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Meat and Poultry Inspection: Background and Selected Issues

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Meat and Poultry Inspection: Background and Selected Issues

Summary

The U.S. Department of Agriculture's (USDA's) Food Safety and Inspection Service (FSIS) is responsible for inspecting most meat, poultry, and processed egg products for safety, wholesomeness, and proper labeling. Federal inspectors or their state counterparts are present at all times in virtually all slaughter plants and for at least part of each day in establishments that further process meat and poultry products. The Food and Drug Administration (FDA), within the U.S. Department of Health and Human Services (HHS), is responsible for ensuring the safety of virtually all other human foods, including seafood, and for animal drugs and feed ingredients.

Debate has ensued for many decades over whether the meat and poultry inspection programs, which were first designed in the early 1900s, have kept pace with changes in the food production and marketing industries, and with perceived hazards, whether naturally occurring or intentionally caused by human intervention.

In the early 1990s, food safety officials recognized that most foodborne illness cases traced to meat and poultry products were caused by naturally occurring microbiological contamination that was not being adequately addressed by the traditional, sight-, smell-, and touch-based system of inspection.

Through the federal rule-making process under its existing authorities, FSIS in 1996 finalized a sweeping new Hazard Analysis and Critical Control Point (HACCP) system for implementation by federally inspected slaughtering and processing plants. Simply put, this means that for each point in the process where contamination could occur, called a "critical control point," the plant must have a contamination prevention plan, document it, and maintain records. Despite data suggesting HACCP-related reductions in pathogen levels, periodic recalls continue to illustrate the difficulty of preventing contamination, particularly in processed products.

Other recent policy challenges have included FSIS's role in keeping livestock diseases such as BSE (bovine spongiform encephalopathy, or "mad cow disease") from threatening human health; the adequacy of funding for inspection and who should provide it (i.e., industry, taxpayers, or both); whether changes are needed in the agency's enforcement authorities; ensuring that meat and poultry for human consumption are slaughtered humanely; and the overall effectiveness of the federal regulatory structure for food safety, which is spread among a number of agencies and departments, and which has taken on added responsibilities to protect the food supply against intentional contamination.

Congress often is drawn into these policy debates, and has held hearings and/or considered legislation to address various aspects. Similar issues have arisen or are expected to arise during the 109th Congress.

This report, which supersedes CRS Issue Brief IB10082, *Meat and Poultry Inspection Issues*, will be updated if significant developments ensue.

Contents

Background on the Programs	1
Statutory Authorities	1
System Basics	2
Coverage	2
Plant Sanitation	2
Slaughter Inspection	2
Processing Inspection	2
Pathogen Testing	2
Enforcement	3
Funding and Staffing	3
State Inspection	3
Import Inspection	3
Selected Issues	4
Microbiological Contamination and HACCP	4
Development of HACCP	4
Pathogen Performance Standards	4
<i>E. coli</i> O157:H7	5
<i>Listeria monocytogenes</i>	6
Funding and Resources	7
BSE	9
Food Security and Emergency Preparedness	11
Humane Slaughter	11
Meat Traceability	13
Recall and Enforcement Proposals	13
Single Food Agency	15

List of Tables

Table 1. Proposed FSIS Funding	8
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Meat and Poultry Inspection: Background and Selected Issues

Background on the Programs¹

The U.S. Department of Agriculture's (USDA's) Food Safety and Inspection Service (FSIS) is responsible for inspecting most meat, poultry, and processed egg products for safety, wholesomeness, and proper labeling. Federal inspectors or their state counterparts are present at all times in virtually all slaughter plants and for at least part of each day in establishments that further process meat and poultry products. The Food and Drug Administration (FDA), within the U.S. Department of Health and Human Services (HHS), is responsible for ensuring the safety of virtually all other human foods, including seafood, and for animal drugs and feed ingredients.

Statutory Authorities

The Federal Meat Inspection Act of 1906, as amended (21 U.S.C. 601 et seq.), requires USDA to inspect all cattle, sheep, swine, goats, and horses brought into any plant to be slaughtered and processed into products for human consumption. The 1957 Poultry Products Inspection Act, as amended (21 U.S.C. 451 et seq.), made poultry inspection mandatory for any domesticated birds intended for use as human food. The current list of included species is chickens, turkeys, ducks, geese, guineas, ratites (ostrich, emu, and rhea), and squabs (pigeons up to one month old). Federal appropriations pay for most, but not all, mandatory inspection (see "Funding," below).

FSIS also offers voluntary inspection for buffalo, antelope, reindeer, elk, migratory water fowl, game birds, and rabbits, which is authorized under the Agricultural Marketing Act (7 U.S.C. 1621), and which the industry can request on a fee-for-service basis. These so-called "exotic" meat species are regulated by the Food and Drug Administration (FDA) within the Department of Health and Human Services (HHS) (under the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. 301 et seq.) if they are not inspected under the voluntary FSIS program. FDA has jurisdiction over meat products from exotic species in interstate commerce, even if they bear the USDA inspection mark.

