



Food Safety on the Farm: Federal Programs and Legislative Action

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Summary

Foodborne illness-causing bacteria on farms can enter the food supply unless preventive measures are in place to reduce them, either prior to or after harvest. Also of potential risk to the food supply are pesticide residues, animal drugs, and naturally occurring contaminants such as aflatoxin.

There is interest in examining on-farm practices, given continued major outbreaks of foodborne illness involving both domestically produced and imported foods. An example is the case in April-July 2008, when more than 1,000 persons in more than 40 states and Canada were found to be infected with the same unusual strain of bacteria (*Salmonella* Saintpaul). Most recently, in May 2010, a large-scale recall of more than 550 million shell eggs has been linked to concerns about a nationwide increase in *Salmonella* Enteritidis (SE) infections.

Food safety experts agree that an effective, comprehensive food safety system should include consideration of potential hazards at the farm level. However, opinions differ on the need for more stringent, government-enforced safety standards for farms, as exist for processors and others in the food chain. This question and others, such as the potential cost of new interventions to producers, taxpayers, and consumers, are at issue as Congress debates food safety legislation.

The lead federal food safety agencies are the Food Safety and Inspection Service (FSIS) within the U.S. Department of Agriculture (USDA), which regulates major species of meat and poultry and some egg products, and the Food and Drug Administration (FDA) within the U.S. Department of Health and Human Services (HHS), which regulates virtually all other foods. Generally, these agencies' regulatory oversight of foods begins after the farm gate, at slaughter establishments and food handling and manufacturing facilities. However, various activities of these and other federal agencies involved in assuring the safety of the food supply can, and do, have an impact on how farms and ranches raise food commodities.

In the 111th Congress, comprehensive food safety bills are progressing that could affect farmers and ranchers. Wide-ranging legislation (H.R. 2749) passed the House in June 2009. The Senate also has a comprehensive bill (S. 510), which is pending further floor action. The House-passed bill would require the establishment of new standards for the production of some fruits, vegetables, nuts, and fungi. Other provisions of H.R. 2749 that focus more broadly on food safety, such as requiring a new food tracing system and expanding authority for access to records, also could impact on-farm practices. Provisions in S. 510—including a section requiring produce safety standards—also would affect on-farm production.

As both bills have progressed, Congress has continued to modify provisions to address the potential effects of proposed food safety requirements on small farms and food processors, and also on organic, direct-to-market, and sustainable farming operations. For example, although the House Energy and Commerce Committee amended H.R. 2749 to address small-farm concerns, the version passed by the full House in June 2010 contained additional changes addressing agricultural interests. Similarly, the version of S. 510 reported by the Senate Health, Education, Labor, and Pensions Committee in December 2009 was further modified to address small-farm concerns as part of a substitute manager's amendment agreed to by Senate leaders that was released in August 2010. Despite these changes, farm groups continue to push for additional changes to further address these concerns.

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Introduction

In recent years, major outbreaks of foodborne illnesses, product recalls, and reports about unsafe food imports have caused some to question the adequacy of the U.S. food safety system. Stakeholders appear to agree that an optimal system should encompass a comprehensive, preventive approach to food safety, focusing on those foods and points in the food system that pose the greatest public health risks, starting at the point of production—that is, on farms and ranches.

Here, viewpoints diverge. Should farmers and ranchers be subject to mandatory safety standards, enforced through certification of their practices, periodic inspections, and penalties for noncompliance? Or, should public policy continue to encourage voluntary strategies for producing safe foods on farms and ranches, through education, cooperation, and market-based incentives? Historically, the federal and state governments have relied on the latter “carrot” approach that, in the view of some critics, is no longer effective. Further complicating matters is that consumers increasingly rely on distant, often foreign, sources of production for a significant portion of their food.

It also could be argued that numerous laws and regulations already impose restrictions, both direct and indirect, on producers of food commodities, which effectively meet food safety objectives—and also involve significant compliance costs. These restrictions include requirements on the use of animal drugs, feed additives, and pesticides. Voluntary and market-based incentives also effectively regulate safety, it could be argued. For example, major food marketing chains and food service providers generally set quality and safety standards that suppliers must meet, which often extend back to the farm.

A number of high-profile illness outbreaks have placed on-farm practices under the policy microscope. Examples include the following:

- After more than 1,300 persons in 43 states, the District of Columbia, and Canada were found to be infected with the same unusual strain of bacteria (*Salmonella* Saintpaul) in April-July 2008, officials first suspected fresh tomatoes as the vehicle and later expanded their concerns to fresh jalapeño and serrano peppers. By late July, genetic tests confirmed the pathogen on samples of a serrano pepper and irrigation water from a farm in Tamaulipas, Mexico, the same strain found on a pepper provided by one of the ill persons.
- In the fall of 2006, more than 200 confirmed illnesses and three deaths were linked to the consumption of packaged spinach that apparently had been contaminated by *E. coli* O157:H7 in California fields, possibly due to the presence of wild pigs, the proximity of irrigation wells used to grow the produce, or surface waterways exposed to feces from cattle and wildlife.
- Numerous recent recalls and illness outbreaks have been linked to *E. coli* O157:H7 in raw or undercooked beef products. The bacteria is endemic in the live U.S. cattle population and can become a greater hazard if measures are not taken to control its spread on ranches and feedlots and in processing plants. (Proper cooking kills *E. coli* O157:H7.)
- In July 2010, CDC noticed a spike in cases of infection with *Salmonella* Enteritidis, a strain commonly associated with shell eggs, which are regulated by

FDA.¹ In August, FDA found the same pathogen on two egg farms in Iowa, leading to the nationwide recall by the companies of more than 500 million eggs packaged under several brand names.² According to the CDC, this is the largest such outbreak reported since the start of its outbreak surveillance in the early 1970s.³ This investigation is ongoing. However, FDA samples collected at the facilities matching the DNA fingerprint of the outbreak strain have been detected from manure and traffic areas in and around the facility (such as walkways, equipment, other surfaces), as well as from the mill providing finished feed to pullets raised at and distributed at both of the egg facilities.⁴

Food Safety Hazards on the Farm

Pathogens—bacteria, viruses and other biological hazards—are the leading cause of foodborne illnesses. Pathogens are found in foods of all kinds, although those of animal origin, including raw meat and poultry, eggs, unpasteurized milk, and seafood, are most likely to be contaminated. Fruits and vegetables also are of growing concern, particularly because a considerable portion is consumed raw. Often these pathogens are first acquired at the farm (or harvest) level; processing and cooking does not always kill them.⁵

Also complicating an understanding of on-farm food safety is “the range of pathogens on the farm and the range of organisms associated with each food product,” the American Society for Microbiology report notes. Foodborne pathogens include the following. Viruses such as hepatitis A often originate from human feces, which can contaminate produce either when handled by infected humans or exposed to unsafe irrigation or washing water. Parasites such as *Cryptosporidium*, *Cyclospora*, and *Giardia* can be acquired from human and other animal fecal material directly or through water or soil; such waste can be generated by both domesticated and wild animals. Bacteria including *Salmonella* Enteritidis, *E. coli* O157, *Campylobacter*, *Vibrio*, and *Yersinia* are ubiquitous and can proliferate on the farm; the degree to which they are a problem depends on such variables as animal density and housing, feeding practices, water and wastewater treatment and disposal methods, human handling practices, interactions between animals, and the proximity of animals to crop-producing fields and orchards. Some hazards are naturally occurring, such as aflatoxin, a fungus that can infect crops, including peanuts and grains.

¹ USDA regulates processed eggs, and grades shell eggs for quality (such as grade and size), but does not oversee the safety of shell eggs.

² FDA, “Salmonella Enteritidis Outbreak in Shell Eggs,” <http://www.fda.gov/Food/NewsEvents/WhatsNewinFood/ucm222684.htm>.

³ FDA, “Frequently Asked Questions and Answers: FDA’s Investigation into the Salmonella Enteritidis Outbreak Involving the Recall of Shell Eggs,” last updated August 27, 2010, <http://www.fda.gov/Food/NewsEvents/WhatsNewinFood/ucm223723.htm>.

⁴ FDA, “Recall of Shell Eggs,” last updated September 8, 2010, <http://www.fda.gov/Safety/Recalls/MajorProductRecalls/ucm223522.htm#483>.

⁵ Sources include various background materials and reports from the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC); also, Isaacson, Richard E., and others, “Preharvest Food Safety and Security,” a 2004 report by the American Society for Microbiology. Although these sources include discussions of seafood-borne food safety risks, this CRS report focuses primarily on land-based agricultural operations. See also CRS Report RS22797, *Seafood Safety: Background and Issues*.

