



Carol Maczka, Ph.D.
Assistant Administrator for the Office of Food Defense and Emergency Response
Food Safety and Inspection Service
United States Department of Agriculture

Tuesday, July 24, 2007
“Federal Efforts to Mitigate Vulnerabilities in the Food Supply Chain”
House Committee on Homeland Security
Subcommittee on Emerging Threats, Cybersecurity, and Science and Technology

Mr. Chairman and Members of the Subcommittee, I am pleased to appear before you today to discuss the issue of defending our food supply system from farm to table. I am Dr. Carol Maczka, Assistant Administrator for the Office of Food Defense and Emergency Response at the United States Department of Agriculture's (USDA) Food Safety and Inspection Service.

The program area within FSIS that I lead is the Office of Food Defense and Emergency Response (OFDER), which manages all homeland security activities within FSIS. OFDER makes sure that policy makers, scientists, field staff and management are prepared to prevent and respond to any food security threat. OFDER develops and coordinates all FSIS activities to prevent, prepare for, respond to, and recover from non-routine emergencies resulting from intentional and non-intentional contamination affecting meat, poultry, and processed egg products. OFDER also serves as the agency's central office for homeland security issues and ensures coordination of its activities with the USDA Homeland Security Office, the Department of Homeland Security (DHS), the FDA, other Federal and State government agencies with food-related responsibilities, and industry.

The Food Safety and Inspection Service (FSIS) is the public health agency in the USDA responsible for ensuring that the nation's commercial supply of meat, poultry, and processed egg products is safe, secure, wholesome, and correctly labeled and packaged. FSIS is charged with administering and enforcing the Federal Meat Inspection Act, the

Poultry Products Inspection Act, the Egg Products Inspection Act, portions of the Agricultural Marketing Act, and the regulations that implement these laws. FSIS also ensures compliance with the Humane Methods of Slaughter Act, which requires that all livestock be handled and slaughtered in a humane manner. The Agency is responsible for determining equivalence to Federal standards at the State level and among our foreign trading partners.

FSIS plays a key role in the nation's food safety system, which also includes agencies such as the Department of Health and Human Services' Food and Drug Administration as well as state, tribal and local food safety partners. FSIS works closely with these agencies and other partners to share information and protect public health.

Our inspection program personnel form the backbone of FSIS' public health infrastructure in laboratories, plants, and import houses throughout the country. FSIS has more than 7,600 inspectors and veterinarians in approximately 6,000 Federal meat, poultry, and processed egg product plants, and at approximately 130 import establishments every day to prevent, detect, and respond to food-related emergencies. In FY 2006, inspection program personnel performed antemortem and postmortem inspection procedures to ensure public health requirements were met in the processing of more than 46 billion pounds of livestock carcasses, almost 57 billion pounds of poultry carcasses, and about 4.4 billion pounds of liquid egg products.

In FY 2006, FSIS inspection program personnel conducted more than eight million procedures to verify that establishments met food safety and wholesomeness requirements. In addition, during FY 2006, approximately 3.9 billion pounds of meat and poultry and about 5.9 million pounds of egg products were presented for import inspection at U.S. ports and borders. FSIS also has Program Investigators nationwide who conduct food safety, food defense, and outbreak investigations and enforcements.

The Agency also engages in active surveillance through a series of food defense verification procedures performed daily in all FSIS-regulated facilities. With a strong food safety verification system in place, FSIS has been focusing on fortifying existing programs with a greater emphasis on food defense and improving internal and external lines of communication, including the integration of the food defense system databases with the larger public health data infrastructure.

Homeland Security Presidential Directives most relevant to our work are:

- HSPD-5: Management of Domestic Incidents;
- HSPD-7: Critical Infrastructure Identification, Prioritization, and Protection;
- HSPD-8: National Preparedness; and especially
- HSPD-9: Defense of U.S. Agriculture and Food.

HSPD-9 was signed on January 30, 2004, and establishes a national policy to defend the agriculture and food system against terrorist attacks, major disasters, and other

emergencies. It directs the Secretary of Agriculture to work with other Federal department and Agency leaders on improving awareness and warning systems, vulnerability assessments, mitigation strategies, response planning and recovery, outreach and professional development, and research and development.