The Egg Products Inspection Act, as amended (21 U.S.C. 1031 et seq.), is the authority under which FSIS assures the safety of liquid, frozen, and dried egg

¹ This report does not compare and contrast FSIS responsibilities with those of FDA, which operates under a considerably different regulatory framework. These differences could have significance in the longstanding debate over the need, if any, for reorganizing the government's food safety authorities and programs. See "Single Food Agency," below, and also CRS Report RL31853, *Food Safety Issues in the 109th Congress*.

products, domestic and imported, and the safe disposition of damaged and dirty eggs. FDA holds regulatory authority over shell eggs used in restaurants and sold in stores.

System Basics

Coverage. FSIS’s legal inspection responsibilities begin when animals arrive at slaughterhouses, and they generally end once products leave processing plants. Certain custom slaughter and most retail store and restaurant activities are exempt from federal inspection; however, they may be under state inspection.

Plant Sanitation. No meat or poultry establishment can slaughter or process products for human consumption until FSIS approves in advance its plans and specifications for the premises, equipment, and operating procedures. Once this approval is granted and operations begin, the plant must continue to follow a detailed set of rules that cover such things as proper lighting, ventilation, and water supply; cleanliness of equipment and structural features; and employee sanitation procedures. Plants are required to have a Hazard Analysis and Critical Control Point (HACCP) plan for their slaughter and/or processing operations. Simply put, this means that at each point in the process where contamination could occur, called a “critical control point,” the plant must have a plan to control it, and must document and maintain records. Under HACCP regulations, all operations must have site-specific standard operating procedures (SOPs) for sanitation. USDA inspectors check records to verify a plant’s compliance (see “Selected Issues” for more on HACCP).

Slaughter Inspection. FSIS inspects all meat and poultry animals to look for signs of disease, contamination, and other abnormal conditions, both before and after slaughter (“antemortem” and “postmortem,” respectively), on a continuous basis — meaning that no animal may be slaughtered and dressed unless an inspector has examined it. One or more federal inspectors are on the line during all hours the plant is operating. Plants pay user fees to have an inspector on duty on overtime and holiday shifts.

Processing Inspection. The inspection statutes give the Secretary discretion to determine how often a USDA inspector must visit facilities that produce processed products like hot dogs, lunch meat, prepared dinners, and soups. Under current regulations, processing plants that are visited once every day by an FSIS inspector are considered to be under continuous inspection in keeping with the laws. Inspectors monitor operations, check sanitary conditions, examine ingredient levels and packaging, review records, verify HACCP processes, and conduct statistical sampling and testing of products during their on-site visits.

Pathogen Testing. The HACCP rule also mandates two types of microbial testing: for generic *E. coli* and for *Salmonella*. Levels of these two organisms are indicators of conditions that either suppress or encourage the spread of such potentially dangerous bacteria as *Campylobacter* and *E. coli* O157:H7, as well as *Salmonella* itself. Test results (plants test for *E. coli* and FSIS for *Salmonella*) help FSIS inspectors verify that plant sanitation procedures are working, and to identify and assist plants whose process controls may be underperforming. In the initial years of HACCP implementation, plants that failed three consecutive *Salmonella* tests could have their USDA inspectors withdrawn. This would effectively shut down the

plant until the problem could be remedied. A federal court ruling in 2000, upheld on appeal in 2001, made such enforcement illegal. Nonetheless, FSIS inspectors still test samples for *Salmonella* and use the results as one of a number of indicators of plant performance.

Enforcement. FSIS has a range of enforcement tools to prevent adulterated or mislabeled meat and poultry from reaching consumers. On a day-to-day basis, if plant conditions or procedures are found to be unsanitary, an FSIS inspector can, by refusing to perform inspection, temporarily halt the plant's operation until the problem is corrected. FSIS can condemn contaminated, adulterated, and misbranded products, or parts of them, and detain them so they cannot progress down the marketing chain. Other tools include warning letters for minor violations; requests that companies voluntarily recall a potentially unsafe product; a court-ordered product seizure if such a request is denied; and referral to federal attorneys for criminal prosecution. Prosecutions under certain conditions may lead to the withdrawal of federal inspection from offending firms or individuals, which results in plant closure.

Funding and Staffing. In FY2005, FSIS received an annual appropriation of more than \$800 million. In addition, FSIS uses revenue from fees paid by the packing industry for FSIS inspection that occurs beyond regularly scheduled shifts, and by private laboratories that apply for FSIS certification to perform official meat testing and sampling. Revenue from the fees amounted to more than \$100 million (FY2005) in additional program support. FSIS carries out its duties with total staff of nearly 10,000. More than 7,500 of FSIS's employees, roughly 1,000 of them veterinarians, are at some 6,200 plants and import stations nationwide.

State Inspection. Nearly 30 states have their own meat and/or poultry inspection programs covering about 2,100 small or very small establishments. The states run the programs cooperatively with FSIS, which provides up to 50% of the funds for operating them, comprising about \$50 million of the total FSIS budget annually. A state program operating under a cooperative agreement with FSIS must demonstrate that its system is equivalent to federal inspection. However, meat and poultry products produced under state inspection are limited to intrastate commerce only. In states that have discontinued their inspection systems for meat or poultry (or both), FSIS has assumed responsibility for inspection at the formerly state-inspected plants. However, actual inspection is performed by state personnel.