Pre-harvest controls are only effective if additional safety problems are avoided further down the food production and marketing chain. There is not always a clear relationship between food safety measures taken—or not taken—prior to harvest, and their impacts on the incidence of foodborne illnesses.

Also of potential risk to the food supply are numerous nonbiological contaminants. Fruits, vegetables, and other crops can contain higher than acceptable levels of pesticides if they are improperly applied prior to harvest to control weeds and kill insect pests, or after harvest to control fungus, insects, or rodents during food storage. Foods of animal origin potentially can contain excess residues of drugs administered to control or eliminate diseases or promote more efficient growth.

Federal Food Safety Programs

Food and Drug Administration

The Food and Drug Administration (FDA) within the U.S. Department of Health and Human Services (HHS) is responsible for ensuring that all domestic and imported foods—excepting major species of meat and poultry and some egg products—are safe, wholesome, and accurately labeled. FDA's primary governing statutes are the Federal Food, Drug, and Cosmetic Act (FFDCA) as amended (21 U.S.C. 301 *et seq.*) and the Public Health Service Act (PHSA) as amended (42 U.S.C. 201 *et seq.*). FDA divides responsibilities for the safety of eggs with the U.S. Department of Agriculture (USDA), under the Egg Products Inspection Act as amended (21 U.S.C. 1031 *et seq.*). FDA appears to have the authority to regulate at least some on-farm activities, although it rarely does so.⁶

FDA has focused its oversight and enforcement activities on periodic inspections of food processing and handling facilities, on sampling and testing foods for the presence of adulterants, and on cooperation with firms seeking approval of specific food or feed additives or packages. FDA has promulgated “current good manufacturing practice” (CGMP) requirements (21 C.F.R. Part 110). Failure to comply with these requirements, which apply to manufacturing, packing, or holding human food, can result in enforcement actions and penalties, including an FDA declaration that a food is adulterated. Excluded from these requirements are establishments engaged solely in harvesting, storing, or distributing raw agricultural commodities. FDA rules do state that the agency “will issue special regulations if it is necessary to cover these excluded operations.”⁷

The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (P.L. 107-188) added several new food-related provisions to the FFDCA. Notably, FFDCA § 414 now sets forth record-keeping requirements and the circumstances for making these records available for

⁶ A more detailed legal analysis is in CRS Report RS22939, *FDA Authority to Regulate On-Farm Activity*. FDA's own arguments in support of its on-farm authority can be found in a final rule to regulate egg production to control *Salmonella enteritidis*, 74 *Federal Register* 33030, July 9, 2009 (p. 33049), <http://edocket.access.gpo.gov/2009/pdf/E9-16119.pdf>. See also CRS Report RS22600, *The Federal Food Safety System: A Primer*.

⁷ 21 C.F.R. 110.19(b). The FFDCA at 21 U.S.C. § 321(r) defines a “raw agricultural commodity” as “any food in its raw or natural state, including all fruits that are washed, colored, or otherwise treated in their unpeeled natural form prior to marketing.”

inspection by the Secretary of Health and Human Services (for practical purposes, by the department's Food and Drug Administration). Also, FFDCA § 415 requires food facilities to register with the FDA. Both provisions exempt farms but do not define the term "farm."

More specifically, FFDCA § 414 states, in part:

If the Secretary has a reasonable belief that an article of food is adulterated or presents a threat of serious adverse health consequences or death to humans or animals, *each person (excluding farms and restaurants) who manufactures, processes, packs, distributes, receives, holds, or imports such article* shall, at the request of an officer or employee duly designated by the [HHS] Secretary, permit such officer or employee, upon presentation of appropriate credentials and with a written notice to such person, at reasonable times and within reasonable limits and in a reasonable manner, to have access to and copy all records related to such article that are needed to assist the Secretary in determining whether the food is adulterated and presents a threat of serious adverse health consequences or death to humans or animals. (emphasis added)

Other parts of FFDCA § 414 delineate the types of such records, and authorize the promulgation of regulations on record-keeping requirements.

FFDCA § 415(a) requires that "any facility engaged in manufacturing, processing, packing, or holding food for consumption in the United States be registered with the [HHS] Secretary," among other language. FFDCA § 415(b) states (in part) that for purposes of this section, a facility "includes any factory, warehouse, or establishment (including a factory, warehouse, or establishment of an importer) that manufactures, processes, packs, or holds food. *Such term does not include farms; restaurants; other retail food establishments; nonprofit food establishments in which food is prepared for or served directly to the consumer; or fishing vessels*" (emphasis added).

As noted, neither FFDCA § 414 nor § 415 provides a definition of "farm." (The term also does not appear to be defined elsewhere in the FFDCA.) However, FDA's implementing regulations for these two provisions of the bioterrorism act do provide more guidance on how farms are to be treated. A portion of the regulations (at 21 CFR 1.226) on the facility registration requirements (i.e., of FFDCA § 415) lists farms among the exempted entities, and (at 21 CFR 1.227) defines a farm as

a facility in one general physical location devoted to the growing and harvesting of crops, the raising of animals (including seafood), or both. Washing, trimming of outer leaves, and cooling produce are considered part of harvesting. The term "farm" includes: (1) Facilities that pack or hold food, provided that all food used in such activities is grown, raised, or consumed on that farm or another farm under the same ownership; and (2) Facilities that manufacture/process food, provided that all food used in such activities is consumed on that farm or another farm under the same ownership.

The FDA regulations implementing the record-keeping and access requirements of FFDCA § 414 also exempt farms (at 21 CFR 1.327), and (at 21 CFR 1.328) also define a farm as noted above.⁸

More generally in its exercise of FFDCA authority, FDA's traditional approach has been not to impose mandatory on-farm safety standards or inspections of agricultural facilities.⁹ Rather, the

⁸ During the rulemaking process, the FDA received extensive comments on how to define a farm, and in its October 10, 2003, final rule on facility registration, it responded in detail. See 68 *Federal Register* pp. 58893–58974.

agency has relied on farmers' adoption of so-called good agricultural practices to reduce hazards prior to harvest. Such practices are issued as FDA guidance, not regulations; they are advisory and not legally enforceable responsibilities.¹⁰ The agency's agricultural guidance documents¹¹ have focused on the safety of fresh fruit and vegetables in recent years, which are more likely to be consumed in uncooked forms than are other regulated foods (cooking can kill many pathogens). FDA's recommendations cover, for example, the use and testing of water that will come in contact with crops, proper application of animal manure, and sanitation for field workers.

FDA in recent years has sought to address recurring outbreaks of *E. coli* O157:H7 associated with fresh and fresh-cut lettuce. For example, the agency launched in 2006 a "Leafy Greens Initiative." Among the key features of this cooperative and voluntary initiative are visits, in cooperation with state agricultural officials, to farms (as well as produce packers and processors) to assess industry efforts to improve lettuce safety and, if appropriate, "stimulate" further needed efforts.¹² In 2007, FDA issued a "Tomato Safety Initiative" modeled after the lettuce initiative and operated in cooperation with Florida officials. FDA stated at the time that 12 different outbreaks of foodborne illness (including from *Salmonella*) had been linked to fresh tomatoes, a majority of which were grown in Florida.¹³

In July 2009, FDA published three guidance documents targeted at specific produce types: *Guide to Minimize Microbial Food Safety Hazards of Tomatoes*, *Guide to Minimize Microbial Food Safety Hazards of Melons*, and *Guide to Minimize Microbial Food Safety Hazards of Leafy Greens*.¹⁴ However, the agency now appears to be moving toward a potentially more hands-on regulatory approach to produce safety. On February 18, 2010, it announced, "While USDA's Agricultural Marketing Service (AMS) is in the midst of evaluating a proposed marketing agreement for the leafy green industry, the FDA is currently developing a proposed produce safety regulation. It is our expectation that these products will take into account the diverse nature of farming operations and that any marketing agreement would conform to any regulations that may be promulgated by FDA."¹⁵

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⁹ An FDA advisory panel acknowledged that the agency "conducts only limited inspections of food-producing farms, except in emergencies." FDA Science Board, *FDA Science and Mission at Risk: Report of the Subcommittee on Science and Technology*, November 2007.

¹⁰ FDA, *Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables*, October 1998, <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/ucm064574.htm>; and *Guide to Minimize Microbial Food Safety Hazards of Fresh-cut Fruits and Vegetables*, February 2008, <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/ucm064458.htm>.

¹¹ *Ibid.* On September 2, 2008, FDA asked for public comments and scientific data to assist it in improving its 1998 guidance.

¹² FDA, "Lettuce Safety Initiative," August 23, 2006, at <http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/FruitsVegetablesJuices/FDAProduceSafetyActivities/ucm115906.htm>, which notes that regulatory action would be considered if deemed appropriate to prevent contamination.

