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Chairman Akaka, Ranking Member Johnson, and Members of the Subcommittee, good afternoon and thank you for holding this hearing today on the important topic of responding to threats against America's agriculture and food system. On the heels of the 10 year anniversary of the devastating attacks of September 11, 2001, we are reminded of the need for improved vigilance and of the importance of partnership and collaboration at all levels of government and with the private sector in order to protect our Nation's critical infrastructure.

The U.S. Department of Agriculture (USDA) considers defense of the Food and Agriculture Sector a critical component of our mission to provide leadership on food, agriculture, natural resources, and related issues based on sound public policy, the best available science, and efficient management.

No single government department or agency has sole responsibility for homeland security; rather, homeland security is a partnership effort. Significant progress in meeting homeland security goals can only be made by establishing and sustaining partnerships among all governmental levels and with those who own the critical infrastructure. The Food and Agriculture Sector is composed of complex production, processing, and delivery systems and has the capacity to feed people within and beyond the boundaries of the Nation. These food and agriculture systems, which are almost entirely under private ownership, operate in highly competitive global markets, strive to operate in harmony with the environment, and provide economic opportunities and improved quality of life for rural and urban citizens of the United States and others around the world.

The Food and Agriculture Sector is composed of complex production, processing, and delivery systems and encompasses upwards of four million assets, including some two million farms;[1] 900,000+ restaurants; 100,000+ food retail establishments; more than 166,000 registered domestic food manufacturing, processing, and holding facilities (including storage tanks and grain elevators)[2]; and approximately 252,400 registered foreign facilities. This sector is dominated by small businesses that employ the majority of the food industry workforce. The $2.1 trillion food, beverage, and consumer packaged goods industry employs 14 million workers and contributes more than $1 trillion in added value

[1] *Louisiana Farm Reporter*, Volume 11, Number 6, March 17, 2011. Available at: http://www.nass.usda.gov/Statistics_by_State/Louisiana/Publications/Farm_Reporter/Ff031711.pdf. Accessed April 13, 2011.

[2] Food Facilities Registration Statistics — December 1, 2010. Available at: http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/RegistrationofFoodFacilities/ucm236512.htm. Accessed April 14, 2011.

to the Nation's economy, accounting for roughly one-fifth of the Nation's economic activity.[3] The sector supply chain operates at the international level with more than 20 percent of all U.S. imports being food products.

USDA has made significant progress in its ability to defend the agriculture and food system since the events on 9/11. Dedication to advancing U.S. capabilities in the areas of surveillance, detection, response and recovery to disease, pest, or poisonous agents that occur naturally, are unintentionally introduced, or are intentionally delivered by acts of terrorism has allowed the agriculture industry to continuously provide the United States and our trade partner's confidence in the quality of our products. USDA's Food Safety and Inspection Service (FSIS), Animal and Plant Health Inspection Service (APHIS) and National Institute of Food and Agriculture (NIFA) enhance agricultural security through programs aimed at inspecting native and foreign agricultural products, conducting vulnerability assessments, and maintaining laboratory networks capable of rapidly identifying diseases and pests that could have drastic consequences on our economy. Likewise, the Agricultural Research Service (ARS) operates laboratories and funds research in the United States and abroad that seek to advance our ability to identify, remediate and even prevent harmful pathogens that threaten the food and agricultural industry.

In spite of considerable progress made to date, significant implementation challenges remain. Though the primary focus of this hearing is on activities associated with Homeland Security Presidential Directive 9 (HSPD-9), there are other policy directives and legislation that have significant impacts on the food and agriculture sector. USDA is working with the White House National Security Staff, our Federal; State, Local, Tribal, and Territorial (SLTT) counterparts; and private sector partners to identify opportunities to leverage limited resources, streamline reporting requirements, and implement a more comprehensive and strategic approach to ensure preparedness and resilience of these vital components of our Nation and our economy.

Even in the current economic environment, it is critical that the agriculture industry continue to maintain and advance its capability and capacity to protect the U.S. food supply. Threats assume many forms: from natural hazards or acts of terrorism that would inevitably cause losses in productivity that would decrease food availability for U.S. consumption, increase commodity prices, decrease exports, harm national and international confidence in U.S. products, force smaller farms/ranches out of business and/or inflict additional monetary losses on a large scale recovery effort.

Again, USDA appreciates the focus of this Subcommittee on these critical issues related to responding to threats against America's agriculture and food system.

Efforts to Implement Response and Recovery Responsibilities in HSPD-9

Significant progress has been made in implementation of response and recovery responsibilities identified in HSPD-9. Select project highlights are provided below.

Food Emergency Response Template. Under a cooperative agreement, the United States Department of Agriculture (USDA), the Department of Homeland Security (DHS), the Food and Drug Administration (FDA), and the National Association of State Departments of Agriculture (NASDA) formed a working group to develop a template. The template provides guidance for who should be involved in creating a plan, what to consider for and include in it, and also, a list of roles and

[3] USDA Recognizes Work of Farmers and Ranchers on National Ag Day — March 15, 2011. http://www.fsa.usda.gov/FSA/mobileNewsReleases?area=newsroom&subject=landing&topic=ner&newstype=newsrel&type=detail&item=nr_20110315_rel_0120.html. Accessed April 13, 2011.

responsibilities that the planner needs to consider. The draft template has been completed and has been tested in three States.