FSIS uses a comprehensive system to ensure that imported meat, poultry, and processed egg products are safe and secure. It includes a thorough analysis of each country's food laws and inspection systems to determine initial equivalence; on-site audits of each country's food safety system to ensure equivalence is maintained; and port-of-entry inspection on all meat, poultry, and processed egg products coming into the United States. It is enhanced by FSIS' Import Surveillance Liaison Officers, who conduct a broader range of surveillance activities at import facilities and in commerce, and serve as liaisons to improve coordination with other agencies like U.S. Customs and Border Protection (CBP).

Every day, FSIS personnel are at U.S. ports, inspecting shipments as they come in and pulling out samples. The Agency focuses on stopping illegal shipments at their point of entry. When meat and poultry imports enter the United States, FSIS import inspectors ensure that each shipment is properly certified, examine each lot for general condition and labeling, and conduct reinspection as directed by a centralized computer system, the Automated Import Information System. Using protocols developed by FSIS with USDA's Office of Inspector General and the Animal and Plant Health Inspection Service (APHIS), 111,000 pounds of ineligible product were detected and 1,766,050 pounds of

product detained in FY 2006 out of 9 billion pounds of meat and poultry and about 5.9 million pounds of egg products presented for import inspection at U.S. ports and borders.

The Agency also worked with CBP's National Targeting Center to develop rules for targeting high-risk, FSIS-regulated shipments entering the country. This effort included a two month pilot program in 2006 in which a total of 3,229 shipments were screened at two ports using the rule sets. The Agency is also moving forward on a system which will allow the sharing of import tracking data by FSIS, CPB, and DHS to further strengthen our ability to ensure the safety and security of imported meat, poultry and processed egg products through better and more rapid access to data on imports.

FSIS is currently working with other Federal government agencies to integrate its International Trade Data Systems (ITDS) design requirements with the ePermits system developed by Animal and Plant Health Inspection Service (APHIS) and the larger Automated Commercial Environment under development by US Customs and Border Protection. Ultimately, these efforts would result in a Federal-government wide linkage of all inspection and border control data systems, meeting FSIS' regulatory needs along with those of sister agencies.

FSIS and FDA are leading the development of the Food Emergency Response Network, a joint effort of national, State, and local laboratories to provide ongoing surveillance and monitoring of food and to promptly respond to a foodborne illness outbreak or intentional contamination that targets the Nation's food supply. In addition, FERN is a critical

source of data for the FSIS public health data infrastructure.

FERN enables FSIS to utilize State and local laboratories in handling the numerous samples required to be tested in the event of an attack on the food supply, a natural outbreak, or even a hoax, involving a meat, poultry, or egg product. It is vital for the Agency to respond rapidly to such emergencies to not only protect the public's health, but also to ensure public confidence in the safety of the food supply. The first line of this rapid response is the laboratories, which must be provided with training, methodology, and state-of-the-art laboratory equipment.

FERN provides ongoing surveillance, as well as detection and surge capacity for large-scale food-related events. It enables not only the sharing of standardized methodologies and proficiency testing but also a secure electronic reporting system for lab results. Four Federal Labs and 18 existing State labs are currently under FSIS cooperative agreements. Additionally, FSIS has cooperative agreements targeting total of 25 State labs geographically located across the country. The FERN laboratories will eventually be proficient to screen for the same threat agents as Federal labs, some with capability to do confirmation testing. FSIS primarily focuses on microbiological agents with our partners at FDA focusing on chemical and radiological agents.

Another example of interagency coordination and collaboration by FSIS is participation in the integrated consortium of lab networks developed by DHS. This consortium ensures coordination among Federal and State partners focused on both food and

agriculture. The consortium ensures consistency of methods development, reporting of lab results and the sharing of lab results among all Federal and State partners.

The Agency has developed specific procedures on monitoring and sampling to be taken depending on the threat level as determined by the DHS. The appropriate testing is based on vulnerability or risk-based assessments for selected domestic and imported food products, which allows the Agency to rank food products and potential contaminating agents in order of highest concern. The Agency's enhanced Consumer Complaint Monitoring System (CCMS), a national surveillance system that monitors food-related consumer complaints which will eventually be integrated with other data systems, also assists in the Agency's efforts to track potential attacks on the food supply.

FSIS' comprehensive and ongoing training and education efforts ensure that every FSIS employee fully understands their role in preventing, or responding to, an attack on the food supply. Food defense awareness training is also conducted at locations nationwide with State and local inspectors and in cooperation with other Federal agencies. Training courses were also developed in conjunction with the FDA; USDA's Food and Nutrition Services; and the Department of Transportation (in development) to focus specifically on food defense for each agency's respective workforce.