¹³ "FDA Implementing Initiative to Reduce Tomato-Related Foodborne Illnesses," June 12, 2007. Florida was cleared as the source in the more recent (April-July 2008) *Salmonella*-linked outbreak in which tomatoes were first suspected.

¹⁴ FDA's website, Produce and Plant Products Guidance for Industry, <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/ProduceandPlanProducts/default.htm>.

¹⁵ "USDA and FDA Coordinating Efforts to Ensure Safety of Produce: FDA Invites Public Comments to Inform Future Rulemaking," February 18, 2010, <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm200965.htm>. The FDA's docket notice inviting public comments was published in the February 23, 2010, *Federal Register*. The AMS leafy greens marketing agreement is described in the "Leafy Greens Marketing Agreement" section of this CRS (continued...)

In another recent instance of on-farm regulatory activity, the FDA on July 9, 2009, published a final rule to require shell egg producers to implement specific safety measures to prevent on-farm contamination of eggs by *Salmonella Enteritidis* (SE).¹⁶ The rule observes that SE-contaminated eggs have been a major source of foodborne illness and that on-farm prevention measures are needed to reduce SE infections from eggs.¹⁷ The rule requires SE testing in poultry houses, with follow-up tests on eggs if environmental testing is positive for the bacteria. Other measures in the rule address the procurement of chicks and pullets, pest control and biosecurity programs, disinfection of poultry houses where SE is found, and on-farm refrigeration of eggs.¹⁸ The rule applies to farms with 3,000 or more laying hens, unless they sell directly to consumers or do not produce shell eggs for table use, although those with less than 50,000 layers have until July 9, 2012, to comply. FDA published a guidance document on April 13, 2010, to help small producers comply with the new rule.¹⁹

Food Safety and Inspection Service

USDA's Food Safety and Inspection Service (FSIS) regulates the safety, wholesomeness, and proper labeling of most domestic and imported meat and poultry and their products (and, beginning soon, of catfish products), under authority of the Federal Meat Inspection Act (FMIA) as amended (21 U.S.C. 601 *et seq.*), and the Poultry Products Inspection Act (PPIA) as amended (21 U.S.C. 451 *et seq.*). Agency officials periodically have stated that these laws provide no direct authority to regulate on-farm activity. Under both statutes, agency oversight begins when animals arrive at slaughter facilities. These laws direct the Secretary of Agriculture to prevent adulterated meat and poultry from entering commerce by examining all animals just before slaughter (*ante-mortem*), with additional provisions requiring post-mortem inspections of all carcasses and of food products made from these carcasses (21 U.S.C. § 455 and §§ 603-606).

Farmers and ranchers do not appear to be among the persons, establishments, and other firms subject to the provisions of these acts, including record-keeping requirements and penalties for noncompliance. Neither act “speaks to how livestock are produced, maintained, or managed,” according to a 1998 report issued by the Institute of Medicine of the National Academy of Sciences.²⁰

FSIS and livestock industry officials have asserted that agricultural producers are indirectly regulated under these laws. For example, slaughter establishments are not to accept unhealthy or

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report.

¹⁶ 74 *Federal Register* 21928-21929.

¹⁷ 74 *Federal Register* 33030-33101. As already noted, since May 2010, a large-scale recall of more than 550 million shell eggs has been linked to concerns about a nationwide increase of SE infections.

¹⁸ “Biosecurity” refers to agricultural practices intended to reduce or prevent the introduction of infectious diseases on a farm or other production facility and includes practices such as limiting access by personnel and vehicles; reviewing and screening introduced items such as seed, feed, and new animals; and controlling vermin. More recently, biosecurity programs have incorporated elements to protect against terrorism, vandalism, and other intentional acts that could compromise disease control, whether or not they were the primary aim of the illicit acts.

¹⁹ *Guidance for Industry: Prevention of Salmonella Enteritidis in Shell Eggs During Production, Transportation, and Storage; Small Entity Compliance Guide*, April 2010, <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/SmallBusinessesSmallEntityComplianceGuides/ucm207507.htm>.

²⁰ *Ensuring Safe Food from Production to Consumption*, National Academies Press, Washington, D.C., 1998.

mistreated animals that may harbor diseases and pathogens dangerous to humans. Such animals can spread contamination in plants, as well as result in rejection or other enforcement actions by inspectors and/or costly (if ostensibly voluntary) product recalls, it is argued. Moreover, FSIS has worked with animal industry organizations to encourage producers to adopt voluntarily “best practices” aimed at reducing the spread of pathogens like *E. coli* O157:H7 among live animals.

Other Programs Affecting Producers

Regulation of Animal Drugs and Feeds

Under the FFDCA, FDA’s Center for Veterinary Medicine regulates the manufacture and distribution of drugs and feeds for animals. Drugs are used in food-producing animals to treat and prevent animal diseases and to improve growth rates, such as with antibiotics. If unapproved or used improperly, they can compromise human food safety. Another regulatory example affecting producers is FDA’s rule prohibiting the use, in animal feeds, of materials of ruminant origin. This rule is aimed at preventing the spread of bovine spongiform encephalopathy (BSE, or “mad cow disease”); though rare, a human form of BSE can be contracted if infected tissues are consumed.²¹

In addition to drug approvals and oversight of feed manufacturers, FDA also works with FSIS, which tests for violative residues of antibiotics and other drugs in meat and poultry and reports them to FDA. FDA can conduct follow-up inspections (often done through state agencies) of livestock producers and others. Another cooperative effort between FDA and state milk control officials is the National Drug Residue Milk Monitoring Program, which routinely tests raw milk for certain drug residues.

Regulation of Pesticides

The Environmental Protection Agency (EPA) regulates the sale and use of pesticides, including those used to control insects, weeds, mold, and other pests affecting food crops, under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA; P.L. 92-516). It is a violation of FIFRA to use a pesticide that is inconsistent with its approved label instructions. Under the FFDCA, EPA sets allowable residue levels, called tolerances, for pesticides used in food production. Tolerances are set to ensure that harm to health is prevented with “a reasonable certainty.” Foods with residues that exceed tolerances, or that contain a residue that lacks an established tolerance, are considered adulterated under the FFDCA. Generally, the FDA monitors and enforces residue limits, while EPA and the states enforce FIFRA’s provisions.²²

The FDA Science Board, in its November 2007 report, argued that these programs have their limitations: “These [FDA and EPA] conditions are meant to prevent the presence of dangerous amounts of those chemicals in food. However, monitoring of compliance with approved usage is poorly funded and episodic. State and local authorities have more to say about on-farm practices, but their monitoring capabilities are severely limited.”²³

²¹ FDA’s website: <http://www.fda.gov/cvm/bsetoc.html>.

²² See CRS Report RL31921, *Pesticide Law: A Summary of the Statutes*.

²³ FDA Science Board, *FDA Science and Mission at Risk: Report of the Subcommittee on Science and Technology*, November 2007.

Animal Health Programs

Under the Animal Health Protection Act (7 U.S.C. § 8301 *et seq.*), USDA's Animal and Plant Health Inspection Service (APHIS) is to protect U.S. livestock and poultry from domestic and foreign diseases and pests. Some of these diseases, including BSE, avian influenza (AI), and bovine tuberculosis, also have public health implications. *Salmonella* Enteritidis, an infection found among poultry (see previous discussion), is a major cause of foodborne illness in humans. Although the APHIS programs often are cooperative, voluntary efforts between APHIS, states, and industry, APHIS does have the authority to impose quarantine, eradication, and other regulatory requirements on producers. These requirements relate to the control animal diseases, however, not food contamination.

Under another program, USDA is proposing a new approach that will allow individual states (and tribal nations) to chose their own degree of within-state animal identification (ID) and traceability for livestock populations. This voluntary program is intended to improve the ability to pinpoint and control animal diseases.²⁴ Some policymakers believe animal ID, which seeks to document the movements of individual animals, or herds or flocks, from place of birth to slaughter, can contribute to food safety, particularly if it can be linked to a farm-to-retail food traceability system. (Other policymakers counter that animal ID should be limited to animal disease control.)

Federal Marketing Programs

USDA's Agricultural Marketing Service (AMS) oversees a number of programs intended to assure that various agricultural products meet specified quality and grade standards, sometimes involving safety attributes. For example, under the Agricultural Marketing Agreement Act of 1937 (7 U.S.C. § 601 *et seq.*), producers and handlers can organize themselves under legally binding marketing orders and agreements that can include quality (and possibly, safety) standards.