National School Lunch Program (NSLP) Protective Initiatives. Higher education and training programs support the defense of U.S. agriculture and food systems by providing proper knowledge to those charged with responding to pest or disease outbreaks, food contamination incidents, or other disasters affecting the sector. The Food Nutrition Service developed and disseminated a technical assistance tool for National School Lunch Program operators, Biosecurity Checklist for School Foodservice Programs: Developing a Biosecurity Management Plan. The publication was disseminated to 22,000 School Food Authorities (SFAs). Supporting materials, including a video/DVD and an interactive version of the checklist on CD-ROM, were later developed to complement the manual and to help recipient agencies develop their food defense plans, a tool that can help protect food from intentional contamination.

Food Defense Plans. The coordinated development of Federal, State, and local response capabilities supports the defense of U.S. agriculture and food systems by minimizing the potential impact of a disease outbreak, terrorist attack, or other disaster affecting the sector. The development of food defense plans by industry and other food production facilities, while voluntary, is considered an important tool in helping to prevent the intentional contamination of food. The Food Safety and Inspection Service has been working cooperatively with industry since 2004 to provide guidance and encourage the adoption of food defense plans. In addition, the Agricultural Marketing Service (AMS) is requiring that vendors from which AMS purchases products for the National School Lunch Program (NSLP) and other Federal nutrition assistance programs have a food defense plan in place and in many instances is requiring vendors to pass an AMS food defense audit of their facilities. During these audits, food defense plans, operating conditions, and practices are evaluated, and deficiencies are identified. The audit program and vendor plans are based on FSIS and FDA Food Defense Guidance. AMS routinely reviews its procurement documents to ensure that they are current with regulatory guidance and address food defense issues associated with the food products purchased by AMS.

Collaboration with FEMA for Agricultural Debris Disposal. As part of Hurricane Katrina Lessons Learned, USDA's Farm Service Agency developed a quick-reference internal document to describe debris authorities for FSA, NRCS, and APHIS. During a national emergency, the disposal of animal carcasses resulting from disease is the responsibility of APHIS under Emergency Support Function (ESF) #11, with technical input on soil properties from NRCS. There continues to be work across federal departments to better understand roles and responsibilities, as well as authorities for debris disposal.

Emergency Support Function (ESF) #11. APHIS the lead agency for ESF #11. On a national and regional level, ESF #11 is engaged with other Federal agencies and States in the development, revision, and review of all-hazards response planning. ESF#11 participates in catastrophic planning for events beyond the normal response capabilities of State and local governments. APHIS fulfills this commitment by having an ESF #11 National Coordinator, two Regional Emergency Response Program Managers, and an ESF#11 Coordinator in each of the ten Federal Emergency Management Agency (FEMA) Regions. The ESF#11 Coordinators work on a daily basis with FEMA, other Federal Agencies, and the States. ESF#11 participates extensively in regional and State all-hazards planning efforts. There have been annual high level coordination meetings between APHIS, the Food and Nutrition Service (FNS), FSIS, and the Department of the Interior (DOI) and other relevant agencies. From 2009 to present, ESF#11 has worked with key stakeholders to conduct training for hundreds of individuals involved in the interagency process with FEMA at the national and State level. These individuals have been essential in the response to natural disasters, and are critical players in any extensive response to all-hazard events.

During 2009, ESF #11 was activated to support responses for the winter storms in the northeast, the severe flooding in Washington State, and flooding in North Dakota. In 2010, ESF #11 was activated to support the earthquake in Haiti, spring flooding in North Dakota, severe flooding in Massachusetts, Hurricane Alex, and Hurricane Earl. In 2011, ESF #11 was activated for the Arizona floods, the severe storms in Connecticut, the earthquake/Pacific Tsunami in Japan, severe flooding in Louisiana, severe flooding in North Dakota and South Dakota, severe flooding and tornadoes in Missouri, and Hurricane Irene. Prior to an incident, ESF#11 coordinators are in contact with primary and support agencies providing situational awareness of possible or actual all-hazards disaster events at the Federal, State, and local levels. During and after an incident, ESF#11 primary and support agencies provide and receive situational reports, spot reports, briefing reports and other information and are also encouraged to participate in hot-wash/after action reports to the event.

APHIS continues to assess and revise as necessary the ESF #11 concept of operations plan based on lessons learned from real world events and exercises. This is done in consultation with other federal partners and state, local, and tribal organizations.

National Veterinary Stockpile (NVS). USDA APHIS established the NVS in 2004 in accordance with HSPD-9. The NVS will contain critical veterinary material for responding to the worst animal diseases within 24 hours. APHIS has two primary goals for the NVS: (1) Deploy within 24 hours countermeasures against the most damaging animal diseases including Highly Pathogenic Avian Influenza, Foot and Mouth Disease, Rift Valley Fever, Exotic Newcastle Disease, and Classical Swine Fever; and (2) Assist States, Tribes, and territories plan, train, and exercise for the rapid acquisition, receipt, processing, and distribution of NVS countermeasures during an event.