FSIS has created and distributed model food security plans that meat, poultry and processed egg products facilities and import establishments can use to develop and implement a Food Defense Plan. These plans identify the types of preventive steps that

establishments might take to minimize food security risks for products under their control. A simplified version of guidance on food defense plans was developed in consultation with industry trade groups. This guidance provides an easy three-step process which will result in a completed food defense plan. The Agency has also held numerous workshops and Webcasts on Food Defense Plans to reach out to as many small and very small plant owners and operators as possible; Webcasts specifically targeted to State officials; efforts to reach various targeted audiences, such as Spanish speakers and various industry and trade associations.

As it is widely understood that the response to most large-scale food emergencies will be initiated at the State level, FSIS and FDA have worked with the National Association of State Departments of Agriculture (NASDA) to develop, test, and implement an emergency response template.

FSIS continues to enhance readiness for a possible outbreak of avian influenza. The agency's goal is to ensure that all appropriate preparations are being made for the potential spread of the H5N1 strain of the virus to the United States, whether in birds or in humans. FSIS has also carried out a tabletop exercise on avian influenza with other Federal and State agencies, as well as industry and consumer groups.

USDA is playing many important roles in this effort. The Department's four-part approach to combating avian influenza includes limiting the spread of the virus overseas through international outreach. Second is educating the American public through a

proactive campaign to inform without causing alarm. Third is USDA's and the Department of Interior's aggressive surveillance program in partnership with States, which includes wild birds, live bird markets, backyard flocks and thanks to the cooperation of industry – testing of commercial flocks. The fourth aspect is to practice executing our response plan. As you may know, USDA has a long and successful history of dealing with highly pathogenic avian influenza.

It should be noted, of course, that detection in birds does not signal the start of a human pandemic. This virus is not easily transmitted from person to person. Most human illnesses that we've seen overseas have resulted from direct contact with sick or dead birds. No human illnesses have been attributed to properly handled and cooked poultry. This is another area where FSIS and USDA have been actively engaged with our partners in government, industry and the consumer community to make sure concerns related to any possible pandemic are addressed before that ever happens.

As part of its coordinated response plan with the Animal and Plant Health Inspection Service (APHIS), the Agency has developed a product testing protocol for detecting Highly Pathogenic Avian Influenza in poultry meat. It should be stressed, however, that cooking poultry to an internal temperature of 165 degrees kills all viruses and all other foodborne pathogens, including avian influenza.

In FY 2006, FSIS' activities better prepared the Agency and its stakeholders to detect, respond, and recover from food-related emergencies. In the area of food defense, FSIS

conducted about 1,200,000 daily food defense verification procedures in FSIS-regulated and State-inspected facilities. The Agency also conducted six tabletop exercises with stakeholders and other local, State, and Federal agencies to test and validate standard operating procedures and directives for responding to non-routine (emergency) incidents. A total of 15 tabletop exercises are planned, which will take into account all 50 states.

In April and May of this year, FSIS worked together closely with FDA to respond to the discovery that some swine and poultry in the human food supply chain had been fed animal feed supplemented with pet food scraps that contained melamine and related compounds. FSIS and FDA alerted the public and investigated the source and extent of the situation. As soon as the situation arose, we also ensured that swine and poultry on farms known to have received or suspected of receiving contaminated feed that had tested positive for melamine and melamine-related compounds were held under State quarantine or voluntarily by the owners. After a risk assessment conducted by scientists from FSIS and FDA, in consultation with scientists from CDC, the Environmental Protection Agency and DHS, concluded the potential exposure to the public, even in a highly unlikely worst-case scenario, was 250 times lower than the dose considered safe and therefore well below any level of public health concern, FSIS cleared the animals in question for inspection and processing.

FSIS has also developed and implemented a series of FSIS directives (two of which have been updated thus far in FY 2007) for each of the agency's eight program areas that prescribe how protective measures defined by Homeland Security Presidential Directive

3, Homeland Security Advisory System are to be implemented. Directive 3 established a threat advisory system to effectively communicate the level of risk of a terrorist attack to the American people. It prescribes that agencies develop appropriate “Protective Measures” in response to each of the five threat levels established. The measures developed by FSIS include active surveillance through a series of food defense verification procedures performed daily in all FSIS-regulated facilities, including import inspection facilities and in-distribution facilities. Results of the verification procedures are reported to and are analyzed by the agency. The results of the analysis direct outreach and guidance initiatives and countermeasures development.