Import Inspection. FSIS conducts overseas evaluations to determine that imports from foreign countries are processed under equivalent inspection systems; agency officials also verify equivalency by visiting various foreign slaughtering and processing operations. A plant seeking to export meat or poultry to the United States must first receive FSIS certification. At U.S. ports of entry, meat and poultry import shipments must first clear Department of Homeland Security (DHS) inspection to assure that only shipments from countries free of certain animal and human disease hazards are allowed entry. This function was transferred to DHS from USDA's Animal and Plant Health Inspection Service (APHIS) when DHS was established by the Homeland Security Act of 2002 (P.L. 107-296). After DHS inspection, imported meat and poultry shipments go to nearby FSIS inspection facilities for final clearance into interstate commerce.

Selected Issues

Microbiological Contamination and HACCP

Development of HACCP. In the early 1990s, following years of debate over how to respond to mounting evidence that invisible, microbiological contamination on meat and poultry posed greater public health risks than visible defects (the focus of traditional inspection methods), FSIS began to add testing for pathogenic bacteria on various species and products to its inspection system.

In 1995, under existing statutes, FSIS published a proposed rule to systematize these program changes in a mandatory program called the Hazard Analysis and Critical Control Point (HACCP) system. In this system, firms must analyze risks in each phase of production, identifying and then monitoring “critical control points” for preventing such hazards, with corrective actions taken when necessary. Record keeping and verification are used to ensure that the system is working. FSIS published the final rule on July 25, 1996, and since January 2000 all slaughter and processing operations are required to have HACCP plans in place. HACCP is intended to operate as an adjunct to the traditional methods of inspection, which still are mandatory under the original statutes.²

Pathogen Performance Standards. The meat and poultry inspection statutes do not give USDA the authority to use *Salmonella* standards as the basis for withdrawing inspection from a plant that has not met them, a federal court ruled in 2000, and an appeals court upheld in 2001. Subsequently, USDA has adopted the position that the court decision did not affect the agency’s ability to use the standards as part of the verification of plants’ sanitation and HACCP plans.

Nonetheless, the appeals court ruling supports the arguments of those who say that pathogen testing results should not be a basis for enforcement actions until scientists can determine what constitutes an unsafe level of *Salmonella* in ground meat and a number of other meat and poultry products. Consumer groups and other supporters of mandatory testing and microbiological standards, as well as of increased enforcement powers, have used the case to bolster their argument for amending the meat and poultry inspection statutes to specify microbiological standards.

The National Advisory Committee on Microbiological Criteria for Foods, established in 1988 to provide scientific advice to the Secretaries of Agriculture and of Health and Human Services on public health issues, concluded in a report issued in October 2002 that “performance standards that meet the principles as outlined in this document [i.e., standards that are based on quantitative rather than qualitative data] are valuable and useful tools to define an expected level of [pathogen] control in one or more steps in the process.”³

² The final rule appeared in 61 *Federal Register* 38805-38855.

³ The report may be viewed at [http://www.fsis.usda.gov/OPHS/nacmcf/rep_stand.htm].

A second review of microbiological performance standards, *Scientific Criteria to Ensure Safe Food*, was released in 2003 by the Institute of Medicine in collaboration with the National Research Council. Among many recommendations, this report calls on Congress to “grant the regulatory agencies clear authority to establish, implement, and enforce food safety criteria, including performance standards, and the flexibility needed within the administrative process to update these criteria.” The report also makes seven specific recommendations for FSIS to improve the safety of meat and poultry products. Among these are recommendations to (1) conduct surveys to evaluate changes over time in the microbiological status of certain components of processed meats and poultry; (2) expand *E. coli* O157:H7 testing, identify control points for *E. coli* O157:H7 back to the farm level, and inform consumers that even irradiated ground beef must be cooked to a temperature that kills the pathogen; (3) greatly expand generic *E. coli* criteria for, and *Salmonella* performance standards for, beef trim intended for grinding.⁴

***E. coli* O157:H7.** According to the CDC, “*E. coli* O157:H7 is one of hundreds of strains of the bacterium *Escherichia coli*. Although most strains are harmless and live in the intestines of healthy humans and animals, this strain produces a powerful toxin and can cause severe illness. *E. coli* O157:H7 was first recognized as a cause of illness in 1982 during an outbreak of severe bloody diarrhea; the outbreak was traced to contaminated hamburgers. Since then, most infections have come from eating undercooked ground beef.”⁵

In October 1994, FSIS began testing samples of raw ground beef for *E. coli* O157:H7 and declared that any such product found with this pathogen would be considered adulterated — the first time a foodborne pathogen on raw product was declared an adulterant under the meat inspection law. Industry groups immediately asked a Texas federal court for a preliminary injunction to halt this effort, on the grounds that it was not promulgated through appropriate rulemaking procedures, was arbitrary and capricious, and exceeded USDA’s regulatory authority under law. In December 1994, the court denied the groups’ request, and no appeal was filed, leaving the program in place. FSIS has taken tens of thousands of samples since the program began; to date, several hundred samples have tested positive.