The NVS employs a full time outreach staff member and an experienced exercise contract team. The NVS has succeeded in deploying countermeasures within its 24-hour goal for all responses. Further, it reviews lessons learned from all exercises and deployments to continuously improve State /Tribal NVS plans, State Planning Templates, and the NVS Deployment Plan.

Testing the National Veterinary Stockpile's (NVS) Avian Influenza (AI) Vaccine: Agricultural Research Service (ARS) is continuing its AI vaccine discovery research and has just completed testing the current H5 AI vaccine in the NVS and found it to be efficacious against the currently circulating Asian H5N1. ARS is continuing to test new vaccine technologies and AI vaccines in the NVS against recent isolates, especially African-Asian H5N1 isolates. The project is ongoing.

National Plant Disease Recovery System (NPDRS). ARS worked with APHIS and other related USDA agencies (NRCS, NIFA, AMS, GIPSA, and ERS) and external entities (DHS, EPA, universities, and the private sector) to establish the NPDRS. The NPDRS identifies governmental and private infrastructure necessary to implement an effective recovery plan for high consequence disease/crop outbreaks; identifies technologies required for recovery from specific disease/crop outbreaks; generates a prioritized list of research needs; and works with Federal agencies and other stakeholders to obtain necessary resources. The NPDRS Steering Committee (USDA, DHS, and EPA) will be a longstanding committee to oversee the development of these recovery plans and coordinate the activities of Federal agencies with authority, responsibility, and expertise to create recovery systems for specific crop/diseases. In fiscal year 2011, the NPDRS coordinated with Federal and State scientists concerned with citrus, small grains, soybean and corn to identify detection needs for pests and diseases, monitoring needs, protectants status, and resistant germplasm availability. Work continues across federal departments and with outside stakeholders to understand emerging disease threats.

Role and Efforts to Enhance National Surveillance and Detection Capabilities

Since the creation of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 and HSPD-9 in 2004, the USDA has made considerable progress to implement and/or enhance national surveillance and detection capabilities, including coordination and collaboration with Federal, State, Local, Tribal, and Territorial (SLTT); and private sector partners. A summary of progress to date is provided below, organized by surveillance and detection (laboratory networks). This is not a comprehensive listing of activities, but rather serves to highlight those efforts that involve coordination and collaboration with our Federal, SLTT, and private sector partners and/or provide a foundation for improved coordination and collaboration.

Surveillance

USDA is currently participating in a Sub-Interagency Policy Committee led by the National Security Staff to develop a National Strategy for Biosurveillance to achieve the United States Government's (USG) biosurveillance goals: decision making informed by early detection and warning of a health incident of potential national significance and ongoing actionable and timely situational awareness. In addition, USDA formed a One Health Working Group to augment the respective missions of participating USDA agencies and offices. This Working Group identifies and pursues opportunities to improve the efficiency and outcomes of USDA's programs for public health, animal and plant health, and environmental health.

In addition, USDA agencies continue to develop and implement monitoring and surveillance programs in collaboration with Federal, SLTT, and private sector partners. Select programs include the following:

National Biosurveillance Integration System (NBIS). The system enables early detection and increased situational awareness to reduce the intensity and duration of a biological event by monitoring information sources in near real-time to detect emerging threats. USDA actively participates in the NBIS Interagency Workgroup (NIWG) to support implementation of NBIS. In addition, FSIS has a full time liaison working at DHS-NBIS, while APHIS participates virtually. APHIS routinely provides subject matter expertise and information sharing/ animal health situational awareness on domestic and international issues

Biological Indication and Warning Analysis Community (BIWAC). To facilitate operational validation of the data collected in Project ARGUS, the BIWAC was created. Project ARGUS is an open source data collection initiative designed to implement global foreign biological event detection and tracking capabilities. It plays a significant role in meeting national needs in support of the National Biosurveillance Integration Mission. Membership in the BIWAC includes the Centers for Disease Control and Prevention's (CDC) Global Disease Detection team; USDA's Centers for Epidemiology and Animal Health; DHS' National Biosurveillance Integration Center; the Armed Forces Medical Intelligence Center; the Defense Threat Reduction Agency; the U.S. Strategic Command Center for Combating Weapons of Mass Destruction; and other intelligence community organizations. USDA APHIS has served as the Chair for the BIWAC Steering Committee since January 2010.

Animal Disease Traceability (ADT). In February 2010, Secretary Vilsack announced the Animal Disease Traceability program**,** a new approach to disease surveillance developed through input from a State-Tribal-Federal working group, Tribal consultations, and discussions with producers and industry. Animal disease traceability, or knowing where diseased and at-risk animals are, where they've been, and when, is very important to make sure there can be a rapid response when animal disease events take place. An efficient and accurate animal disease traceability system helps reduce the number of animals involved in an investigation, reduces the time needed to respond, and decreases the cost to producers and the government. ADT is designed to recoup and capitalize as much as possible on previous investments in the

National Animal Identification System (NAIS), while reducing burden on the industry. Key principles to the new animal disease traceability framework will:

- Only apply to animals moved interstate;
- Be administered by the States and Tribal Nations to provide more flexibility;
- Encourage the use of low-cost technology; and
- Be implemented transparently through Federal regulations and the full rulemaking process.

