Order Code IB10082

CRS Issue Brief for Congress
Received through the CRS Web

Meat and Poultry Inspection Issues

Updated March 22, 2002

Jean M. Rawson
Resources, Science, and Industry Division

CONTENTS

Meat and Poultry Inspection 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. The Food and Drug Administration (FDA) is responsible for ensuring the safety of all other foods, including seafood.

Since September 11, much of the Congress's and food inspection agencies' attention has focused on assuring that food and the U.S. agricultural production system are adequately protected from bioterrorism. **(See sections at the end of this issue brief.)**

Prior to the concern with bioterrorism, Congress paid close attention to the efforts of FSIS and the meat and poultry industry to address the ongoing problem of naturally occurring microbiological contamination, which has been responsible for outbreaks of severe and sometimes fatal foodborne illness.

Since January 2000, all federally inspected slaughtering and processing plants are operating under a new system of inspection called HACCP (for Hazard Analysis and Critical Control Point). The system is intended to prevent meat contamination by microbial pathogens at points along the manufacturing chain where it is most likely to occur. The HACCP system complements, but does not replace, the traditional system of inspection under existing statutes.

Although most consumer advocates, the meat and poultry industries, scientists, and USDA officials state that recent program and policy reforms have improved meat and poultry safety, implementation of HACCP has not quelled congressional debate on how to maintain progress and whether further improvements in meat and poultry safety — through regulatory and/or legislative changes — are needed.

Both before and since September 11, lawmakers have introduced measures intended to consolidate and modernize the inspection of *all* foods, including meat and poultry (S. 1501, Durbin), and to give FSIS stronger enforcement powers (H.R. 1276, H.R. 3127). In addition, Senator Harkin sought (unsuccessfully) to amend the Senate's FY2002 appropriations bill (S. 1191) to establish the Secretary's authority to prescribe performance standards for pathogen reduction (the Senator reintroduced a stronger version of this proposal as separate legislation (S. 2013) on March 14, 2002). This proposal relates to a federal court ruling in 2000 (which was reaffirmed on December 11, 2001) that held that FSIS does not have the statutory authority to use *Salmonella* bacteria test results as a basis for enforcement decisions under HACCP.

On February 4, 2002, the Bush Administration released its FY2003 budget request for USDA. It proposes a $864 million program level for FSIS, of which $763 million would be appropriated and $101 million would be from user fees collected from the processing industry for overtime and holiday inspection services. FSIS received $715.5 million in appropriated funds in FY2002; in addition, P.L. 107-117, the defense supplemental law that the President signed on January 10, 2002, provides an additional $15 million to FSIS to enhance inspection and interagency cooperation activities to counteract bioterrorism. Several of the anti-bioterrorism measures introduced at the end of the last session propose additional funding for FSIS.

MOST RECENT DEVELOPMENTS

On March 14, 2002, Senator Harkin introduced legislation to clarify the authority of the Secretary to set enforceable performance standards for the reduction of pathogens in meat and poultry. The Senator earlier had offered this proposal as an amendment to the FY2002 USDA appropriations act, but it was not adopted.

On February 28, 2002, the Speaker appointed conferees to meet with earlier-appointed Senate conferees on the Bioterrorism Preparedness Act of 2001 (H.R. 3448). The Senate-passed version of the bill would authorize $15 million for enhanced FSIS inspection activities, along with additional funds for USDA and state-level research on bioterrorism detection and response. ***(See Protecting the Meat, Poultry, and Egg Supply from Bioterrorism near the end of this issue brief.)***

On February 4, 2002, the Bush Administration released its FY2003 budget request for USDA. It proposes an appropriation of $763 million for FSIS, a $47.4 million increase over the current fiscal year.

BACKGROUND AND ANALYSIS

Overview

FSIS inspects most meat, poultry, and processed egg products sold for human consumption for safety, wholesomeness, and proper labeling. FSIS carries out its inspection duties with a total staff of about 10,000, funded in FY2002 by an annual appropriation of $715.6 million (P.L. 107-76). In addition, the agency can use for program support the user fees paid by the packing industry for overtime and holiday inspection services – estimated at $101 million in FY2002. P.L. 107-76 also makes an additional $1 million available from user fees collected for laboratory accreditation services. P.L. 107-117, the Defense supplemental law containing funds for anti-terrorism activities, provides an additional $15 million for increased FSIS inspection to protect meat and poultry products from bioterrorism. About 7,600 of FSIS's employees, roughly 1,000 of them veterinarians, are located at some 6,200 plants and import stations nationwide. Traditional inspection under the original statutes comprises constant organoleptic inspection (for appearance, odor, and feel) at slaughter operations and daily inspection of sample products and operations at processing plants.

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 in the early 1990s 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 new inspection system called the Hazard Analysis and Critical Control Point system – HACCP. In this system, hazards are identified and risks are analyzed in each phase of production; "critical control points" for preventing such hazards are identified and monitored; and corrective actions are taken when necessary. Record keeping

and verification are used to ensure the system is working. The final rule was published in 1996, and since January 2000 all slaughter and processing operations are required to have HACCP plans in place. HACCP operates as an adjunct to the traditional methods of inspection, which still are mandatory under the original statutes.