In September 2002, FSIS issued a press release stating that “[t]he scientific data show that *E. coli* O157:H7 is more prevalent than previously estimated,” and in October 2002 the agency published a notice requiring manufacturers of all raw beef products (not just ground beef) to reassess their HACCP plans and add control points for *E. coli* O157:H7 if the reassessment showed that the pathogen was a likely hazard in the facility’s operations. The changes at large operations were required to be complete by December 6, 2002; small plants had until February 4, 2003, and very small plants until April 7, 2003. FSIS inspectors are to verify that corrective steps have been taken and conduct random testing of all beef processing plants, including all grinders (some previously had been exempted). In addition, the agency

⁴ This report may be accessed at [<http://www.nap.edu/catalog/10690.html>].

⁵ Background information on this pathogen may be viewed at the following CDC website: [http://www.cdc.gov/ncidod/dbmd/diseaseinfo/escherichiacoli_g.htm#What%20is%20Escherichia%20coli%20O157:H7].

announced guidelines for grinding plants advising them to increase the level of pathogen testing by plant employees, and to avoid mixing products from different suppliers.⁶

FSIS reported on February 28, 2005, that of 8,010 ground beef samples tested in 2004, 0.17% tested positive for *E. coli* O157:H7, part of the 80% decline in the percentage of positive samples since 2000, when it was 0.86%. FSIS asserted that the reduction reflected the success of its HACCP-based and related regulatory policies.

A CDC report issued on April 14, 2005, indicated that the incidence of infections caused by *E. coli* O157:H7 had declined significantly from the 1996-98 baseline through 2004.⁷

Listeria monocytogenes. In February 2001, FSIS published a proposed rule to set performance standards that meat and poultry processing firms would have to meet to reduce the presence of *Listeria monocytogenes* (*Lm*), a pathogen in ready-to-eat foods (e.g., cold cuts and hot dogs). The proposal covered over 100 different types of dried, salt-cured, fermented, and cooked or processed meat and poultry products. *Lm* causes an estimated 2,500 illnesses and 499 deaths each year (from listeriosis), and is still the primary cause of meat and poultry product recalls.

The proposed regulations raised a controversy among affected constituencies. The meat industry argued that the benefits to consumers would not outweigh the cost to packers of additional testing. Representatives of food manufacturers criticized the proposed regulations for covering some categories of foods too broadly and heavily, while not covering some other high-risk foods at all (such as milk, which is under FDA jurisdiction). Consumer groups said the proposed rule would not require enough testing in small processing plants and that products not tested for *Lm* should not be labeled “ready-to-eat” because they would still require cooking to be 100% safe.

Interest in the *Listeria* issue had grown in 1998 and 1999, following reports of foodborne illnesses and deaths linked to ready-to-eat meats produced by a Sara Lee subsidiary.⁸ Interest increased significantly after October 2002, when Pilgrim’s Pride Corporation recalled a record-breaking 27.5 million pounds of poultry lunch meats for possible *Lm* contamination after a July 2002 outbreak of listeriosis in New England. The Centers for Disease Control and Prevention confirmed 46 cases of the disease, with 7 deaths and 3 stillbirths or miscarriages. The recall covered products made as early as May 2002, and officials stated that very little of the meat was still available to be recovered.

In December 2002, FSIS issued a directive to inspection program personnel giving new and specific instructions for monitoring processing plants that produce

⁶ *Federal Register* 67 FR 62325.

⁷ Data are from the preliminary CDC FoodNet report, which can be viewed at [<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5414a2.htm>].

⁸ Source: *Food Chemical News*, various issues.

hot dogs and deli meats.⁹ In June 2003, FSIS announced the publication of an interim final rule to reduce *Listeria* in ready-to-eat meats. Rather than set performance standards, as the February 2001 proposed rule would have, the new regulation requires plants that process RTE foods to add control measures specific to *Listeria* to their HACCP and sanitation plans, and to verify their effectiveness by testing and disclosing the results to FSIS. The rule directs FSIS inspectors to conduct random tests to verify establishments' programs. Plants are subject to different degrees of FSIS verification testing depending upon what type of control steps they adopt in their HACCP and sanitation plans.¹⁰

On January 4, 2005, the Consumer Federation of America (CFA) issued a report sharply criticizing USDA's *Listeria* rulemaking. CFA asserted that the Department essentially adopted meat industry positions in weakening the final rule, such as by deleting proposed plant testing requirements and by not explicitly requiring that HACCP plans include *Listeria* controls. In 2003, *Listeria* illnesses increased by 22%, CFA contended, citing CDC data.¹¹ USDA and meat industry officials countered that the number of product recalls related to *Listeria* had declined from 40 in 2002 to 14 in 2003, that the rise in *Listeriosis* cases was quite small in 2003 after four years of declines, and that the interim rule provides more incentives for plants to improve safety. The CDC's 2004 FoodNet reported that the incidence of foodborne illness caused by *Listeria* experienced a decline in 2004 after an increase in 2003, with an overall 40% decline from a 1996-1998 baseline. FSIS had announced nearly a dozen recalls of processed meat and poultry products totalling nearly 90,000 pounds due to *Listeria* in 2005 (through mid-April), according to the agency's website.¹²

In Congress. In past years, bills have been offered to add language to the inspection laws clarifying the Secretary's authority to set enforceable performance standards (e.g., S. 1103 and H.R. 2203 in the 108th Congress). Other bills are possible in the 109th Congress.