On August 11, 2011, USDA APHIS published a proposed rule on animal disease traceability for livestock moved interstate that would establish minimum national official identification and documentation requirements. The rule has two primary requirements. First, animals moved interstate would have to be officially identified. Second, animals moved interstate must be accompanied by an interstate certificate of veterinary inspection or other movement document. The comment period on the proposed rule closes on November 9, 2011. The final rule is slated for publication in the *Federal Register* in 2012. Information systems developed through NAIS have been modified to support ADT.

Pathogen Reduction Enforcement Program. The Pathogen Reduction Enforcement Program schedules tests, tracks food samples, and generates a series of reports concerning food testing eligibility and the status of food sample testing results. It collects and stores food manufacturing establishment addresses and product information, as well as the establishment's performance in previous food safety tests. It uses this information to schedule and request the collection of food samples for testing. These tests results are used to alert agency personnel and the industry of contaminations, so an appropriate response can be issued. The Pathogen Reduction Enforcement Program is also used for risk assessment and decision support purposes, improving early detection of problem products, enabling active food safety surveillance, and evaluating potential threats to the U.S. food supply.

Detection

Laboratory capability and capacity are essential components of food and agriculture defense initiatives. Within the Federal Government, laboratory networks are coordinated through the Integrated Consortium of Laboratory Networks (ICLN). The ICLN was established by a Memorandum of Agreement signed in June 2005. Signatory departments and agencies to this agreement include USDA, Department of Commerce, Department of Energy, Department of Health and Human Services (HHS), DHS, DOI, Department of Justice, Department of State, and the Environmental Protection Agency. Three of the laboratory networks that comprise the ICLN support the Food and Agriculture Sector: the Food Emergency Response Network (FERN), the National Animal Health Laboratory Network (NAHLN), and the National Plant Diagnostic Network (NPDN).

Food Emergency Response Network (FERN). Co-sponsored by USDA and the Food and Drug Administration (FDA), FERN is a robust national network of food regulatory laboratories with a proven ability to respond to food emergencies by providing vital laboratory capabilities and capacities to large-scale food events. It has the technical expertise to develop, validate, disseminate, and make use of rapid screening techniques and is often required to meet the challenges of outbreaks of novel contaminants affecting previously uninvolved foods. Significant progress has been made in implementing the network's structure and operations. FERN integrates the Nation's food-testing laboratories at the local, State, and Federal levels into a network that is able to respond to emergencies involving biological, chemical, or radiological contamination of food. The FERN structure is organized to ensure Federal and State interagency participation and cooperation in the formation, development, and operation of the network. Currently, FERN consists of 172 laboratory members from federal, state, and local agencies, representing the public health, agriculture, veterinary diagnostic, and environmental disciplines. FERN plays a critical role in food defense by integrating these food-testing laboratories into a network that is able to detect, identify, respond to, and provide recovery from emergencies involving biological, chemical, or radiological contamination of food. The FERN focuses on preparedness through awareness, surveillance,

prevention, and capacity building and provides response and recovery efforts through organized large-scale surge capacity. FERN laboratories have been activated in response to multiple outbreaks and public health events including:

- *E. coli O*157:H7 in Spinach Outbreak (2006)
- Melamine in Pet Food (2007)
- *Salmonella* Saintpaul in peppers (2008)
- *Salmonella* Typhimurium in peanut butter (2009)
- Polyaromatic hydrocarbons in seafood (2010)

National Animal Health Laboratory Network (NAHLN). USDA established the NAHLN as part of a national strategy to coordinate and network the diagnostic testing capacities of the Federal veterinary diagnostic laboratories with the extensive infrastructure (facilities, professional expertise, and support) of State and university veterinary diagnostic laboratories. This network enhances the Nation's early detection of, response to, and recovery from animal health emergencies, including bioterrorist events, newly emerging diseases, and FAD agents that threaten the Nation's food supply and public health. In 2002, USDA/APHIS and USDA's Cooperative State Research, Education and Extension Service (CSREES), now NIFA, initiated the network by entering into cooperative agreements with 12 State and university veterinary diagnostic laboratories. APHIS has since contracted with additional State and university diagnostic laboratories to assist with testing and surveillance. These contracts are with 54 State/university laboratories; the U.S. Department of the Interior (DOI) laboratory in Madison, Wisconsin; USDA/FSIS laboratory in Athens, Georgia; and the National Veterinary Services Laboratories (NVSL) at the Ames, Iowa, and Plum Island Animal Disease Center (PIADC) (New York) campuses, for a total of 58 laboratories in 43 States. In FY 2010, 28 of these laboratories received cooperative agreement funding through NIFA. Key elements and accomplishments of NAHLN include:

- Increased and more flexible capacity for laboratory support of routine and emergency animal disease diagnosis, including bioterrorism events;
- Standardized, rapid diagnostic techniques used at state, regional, and national levels;
- Secure communication, alert, and reporting systems;
- Modern equipment and experienced personnel;
- National training, proficiency testing, and quality assurance;
- Upgraded facilities that meet biocontainment and physical security requirements; and
- Regional and national animal health emergency training exercises (scenario tests) to test and evaluate the communication and reporting protocols of the network.