The packing industry was generally receptive to HACCP at the outset. Numerous plants, particularly the ones with 500 or more employees (which account for 75% of all U.S. slaughter production and 45% of all processed product output), already were using HACCP-type processes in their operations. However, since full implementation, the mandatory HACCP system has proved to be controversial. Although records show that packing plants for the most part have been abiding by the mandatory standards for pathogen levels, major players in the industry argue that the regulations exceed the HACCP concept by establishing what they view as impractical, expensive testing regimes and unrealistic standards.

In December 1999, a coalition of eight major meat industry trade associations petitioned FSIS asking the agency to tighten and clarify certain sections of the 1996 HACCP final rule. Two lawsuits, one in 1999 and another in 2000, also have challenged FSIS's authority to carry out HACCP reforms under existing statutes. These events raise the question of whether the original laws sufficiently undergird FSIS's stated intention to move to a science-based system.

Performance data on HACCP gradually are becoming available and generally indicate that HACCP is having a measurable beneficial impact on levels of microbiological contamination in processing plants. FSIS data from the second year of testing in large operations show that the prevalence of *Salmonella* in hogs dropped by 75%, in young chickens by more than 50%, and in ground beef by nearly two-thirds. Reductions in *Salmonella* levels mean reductions in the presence of other foodborne pathogens as well, according to FSIS. Nonetheless, given the myriad pathways for food contamination to occur – especially after the product leaves the plant – it likely never will be possible to directly link a decline in pathogens on meat and poultry in processing plants to decreases in the incidence of foodborne illness.

Standard and HACCP Inspection Authority and Requirements

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 original Meat Inspection Act did not cover the poultry industry, which at the time was mainly small-scale production by independent farmers. The 1957 Poultry Products Inspection Act, as amended [21 U.S.C. 451 et seq.], made poultry inspection mandatory. In May 1995, the authority for processed egg inspection was transferred from USDA's Agricultural Marketing Service to FSIS. 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 products, domestic and imported, and the safe use or disposition of damaged and dirty eggs.

The primary goals of the FSIS inspection program are to prevent adulterated or misbranded animals and products from being sold as food, and to ensure that meat and poultry are slaughtered and processed under sanitary conditions. Uninspected and condemned products cannot be sold for human consumption in domestic or foreign commerce. Requirements also apply to intrastate commerce (for which either USDA programs or federally approved state programs must be in place). Imports from foreign countries must be processed under equivalent inspection systems and be certified prior to entry into the United States.

The following are the basic requirements of FSIS standard and HACCP inspection systems:

Coverage. FSIS's legal inspection responsibilities do not begin until animals arrive at slaughterhouses, and they generally end once products leave processing plants. The agency has no regulatory jurisdiction at the farm level. Also, certain custom slaughter and most retail store and restaurant activities are exempt from federal inspection; however, they may be under state inspection. Most exotic meats – including venison, rabbit, and buffalo – are under the Food and Drug Administration's (FDA) regulatory oversight and not subject to mandatory inspection under the meat and poultry acts, although producers of these meats may request USDA inspection on a fee-for-service basis. FDA also is responsible for seafood (even those fish and shellfish raised through aquaculture), milk, and for the safety of shell eggs in retail stores and restaurants. Beginning April 26, 2001, FSIS inspection is mandatory for meat from ratites (ostrich, emu, rhea) and quail. A provision in the USDA appropriations act for FY2001 (P.L. 106-387) amended the Poultry Products Inspection Act to include these animals, and the interim final rule was published in the *Federal Register* May 1, 2001 (66 FR 21631).

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. In addition, under HACCP regulations, all operations must have site-specific standard operating procedures (SOPs) for sanitation. For each "critical control point" along the production line, plants must document and maintain records on all cleaning procedures being used to prevent contamination before, during and after production. USDA inspectors check the records to verify the plant's compliance.

Slaughter Inspection. FSIS inspects all meat and poultry animals at slaughter on a continuous basis; that is, no animal may be slaughtered and dressed unless an inspector has examined each carcass. 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. Slaughter inspection under the original statutes consists primarily of *organoleptic* detection procedures – sight, touch, and smell – to look for signs of disease, contamination, and/or other abnormal conditions, both before and after slaughter.

In addition to standard inspection, plants are required under the HACCP rule to have a HACCP plan for their slaughter and/or processing operations. Simply put, this means that at each point in the process where contamination could occur, the plant must have a plan to

control it. FSIS's role is to verify that the plant's plan effectively maintains sanitation standards at all the control points.

The HACCP rule also mandates two types of microbial testing to verify that plant safety procedures are working and to measure plant performance in reducing pathogens:

- All meat and poultry slaughter plants must regularly test carcasses for generic *E. coli* in order to verify that their systems are effectively controlling fecal contamination. The testing is intended as a process verification tool for plants and inspectors and is not to be used as a standard for enforcement purposes. However, plants are required to follow approved testing procedures and methods, and failure to meet specified performance criteria will result in USDA's working with the plant to improve sanitation and process controls. Testing frequency varies, from many tests daily in high volume plants to once a week in the smallest ones.