Funding and Resources

From time to time in the past, FSIS has had difficulty in sufficiently staffing its service obligations to the meat and poultry industries. Usually a combination of factors causes these shortages, including new technologies that increase plant production speeds and volume, insufficient appropriated funds to hire additional inspectors at times of unexpected increases in demand for inspections, and problems in finding qualified people to work in dangerous or unpleasant environments or at remote locations. These staffing problems have been exacerbated by the addition of HACCP requirements on top of the traditional meat and poultry inspection duties.

⁹ The guidelines can be found on the FSIS website at [<http://www.fsis.usda.gov>].

¹⁰ See the FSIS website for more details on the rule.

¹¹ CFA website: [<http://www.consumerfed.org/>].

¹² Updates are at the FSIS website: [http://www.fsis.usda.gov/FSIS_Recalls/index.asp]; a more comprehensive list of FSIS and FDA recalls is at [<http://www.recalls.gov/food.html>].

To address staffing problems, most administrations over the past 20 years have proposed to charge the meat-packing industry new user fees sufficient to cover the entire cost or a portion of federal inspection services. The primary rationale for more comprehensive user fees has been that resources would then be adequate to hire new inspectors as necessary. USDA economists estimate that the cost passed on to consumers from such a fee would be no more than one cent per pound. Meat industry and consumer groups have consistently opposed increased fees, arguing that food safety is a public health concern that deserves taxpayer support.

In Congress. The Administration's FY2006 budget proposal (February 2005) is now before the Appropriations Committees. The President's FY2006 budget proposes a \$973 million program level for FSIS, of which \$123 million is funded by existing user fees, and \$850 million by congressional appropriation. Counted as part of the overall \$850 million appropriation is \$139 million in new user fees. The Administration is reiterating user fee proposals made in FY2003, FY2004, and FY2005 to increase the industry's reimbursement for FSIS inspection beyond one shift per day. The Administration's rationale for this change, which would require a change in the programs' authorization, is that the regular working day should be considered standard inspection, and any services provided beyond that time should be considered additional, hence subject to a higher fee schedule.

Appropriators have rejected these and similar proposals every year, generally agreeing that the safety of the food supply is a legitimate responsibility of the government. In addition, some Members have argued that the large meat recalls that have occurred since HACCP was implemented illustrate why the government should retain taxpayer-funded regulatory oversight. In recent years appropriators have included report language stating that they will not consider offsetting FSIS appropriations with greater revenue from user fees unless authorizing legislation has first been passed.

Also in the Administration's budget proposal are proposed FSIS increases of \$19.4 million to expand FSIS activities related to USDA food defense and biosurveillance initiatives; and \$2.2 million to hire 22 additional "Consumer Safety Inspectors" so that the work of FSIS veterinarians can be shifted "to more complex activities related to public health."¹³

Table 1. Proposed FSIS Funding
(millions)

	FY2004 Actual	FY2005 Estimate	FY2005 Proposal
From Appropriations	\$786	\$817	\$711
From User Fees	\$119	\$120	\$262
Total Program Level	\$905	\$937	\$973

Source: USDA Budget Summary, 2006.

¹³ For congressional action on the FY2006 budget proposal, see CRS Report RL32904, *Agriculture and Related Agencies: FY2006 Appropriations*.

BSE

Bovine spongiform encephalopathy (BSE, or “mad cow disease,”) entered the public policy spotlight with the discovery of four native North American cases. The first was announced in Canada in May 2003, and the second in the United States in December 2003 (it too was Canadian-born). Canadian officials confirmed their second and third cases on January 2 and 11, 2005. Domestic beef demand held, but virtually all foreign countries closed their borders first to Canadian and then U.S. beef, reportedly costing the industry several billion dollars in losses.¹⁴

FSIS is one of the three federal agencies primarily responsible for keeping BSE out of the food supply. The other two agencies involved in BSE are USDA’s Animal and Plant Health Inspection Service (APHIS), which handles primarily the animal disease aspects, and FDA, which regulates feed ingredients (cattle consumption of feed contaminated with the BSE agent is considered the primary means of transmission).

After the U.S. BSE case was discovered in December 2003, FSIS officials declared that any human health risks were minimal, and that no high-risk BSE tissues had entered the food supply. However, they announced, out of “an abundance of caution,” a voluntary recall of 38,000 pounds of meat from 20 animals slaughtered at the same plant that day, and acknowledged that some of it likely had been consumed. FSIS also published, as interim final rules in the January 12, 2004, *Federal Register*, several actions to bolster U.S. BSE protection systems, effective immediately:

- Downer (nonambulatory) cattle are no longer allowed into inspected slaughter and processing facilities.
- Cattle selected for testing cannot be marked as “inspected and passed” until confirmation is received that they have tested negative for BSE.
- Specified risk materials (SRM), which include the skull, brain, trigeminal ganglia, eyes, vertebral column, spinal column, and dorsal root ganglia of cattle over 30 months of age, and the small intestine of cattle of all ages, are now prohibited from the human food supply.
- Slaughter facilities are required to develop and implement procedures to remove, segregate, and dispose of SRM and make information readily available for review by FSIS inspection personnel.
- SRM from cattle 30 months or older cannot be in a product labeled as “meat” if derived from advanced meat recovery (AMR) technology, which USDA said would help ensure it does not contain spinal tissue.
- Mechanically separated meat may not be used for human food.