Under the Agricultural Marketing Act of 1946 (7 U.S.C. § 1621 note), AMS has implemented a wide range of voluntary testing and process verification programs. Funded by industry user fees, these AMS services use independent, third-party audits and other standardized procedures to help producers certify that their products meet buyer specifications.²⁵ Although some of these programs can be, and are, designed to ensure the safety of certain food commodities from a public health standpoint, they are not regulatory by nature. Rather, they are intended to facilitate commercial agreements in the trade or to provide consumers with more information about their prospective purchases.²⁶

Leafy Greens Marketing Agreement

In October 2007, AMS invited comments on whether to create a federal marketing program that specifically would commit handlers (packers, processors, shippers) of leafy greens, including

²⁴ For more information, see CRS Report R40832, *Animal Identification and Traceability: Overview and Issues*.

²⁵ More detailed information about this programs was presented in May 14, 2009, testimony before the House Agriculture Subcommittee on Horticulture and Organic Agriculture by AMS Acting Administrator David Shipman, <http://agriculture.house.gov/testimony/111/h051409/Shipman.pdf>. Detailed information about these programs can be accessed through the AMS website at <http://www.ams.usda.gov>.

²⁶ For a more detailed analysis of USDA's on-farm authorities with respect to food safety, see CRS Report R40577, *USDA Authority to Regulate On-Farm Activity*.

lettuce and spinach, to meet prescribed safety standards.²⁷ In June 2009, a group of agricultural associations formally requested that AMS begin the steps toward establishment of a national marketing agreement for leafy greens.²⁸ The key difference between an agreement and an order is that an agreement is legally binding only on those who voluntarily join it, whereas an order is binding on all handlers. Nonetheless, sponsors of the request for a national agreement (including major produce industry associations) anticipate broad participation.

A similar state order was adopted in California in 2007 and by Arizona later that year. Under the California Leafy Green Products Handler Marketing Agreement (LGMA), nearly 120 handlers (essentially, those who first handle the product as it leaves the farm), representing 99% of the volume of California-grown leafy greens, have committed to selling products grown in compliance with the food safety practices accepted by the LGMA board. Members submit to mandatory third-party audits to verify compliance.²⁹ Reportedly, California and Arizona represent approximately 90% of leafy greens production, and a national agreement would seek to cover the nation's remaining 10%.³⁰

Such audits would be to ensure that the good agricultural production, handling, and related practices the agreement stipulates—referred to as “metrics”—are being followed. These practices are aimed at enhancing the safety aspects of produce quality. Some food safety advocacy organizations have expressed concern that AMS, an agency whose primary mandate is providing quality and grading services to industry, essentially would be conducting safety inspections, which is within the purview of FDA.³¹ The metrics themselves are not regulatory FDA standards under the FFDCFA; however, the agreement's drafters expect that any violations of FDA law will be reported to the FDA by agricultural inspectors.³²

Currently, the USDA (AMS) role in a national agreement is to publish a notification regarding the request and to conduct public hearings. In fall 2009, USDA held public hearings on a proposed marketing agreement covering leafy green vegetables and products under the Agricultural Marketing Agreement Act.³³ If adopted, the agreement would be managed by an industry committee and would provide for AMS inspectors, or inspectors designated by AMS, to audit producers who supply the participating handlers. These inspections would be conducted on a fee-for-service basis, although AMS asked Congress to provide it with \$2.3 million to write and

²⁷ An advance notice of proposed rulemaking appeared in 72 *Federal Register* pp. 56678-80. A provision in the House-passed farm bill in 2007 (H.R. 2419) would have expressly authorized the implementation of quality-related food safety programs under marketing orders for specialty crops. The provision was deleted from the final version in 2008 (P.L. 110-246).

²⁸ See, for example, letter from various produce groups to USDA's AMS Administrator Rayne Pegg, July 31, 2009, <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5081064>.

²⁹ California Leafy Green Products Handler Marketing Agreement website, <http://www.caleafygreens.ca.gov/>.

³⁰ “Produce industry petitions USDA for leafy greens marketing agreement,” *Food Chemical News*, June 15, 2009.

³¹ Concerns about the use of marketing agreements as food safety instruments were aired at a July 29, 2009 hearing before the House Committee on Oversight and Government Reform's Subcommittee on Domestic Policy.

³² National Leafy Greens Marketing Agreement, “Frequently Asked Questions,” <http://www.nlgma.org/faqs.php>. The greens to be covered by the national agreement would be arugula, cabbage (red, green, and savoy), chard, cilantro, endive, escarole, kale, lettuce (iceberg, leaf, butterhead, and romaine), parsley, raddichio, spinach, spring mix (baby leaf items including but not limited to cress, dandelion, endigia, mache, mizuna, tat soi, winterpurslane), or any other leafy green recommended by the committee and approved by USDA.

³³ 74 *Federal Register*, 45565-45574, September 3, 2009, <http://www.gpo.gov/fdsys/pkg/FR-2009-09-03/pdf/E9-21295.pdf>. Information on the hearings is at AMS website.

initiate an agreement. In March 2010, FDA announced that it would issue a proposed rule to establish safety standards for the production and packing of fresh produce by the end of 2010.³⁴ Many produce groups supporting the establishment of a national marketing agreement further want Congress to consider viewing the LGMA as “an instructive example for how to proceed” with the development of new food safety rules and regulations.³⁵

Legislative Action

Food Safety Bill Overview

In the 111th Congress, a number of bills seeking to regulate agricultural producers directly were introduced. These included H.R. 759 (Dingell), which was reintroduced as H.R. 2749; H.R. 1332 (Costa); H.R. 875 (DeLauro); and S. 510 (Durbin). The Costa and Durbin bills focused on safety standards for fresh fruits and vegetables; the Dingell bill originally covered other types of food production (except animal-based commodities), as described below, but has since been scaled back. The DeLauro bill would have combined all federal food safety responsibilities under a single new Food Safety Administration, and imposed various new record-keeping, risk reduction, and certification requirements on both the domestic and imported food systems. With regard to farms, the DeLauro bill first would have defined a “food production facility” to be “any farm, ranch, orchard, vineyard, aquaculture facility, or confined animal feeding operation.”

Comprehensive food safety bills have progressed in both the House and the Senate and could affect farmers and ranchers. In the House, H.R. 2749 became the main legislative vehicle for food safety changes. It was amended and approved by the Energy and Commerce Committee on June 17, 2009, and was passed by the full House on July 30, 2009. In the Senate, S. 510 was modified and approved by the Senate Health, Education, Labor, and Pensions (HELP) Committee and reported in late 2009. On August 12, 2010, a manager’s amendment in the nature of a substitute was released by several Members of the Senate HELP Committee and the bill’s original sponsor.³⁶ For additional background information on these bills, see CRS Report R40443, *Food Safety in the 111th Congress*.

The House and Senate food safety proposals have numerous elements that appear to be similar to each other, including new record-keeping and records access provisions, changes in food registration, and a mandate for preventive food safety plans for food facilities and for produce, among other provisions. Several of these requirements could potentially affect small farms and food processors. For example, H.R. 2749 would require the establishment of new standards for the production of some fruits, vegetables, nuts, and fungi. Other provisions of H.R. 2749 that focus more broadly on food safety, such as requiring a new food tracing system and expanding authority for access to records, also could impact on-farm practices. Provisions in the Senate food

³⁴ FDA, “Preventive Controls for Fresh Produce” (FDA-2010-N-0085), March 12, 2009, <http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/FruitsVegetablesJuices/FDAProduceSafetyActivities/ucm202945.htm>.

³⁵ Comments to FDA on preventive controls for fresh produce safety (Docket No. FDA-2010-N-0085) from Scott Horsfall and the Leafy Green Products Handler Marketing Agreement, July 23, 2010.

³⁶ The manager’s amendment is available at U.S. Senate Committee on Health, Education, Labor, and Pensions, “Senate Leaders Release Manager’s Package of the FDA Food Safety Modernization Act,” press release, August 12, 2010, <http://help.senate.gov/newsroom/press/>.

safety proposal—including a section requiring produce safety standards—also would affect on-farm production.

As both bills have progressed, Congress has continued to modify provisions to address the potential effects of the proposed food safety requirements on small farms and food processors, as well as organic, direct-to-market, and sustainable farming operations. For example, although the Energy and Commerce Committee amended and approved H.R. 2749 to address small-farm concerns, the version passed by the full House in June 2010 contained additional changes addressing agricultural interests. Similarly, the version of S. 510 reported by the Senate Health, Education, Labor, and Pensions Committee in December 2009 was further modified to address small-farm concerns as part of a substitute manager’s amendment agreed to by Senate leaders that was released in August 2010. Despite these changes, some farm groups are continuing to push for additional changes to further address these concerns.