  USDA states that generic *E. coli* was chosen because it is the best microbial indicator of fecal contamination, the primary vehicle for such potentially dangerous bacteria as *Salmonella, Campylobactor*, and *E. coli* O157:H7.

- Both slaughter plants and those that produce raw ground product must meet or stay below a national standard incidence rate for *Salmonella* contamination. USDA states that it chose *Salmonella* for testing over other bacteria because: (1) it is the leading cause of foodborne illness; (2) it is one of the most common foodborne bacteria; (3) it is easy to test for; and (4) its reduction also will cause reductions in other foodborne pathogens. The national standard varies by product. For example, it is set initially at 1% of samples testing positive for steers and heifers, 7.5% for ground beef, 20% for broilers, and 49.9% for ground turkey. Plants with higher levels than the standard are required to take remedial actions in order to meet the targets; failure to meet USDA standards by a third testing series can lead to suspension of inspection, which effectively closes the plant. USDA inspectors conduct the *Salmonella* testing.

Processing Inspection. Inspection of processed products like hot dogs, lunch meat, prepared dinners, and soups does not require an FSIS inspector to remain constantly on the production line or to inspect each and every processed item. Instead, inspectors are on site daily to monitor operations, check sanitary conditions, examine ingredient levels and packaging, review records, and conduct statistical sampling and testing of products. Such plants also are required to have HACCP plans, which are verified daily by USDA inspectors. Processing inspectors often have responsibility for two or more plants that must be visited each day; consequently, these plants are processing meat or poultry without on-site federal oversight for a large portion of their workday. Nonetheless, because each plant is visited daily, processing inspection is considered to be continuous.

Enforcement Authority. 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.

Contaminated, adulterated, and misbranded products, or parts of them, can be condemned and removed from 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. Without inspection, plants are prohibited from operating.

Challenges to the HACCP Rule

Reaction to the mandatory HACCP regulations has been mixed. As mentioned above, a significant portion of the packing industry already was using HACCP-type processes before they became mandatory. Most of these plants already conduct their own pathogen testing, but events since the start of HACCP implementation indicate that although plants for the most part have been staying within the new national *Salmonella* standard, the industry finds the standards problematic. Consumer advocacy organizations such as the Center for Science in the Public Interest and Safe Tables Our Priority have remained supportive of the HACCP rule, contending, among other things, that the testing program is effective at reducing pathogens because it forces companies to emphasize prevention in their operating plans.

However, other members of the meat and poultry industry argue that the regulation goes too far beyond HACCP, by establishing what they view as impractical, expensive microbiological testing and unrealistic microbiological standards. They also maintain that adding HACCP onto existing requirements increases the regulatory burden for meat and poultry processors, with no tangible improvement in public health.

Petition for Changes to the Rule. In December 1999, the American Meat Institute submitted a petition on behalf of eight major meat industry trade associations asking FSIS to tighten and clarify sections of the 1996 HACCP final rule pertaining to: (1) what constitutes a food safety hazard under HACCP; (2) the extent of a plant's responsibility after the product is shipped; and (3) events that signal that a plant's HACCP plan is inadequate. FSIS published the petition in the May 15, 2000 *Federal Register* (65 FR 30952) and asked for responses to six specific questions concerning the scientific and regulatory aspects of the petition. At the request of the trade groups and of the National Advisory Committee on Meat and Poultry Inspection, FSIS re-published the petition and questions twice in order to give the petitioners time to submit data to support their recommendations. (The National Advisory Committee on Meat and Poultry Inspection was established by Congress in 1971 to provide consultation to the Secretary before any changes are made in matters affecting federal and state inspection activities.) The latest comment period on the HACCP petition closed in late December 2000. At a June 2001 public meeting of the Advisory Committee, FSIS announced it might issue a proposed rule reflecting agreement with certain parts of the petition concerning sanitation, but that further changes in definitions might prove confusing rather than helpful to inspectors.

Recent HACCP-related Legal Actions.

Supreme Beef. In December 1999, FSIS attempted to withdraw inspectors from a processing firm in Texas (Supreme Beef) whose ground beef products had repeatedly violated *Salmonella* levels (withdrawing inspectors effectively closes down a plant). However, the firm obtained a federal court injunction to prevent FSIS's action. The firm argued that (1) high *Salmonella* levels did not indicate the presence of other dangerous pathogens, (2) that the *Salmonella* came in with the product from the slaughterhouse and thus could not be removed,

and (3) that the plant had never failed to meet standards for sanitation. In May 2000, the federal judge ruled that the meat and poultry inspection statutes did not give FSIS authority to use the *Salmonella* standard as the basis for withdrawing inspection.