¹⁴ For more detailed discussion of these and other BSE issues, see CRS Issue Brief IB10127, *Mad Cow Disease: Agricultural Issues for Congress*. Trade and economic impacts are discussed specifically in CRS Report RS21709, *Mad Cow Disease and U.S. Beef Trade*.

- Air injection stunning is banned, to ensure that portions of the animal brain are not dislocated into the carcass.

The FSIS actions were in addition to other BSE regulatory safeguards that have been in place for several years. These include import controls and ongoing BSE surveillance through carcass testing by APHIS, and restrictions on the feeding of certain mammalian proteins to cattle by FDA. Additional USDA actions in the wake of the December 2003 BSE discovery have included more attention to implementing a nationwide animal identification (ID) program that would enable all cattle and other animal movements to be traced within 48 hours in cases of animal disease; and an intensive 12-18 month BSE testing program for higher-risk cattle. As of May 9, 2005, nearly 350,000 had been tested, all negative for BSE (20,000 were tested in 2003).

USDA's and FDA's preparation for, and response to, BSE have come under harsh criticism from several fronts. For example, USDA used an import permit system (rather than promulgating rules) to begin admitting some low-risk beef products from Canada in 2003. When in April 2004 USDA expanded the types of allowable Canadian beef imports using this permit system, a federal judge halted the expansion, declaring that the Department had failed to follow proper rulemaking procedures. When USDA did publish a final rule that would allow more Canadian imports (including imports of younger cattle), the same federal judge in early March 2005 temporarily blocked implementation. The judge's decisions came in response to lawsuits by a national cattle group, Ranchers-Cattlemen Action Legal Fund (R-CALF)-USA. USDA is appealing. Others, including the main U.S. cattle producers' group, the National Cattlemen's Beef Association, and meat companies, have generally been supportive of USDA's Canadian import policy, but the federal judge and/or the appeals court are not expected to resolve the issue until summer 2005 at the earliest. FDA has been criticized by the Government Accountability Office (GAO) for gaps in its enforcement of the feed rules, and USDA by its Office of Inspector General (OIG) and others over perceived problems in its BSE testing procedures, for example.

In Congress. BSE remains a high priority for many Members of the 109th Congress. A number of them have joined others in calling for a delay or rescission of the USDA rules (now delayed by a federal judge) to open the border to imports of younger Canadian cattle. Congress had 60 legislative days from publication of the rule to review it, as provided for in the Small Business Regulatory Enforcement Fairness Act of 1996 (5 U.S.C. 801-808). On March 3, 2005, the Senate approved a resolution of disapproval (S.J.Res. 4) by a vote of 52-46. However, House passage and the President's signature are needed, neither of which is considered likely by observers.

Other bills addressing the Canada rule include H.R. 187, to prohibit the rule "unless United States access to major markets for United States exports of cattle and beef products is equivalent or better than the access status accorded such exports as of January 1, 2003"; and H.R. 384/S. 108, to prohibit the Canada rule unless mandatory retail country-of-origin labeling (COOL) is implemented. The current statutorily set deadline for COOL for fresh meats is September 30, 2006 (see CRS Report 97-508, *Country-of-Origin Labeling for Foods*). S. 294 would prohibit

imports (from a minimal risk region like Canada) of meat, meat byproducts, and meat food products from bovines over 30 months old unless the Secretary reports to Congress that the region “is in full compliance with a ruminant feed ban and other [BSE] safeguards.” No action has been taken on these bills.

Among other BSE-related bills pending in the 109th Congress are S. 73, to ban specified risk material from all animal feeds; and S. 135, to include processed as well as fresh meats as COOL-covered commodities, and to advance implementation to September 30, 2005. The chairman of the House Agriculture Committee introduced a bill (H.R. 2068) that would replace mandatory COOL for meat with a program that is voluntary.

Food Security and Emergency Preparedness

Since September 11, 2001, concern has been voiced about the potential for terrorist attacks on U.S. agriculture and the food supply through intentional contamination by organisms or chemicals injurious to crop, animal, or human health. FSIS’s Food Biosecurity Action Team (F-BAT) has conducted mock exercises to improve response time and communication in emergency situations. FSIS made security guidelines available to food processors in August 2002; it unveiled its new Food Emergency Response Network (FERN) Division on February 15, 2005 (accessible on the FSIS website). Also, USDA on April 14, 2005, announced the availability of model food security plans and training for meat and poultry plants to help strengthen security measures and prevent potential acts of intentional contamination. The Food Threat Preparedness Network (PrepNet) is a joint FSIS/FDA group that works on threat prevention and emergency response.¹⁵

In Congress. Protecting the U.S. food supply from acts of terrorism or other intentional contamination has been among the many facets of the ongoing congressional debate on homeland security since September 2001. For example, Congress, through various funding measures, has provided FSIS new monies to conduct the increased oversight of meat and poultry safety, some of which is described above. In the 109th Congress, S. 572 and S. 573 are intended to improve federal responsiveness to agroterrorism and to give added agricultural biosecurity responsibilities to the Department of Homeland Security.