Following a brief overview of farm interest concerns with the pending food safety bills, this report focuses on selected provisions in the House-passed bill, H.R. 2749, and the Senate manager’s amendment to S. 510 that could affect farming operations. The current versions of these proposals reflect compromises with farm interests to address the treatment of farms.

Farm Interest Concerns with Food Safety Bills

House Debate

Concerns among farm and rural groups about the potential effects of new food safety requirements on farms and food processors surfaced early in the debate. Most vocal were small farms and food processors; organizations representing small, organic, direct-to-market, and sustainable farming operations; and also small livestock operations. In part, the concerns arose in the wake of videos and emails circulated on the Internet asserting that the proposed food safety bills would undermine or even destroy the nation’s small and organic farms, to the benefit of industrialized agriculture.³⁷ In fact, none of the original bills’ farm-related provisions appeared to explicitly exempt such operations, other than directing that the needs of small businesses be considered during implementation. Some groups, such as the Organic Consumers Association (OCA) and La Vida Locavore, sought on the one hand to challenge what they viewed as the “hysteria” and unsubstantiated facts that were circulating (about H.R. 875 in particular), and on the other hand to criticize sharply the bill’s language.³⁸ Most concerns centered on potential ambiguity in the definition of a “food production facility” and fears that organic producers as well as “individuals beyond large farms (i.e., backyard gardeners) could be penalized and subject to review by the government.”³⁹

³⁷ See, for example, <http://www.youtube.com/watch?v=eDl6RjYaOt4> (video) and articles; <http://educate-yourself.org/cn/HR875andS425organicfarmingban13mar09.shtml>.

³⁸ See, for example, OCA, “H.R. 2749 The Food Safety Enhancement Act,” *Action Alert*, <http://capwiz.com/grassrootsnetroots/issues/alert/?alertid=13799941>; and Jane Richardson, “HR 875 Rumors Will Destroy Our Credibility,” March 23, 2009, <http://www.lavidalocavore.org/showDiary.do?diaryId=1266>.

³⁹ Alexandra Gross, “Food Fight: The Food Safety Bill Is Cause for Concern, Not Panic,” *E Magazine*, March/April 2009, <http://www.emagazine.com/view/?4629&src=QSA062>.

In a posting on her own website, Representative DeLauro sought to challenge the “myths” about her bill, H.R. 875, arguing that its focus was to ensure the safety of food in interstate commerce, not to regulate or penalize backyard gardens or farmers markets. She also asserted it would not interfere with organic farming, and had the support of major consumer and food safety groups.⁴⁰

One consumer advocacy organization acknowledged that some of the bills contained provisions that could prove problematic for small farms and processors and that “one-size-fits-all regulation only tends to work for one size of agriculture—the largest industrialized operations.” However, it urged affected interests essentially to seek improvements in the bills rather than to defeat “any attempt to fix our broken food safety system.”⁴¹ At a conference in early April 2009, Carol Tucker Foreman, of Consumer Federation of America’s Food Policy Institute, agreed that Congress might want to consider tailoring some requirements based on different types of operations or phasing in requirements for some operations. Foreman suggested, for example, possibly exempting direct-to-market farms (e.g., those serving farmers markets).⁴²

Around this time, H.R. 2749 had overtaken the DeLauro bill (H.R. 875) as the House food safety vehicle, and it had been altered several times in response to criticisms by agricultural interests. H.R. 2749 was modified during committee action to exempt direct-to-market farms from some of the new traceability provisions. However, some small farm advocates have continued to express their opposition to this and other major sections of the bill. For example, although the bill’s new facility registration requirements continued to exempt farms, there were concerns that the requirements could be applied by FDA to a farm that does any processing, even of its own food, such as washing and packaging fruits and vegetables before selling them. These and other provisions appeared to create a regulatory framework that would heavily burden small farms and local food processors, which some claim are “the very people who provide a safe, healthy alternative to the industrial food supply.”⁴³

One mainstream agricultural publication observed, “small farms and organic growers are objecting to any requirement that they register their facilities and be subject to possible inspection by federal authorities. Apparently they are as pure as the driven snow and claim that food borne diseases only come from ‘some multinational food corporation’ (e.g., ignore CDC data on outbreaks at fairs, festivals, *campylobacter* from small local dairy farms, etc.).”⁴⁴

As H.R. 2749 was being readied for consideration by the full House, some of the more traditional agricultural groups weighed in with their own concerns. For example, in separate letters to the House Energy and Commerce Committee and the House Agriculture Committee, a group of agriculture interests asserted that H.R. 2749 would create new on-farm regulatory authorities that would be redundant with USDA oversight.⁴⁵ They argued that such new requirements could affect

⁴⁰ “Myths and Facts, H.R. 875—The Food Safety Modernization Act,” http://delauro.house.gov/files/HR875_Myths_Facts1.pdf.

⁴¹ Food & Water Watch, “Background on H.R. 875,” <http://www.foodandwaterwatch.org/food/foodsafety/background-on-h-r-875?searchterm=h.r.+875>.

⁴² Remarks at the Farm Foundation Forum, “The Future of Food Safety Regulation,” available by audio link at http://www.farmfoundation.org/news/articlefiles/363-20090407_pv_farm_foundation.mp3.

⁴³ Farm-to-Consumer Legal Defense Fund, “H.R. 2749’s Real Impacts: a Response to Consumers’ Union,” <http://www.farmtoconsumer.org/HR2749-response.htm>.

⁴⁴ Gary Blumenthal, “Policy Roundup,” *World Perspectives*, March 11, 2009.

⁴⁵ The June 26, 2009, letters were signed by the American Farm Bureau Federation and several other commodity associations such as the National Association of Wheat Growers and the National Milk Producers Federation (continued...)

agricultural practices that the FDA neither has the funding or expertise to regulate, and that the bill would impose significant costs on small farms and food producers while doing little to improve safety. This, they argued, would violate U.S. trade commitments, inviting retaliation by trading partners against U.S. agricultural exports.

The House-passed bill contains additional provisions that are intended to address potential effects of the food safety requirements on small, organic, direct-to-market, and sustainable farming operations, among other related provisions. For example, H.R. 2749 would exempt from the facility registration requirements most commodity producers that sell directly to consumers, including an “operation that sells food directly to consumers if the annual monetary value of sales of the food products from the farm or by an agent of the farm to consumers exceeds the annual monetary value of sales of the food products to all other buyers” (Section 101(b)(1)). H.R. 2749 also would require that any regulations governing performance standards “take into consideration, consistent with ensuring enforceable public health protection, the impact on small-scale and diversified farms, and on wildlife habitat, conservation practices, watershed-protection efforts, and organic production methods” (Section 104(b)).

Senate Debate

Following passage of the House bill, and modifications to address farm interest concerns with H.R. 2749, agriculture groups continued to urge Congress to mitigate any potential effects of the food safety requirements on small, organic, direct-to-market, and sustainable farming operations.

In spring 2010, Senator Jon Tester announced that he planned to introduce two amendments to S. 510.⁴⁶ Under one amendment, certain commodity producers would face limited traceback and record-keeping requirements if the “average annual adjusted gross income of such facility for the previous 3-year period is less than \$500,000”; another amendment would exempt producers who sell directly to market if “the annual value of sales of food directly to consumers, hotels, restaurants, or institutions exceeds the annual value of sales of food to all other buyers.”

Adjusted gross income (AGI) is a common measure of income for tax purposes. It combines income from all sources. Business income contributes to AGI on a net basis, that is, after business expenses. Thus, it is comparable to profit: sales minus expenses and also taxable deductions.⁴⁷ Given that most business information is proprietary, data are limited on the share of commodity producers (farms and food processors) that have an annual AGI of less than \$500,000. Information for U.S. farms indicate that farms with less than \$500,000 AGI account for the majority (more than 95%) of farm numbers.⁴⁸ Some media reports and postings by farm groups

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(<http://www.ncga.com/files/pdf/foodsafety-ecc090625.pdf>; <http://www.ncga.com/files/pdf/foodsafety-ag09.0625.pdf>). Farm-related concerns also were explored at a July 16, 2009, hearing before the House Agriculture Committee.

⁴⁶ Senator Tester press release, “Tester to introduce ‘common sense’ amendments to food safety bill,” April 14, 2010, http://tester.senate.gov/Newsroom/pr_041410_foodsafety.cfm (bill language is posted at website).

⁴⁷ AGI limits are used elsewhere in farm legislation, including in the periodic omnibus farm bill (the most recent farm bill was the Food, Conservation, and Energy Act of 2008, P.L. 110-246). The farm bill includes AGI limits as a means test for the maximum amount of income that an individual can earn and still remain eligible for commodity program benefits. The 2008 farm bill tightened limits by reducing the AGI limit to \$500,000 of non-farm AGI and \$750,000 of farm AGI. For more information, see CRS Report RL34594, *Farm Commodity Programs in the 2008 Farm Bill*.