The original ruling in May 2000 applied only to meat processors in the judge's district in Texas. In part because Supreme Beef subsequently went out of business, USDA asked an appeals court in 2001 to overturn the ruling. However, on December 11, 2001 the court upheld the district court's decision. On December 18, 2001, Secretary Veneman issued a statement saying that although the decision limited FSIS's ability to enforce performance standards, it did not affect the agency's ability to use the standards as a way to measure the effectiveness of plants' food safety programs.

As evidence in support of its action against Supreme Beef, USDA has stated that only three of 6,400 federally inspected plants have ever failed to meet the standard. Opponents maintained that until scientists could determine what constitutes an unsafe level of *Salmonella* in ground meat, pathogen testing results should not be a basis for enforcement actions. 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 moving ahead quickly with adding microbiological standards to the meat and poultry inspection statutes.

Senator Harkin has made several attempts to amend the meat and poultry inspection statutes to clarify the Secretary's authority to set enforceable performance standards for the reduction of pathogens in meat and poultry. In June 2000, he introduced the Microbiological Performance Standards Clarification Act of 2000 (S. 2760). Subsequently he offered the bill for adoption as floor amendment to the FY2001 agricultural appropriations bill, but it failed adoption by one vote. Senator Harkin offered the proposal as an amendment to the Senate's FY2002 USDA appropriations measure (S. 1191/S.Amdt 1984), but withdrew it when the lawmakers agreed to take up a competing amendment (S.Amdt. 1987) that would have postponed enforcement of microbial standards until two research organizations complete scientific reviews of the issue in 2002. On March 14, 2002, Senator Harkin reintroduced a stronger version of the measure as separate legislation (S. 2013). The Meat and Poultry Pathogen Reduction and Enforcement Act would require the Secretary to set performance standards for the top illness-causing pathogens in raw meat, after a 3-year survey and evaluation period.

HACCP-based inspection models project. In 1998, the meat inspectors union charged that a pilot project that FSIS planned to begin in October 1999 would violate language in the meat and poultry inspection statutes that mandates carcass-by-carcass inspection at slaughter operations. The pilot project, called the HACCP-based inspection models project (HIMP), permits FSIS inspectors at approximately 25 chicken, turkey, and swine slaughtering operations to leave the inspection line periodically to conduct increased sampling for microbiological contaminants and to verify the compliance records of plant employees who are now carrying out some of the hands-on inspection and corrective actions that inspectors used to do. FSIS has stated that if HIMP is successful at meeting pathogen-reduction goals in the pilot plants, the agency might eventually implement it at all slaughter operations. Underlying the inspector union's charge is the concern that such a move would threaten inspectors' jobs. In June 2000, a federal appeals court upheld the union's position concerning the statutory language, but did not prohibit FSIS from proceeding with the pilot project. In August 2000

the union asked the court to stop the project; in the meantime, FSIS in September implemented a change in the project to require an inspector to be permanently stationed at the end of the slaughter line. In January 2001 the court ruled that the HIMP project could continue because the changes that FSIS made in September 2000 brought it into compliance with the law.

In January 2002, concurrently with the release of a new GAO report critical of the HIMP project, FSIS issued a statement saying it intends to extend the program to additional plants on a voluntary basis, and that it will publish proposed regulations to address certain of the GAO's criticisms. The GAO report states that (1) the pilot program has design and methodology limitations that compromise the overall validity and reliability of its results; (2) FSIS did not train meat and poultry plant personnel prior to program implementation; (3) the data do not conclusively show that modified inspections are at least equal to traditional inspections; and (4) GAO stands by its long-standing recommendation that legislative changes be made to provide FSIS with clear authority to modify its inspection system [http://www.gao.gov/].

Throughout the controversy, officials and industry observers noted that the court's original decision was based on a strict interpretation of the language in the inspection laws and not on the efficiency of a change in division of labor or the effectiveness of the HIMP project from a food safety standpoint. Preliminary data that FSIS released in July 2000 show that chicken slaughtering plants operating under the HIMP system experienced a 100% decrease in the incidence of diseased carcasses and a 92% decrease in fecal contamination on carcasses, a leading source of potentially illness-causing bacteria. The January 2002 GAO report disputes these results, but FSIS officials maintain that the data collected are reliable and valid.

Funding Issues

USDA for several years has experienced difficulties in meeting its inspection obligations with the annual appropriation it receives from Congress. Among the reasons given are that: (1) technological innovations have increased the amount of product needing inspection; (2) natural attrition in FSIS's sizeable workforce creates steady hiring pressure and it can be difficult to find and retain qualified employees, especially in certain geographical locations; and (3) the addition of HACCP requirements on top of the traditional carcass-by-carcass inspection duties puts additional pressure on adequate inspector staffing. For almost two decades, the President's annual budget request has included a proposal to charge the meat packing industry user fees sufficient to cover the entire cost of federal inspection services – one rationale being 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 a one cent per pound. Congressional appropriators have rejected the user fee proposal every year, arguing that the safety of the food supply is a legitimate responsibility of the government. The Bush Administration's FY2002 budget request did not contain the user fee proposal.