National Plant Diagnostic Network (NPDN). NPDN was established in 2002 by legislative mandate in response to the need to enhance agricultural security through protection of the health and productivity of plants in agricultural and natural ecosystems in the United States. With support from the NIFA Food and Agricultural Defense Initiative, the specific purpose of the NPDN is to provide a nationwide network of public agricultural institutions with a cohesive distribution system to quickly detect high-consequence pests and pathogens that have been introduced into agricultural and natural ecosystems, identify them, and immediately report them to appropriate responders and decision-makers. To accomplish this mission, NIFA and NPDN have invested in plant diagnostic laboratory infrastructure and training, developed an extensive network of first detectors through education and outreach, and enhanced communication among the agencies and stakeholders responsible for responding to and mitigating new outbreaks. A summary of NPDN accomplishments include the following:

- National Repository established for records of endemic and emerging pests and diseases;
- Secure communications protocols established among NPDN labs and regulatory agencies;
- Diagnostic infrastructure supporting plant diagnostics in the U.S. greatly enhanced for both capability and capacity. Diagnosticians are well trained in modern diagnostic technologies and molecular protocols;

- NPDN labs routinely support national, state, and local response to disease and pest outbreaks, providing surge capacity for over 1,000,000 high consequence samples;
- NPDN has trained and registered 11,480 First Detectors nationwide;
- NPDN has protected jobs in agriculture by verifying that traded agricultural products are free of quarantine pests and diseases, thus ensuring that export and domestic markets remain open; and
- NPDN serves as a model for efficiency, communication and integration across jurisdictions. In 2010, the NPDN was acknowledged with the NIFA Partnership Award for Innovative Program Models.

National Bio and Agro-Defense Facility (NBAF). The Plum Island Animal Disease Center (PIADC) is our nation's primary facility to conduct livestock disease research. However, PIADC is at the end of its life-cycle, is too small to accommodate necessary research, and does not have biosafety level-4 capabilities. The NBAF, a state-of-the-art biosafety level 3 & 4 facility currently under design to be built near Kansas State University, will enable the U.S. to conduct comprehensive research, develop vaccines and anti-virals, and provide enhanced diagnostic capabilities to protect our country from numerous foreign animal and emerging diseases. Research and development at NBAF will additionally address multiple threats/vulnerabilities related to bio- and agro-attacks and improve our understanding of potential agro-terrorism such as employing foreign animal and zoonotic disease pathogens against U.S. targets.

The NBAF would be one of many high containment laboratories which are safely run in the United States every day (e.g., CDC laboratories in Atlanta, GA; and Department of Defense Labs in Fort Detrick, MD.) The rigorous construction requirements and operational procedures in place today have successfully protected the local environments around Federal high-biocontainment facilities on the U.S. mainland for decades, and modern technologies only improve that protective capability for future facilities like the proposed NBAF.

As a future tenant at NBAF, USDA is providing technical expertise to DHS on the design and construction to ensure that the facility can safely and efficiently accommodate USDA's research, diagnostic and training needs; protect the domestic livestock industry and markets; properly implement all recommendations from the risk assessment; and meet all biosafety and biosecurity requirements.

The United States needs to be on the frontline of livestock animal health research and defend America against foreign animal, emerging, and zoonotic diseases. NBAF will be a modern research facility that will help to protect the United States from threats to our animal agriculture, food supply, and public health.

Efforts to Coordinate and Collaborate with Federal Partners, State, Tribal, and Local Officials, and the Private Sector to Ensure an Effective Response to an Agriculture or Food Incident including Information Sharing, Exercises, Education, and Training

In response to HSPD-7and in close collaboration with FDA and DHS, USDA helped to establish the Food and Agriculture Sector Coordinating Councils in 2004. The coordinating councils are comprised of a Government Coordinating Council (GCC) and a Sector Coordinating Council (SCC) representing private industry. Today there are approximately 59 members of the Food and Agriculture Sector GCC representing 22 agencies/organizations, including Federal and SLTT associations and other entities. The Food and Agriculture SCC has 77 members representing 51 entities/organizations, including trade associations, owners and operators, and others. The councils host quarterly joint meetings that provide a public-private forum for effective coordination of agriculture security and food defense strategies and activities, policy, and communications across the sector to support the Nation's homeland security mission. They provide a venue to mutually plan, implement, and execute sector-wide security programs,

and procedures; as well as to exchange information and assess progress in defending the Nation's food and agriculture critical infrastructure. They provide a central forum for introducing new initiatives for mutual engagement, evaluation and implementation, issue resolution, and education. Joint initiatives include identifying and prioritizing items that need public-private input, coordination, implementation, and communication; coordinating and communicating issues to all members; and identifying needs/gaps in research, and best practices/standards.