Humane Slaughter

Under the Federal Meat Inspection Act, FSIS inspectors are responsible for enforcing the Humane Methods of Slaughter Act (7 U.S.C. 1901-1906). This act requires that all livestock (but not poultry) be rendered unconscious before slaughter. FSIS inspectors have the authority to stop slaughter lines and order plant employees to take corrective actions to ensure compliance with the act.

¹⁵ For more information on FSIS and other federal funding for these activities, see CRS Report RL32521, *Agroterrorism: Threats and Preparedness*. The FSIS Food Security and Emergency Preparedness Website is at [http://www.fsis.usda.gov/food_security_&_emergency_preparedness/index.asp].

Concerns have persisted about FSIS enforcement of compliance with the Humane Methods of Slaughter Act (HMSA) regarding healthy, ambulatory animals. These concerns arose in early 2002 when media reports alleged widespread violations of the act, which prompted a number of administrative and congressional actions. In February 2002, FSIS placed 17 veterinarians in its district offices, specifically to monitor humane slaughter and handling procedures and to report to headquarters on compliance.

On January 31, 2004, GAO released a report to Congress stating that it had found it difficult to assess FSIS's performance on enforcing the act because of incomplete and inconsistent inspection records (GAO-04-247, *Humane Methods of Slaughter Act: USDA Has Addressed Some Problems but Still Faces Enforcement Challenges*). GAO also reported that inspectors' knowledge of regulatory requirements varied, documentation did not consistently reflect the scope and severity of incidents, and enforcement action varied depending upon whether it was one animal or several that had not been rendered completely unconscious by stunning. FSIS issued new guidelines to its field personnel in November 2003, and indicated it would follow up on GAO's recommendations for improvement. On September 9, 2004, the agency published a *Federal Register* notice outlining a "systematic approach" to meeting humane slaughter requirements.

In Congress. The conference agreement on the 2002 farm act (P.L. 107-171, H.Rept. 107-424) expresses the sense of Congress that FSIS should fully enforce the HMSA and report the number of violations to Congress annually.¹⁶ In the FY2003 omnibus appropriation act (P.L. 108-7), Congress designated \$5 million of FSIS funding specifically for hiring 50 additional inspectors to oversee the agency's compliance. Language in the FY2004 consolidated appropriations act (P.L. 108-199) directed FSIS to continue this process.

The FY2005 consolidated appropriations act (P.L. 108-447) directs no less than 63 full-time equivalent positions (above the FY2002 level) be devoted to enforcement of the HMSA, and that \$3 million be provided to incorporate the agency's Humane Animal Tracking system into its field computer systems. Also in the act, as part of the FSIS total, are \$17.3 million combined for frontline inspectors and humane slaughter enforcement.

Until recently, the issue of humane slaughter has been closely connected with the issue of humane treatment of downer cattle at federally inspected slaughtering facilities and other locations. During action on the FY2004 agriculture appropriations bill in the 108th Congress, lawmakers debated amendments that reflected the content of companion bills in the House and Senate (the Downed Animal Protection Act; H.R. 2519/S. 1298). These would have amended the 2002 farm act to require that downed animals at stockyards, market agencies, livestock dealer facilities, and slaughter facilities be euthanized immediately and barred from federal inspection. The Senate adopted the downed animal provision in its funding bill, but it was dropped in conference. The January 2004 USDA regulatory ban on

¹⁶ Section 10305 of P.L. 107-191, the Farm Security and Rural Investment Act of 2002.

slaughtering downers for human food was adopted in response to BSE concerns, but some Members of the 108th Congress remained interested in writing the ban into law.

Legislative proposals to include poultry under the act were introduced in the 102nd through 104th Congresses, but no action was taken.

In the 109th Congress, H.R. 503 would amend the Horse Protection Act to prohibit any movement of or commerce in horses and other equines to be slaughtered for human consumption. Some 50,000 or more U.S. horses are slaughtered each year for human food, mainly for European and Asian markets. Debate has focused on the acceptability of this practice, and whether adequate care could be provided for such horses if they no longer went for human food.¹⁷

Meat Traceability

On September 30, 2003, USDA's OIG released an audit report on a 2002 meat recall by Con Agra (see "*E. coli* O157:H7," below). The report recommends "that FSIS reassess its management control process over ... recall operations ... by ensuring that ground beef is traceable from manufacturing to point-of-sale and that adequate production records are maintained to facilitate traceback." The issue has also been debated in connection with protecting against BSE and against terrorism; verifying the U.S. origin of live cattle and meat products for export; and facilitating recalls to prevent or contain foodborne illness outbreaks, among other things.

Supporters of animal ID and meat traceability point out that most major meat-exporting countries already have domestic animal ID systems. The U.S. meat industry argued in the past that such a system would not be based on sound science, and would be technically unworkable. However, since the domestic BSE case, the industry, USDA, and some Members of Congress have been actively pursuing adoption of a national animal ID (but not meat traceability) system, focused on animal disease control rather than food safety *per se*. Among other issues are cost, need for a mandatory rather than voluntary system, potential producer liability, and privacy of records.