Separate from a user fee to cover all inspection costs, FSIS has charged user fees for overtime and holiday inspection services since 1919. The agency currently collects approximately $100 million annually from such fees. These funds are available to the agency for supporting its inspection activities.

The FY2002 appropriations act for USDA (P.L. 107-76) includes $715.6 million for FSIS for FY2002, a $21 million increase over FY2001. The bulk of the increase ($13 million) is to cover pay and benefit increases and maintain an inspection force of 7,600. The conference agreement also permits FSIS to credit $1 million in fees collected for laboratory accreditation to the agency's food inspection activities, in addition to the estimated additional $101 million that will be collected in user fees for overtime and holiday inspection services. P.L. 107-117, the $20 billion Defense supplemental funding measure, provides an additional $15 million to FSIS in FY2002 for activities to protect the meat and poultry supply from bioterrorism.

The Bush Administration is requesting $763 million in FSIS appropriations for FY2003 (+ $47.4 million) and assumes the availability of an additional $101 million in user fees. The budget request would designate $14.5 million of the increase to allow FSIS to upgrade its computer systems to improve information-sharing between inspectors and managers. The President's budget also contains one legislative proposal and promises a second to be submitted to Congress in 2003. The first would require processing firms to pay a fee to obtain an FSIS license; the collected fees would support FSIS investments in inspection technology. The second proposal would reduce current overtime fee rates and instead charge establishments for inspection services on second and third shifts; such service now is provided without reimbursement.

Current Legislative and Regulatory Proposals

Country-of-Origin Labeling

Federal law requires most imports, including many retail food items, to bear labels informing the purchaser of their country of origin. However, imported meats that are cut into smaller pieces for retail sale are not required to maintain their country-of-origin labeling at the retail level. In the 107th Congress, H.R. 1121 (Pomeroy), S. 280 (Johnson), and a provision in S. 20 (Daschle) would require it for red meats (among other things). The focus of legislative activity, however, is likely to be the omnibus farm bill (H.R. 2646) currently in conference. The House-passed H.R. 2646 would require retailers to inform consumers of the country of origin of all fresh fruits and vegetables; the Senate-passed version would require it for fresh produce, red meats, peanuts, and farm-raised catfish.

Proponents of mandatory country-of-origin labeling (primarily groups representing producers) contend that it would enable consumers to know the source of meats and to make more informed food choices. Opponents (primarily packers and retailers) counter that, if food safety is the issue, country-of-origin labeling would be of no practical help to consumers but very costly to the industry. Furthermore, they argue, it could be perceived as a trade barrier and could undermine ongoing efforts to expand international markets for U.S. products. In January 2000, FSIS released a report analyzing the costs and benefits of country-of-origin labeling that concluded that Congress should find ways to assure U.S. compliance with international trade agreements and minimize the cost to industry if it decides to enact such a law [http://www.fsis.usda.gov/OA/congress/cool.htm#VIII]. (For further information, see CRS Report 97-508, *Country-of-Origin Labeling for Foods: Current Law and Proposed Changes*.)

Meanwhile, on August 7, 2001, FSIS published in the *Federal Register* an advance notice of proposed rulemaking (ANPR), requesting comments on the need for regulations to clarify the definition of "United States cattle" and "United States fresh beef products" for labeling purposes. The comment period closed October 9. According to FSIS officials, the outcome of this rulemaking process would facilitate the response of USDA's Agricultural Marketing Service (AMS) to a September 2000 petition from several major livestock and meat trade organizations to establish a voluntary program under which producers could certify and label their meats as "Products of the U.S.A." No final rule has been published to date.

Other Selected Issues

"Mad Cow" Disease

"Mad cow" disease, or bovine spongiform encephalopathy (BSE), is a slowly progressive, incurable disease affecting the central nervous system of cattle. It was first diagnosed in Britain in 1986. In 1997, European scientists determined that there was a likely link between BSE in cattle and an outbreak in humans of a new type of fatal brain disease called Creutzfeldt-Jakob disease (nvCJD) that had begun in Europe in the late 1980s. Most experts now agree that nvCJD is a human form of BSE that is transmitted to humans who consume meat from BSE-infected cattle. U.S. federal and state agencies have found no BSE in U.S. cattle since they began surveillance in 1989.

Scientific uncertainty about BSE's cause and transmission has led the U.S. government to take several precautionary steps and to develop an emergency response plan to implement if a case is found. USDA's Animal and Plant Health Inspection Service (APHIS), which administers the laws and regulations designed to prevent the importation and spread of animal diseases, has banned the import of all live ruminants from countries where BSE is known to exist since 1989 (Japan is the latest addition to the list). In 1991 APHIS banned the importation of rendered by-products from ruminants. As of December 2000, the importation of all rendered animal protein products (whether from ruminants or not) is prohibited. The Food and Drug Administration, which regulates animal feed ingredients domestically, banned the feeding of virtually all mammalian proteins to ruminants in August 1997. Periodic surveys show, however, that full compliance has been difficult to achieve. A June 2001 FDA survey showed that 22% of renderers, feed mills, and other facilities that handle ruminant material were out of compliance with FDA's labeling, recordkeeping, and commingling requirements. A February 2002 GAO study reports that 364 out of 10,576 firms inspected by FDA (out of at least 11,741 total firms potentially handling ruminant material) are still out of compliance. Furthermore, according to GAO, FDA's database for ensuring compliance is so flawed as to be useless [http://www.gao.gov].