Additional examples of coordination and collaboration for information sharing, exercises, education, and training are provided below.

Information Sharing

The Food and Agriculture Sector has designated Homeland Security Information Network (HSIN) FA and FoodSHIELD as its two chief information-sharing platforms to support its public and private sector partners. FoodSHIELD is based on the CoreSHIELD platform, which helps create community, increases collaboration, and facilitates communication among thousands of public and private entities involved in protecting and defending the food supply of the United States. The intent is to clarify, improve, and communicate the overall process to ensure dissemination of the right information to the right people in private sector institutions in a timely manner.

HSIN-FA provides a secure, unclassified, and common Web-based communications platform to serve as the primary information-sharing and collaboration system for sharing Sensitive but Unclassified information within the FA Sector. DHS provides the procedures, content, and tools needed to enable security partners to share the vital information needed to manage security and risk to their critical infrastructure, respond to events, and enhance resilience. Industry members are piloting access to FoodSHIELD and more than 6,000 Federal, State, and local regulators, laboratory staff, military personnel, and academics are active members of FoodSHIELD and its associated portals. As of August 2011, more than 1,500 accounts have been created to expand access to HSIN-FA based on FoodSHIELD membership.

Exercises

USDA, FDA and DHS conducted a series of food service, food defense information sharing exercises with state, local, tribal and territorial and private sector partners. The purpose of these exercises was to focus on sharing of classified information across the federal family and with industry. After action reports for the exercise and workshop were distributed to exercise participants, presented at the March 2011 Joint Quarterly Meeting of the Food and Agriculture Sector, and are posted to the HSIN portal for access by approved Critical Sector subscribers.

In addition to sector-sponsored exercises, USDA agencies conduct a number of exercises and workshops in support of food and agriculture defense efforts that involve SLTT and private sector partners. Representative examples include the following:

- **Southern Agriculture and Animal Disaster Response Alliance (SAADRA) National Veterinary Stockpile 2010 Logistics Exercise.** On April 28 and 30, 2010, SAADRA and USDA/APHIS conducted 1-day logistics exercises in Montgomery, Alabama; Pearl, Mississippi; and Baton Rouge, Louisiana. The purpose was to test State and Federal request procedures for the NVS, deployment and response plans, and logistics response capabilities on the basis of a simulated rift valley fever (RVF) outbreak. During each exercise, the NVS deployed countermeasures (including supplies, equipment, and simulated vaccine) to each location, and the States conducted logistics warehouse and inventory management operations. Approximately 180

participants from SAADRA, private industry, and APHIS regional offices attended the exercise. Additional information is available at: http://nvs.aphis.usda.gov.

- **FSIS Exercise Program**. FSIS regularly conducts food defense exercises at the Department, headquarters and field level to test preparedness and response procedures (i.e., how program offices would manage an emergency and how FSIS functions in an ICS structure, including product recalls and communication issues). Summary Reports and After Action Reports from the exercises are prepared and shared with stakeholders, including Federal, State, and local government agencies, tribal nations, industry, and consumer groups. FSIS also regularly conducts exercises to test it readiness and preparedness including Continuity of Operations E Exercises.

Education and Training

USDA agencies conduct a variety of education, training, and outreach programs targeted to and/or conducted in collaboration with Federal, SLTT, and private sector partners. Select examples include the following:

- **Small/Very Small Plant Outreach. FSIS conducts annual survey of its regulated establishments to determine whether or not they have food defense plans. Food defense plans are an important tool in helping industry to ensure that the food they make is not intentional contaminated.** Results from FSIS' 2009 FSIS food defense plan survey found nearly 100 percent adoption of food defense plans by large establishments, and a rate of above 70 percent adoption by small plants. However, less than half of the approximately 2,600 very small establishments surveyed in 2009 had food defense plans. Therefore, FSIS expanded outreach in 2010, with particular emphasis on small and very small establishments. FSIS highlighted food defense issues at exhibitions, conventions, and educational seminars and worked with State Hazard Analysis and Critical Control Point Contacts and Coordinators and trade associations representing very small establishments to distribute food defense information, guidance, and educational materials. Language was identified as a barrier to reaching some small and very small establishments. FSIS had its *Guide to Developing a Food Defense Plan for Meat and Poultry Slaughter and Processing Plants* translated into Spanish, Mandarin Chinese, Korean, and Vietnamese and posted on the FSIS Web site. FSIS also had its *Guide to Developing a Food Defense Plan for Warehouse and Distribution Centers* translated into Spanish and Mandarin Chinese and posted on the FSIS Web site. The General Food Defense Plan was also translated into Spanish, Mandarin Chinese, Vietnamese, and Korean and is available on the FSIS Web site. FSIS also mailed copies of the General Food Defense Plan to all establishments that lacked a written food defense plan. The 2010 Food Defense Plan Survey determined that, as a result of the various outreach efforts, 82 percent of small establishments and 64 percent of very small establishments have a functional food defense plan—up from 2009 rates of 72 percent and 48 percent, respectively. The adoption and implementation of functional food defense plans enhance protection of the food supply and public health. Preliminary results from the 2011 survey indicate that the trend in increasing adoption by industry of food defense plans continues.
- **Department of Education Readiness and Emergency Management for Schools Grantee Meeting**. The USDA/Food and Nutrition Service (FNS) reached about 150 attendees at the July 2010 meeting for Readiness and Emergency Management for School (REMS) grantees. The U.S. Department of Education Office of Safe and Drug-Free Schools began administering the REMS discretionary grant program in 2003 to help school districts develop comprehensive plans for any emergency or crisis. Developing a food defense management plan is one requirement for those receiving a REMS grant. FNS provided information on the importance of food defense for schools and on the resources and technical assistance, such as the National School Lunch Program (NSLP) Tabletop Exercise Toolkit and a template for developing a school food defense plan, that FNS can or soon will make available to schools.