The Office of Management and Budget and the relevant food safety agencies are collaborating on ways to most effectively address issues raised in GAO's designation of Federal Oversight of Food Safety as a high-risk item in February 2007.

USDA, the Department of Health and Human Services, and DHS are working together to create a comprehensive food and agriculture policy that will improve the government's ability to respond to dangers to the food supply. For FY 2008, the Agency has proposed a budget which includes \$31 million to further improve FSIS' ability to detect and respond to intentional or accidental contamination of the food supply.

While food defense is critical to our work, another threat to the food supply is naturally-occurring pathogens. Our work identifying and limiting pathogens in the food supply will also help mitigate vulnerabilities in food defense.

In conclusion, Mr. Chairman and all Members of the Subcommittee, I want to thank you again for this opportunity to explain the vital role played by USDA and FSIS in protecting the nation's food supply. We take pride in knowing that our nation's food safety and food defense system for meat, poultry, and processed egg products is the best and safest in the world. But we also realize that it is vital not to stand still but instead to continue improving our nation's food safety and food defense systems. We take this stand not only as public health professionals but also as everyday Americans who ourselves rely on the results of what we do. I am happy to answer any questions you may have.

FSIS Food Defense Mission and Initiatives

- **To prevent, prepare for, respond to, and recover from an intentional attack on the food supply and large scale food-related emergencies.**
- **Consistent with HSPDs 5, 7, and 9.**

<p>Outreach and training to prepare stakeholders to protect the food supply</p>	<ul style="list-style-type: none"> -Security guidance materials for food processors, transporters, & distributors. -Self assessment and food defense plan tools for industry, including training. -Food defense awareness training for employees, industry, and other Federal and State government agencies.
<p>Assessing Food System vulnerabilities for developing countermeasures</p>	<ul style="list-style-type: none"> -Ten FSIS vulnerability assessments conducted--identified products, agents, and nodes of highest concern, as well as countermeasures. -Participate in Strategic Partnership Program on Agroterrorism (DHS, FBI, FDA) to conduct vulnerability assessments (includes States & industry) -Workshops for industry, G8 task force, & APEC economies on methodologies to conduct vulnerability assessments to protect imports and exports. Collaborated with FDA and State Department on the workshops for G8 countries and APEC economies

FSIS Food Defense Initiatives

Developing countermeasures to mitigate vulnerabilities	<ul style="list-style-type: none"> -Coordinating with ARS, CSREES, DHS on filling research needs relating to critical food defense data gaps (e.g., detection methods, feasibility, and agent characterization studies). -Working directly with industry and through DHS's Sector Coordinating Council to develop countermeasures.
Conducting surveillance to identify attack on the food supply	<ul style="list-style-type: none"> -Daily testing of samples for specified threat agents. -Early warning tools (e.g., CCMS, FABIS/NBIS). -Homeland security directives—direct personnel on what food defense verification procedures to perform on a daily basis in federally-inspected establishments and in distribution. Working with industry to harden infrastructure. -Targeting illegal & high-risk shipments with Customs and Border Protection.
Managing food defense & food safety emergencies	<ul style="list-style-type: none"> -Created the Emergency Management Committee & a Non Routine Incident Management System for managing & tracking non-routine incidents. -Conduct food defense exercises with States, industry, consumer groups, & other Federal agencies(eg;FBI, DHS, FDA). 6 conducted to date, 4 planned in FY07, and 5 in FY08. Conducted and AI outbreak exercise in FY 06 and planning a Pandemic exercise in FY 07. -Guidance for industry on the disposal of food products & facility decontamination. -Template for developing State response plans for food emergencies. -Provide training on Incident Command System and ESF 11 for key personnel.
Ensuring Agency Continuity of Operations	<ul style="list-style-type: none"> -Conduct agency-wide COOP exercises. -SOPs to ensure critical essential functions are maintained. -Established alternative relocation sites, designated essential personnel, and identified vital records. -Developed All-Hazards, Avian Influenza, & Human Pandemic plans.

SUPPLEMENTAL

Dr. Carol Maczka

Assistant Administrator for Food Defense and Emergency Response

1400 Independence Avenue, SW

Room 3130, South Building

Washington, DC 20250

(202) 720-5643 phone

(202) 690-5634 fax