Wide differences of opinion on the adequacy of U.S. safeguards against BSE persist. A study issued November 30, 2001, by the Harvard Center for Risk Analysis states that the steps that USDA and HHS have taken to date to prevent and prepare for possible BSE introduction are effective, although some improvements could still be made. The February 2002 GAO study states, "Federal actions do not sufficiently ensure that all BSE-infected animals or products are kept out or that if BSE were found, it would be detected promptly and not spread to other cattle through animal feed or enter the human food supply."

FSIS's responsibility regarding BSE requires the agency's inspectors to divert from processing any cattle showing suspicious clinical symptoms and send their brains to an APHIS laboratory in Ames, Iowa, for testing. More than 11,000 cattle brains have been tested since 1990, and no BSE has been found. Under FSIS's foreign meat inspection program, no establishments in countries where BSE has been found are approved to ship beef to the United States. However, the February 2002 GAO report criticizes USDA for not testing the brains of cattle that die on farms, since they may be at higher risk of carrying BSE, and questions the adequacy of the inspection procedures for imported meats. Concern over the general safety of imported meat has recently intensified upon the discovery, in February 2002, that FSIS officials had discovered major sanitation failures at certain Mexican meat processing facilities that had been exporting products to the United States. Senator Durbin has stated his intent to introduce legislation to require greater restrictions on the use of animal tissues carrying a high risk of BSE, and to enhance detection and response plans. (For additional information on BSE, see CRS Report RS20839, *Mad Cow Disease: Agriculture Issues*).

Foot-and-Mouth Disease

APHIS is the USDA agency primarily responsible for assuring that the foot-and-mouth livestock disease outbreak in England and in other places such as Argentina and the Middle East, does not migrate to the United States. As with BSE, FSIS inspectors are responsible for monitoring slaughter animals for any signs of disease, culling suspicious animals, and testing them to determine their disease status. APHIS has banned imports of live animals and meats from countries with active FMD outbreaks, and reportedly has strengthened inspections of airline and ship passengers and cargo at U.S. ports of entry. However, a report released by the USDA's Office of Inspector General in July 2001 found flaws in APHIS's inspection and tracking systems that allowed prohibited meat products to enter the United States (although they were prevented from going into commerce). In February 2002, the acting Inspector General testified at a House Appropriations Agriculture Subcommittee hearing that improvements still need to be made in FSIS/APHIS communication and coordination. (The OIG report is available at [http://www.usda.gov/oig/auditrpt/auditrpt_APHIS.html]). (For further information, see CRS Report RS20890, *Foot and Mouth Disease: A Threat to U.S. Agriculture*.)

Humane Slaughter

Under provisions in the Federal Meat Inspection Act (21 U.S.C. 603(b), 610(b), 620(a)), FSIS inspectors are responsible for enforcing the Humane 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. Legislative proposals to include poultry under the act were introduced in the 102nd through 104th Congresses, but none was acted upon.

Public awareness of conditions in livestock slaughter operations as heightened in 2001 by large newspaper advertisements, placed by animal right organizations (primarily the Humane Farming Association and affiliated groups), claiming that packing plants routinely slaughter conscious animals. Formal investigations by state authorities of the plants where the rights groups allege abuses to have occurred have discredited their claims. Nonetheless, as of February 2002, FSIS has placed 17 veterinarians in its district offices specifically to monitor

humane slaughter and handling procedures and to report to headquarters on compliance. Both the House- and Senate-passed versions of H.R. 2646, the 2002 farm bill, contain amendments stating that the Humane Slaughter Act should be fully enforced. Relatedly, public awareness has risen concerning the treatment of nonambulatory ("downer") cattle at stockyards. Both versions of H.R. 2646 contain a provision amending the Packers and Stockyards Act of 1921 to make it unlawful to physically move any nonambulatory animal unless it has been humanely euthanized first. (For further information on "downers" and related livestock issues, see CRS Issue Brief IB10063, *Animal Agriculture: Issues in the 107th Congress*.) (Links to FSIS, state, and scientific reviews of humane slaughter practices are available through [http://www.fsis.usda.gov/]).

Protecting the Meat, Poultry, and Egg Supply from Bioterrorism

Since September 11, widespread concern has been voiced about the potential for terrorist attacks on the U.S. agricultural base and food supply through intentional contamination by organisms or chemicals injurious to crop, animal, or human health. Several legislative proposals have been introduced to strengthen the government's ability to protect these critical resources, and many of them contain provisions to enhance FSIS's ability to assure the safety of the products it inspects and to respond quickly in the event of an incident.