- **Extension Disaster Education Network**. EDEN is a collaborative, multistate effort by Extension Services across the country to improve the delivery of services to citizens affected by disasters, including agricultural disasters. The network has a wealth of national and State-based disaster education preparedness, response, recovery, and mitigation resources available at: http://www.eden.lsu.edu and http://www.extension.org/disasters. These enable locally trusted extension educators to increase their impact before, during, and after a crisis in all 50 States and many U.S. territories. EDEN has the ability to conduct internal communications behind the Louisiana State University firewall at: https://eden4.lsuagcenter.com and via list-serve. In addition to closed-source telephone, e-mail, and intranet methods, USDA/NIFA can instantly publish open-source communications with the cooperative extension system at https://blogs.extension.org/edenotes and http://www.facebook.com/edenfb.
- **Extension Disaster Education Network Strengthening Community Agrosecurity Planning Workshops.** The objectives of the workshops are to enable community partners to 1): build capacity to handle agricultural issues during an emergency or disaster; 2) improve networking among stakeholders who can plan for and respond to emergencies; and 3) develop community agrosecurity planning teams to establish or enhance agrosecurity components within existing local emergency operations plans. A total of 19 EDEN Strengthening Community Agrosecurity Planning (S-CAP) workshops have already been conducted in 16 States. A Train-the-Trainer program enables States to continue training to maximize dissemination of the program. To date, 12 States have trained their own trainers. Additional information can be found at: http://eden.lsu.edu/s-cap.

USDA also works closely with our colleagues in the Federal Bureau of Investigation (FBI) to conduct outreach and training for law enforcement, public health, emergency first responders, and security personnel responsible for responding to situations involving potential chemical, biological, and radiological threats. This training includes guidance and recommendations for performing joint criminal and epidemiological investigations to ensure that tailored tactics, techniques, and procedures are made available, including access to the tools needed to respond to these threats. It also promotes the use of simulation among Federal, SLTT, and private sector partners to exercise capabilities, refine operational concepts, and strengthen relationships across and ensure that law enforcement, public health, emergency first responder, and agricultural investigations are coordinated. Recent examples include a workshop in Napa Valley, California (June 2010) with 82 attendees and another in Des Moines, Iowa (August 2010) with 77 attendees. The workshops included representatives from local law enforcement; public health and agriculture representatives from SLTT government entities; private sector partners; and Federal partners from the USDA, FDA, FBI, and DHS. The workshops develop the investigative, intelligence, and coordination efforts conducted by the FBI Joint Terrorism Task Forces in local field offices by providing Federal, State, and local law enforcement with the opportunity to interact and cross-train on topics of basic food and agriculture security awareness.

Response to Findings and Recommendations of GAO Report: *Homeland Security: Actions Needed to Improve Response to Potential Terrorist Attacks and Natural Disasters Affecting Food and Agriculture*

The Government Accountability Office (GAO) recently submitted a Draft Report titled *Homeland Security: Actions Needed to Improve Response to Potential Terrorist Attacks and Natural Disasters Affecting Food and Agriculture* (GAO-11-652) to the USDA.

To ensure the most effective use of resources, GAO recommended that the Secretaries of Agriculture and Health and Human Services jointly determine if there are opportunities, where appropriate, for the National Veterinary Stockpile (NVS) to leverage Strategic National Stockpile (SNS) mechanisms or

infrastructure as directed by HSPD-9. If such opportunities exist, the two Agencies should formally agree upon a process for the NVS to use the identified mechanisms and infrastructure.

The CDC's SNS and APHIS' NVS have collaborated since the NVS began operations in 2006. The SNS has provided technical assistance and shared lessons learned, planning documents, and numerous guidance documents that were subsequently utilized by the NVS. APHIS and CDC will continue to explore opportunities for which the NVS may leverage SPS mechanisms or infrastructure as directed in HSPD-9.

To improve USDA's performance as ESF-11 coordinator and to address issues experienced by key parties, such as pet sheltering, GAO recommended that the Secretary of Agriculture develop a process for ensuring that: (1) following all ESF-11 activations, after-action reports (AAR) are consistently completed and shared with key parties involved in each activation; (2) the perspectives of key parties are incorporated in these reports; (3) any identified gaps and/or challenges are addressed through corrective actions; and (4) the completed after-action reports are used to provide a complete, accurate, and consistent count of ESF-11 activations over time, in turn producing sufficiently reliable data on ESF-11 activations.