⁴⁸ The White House, “Strengthening the Rural Economy—Improving America’s Support of Agriculture,” <http://www.whitehouse.gov/administration/eop/cea/factsheets-reports/strengthening-the-rural-economy/improving-> (continued...)

cite alternative information, claiming that the Tester amendment exemption may instead be based on some other financial measure, such as gross income (less deductions), farm income, or sales. Whether this exemption is determined according to a cutoff based on AGI or some other financial measure could influence which commodity producers may or may not be exempted from these requirements.

In September 2010, Senator Tester, along with Senator Kay Hagan, announced an updated version of this amendment.⁴⁹ The modified Tester-Hagan amendment would establish “modified requirements for qualified facilities” for so-called “very small” businesses, among other provisions for both small and very small businesses (to be defined in regulation). Under this proposed amendment, the qualified facility would not be subject to the facility registration requirements under FFDC § 415; instead it would be required to submit to HHS relevant documentation showing that it has implemented preventative food safety controls and evidence that it is in compliance with state, local, county, or other applicable non-federal food safety laws, among other documentation. Such modified requirements would apply to producers that are considered “very small” and would include operations that have annual sales of less than \$500,000 (defined not as AGI, but as the three-year average “annual monetary value of sales,” adjusted for inflation) and whose value of sales sold directly to “qualified end-users” exceeds all other sales. Qualified end-users would include consumers or a restaurant or retail food establishment that is located in the same state or less than 400 miles⁵⁰ from the qualified facility, or that is buying food for sale directly to consumers. There would also be delayed implementation deadlines for small and very small businesses, following promulgation of any applicable regulations under the newly enacted law. The Tester-Hagan amendment also includes other clarifying language with respect to the exemption for direct farm marketing and sales. The provision further would require that HHS conduct a study of the food processing sector, in conjunction with USDA.

Many farm groups expressed support for Senator Tester’s proposed amendments.⁵¹ However, one of the leading produce industry groups, United Fresh Produce Association (UFP), is urging the Senate not to add “exemptions based on the size of the operation, production practices, or geographic location for food being sold in the commercial market” to its food safety proposal.⁵² In addition to broader industry concerns about the need to preserve consumer confidence in the safety of all marketed produce, another industry concern is whether smaller foreign producers might also be exempt, if smaller U.S. producers were to be exempt (given prevailing U.S.

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americas-support-of-agriculture. Based on USDA data from the 2007 Department of Agriculture’s Agricultural Resource Management Survey: <http://www.ers.usda.gov/Briefing/FarmIncome/govtpaybyfarmtype.htm>.

⁴⁹ Press release, Senator Tester, “Updated Food Safety amendment protects small producers,” September 24, 2010, http://tester.senate.gov/Newsroom/pr_092410_foodsafety.cfm. Bill language is available at <http://tester.senate.gov/Legislation/upload/Tester-Food-Safety-Amendment.pdf>.

⁵⁰ The 400 mile designation is similar to the distance specified in a provision of the Food, Conservation, and Energy Act of 2008 (P.L. 110-246, Section 6015). That provision defines a “Locally or Regionally Produced Agricultural Food Product” as any agricultural food product that is grown, produced, and distributed near where it is marketed such that “the total distance that the product is transported is less than 400 miles from the origin of the product.”

⁵¹ See, for example, letter from more than 100 farm groups under the Small Holder Alliance, “Support Fresh, Safe Local Food in the Food Safety Bill,” April 15, 2010, [http://smallholdersalliance.com/Amend-S510-April-15%20\(2\).pdf](http://smallholdersalliance.com/Amend-S510-April-15%20(2).pdf); and articles in *Food Safety News* (<http://www.foodsafetynews.com/>); Helena Bottemiller, “Tester Amendment Picks Up Cosponsor,” May 3, 2010, and “Farmers Gain in Senate Food Safety Battle,” April 15, 2010.

⁵² United Fresh Produce Association, 2010 Issues Brief, http://www.unitedfresh.org/assets/Issue_Brief_United_Fresh_Produce_Association_2010.pdf.

equivalency standards).⁵³ Some consumer groups, including the Consumers Union, have expressed concern that the proposed amendments would create “too great a loophole” in the food safety requirements, among other concerns.⁵⁴ Although Senator Tester’s amendments were not ultimately included in the Senate amendment, the Senator has stated that he intends to offer his revised amendment if the measure receives floor consideration in the 111th Congress.⁵⁵

Aside from exemptions for small farm businesses, farm interests have sought other changes in the Senate food safety proposal. Sustainable farm groups, including NSAC, continue to claim that the food safety bills in Congress would subject farm-based facilities with value-added processing, or those that commingle products with neighboring farms, to extensive FDA regulation regardless of their risk or scale. NSAC has called for amendments to address this concern. In addition to including authority to exempt from regulation farms with relatively low risks or sales, NSAC also supported language in a freestanding bill introduced by Senator Stabenow (S. 2758) that would create a USDA competitive grants program to provide food safety training and technical assistance to smaller producers, processors, and produce wholesalers.⁵⁶ A provision encompassing the language in the Stabenow bill, and several other provisions intended to address farm interests, were included in the August 2010 Senate manager’s amendment to S. 510. A circulating Senate document⁵⁷ and other media reports⁵⁸ outline many of these added provisions.

In addition, the Senate amendment includes other general provisions intended to address the potential effects of the food safety requirements on small, organic, direct-to-market, and sustainable farming operations. (See section “Treatment of Farms in the House and Senate Food Safety Bills” for more detailed information.) These include the requirement that HHS publish a “small entity compliance policy guide” to assist small entities in complying with many of the bill’s requirements; allowances for HHS to exempt or limit compliance requirements for certain types of farming operations and food processors, along with provisions that will allow the HHS Secretary the discretion to exclude certain operations, if it is determined that these are low risk and/or do not present a risk of “serious adverse health consequences or death”; and assurances that any new regulations do not conflict with or duplicate other federal policies and standards, and

⁵³ Comments by industry representatives at the UFPA’s 2010 Washington Public Policy Conference, September 15, 2010; Helena Bottemiller, “Group Breaks Ranks on Small Farm Exemptions,” *Food Safety News*, September 10, 2010.

⁵⁴ Letter to Senator Tester from the Consumers Union regarding Amendments to S. 510, the FDA Food Safety Modernization Act, April 20, 2010, <http://www.consumersunion.org/campaigns/notinmyfood/016345indiv.html>; and articles in *Food Safety News* (<http://www.foodsafetynews.com/>); Helena Bottemiller, “Public Health Opposition to Tester Amendment,” April 28, 2010; Helena Bottemiller, “Farmers Gain in Senate Food Safety Battle,” April 15, 2010; and Alex Ferguson, “What’s Wrong with the Tester Amendments,” May 4, 2010.

⁵⁵ Press release, Senator Tester, “Updated Food Safety amendment protects small producers,” September 24, 2010.

⁵⁶ Interview with Ferd Hoefner, Policy Director, National Sustainable Agriculture Coalition (NSAC), posted in a two-part article: Chuck Jolley, “Food Politics Q&A: NSAC Policy Director on S. 510,” *Food Safety News*, April 28-29, 2010, <http://www.foodsafetynews.com/contributors/chuck-jolley>. Also see NSAC, “Food Safety on the Farm Policy Brief and Recommendations,” October 2009, <http://sustainableagriculture.net/wp-content/uploads/2008/08/NSAC-Food-Safety-Policy-Brief-October-2009.pdf>; NSAC press releases, “Senate Food Safety Bill Includes Improvements That Support Farmers,” April 14, 2010, and “Update on Food Safety: Wins and Future Directions in the Senate,” February 18, 2010, <http://sustainableagriculture.net>.

⁵⁷ Senate staff document, “S. 510—FDA Food Safety Modernization Act Small Farm and Small Business Guide,” August 2010, <http://thehill.com/images/stories/blogs/smallfarms.pdf>.

⁵⁸ NSAC, “Revised Senate Food Safety Bill Includes Important Amendments,” August 13, 2010, <http://sustainableagriculture.net/blog/senate-food-safety-bill/>; and Helena Bottemiller, “Small Farms Gain From Compromise on S. 510,” *Food Safety News*, August 18, 2010, <http://www.foodsafetynews.com/2010/08/s-510-compromise-contains-key-changes-for-small-farms/>.

that they minimize regulatory burden and unnecessary paperwork and the number of separate standards on the facility. There is also delayed implementation for small and very small businesses (as defined by the Secretary) for the facility requirements and produce standards (Sections 103 and 105), as well as assurances of “sufficient flexibility” for producers, including small businesses and entities that sell directly to consumers.