The meat, poultry, and egg inspection statutes already give FSIS much more regulatory control over these products than the Food and Drug Administration (FDA, in the Department of Health and Human Services (HHS)) exercises over the rest of the food supply. Meat animals and poultry cannot be slaughtered unless FSIS inspectors are present. Every plant that processes meat, poultry and egg products receives a daily visit from an inspector who checks operations and the plant's compliance with extensive record-keeping requirements. Meat and poultry imports can come only from countries whose inspection systems FSIS has certified to be at least equal to the U.S. system, and then only from plants that FSIS has approved. Imports receive various levels of reinspection by FSIS before they are released into commerce. Most of the FSIS-related anti-bioterrorism measures introduced to date focus on (1) providing more money to FSIS for inspection, (2) enhancing its enforcement powers, and (3) facilitating the agency's collaboration with other USDA and non-USDA agencies with food safety and law enforcement responsibilities. These last two issues – enforcement powers and interagency collaboration – are ones that Congress has debated many times before. In nearly every Congress over the past decade, Members have introduced legislation either to consolidate all of the agencies having food safety related responsibilities into a single, independent federal entity, or grant authority for FSIS to make direct recalls and impose civil penalties, or both.

Several bills introduced in the Senate contain provisions affecting the anti-terrorism activities of FSIS and/or its two primary cooperating USDA agencies, the Animal and Plant Health Inspection Service (APHIS) (which inspects cargo and passengers at U.S. ports of entry for animal and plant pests, and responds to animal disease outbreaks, among other duties) and the Agricultural Research Service (ARS) (which conducts research on animal diseases and food safety to support FSIS's regulatory activities, among other subjects). USDA-related provisions in these bills have been incorporated into S. 1765, the Bioterrorism Preparedness Act of 2001, which the Senate adopted *in toto* as an amendment in the nature

Meat and Poultry Safety Related Provisions in Selected Anti-Terrorism Bills

	FSIS	APHIS	ARS	CSREES	STATES
S. 1551/ H.R. 3184	• Sec. 404A(d) amends FFDCA to permit FSIS and APHIS personnel to conduct investigations for HHS	--	--	--	--
S. 1546/ H.R. 3174	--	--	• $825 m. for biosecurity enhancement of ARS and ARS/APHIS labs • $2.3 b. for 10-year in-house and collaborative research programs	• $250 m. for competitive grants for counter-bioterrorism research	--
S. 1765/ H.R. 3310	• $15 m. for enhanced inspection	• $30 m. for increased inspection, cooperative agreements with state and private veterinarians, and an automated, integrated, inter-agency record-keeping system	• $180 m. for upgrading security at ARS labs	• $190 m. for increased state and ARS research on bioterrorism detection and response	• $20 m. in FY2002 and such sums as may be necessary in out-years for grants to land grant universities to enhance security of labs and hazardous materials; also for USDA to develop a National Hazardous Agent Inventory and a livestock industry and on-farm biosecurity education program
S. 1563/ H.R. 3293	• $560 m. for enhanced inspection, detection, and interagency collaboration	• $560 m. for enhancing interdiction and control programs	• $720 m. for enhancing biosecurity at ARS labs • $560 m. for a 4-year anti-bioterror R&D program	• $120 m. for NRI competitive grants on anti-bioterrorism	• $150 m. for anti-terrorism research and technology • $200 m. for a Consortium (of universities) for Countermeasures against Ag. Bio-terrorism
H.R. 3255	• Sec. 202 expands cooperation between FSIS and FDA in responding to terrorism against the food supply, and joint testing of response plans	• Sec. 202 also directs APHIS-FDA cooperation and joint testing of response plans • Sec. 201 authorizes $220 m. for enhanced threat response and automated, integrated, interagency record-keeping	--	--	--
P.L. 107-117 (H.R. 3338)	• $15 m. for increased inspection	• $119 m. for increased inspection and emergency response	• $113 m. for research • $81 m. for USDA facility and operational security and other needs	--	--

of a substitute to H.R. 3448 on December 20, 2001. The House-passed version of H.R. 3448 (passed on December 12, 2001) does not contain any USDA-related authorities. Conferees have been named for this bill and conference is expected soon. H.R. 3338, the Defense emergency supplemental bill to allocate the remaining $20 billion from the September 11 disaster relief act (P.L. 107-38), which the President signed into law (P.L. 107-117) on January 10, 2002, also contains funding for FSIS and APHIS activities. The table above summarizes and compares selected bills that have been introduced to date that contain meat- and poultry-related provisions.

While debate on these bills continues, USDA has released information on steps it currently is taking administratively to address the biosecurity and food safety responsibilities under its jurisdiction. At the Secretary's level, the Office of Crisis Planning and Management coordinates anti-terrorism activities across USDA and with other federal agencies. The Food Emergency Rapid Response and Evaluation Team (FERRET) authorized by the Agricultural Research, Extension and Education Reform Act of 1998 (P.L. 105-185), is an FSIS-led, intra-USDA coordination effort. Thirdly, FSIS would participate in the intergovernmental Foodborne Outbreak Response Coordinating Group (FORC-G), if the Administration were to reactivate it. FORC-G comprises the FDA, the Centers for Disease Control, The Environmental Protection Agency (EPA) and state and local agencies, and was created in 1998 under the previous administration's Food Safety Initiative. Finally, FSIS officials say that in direct response to the September 11 attacks, the agency has placed its 7,600 inspectors on high alert to look for ante-mortem and post-mortem irregularities in meat animals and poultry, has conducted mock exercises to improve response time and communication in emergency situations, and is working with slaughtering and processing operations to improve the security of both the physical plant and the workforce. These and other FSIS internal anti-terrorism preparedness activities are under the direction of a newly created Food Biosecurity Action Team (F-BAT).