Since 2008, the APHIS ESF-11 coordinator has developed a consistent approach for developing AAR. The AARs are modeled after FEMA's AARs, which include identifying successes and areas needing improvement. These ESF #11 AARs are posted on the ESF #11 Web site, http://www.aphis.usda.gov/emergency_response/esf_11/esf11_resources.shtml, and are available for key parties to review. In the future, APHIS plans to e-mail the AARs directly to ESF #11 stakeholders. The GAO report also recommended development and implementation of a documented, systematic process to track research gaps identified in the NPDRS recovery plans and monitor progress in filling these gaps, as well as development of a department-wide strategy for implementing HSPD-9 responsibilities that includes an overarching framework for setting priorities, as well as allocating resources.

USDA concurs with both of these recommendations and will work to implement them. With regard to the development of a department-wide strategy, USDA feels it is important to look more broadly than HSPD-9 and focus on strategic implementation of all homeland security related policies and legislation. This will allow for a more strategic and efficient management approach to ensure improved preparedness and resilience of the food and agriculture sector and supporting equities, programs, and resources.

Efforts to Implement GAO's Recommendations from the Report on the Veterinarian Workforce (GAO-09-178)

Veterinarians are essential for controlling zoonotic diseases – which can spread between animals and humans – such as avian influenza. Most Federal veterinarians work in USDA and other Federal agencies such as the Departments of Defense, and HHS. GAO found that given the needs, there is a growing national shortage of veterinarians. GAO assessed the sufficiency of the Federal veterinarian workforce for routine activities, identified veterinarian workforce needs during a catastrophic event, and the challenges faced by the federal government and states during four recent zoonotic outbreaks. USDA's implementations of GAO recommendations are summarized below.

To help ensure the Federal veterinarian workforce is sufficient to meet the critical responsibilities it carries out on a routine basis, GAO recommended that the Secretary of Agriculture direct FSIS to periodically assess whether its level of inspection resources dedicated to food safety and humane slaughter activities is sufficient. As part of the budget formulation process, FSIS annually assesses inspection and veterinary resource needs to meet the statutory mandates for food safety and the humane handling of livestock. FSIS is continually taking steps to enhance veterinary and inspection capacities to

best allocate its resources to protect public health. In addition, as part of routine operations, FSIS managers continually assess inspection resource requirements to determine the number of Public Health Veterinarian (PHV) positions needed in specific establishments, primarily by considering the geographic location or proximity of other Federal establishments, the size of the establishment, the production volume of plant operations (which determines the number of on-line inspection personnel), and the number of approved operational shifts. The results of these assessments are documented using the Resource Information System—a computer database that tracks resource data and builds inspection assignments. Although FSIS regularly assesses inspection resources as part of the budget formulation process and in the course of regular operations, in response to GAO's recommendation, in 2009, FSIS began conducting periodic assessments of inspection resources, including Public Health Veterinarian positions. Results of these assessments are provided in the "Demand for Service" report. Since December 2008, the vacancy rate has decreased nearly eight percent, from 15.6 to 7.7 percent.

GAO also recommended that the Secretary of Agriculture conduct a departmental assessment of USDA's veterinarian workforce—based, for example, on workforce assessments by its component agencies—to identify current and future workforce needs (including training and employee development) and Department-wide solutions to problems shared by its agencies. The recommendation indicated that results should be forwarded to the Director of the Office of Personnel Management (OPM) when complete.

Departmental Administration Office of Human Capital Management, through the USDA Human Resources Leadership Council, completed a USDA-wide Veterinary Medical Officer (VMO) workforce plan, building on agency assessments and providing analysis to benefit all affected agencies in developing long-term strategies for addressing workforce needs. To help the veterinarian workforce continue essential functions during a pandemic, GAO recommended that the Secretaries of Agriculture, Defense, and HHS ensure that their component agencies that employ veterinarians complete pandemic plans that contain the necessary elements put forth in the Department of Homeland Security's (DHS) continuity of operations pandemic guidance, including periodically testing, training, and exercising plans. APHIS finalized a revised Pandemic Plan based upon DHS's Pandemic Plan checklist in 2009.

To improve estimates of the veterinarian workforce needed to respond to a large-FMD outbreak, GAO recommended that the Secretary of Agriculture detail in a contingency response plan how a response using vaccines would be implemented. USDA issued contingency plans for use of the FMD vaccine. In addition, APHIS' Foreign Animal Disease Preparedness and Response Plan (FAD-PreP) includes a decision-making process that would lead to the use of vaccine as an aid in the control and eradication of FMD in North America. USDA and DHS continue to actively support development of new vaccine technologies that do not require expensive, high-containment production facilities and can be produced safely in the United States.

Mr. Chairman, thank you for the opportunity to testify today. I think we can all agree on the importance of having a strong, coordinated system in place to prepare for and respond to threats to our food and agriculture infrastructure. I assure you that USDA stands ready to work with our partners in this effort to continue to strengthen our protection of these critical resources. That concludes my statement. I would be happy to answer any questions.