Treatment of Farms in the House and Senate Food Safety Bills

The provisions in the House-passed bill and Senate amendment that could have the most direct effect on on-farm activity, especially produce growers, will be the establishment of new standards for produce safety. In H.R. 2749, Section 104 will require that producers follow new rules for the growing, harvesting, processing, packing, sorting, transporting, and holding of certain types of raw agricultural commodities, covering fruits, vegetables, nuts, and fungi. In the Senate amendment, Section 105 will require that producers follow new minimum standards for the safe production and harvesting of those types of fruits and vegetables that are raw agricultural commodities.

These provisions, among other provisions in H.R. 2749 and the Senate amendment to S. 510, could potentially affect agricultural producers:

- new on-farm safety standards, especially for produce (Section 104 of the House-passed bill and Section 105 of the Senate amendment);
- facility registration requirements (Section 101, H.R. 2749; Section 102, Senate amendment);
- records access and/or inspection requirements (Section 106, H.R. 2749; Sections 101 and 204, Senate amendment);
- food traceability requirements (Section 107, H.R. 2749; Section 204, Senate amendment);
- hazard analysis and risk-based preventive controls (Section 103, Senate amendment);
- targeting of inspection resources (Section 201, Senate amendment); and
- changes in the reportable food registry (Section 112, H.R. 2749).

Following is a more detailed discussion of these provisions.

The extent to which these other provisions might actually affect small business and farming operations remains unclear, since the specific business requirements under these provisions would be subject to agency rulemaking, as well as the discretion of the HHS Secretary.

H.R. 2749 (House-Passed)

Safety Standards for Produce and Certain Other Raw Agricultural Commodities

Section 104 of H.R. 2749 creates a new § 419A of the FFDCA, requiring the HHS Secretary to publish rules establishing scientific and risk-based food safety standards for the growing, harvesting, processing, packing, sorting, transporting, and holding of those types of raw

agricultural commodities that are a fruit, vegetable, nut, or fungus, and for which the Secretary has determined such standards are reasonably necessary to minimize the risk of serious adverse health consequences or death to humans or animals. This provision was modified from the committee-approved bill version, which would have authorized the imposition of on-farm standards for any plant or fungus (in other words, all crops but not animal-based food commodities) for which the HHS Secretary similarly determined that such standards are reasonably necessary. In other words, the House-passed bill limits these standards to a fruit, vegetable, nut, or fungus. It requires a notice of proposed rulemaking within 18 months of enactment, and final rules within three years afterwards.

The Secretary is authorized to include in these regulations procedures and practices that the Secretary determines to be reasonable to prevent known or reasonably foreseeable biological, chemical, and physical hazards, including natural ones, that may be intentionally or unintentionally introduced. The regulations may also include minimum safety standards, and address manure use, water quality, employee hygiene, sanitation and animal control, and temperature controls, as the Secretary determines to be reasonably necessary. They could provide for coordination of education and enforcement activities and must provide a reasonable time for compliance, taking into account the needs of small businesses for additional time, among other permitted activities. In developing these regulations, the Secretary would be required to take into consideration (consistent with public health) “the impact on small-scale and diversified farms, and on wildlife habitat, conservation practices, watershed-protection efforts, and organic production methods.”

A food would be adulterated under terms of the FFDCA if it is grown, harvested, packed, sorted, transported, or held under conditions that do not meet these requirements, if applicable. H.R. 2749 also would require the Secretary to update the 1998 FDA guidance for minimizing hazards in fresh fruits and vegetables.

The committee-approved bill would have authorized the imposition of on-farm standards for any plant or fungus (in other words, all crops but not animal-based food commodities) for which the HHS Secretary determined such standards are reasonably necessary to minimize the risk of serious adverse health consequences or death to humans or animals. The final House bill limits this standards authority to a fruit, vegetable, nut, or fungus

Facility Registration Requirements

Section 101 of the House-passed version of H.R. 2749 amends FFDCA § 415 to require facilities to register annually, by each December 31, and to pay an annual registration fee of \$500. As approved by the committee, the bill does not require farms (or retail food establishments) to begin registering and incur the \$500 annual fee. To clarify this continuing exemption, the House-passed bill adds extensive new language defining the meaning of a farm, which is intended to ensure that those farms marketing directly to consumers, among other specified activities, will not be newly subjected to such registration requirements. For example, a farm means “an operation in one general physical location devoted to the growing and harvesting of crops, the raising of animals (including seafood), or both.” It includes an operation that packs, holds, manufactures, or processes food, so long as it is produced and consumed on the farm; an operation that sells food directly to consumers if the sales value from such consumer sales exceeds the value of food products sold to all other buyers; and operations that manufacture grains or other feedstuffs grown there and only distributed directly to another farm for its consumption there.

Records Access

Section 106 of H.R. 2749 amends FFDCFA § 414(a) regarding records inspection and access. The committee-approved bill, while broadening the HHS Secretary's authority to access records, would also have subjected farms to such records access (and record-keeping) provisions. The House-passed bill continues to exempt farms from records access requirements, except where the article of food is a fruit, vegetable, or fungus that has a standard, or is the subject of an active foodborne illness investigation and is not a grain or similarly handled commodity—wheat, corn, grain sorghum, barley, oats, rice, wild rice, rye, soybeans, legumes, sugar cane, sugar beets, sunflower seed, canola, safflower, flaxseed, mustard seed, crambe, sesame seed, camelina, cottonseed, cocoa beans, grass hay, and honey, and any other commodity determined by the HHS Secretary in coordination with the Secretary of Agriculture. Also, any record-keeping regulations affecting farms must be promulgated in consultation the Secretary of Agriculture. Relevant records (i.e., for access and copying) are to be all those “relating to such article bearing on whether the food is adulterated, misbranded, or otherwise in violation of this Act,” rather than the higher current threshold—which is those records “needed to assist the Secretary in determining whether a food is adulterated and presents a threat of serious adverse health consequences.”

Food Traceability

Section 107 of H.R. 2749 amends FFDCFA § 414 to require the Secretary to establish by regulation a tracing system for food in, or to be imported into, the United States. The committee-approved bill required the HHS Secretary to establish a tracing system able “to identify each person who grows, produces, manufactures, processes, packs, transports, holds, or sells such food in as short a timeframe as practicable but no longer than two business days.” This also would entail new record-keeping requirements for those in each segment of the food industry. The committee bill exempted foods produced on a farm and sold directly to consumers, restaurants or grocery stores, except for a requirement that they keep records for at least six months on which restaurants or grocery stores received their foods. The committee bill also authorized the Secretary to partially exempt farms (or foods, facilities, restaurants) if he/she determines that traceability is not necessary to protect the public health.

Additional language was added to the final House bill to satisfy agricultural interests that would also require the HHS Secretary to coordinate with the Secretary of Agriculture in both conducting pilot projects on traceability (a prerequisite to traceability regulations) and issuing such regulations; the nature of the impact of the regulations on farms also must be taken into account. Furthermore, the final House bill contains extensive new language intended to limit the system's applicability regarding farms that grow and store grain or similarly handled commodities (see “Records Access” above, for specific commodities).

Reportable Food Registry

The Administration is currently implementing a provision of the FDA Amendments Act of 2007 (P.L. 110-85) which requires food facilities to report foods for which there is a reasonable probability of serious adverse health consequences or death to humans or animals. Section 112 of H.R. 2749 expands coverage to farms where food is produced for sale or distribution in interstate commerce, to restaurants and other retail food establishments, and to those required by this bill to register as importers. Under a change in the final House bill, farms (and restaurants and retail

food establishments) that are unable to provide such information through a new electronic portal must be given an alternative means for reporting.

Other Farm-Related Modifications

Section 5 of H.R. 2749 specifically exempts from the proposed requirements foods and facilities regulated by USDA under the meat, poultry products, or egg inspection acts; it also would exempt farms to the extent they raise animals sourced for such USDA-regulated foods. The House-passed bill added language to ensure that the animals themselves are also exempt and that USA-approved, state-inspected meat and poultry facilities are exempt as well.

