near the viscera table. The inspector asked the employee to get the backup rifle. The employee stated that the plant did not have one.

A Wisconsin state inspector at plant WI183 observed plant employee shoot a steer in the kill chute with a .22 caliber rifle. The first shot hit the steer's forehead but did not kill the animal or knock him down. The gun jammed, and it took the employee a couple minutes to unjam the rifle, put another round in it, and shoot and effectively kill the animal with the second shot. The plant immediately cleaned the rifle, and promised that they will have a backup rifle available on the kill floor before slaughter the following week.

A Wisconsin state inspector at plant WI56 witnessed a hog shot with a rifle. The first shot did not render the hog unconscious. When the slaughter foreman attempted to shoot again, the rifle ran out of bullets. He went back to the table where the ammunition was stored and reloaded the clip. The time between the first and second shot caused the hog more than a minimum of excitement and discomfort.

A federal inspector at plant M34181 witnessed two missed stuns on a hog. It took 15 minutes for the plant to locate a backup stunning device.

AWI's Petition to Update Regulations

In May 2013, AWI filed a rulemaking petition requesting that the USDA amend its HMSA regulations to add the following requirements:

- Every establishment shall develop a written, systematic humane handling plan in order to address the risks the HMSA seeks to mitigate.
- Establishment workers shall be trained in humane handling of animals prior to first coming in contact with any animal, and at regular intervals thereafter, and the training shall be recorded.
- If more than one stunning method is used at an establishment, guidelines shall be posted in the stunning area regarding the appropriate device with regard to kind, breed, size, age, and sex of the animal to produce the desired results.
- Guidelines shall be posted in the stunning area regarding the proper placement of mechanical stunning devices for all species of animals slaughtered at the establishment.
- Chemical, mechanical, and electrical stunning equipment shall be routinely tested and maintained, and the testing and maintenance shall be recorded.
- Establishments shall maintain loaded backup stunning devices in the holding and stunning areas of the plant; these devices shall be checked and cleaned at least weekly, and the routine maintenance shall be recorded.

In December 2016, AWI filed a lawsuit against the USDA for its unreasonable delay in responding to the 2013 petition. AWI—represented by the Public Justice Advocacy Clinic at The George Washington University Law School—sued the USDA under the Administrative Procedure Act, which requires agencies to respond to citizen petitions for rulemaking within a reasonable time. The USDA responded to the lawsuit in February 2017 by denying the petition. While explaining that the USDA has decided not to engage in rulemaking at the current time, the denial letter also stated that the department “continues to examine the issues addressed in [the AWI] petition to determine whether rulemaking would be warranted in the future.”

Recommendations

AWI's recommendations for improving enforcement of the Humane Methods of Slaughter Act remain essentially unchanged since its 2010 report. AWI offers the following recommendations based on its continued research into federal and state humane slaughter enforcement:

- ↘ **The USDA and state departments of agriculture should significantly increase their allocation of resources to humane handling and slaughter activities.** Inspection personnel should be permanently stationed in the stunning area of every plant; at a minimum, inspectors should observe the stunning process at least twice each shift.
- ↘ **The USDA should continually analyze federal and state level enforcement activities** in order to ensure more consistent application of the humane slaughter law in plants of all sizes and locations across the country. The USDA should more closely monitor state enforcement programs to assess whether their actions are consistent with the FSIS humane handling and slaughter directive, specifically that NRs and MOIs are not being issued for egregious violations.
- ↘ **The USDA should remove meat inspection accreditation from the state of Louisiana** on the basis that there is no evidence that Louisiana is enforcing the HMSA at state-inspected plants.
- ↘ **To address repeat violators and discourage future offenses, the USDA should establish a policy of escalating penalties,** including longer suspension periods and more frequent withdrawal of inspection for repeated violations. The USDA should monitor compliance with the repeat violator policy among states and federal district offices.
- ↘ **As a further means of deterrence, the USDA and state departments of agriculture should cooperate with state and local law enforcement agencies in the pursuit of criminal animal cruelty charges for incidents of willful animal abuse.** The USDA should begin this process by developing guidelines for the referral of potential criminal animal cruelty cases, which should be incorporated into the FSIS humane handling and slaughter directive.
- ↘ **The USDA and state departments of agriculture should seek to improve the effectiveness of the district or regional veterinary specialist role** and increase funding for this position in order to provide in-plant personnel with greater access to humane slaughter expertise and to increase the frequency of audits—both scheduled and unscheduled—by qualified individuals outside the slaughter plant.
- ↘ **The USDA should make additional slaughter plant inspection records, including noncompliance records, available to the public on its website** to help educate the public regarding humane slaughter practices and encourage compliance by slaughter plants with humane slaughter requirements. (As of April 2017, notices of suspension and notices of intended enforcement are posted.)
- ↘ **Finally, the USDA should revise the federal humane slaughter regulations to address the most common causes of violations,** including requiring that all animal stunning devices be routinely tested, workers be formally trained in humane handling and slaughter, and functional backup stunning devices be available.



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