In Congress. Several bills intended to create an animal ID and tracking system were introduced in the second session of the 108th Congress, but not adopted. H.R. 1254 has been offered in the 109th Congress, which would require the establishment of an electronic nationwide livestock identification system.¹⁸

Recall and Enforcement Proposals

Currently, the Agriculture Secretary must go to the courts to obtain an order to seize and detain suspected contaminated products if a firm refuses to issue a recall voluntarily. The GAO has criticized agencies' efforts to ensure that companies carry out recalls quickly and efficiently, particularly of products that may carry severe risk of illness. For example, an October 2004 GAO report concluded that the agencies

¹⁷ See CRS Report RS21842, *Horse Slaughter Prevention Bills and Issues*.

¹⁸ See CRS Report RL32012, *Animal Identification and Meat Traceability*.

do not know how well companies are carrying out recalls and are ineffectively tracking them. As a result, most recalled items are not recovered and thus may be consumed, GAO reported.¹⁹

At past hearings, consumer groups and food safety advocacy groups have testified in favor of obtaining these new enforcement tools to improve food safety in general, and to strengthen USDA's enforcement of the new HACCP system in particular. These groups have stated that civil fines would serve as an effective deterrent and could be imposed more quickly than criminal penalties or the withdrawal of inspection. They also have argued that the authority to assess civil penalties would permit USDA to take stronger action against "bad actors" — processors who persistently violate food safety standards. Food safety advocates argue that FSIS should have the authority to mandate product recalls as a backup guarantee in case voluntary recalls moved too slowly or were not comprehensive enough.

Meat and poultry industry trade associations have testified in opposition to granting USDA new enforcement powers. Both producers and processors argue that current authorities are sufficient and that only once has a plant refused to comply with USDA's recommendation to recall a suspected contaminated product. Industry representatives have testified that USDA's current authority to withdraw inspection, thereby shutting down a plant, is a strong enough economic penalty to deter potential violators and punish so-called bad actors. Furthermore, they say, new enforcement powers would increase the potential for plants to suffer drastic financial losses from suspected contamination incidents that could ultimately be proven false. Some observers argue that much still needs to be done to educate consumers and restaurateurs about safe meat and poultry handling and cooking practices.

In August 2004, the consumer group Center for Science in the Public Interest (CSPI) began a national campaign to urge USDA to publicize the names of retail outlets where recalled meat has been distributed, so that consumers can learn more quickly whether they have purchased potentially contaminated products. USDA and industry leaders contend that distribution records are proprietary, and exempt from provisions of the Federal Freedom of Information Act; such information, they argue, should be limited mainly to public officials so that they can monitor recalls. The California legislature in August 2004 passed a bill (SB 1585) to require food companies and public agencies to make recall information more widely available. However, the governor vetoed the bill.

In Congress. Bills to enhance the effectiveness of meat and poultry recalls have been introduced in successive Congresses. In the 108th Congress, for example, bills were proposed to authorize FSIS to recall suspected contaminated products directly if the product owner did not comply with the agency's request for a voluntary recall. Another bill would have given FSIS the authority to impose substantial civil money penalties on slaughtering and processing operations that violated the meat and poultry inspection laws and regulations. These measures did not advance beyond

¹⁹ *Food Safety: USDA and FDA Need to Better Ensure Prompt and Complete Recalls of Potentially Unsafe Food*, GAO-05-51.

their committees, but similar proposals could arise in the 109th Congress. Meanwhile, language in the conference report to accompany the FY2005 appropriation for USDA (P.L. 108-447; H.Rept. 108-792) commends FSIS for beginning to include, in its meat and poultry recall notices, photographs of recalled products and website addresses of their manufacturers. Conferees urge the agency to continue this practice and also to ask manufacturers to voluntarily provide information on retail locations of recalled products, for inclusion in the releases.

Single Food Agency

U.S. food safety oversight, while concentrated in FSIS and FDA, is spread among 15 agencies operating under a variety of statutes. This complex system is supplemented by many state food safety programs. GAO, which has looked at the matter several times, noted in a recent report that the federal food safety system “emerged piecemeal, over many decades, typically in response to particular health threats or economic crises. The result is a fragmented legal and organizational structure that gives responsibility for specific food commodities to different agencies and provides them with significantly different authorities to enforce food safety laws.”²⁰ Besides GAO, the National Academy of Sciences and the National Commission on the Public Service have studied the issue and recommended options for change.²¹

Legislative proposals have been offered to reorganize and/or consolidate this food safety structure, and the laws underpinning it. In examining such proposals, Congress could be asked to address a range of policy questions including whether the current disparate regulatory approaches and their authorizing statutes remain appropriate, particularly given the diversity of food types, their different health risks, their methods of production, and their sources of supply; the continuously evolving science on foodborne illness and how to prevent it; and funding constraints, among other things.

In Congress. In the 109th Congress, companion bills (H.R. 1507, S. 729) have been introduced which would combine federal food safety programs, including meat and poultry inspection, under a new Food Safety Administration. The bill’s chief sponsors had introduced legislation (H.R. 5259, S. 2910) with a similar purpose in the 108th Congress.

²⁰ *Food Safety: Experiences of Seven Countries in Consolidating Their Food Safety Systems*, GAO-05-212, February 2005.

²¹ See National Research Council, Institute of Medicine, *Ensuring Safe Food From Production to Consumption*, Washington, D.C., National Academy Press, 1998; and National Commission on the Public Service, *Urgent Business For America: Revitalizing the Federal Government For the 21st Century*, Washington, D.C., 2003.