S. 510 (Senate Manager’s Amendment)

Standards for Produce Safety

Section 105 of the Senate amendment establishes a new FFDC § 419, regarding safety standards for produce. It would require within one year—in consultation with USDA and state agriculture departments (including with regard to the national organic foods program), and in consultation with the Department of Homeland Security—the publication of a notice of proposed rulemaking for “science-based minimum standards for the safe production and harvesting of those types of fruits and vegetables that are raw agricultural commodities for which the [HHS] Secretary has determined that such standards minimize the risk of serious adverse health consequences or death.” The Senate proposal provides that any proposed rules include, with respect to growing, harvesting, sorting, packing, and storage operations, minimum standards related to soil amendments, hygiene, packaging, temperature controls, animal encroachment, and water; and they are to “consider hazards that occur naturally, may be unintentionally introduced, or may be intentionally introduced, including by acts of terrorism.”

The Senate proposal also provides that proposed rulemaking shall “provide sufficient flexibility to be applicable to various types of entities ... including small businesses and entities that sell directly to consumers and be appropriate to the scale and diversity” of production and harvesting, as well as take into consideration, consistent with public health protection, “conservation and environmental practice standards and policies established by Federal natural resource conservation, wildlife conservation, and environmental agencies.” It also requires that for certified organic production, the rules shall “not include any requirements that conflict with or duplicate the requirements of” the national organic foods program, while providing the same level of protection as required under this act. Priority is to be given to those raw fruits and vegetables that have been associated with foodborne illness outbreaks. The bill also includes provisions for public input, timelines for implementation of rules, and a system for granting variances for states and foreign governments.

The Senate amendment contains provisions for consideration of small businesses. As noted above, small and very small businesses may be exempted from regulation if the Secretary has determined these “are low risk and do not present a risk of serious adverse health consequences or death.” In addition, there are extended implementation deadlines for small and very small businesses: small businesses (as defined by the Secretary) are given one year after final regulations are promulgated, and very small businesses (as defined by the Secretary) two years after final regulations. In addition, the HHS Secretary is required to issue a “small entity compliance policy guide” to assist small entities in complying with the registration requirements

and other activities (no later than 180 days after the issuance of the regulations under this section). The Secretary must also ensure that any updated guidance complies with the Paperwork Reduction Act (PRA) and minimizes regulatory burden and unnecessary paperwork and the number of separate standards on the facility, among other clarifications regarding acknowledgment of risk differences and compliance burden.

Inspection of Records

Section 101 of the Senate amendment amends FFDCA § 414 and modifies the circumstances under which the HHS Secretary could access the records of facilities (see above definitions for what is or is not considered a facility). However, it does not appear to change the definition of a facility; thus farms would not be newly impacted by this provision, at least directly.⁵⁹ However, farms that fall within the definition of “facility” (e.g., those that process some or all of their production for sale) would be affected.

Registration of Food Facilities

Section 102 of the Senate amendment amends FFDCA § 415 to require biennial facility registration, with an abbreviated process for registrants whose information has not changed. It would require all food facilities to register biennially, and there is new language regarding what information should be provided and regarding terms for suspending registrations. However, this provision would not alter the definition of “facility” in the current FFDCA; farms are not affected unless they process food for sale. In addition, S. 510 does not set a registration fee, unlike the House-passed food safety bill (H.R. 2749). The Senate amendment contains provisions for consideration of small businesses, including a requirement that the Secretary issue a “small entity compliance policy guide” no later than 180 days after issuing regulations.

Hazard Analysis and Risk-Based Preventive Controls

Section 103 of the Senate amendment establishes a new FFDCA § 418, requiring the owner, operator, or agent in charge of a facility to develop, implement, and keep records on preventive controls for food safety. Section 103 references the current definition of “facility” under FFDCA § 415. Therefore, farms are not affected unless they process food for sale. This section of the bill explicitly permits the Secretary to exempt or modify compliance requirements for those facilities “solely engaged in the production of food for animals other than man, the storage of raw agricultural commodities (other than fruits and vegetables) intended for further distribution or processing, or the storage of packaged foods that are not exposed to the environment.”

As with other provisions, the Senate amendment contains language for consideration of small businesses, including a requirement that the Secretary issue a “small entity compliance policy guide” no later than 180 days after issuing regulations. It provides for extended implementation deadlines for small and very small businesses: small businesses (as defined by the Secretary) are to have two years after final regulation are promulgated, and very small businesses (as defined by the Secretary) three years after final regulations. The bill also contains clarifying language

⁵⁹ It could be argued that this provision—and other provisions of S. 510 not readily applicable to farms—might indirectly affect farms if, for example, the buyers of their products were to require a farm supplier to meet new contractual terms to help the buyer meet any newly enacted food safety requirements.

regarding the promulgation of FDA regulations, including consideration for various types of businesses and activities (on-farm and at processing facilities).

Targeting of Inspection Resources for Domestic Facilities, Foreign Facilities, and Ports of Entry; Annual Report

Section 201 of the Senate amendment specifically requires the HHS Secretary to inspect food facilities (as defined under FFDCA § 415) and to allocate inspection resources according to the risk profiles of the facilities. Generally, those determined to be of lower risk must be inspected at least once every four years; those of higher risk within two years of enactment and then every year thereafter. Again, farms that process food for sale would be subject to these inspections; others would not because they are excluded under current law from the definition of a “facility.”

Enhancing Traceback and Record-Keeping

The Senate amendment substantially modified the original version of Section 204 of S. 510. It requires the Secretary, in consultation with USDA and state officials, to improve the capacity of FDA to effectively and rapidly track and trace foods in the event of an outbreak. Within 270 days of enactment, the Secretary is required to establish pilot projects in coordination with the food industry to explore and evaluate methods to rapidly and effectively identify recipients of food to prevent or mitigate a foodborne illness outbreak and to address credible threats of serious adverse health consequences or death to humans or animals as a result of such food being adulterated or misbranded. Participants are to include one or more projects with the processed food sector and one or more projects coordinating processors or distributors of fruits and vegetables that are “raw agricultural commodities,” reflecting the diversity of the food supply. The projects must include at least three different types of foods that have been the subject of significant outbreaks during the five-year period preceding enactment, among other criteria for project selection intended to inform future rule promulgation.

The Secretary shall publish a notice of proposed rulemaking to establish additional record-keeping requirements for high-risk foods, subject to certain specified conditions, no later than two years after enactment. The Secretary shall designate such high-risk foods within one year after enactment based on criteria specified in the provision, and shall publish the list of the foods designated as high-risk, which may be subject to updates and revision. The provision on record-keeping addresses information protection; requirements for public input; and rules on retention of records. It allows for the consideration of less restrictive requirements (as specified) for farm-to-school or farm-to-institution programs of USDA and other related programs; food produced through the use of a fishing vessel; producers of commingled raw agricultural commodities; grocery stores; direct farm sales to consumers or grocery stores; and “identity-preserved labels” on farm sales of food produced and packaged on a farm, among others. The Secretary may modify requirements, or exempt a food or facility from them, if product tracing requirements are not needed to protect public health. The provision also specifies the information the Secretary may request from U.S. farms, subject to certain limitations, but specifies that the Secretary is not authorized to impose any limitations on commingled foods. With the exception of farms, failure to comply with record-keeping provisions under this section is prohibited.

As with other provisions in the bill, the Senate amendment contains provisions for consideration of small businesses, including the requirement that the Secretary issue a “small entity compliance policy guide” and provide delayed implementation timelines for small and very small operations

to comply with the requirements. Small businesses (as defined by the Secretary) will have one year after final regulations are promulgated, and very small businesses (as defined by the Secretary) two years after final regulations to comply.

Concluding Observations on the Bills' Provisions

The farm-related provisions of the original House-passed bill and the Senate amendment generally made no explicit distinctions between agricultural producers of different sizes or of varying production practices. Concerns raised by groups representing organic producers, smaller-scale farmers, and others have since led sponsors of both versions to add new language aimed at recognizing any special circumstances faced by, for example, smaller farms, those that market directly to consumers, and others. At issue is whether these changes will satisfy farm interests, what, if any additional modifications might still be made, and their potential impact on food safety.

The House and Senate proposals have numerous elements that appear to be similar to each other, including new record-keeping and records access provisions, changes in food registration, and a mandate for preventive food safety plans for food facilities and for produce. However, these seemingly similar provisions appear to be somewhat more prescriptive under the House version and could have a greater potential impact on producers, regardless of size, production, and/or marketing practices. That may be one reason why the House-passed version of H.R. 2749 appears to contain more specific language than the Senate amendment, in order to limit the applicability of the bill—or a number of its specific provisions—to farms generally.

Despite changes in the Senate amendment to S. 510, some small-farm interests are continuing to seek additional changes to the bill, including amendments such as those proposed by Senator Tester. Some groups fully expect that additional considerations will be negotiated and adopted either once the final bill reaches the Senate floor or if offered as separate floor amendments. If and when S. 510 passes the Senate and reaches a conference with the House, it is possible that further modifications affecting the agricultural sector could be made.

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