Meanwhile, the livestock industry has publicly announced that it is launching a food industry-wide effort (the Alliance for Food Security) to develop bioterrorism risk management plans that coordinate with federal preparedness and emergency response plans. Industry officials note that these activities build upon efforts that began several years ago to forestall the introduction and spread of mad cow disease, and more recently, foot and mouth disease.

Policy Issues

The underlying purposes of the meat- and poultry-related provisions in the bills introduced to date are to provide more money to the USDA agencies with animal health and food safety responsibilities and to improve interagency coordination. While the first purpose has widespread support, the second is an issue for some observers who are concerned that the HHS secretary and the FDA may be given too much authority over activities that should, in their opinion, remain fully within USDA's purview. Livestock and meat industry trade groups also have expressed their concern that the current anti-terrorism proposals could significantly increase the level of federal regulation of the industry.

These issues have been at the heart of a decades-long debate over whether the 12 federal agencies and roughly 35 laws governing food safety should be consolidated into a **single food safety entity**. Senator Durbin, a long-standing proponent of the single agency

concept, reintroduced consolidation legislation shortly after the September 11 attacks, stating that such reform was necessary to protecting the food supply from terrorist threats (S. 1501, the Safe Food Act of 2001/H.R. 1671 (DeLauro)). A Senate Government Affairs Subcommittee hearing on October 10, 2001, on food safety preparedness included testimony on the single entity concept proposed in S. 1501. In a speech at a major food industry conference in March 2002, Homeland Security Director Tom Ridge stated that the Bush Administration is considering reorganizing or consolidating federal food safety agencies.

Despite the Administration's interest in exploring the idea of consolidating food safety agencies, the speed with which Congress is expected to move on anti-bioterrorism legislation makes it unlikely that such a substantial or controversial change would be put into that legislation. However, the Administration's interest, the Durbin bill, and possibly additional legislative proposals in the 107th Congress, are likely to raise the issue for further discussion. Consumer groups are in favor of provisions that make federal regulatory oversight of food safety more consistent across all types of food products, however that might be achieved. Food processors argue that: (1) increased regulation will not result in increased food safety until scientifically valid microbiological standards can be determined; (2) reorganization by itself will not necessarily improve public health; and (3) reorganization or physical restructuring of agencies would create huge logistical problems.

The GAO restated its long-standing criticism of the current food inspection system at the October 10 hearing on S. 1501, and reemphasized the National Academy of Sciences's (NAS) report calling for greater coordination and statutory reform, *Ensuring Safe Food from Production to Consumption*, which Director Ridge also mentioned in his speech. (The NAS report is available at [http://books.nap.edu/books/0309065593/html/index.html]; also see the GAO website [http://www.gao.gov/] for links to the October 10 testimony).

Two bills have been introduced that address **FSIS's enforcement powers** separately from the anti-bioterrorism initiatives. Representative Lowey introduced a bill early in the 107th Congress that would give FSIS authority to levy civil penalties for packers that violate inspection laws (H.R. 1276). Shortly after September 11, Representative Udall introduced legislation that would amend the meat and poultry inspection acts to authorize FSIS to recall suspected contaminated products directly (H.R. 3127). Currently, the Secretary must go to the courts in order to recall potentially unsafe products if a firm refuses to issue a recall voluntarily. An August 2000 GAO study on FSIS and FDA recalls (*Food Safety – Actions Needed by USDA and FDA to Ensure that Companies Promptly Carry Out Recalls)* criticized the agencies' efforts in making sure that companies carry out recalls quickly and efficiently, particularly of products that may carry severe risk of illness. GAO also stated that neither FDA nor FSIS compile sufficient information on companies' recall schedules or methods, and that determining the need for mandatory recall authority could not be done until such data were available.

At past hearings, USDA officials 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. USDA officials 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. Concerning the authority to mandate product

recalls, the Department has said that it would serve as a backup guarantee in case the voluntary recall system moved too slowly or was not comprehensive enough. Representatives of consumer groups and food safety advocacy groups have testified in favor of these proposals.

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 cases where a plant has refused to comply with USDA's recommendation to recall a suspected contaminated product have been extremely rare. Industry representatives have testified also 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 which could ultimately be proven false. Some observers argue that much still needs to be done in educating consumers and restaurateurs about safe meat and poultry handling and cooking practices. If Congress takes action on either of these enforcement measures, the debate will occur in an environment that now includes the potential for food safety threats from intentional acts.