Food & Agriculture Sector:  
Critical Infrastructure Security & Resilience  

EDEN Agrosecurity Symposium  
April 22-23, 2013  
Washington, DC

Jessica Pulz  
Co-chair, Food & Agriculture Government Coordinating Council  
Chief, Resilience & Preparedness Division  
Office of Homeland Security & Emergency Coordination  
U.S. Department of Agriculture
Presentation Overview

- Background & Approach
- Policy Directives, Statues, & Authorities
- Public-Private Partnerships
- Achieving a Secure & Resilient Sector
- Tools & Resources

Definitions and Concepts

- Preparedness
- Resilience
- Food Security
- Food Safety
- Food Defense
The Global Supply Chain

Background & Approach

Why: $2.1T industry, 1/5 of the Nation’s economy, vast & open systems, diverse farm-to-fork continuum, susceptible to a wide range of threats & hazards

How: Policy Directives, Statutes, Regulations, & Authorities; Grants, Cooperative Agreements, Assistance Programs; and Public-Private Partnerships

What: A secure & resilient [food & agriculture sector] with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from threats & hazards of greatest risk.
Policy Directives, Statues, & Authorities

Then …
- Homeland Security Act of 2002
- Bioterrorism Preparedness and Response Act of 2002
- Animal Health Protection Act of 2002

Now …
- PPD-2: Countering Biological Threats (2009)
- PPD-8: National Preparedness (2011)
- FDA Food Safety Modernization Act (2011)
- National Disaster Recovery Framework (2011)
- National Preparedness Goal (2011)
- National Planning Frameworks (2013)
- Interagency Operating Plans (2013)
HSPD-7: Protecting Critical Infrastructure

- National policy for Federal departments and agencies to identify and prioritize U.S. critical infrastructure and key resources and to protect them from terrorist attacks
- Defines roles and responsibilities for DHS and designated Sector Specific Agencies
- Key Activities:
  - National Infrastructure Protection Plan
  - Sector Specific Plans
  - National and Sector Annual Reports

USDA and FDA are the designated Sector Specific Agencies for the Food and Agriculture Sector.

PPD-21: Critical Infrastructure Security & Resilience

- Refocuses efforts based on:
  - Threats and hazards of greatest risk
  - Critical infrastructure resilience
  - Improved coordination and integration of physical and cyber security initiatives
- Addresses strategic imperatives:
  - Refine and clarify critical infrastructure initiatives across the Federal government
  - Enable effective information exchange
  - Implement an integration and analysis function to inform planning and operations decisions
HSPD-9: Defense of Agriculture & Food

HSPD-9 set a national policy for defending our food and agriculture system against terrorist attacks, major disasters, and other emergencies

Key Components:
- Awareness & Warning
- Vulnerability Assessments
- Mitigation Strategies
- Response Planning & Recovery
- Outreach & Professional Development
- Research & Development

Future Food & Agriculture Defense Policy

- What are the strategic imperatives for the next 5 – 10 years of food and agriculture defense policy?
- Interagency working group established to discuss capabilities and gaps focusing on:
  - Public-private partnerships
  - Intelligence and information sharing
  - Response and recovery
PPD-8: National Preparedness

• Aimed at “strengthening the security and resilience” of the U.S. through “systematic preparation for the threats that pose the greatest risk to the security of the Nation”

• Linking together of the national efforts, organized around key elements
  – Ends we wish to achieve (National Preparedness Goal)
  – Means to achieve it (National Preparedness System)
  – Delivery; how we use what we build (National Frameworks; Federal Interagency Operational Plans)
  – Reporting of our progress (Annual National Preparedness Report)
  – Sustained engagement (Build and Sustain Preparedness - Ongoing)

FDA Food Safety Modernization Act

• Prevention
  – Mandatory preventive controls for food facilities
  – Mandatory produce safety standards
  – Authority to prevent intentional contamination
  – Prevention
    – Mandatory produce safety standards
    – Authority to prevent intentional contamination

• Inspection and Compliance
  – Mandated inspection frequency
  – Records access
  – Testing by accredited laboratories

• Response
  – Mandatory recall
  – Expanded administrative detention
  – Suspension of registration

• Imports
  – Importer accountability
  – Third-party certification
  – Certification for high risk foods
  – Voluntary qualified importer program
  – Authority to deny entry

• Enhanced Partnerships
  – State and local capacity building
  – Foreign capacity building
  – Reliance on inspections by other agencies
  – Additional partnerships are required to:
    • Develop and implement a national agriculture and food defense strategy
    • Establish an integrated consortium of laboratory networks, and
    • Improve foodborne illness surveillance

  – Authority to deny entry

• Additional partnerships are required to:
  • Develop and implement a national agriculture and food defense strategy
  • Establish an integrated consortium of laboratory networks, and
  • Improve foodborne illness surveillance

  – Authority to deny entry

• Enhanced Partnerships
  – State and local capacity building
  – Foreign capacity building
  – Reliance on inspections by other agencies
  – Additional partnerships are required to:
    • Develop and implement a national agriculture and food defense strategy
    • Establish an integrated consortium of laboratory networks, and
    • Improve foodborne illness surveillance

  – Authority to deny entry
Public-Private Partnerships

Food & Agriculture Coordinating Councils

**Food & Agriculture Government Coordinating Council (GCC)**
- Department of Agriculture*
- Department of Health and Human Services - Food and Drug Administration*
- Department of Homeland Security
- Department of Defense
- Environmental Protection Agency
- Department of Commerce
- Department of Justice
- Department of Interior
- American Assoc. of Veterinary Laboratory Diagnosticians
- Assoc. of Food & Drug Officials
- Assoc. of Public Health Laboratories
- Assoc. of State & Territorial Health Officials
- Intertribal Agriculture Council
- Multi-State Partnership for Agriculture Security
- Nat’l Assembly of State Chief Livestock Health Officials
- Nat’l Assoc. of State Dept’s of Agriculture
- National Environmental Health Association
- National Plant Board
- Southern Agriculture and Animal Disaster Response Alliance
- State, Local, Tribal, and Territorial GCC

**Food & Agriculture Sector Coordinating Council (SCC)**
- Producers/Plant firms and associations
- Producers/Animal firms and associations
- Processors/Manufacturers firms and associations
- Restaurants/Food Service associations
- Retail associations
- Warehousing and Logistic associations
- Agriculture Production Inputs and Services firms and associations
GCC Value Proposition

- Network with Peers and Partners
- Provide Leadership and Make an Impact
- Access Vital Information and Delivery Mechanisms
- Leverage Funding Opportunities and Shape Programs
- Provide a Unified Value to Influence Policy and Planning

GCC Goals & Activities

**NURTURE PROACTIVE PARTNERSHIPS**

**PRIORITY ACTIVITIES**
1. Partner with interdependent sectors to improve understanding and work collectively toward common goals
2. Expand SSTT participation and leadership within the FASGCC

**FASGCC VISION**
A transparent and collaborative partnership to support secure and resilient food and agriculture networks and systems

**FACILITATE INFORMATION SHARING, BEST PRACTICES, AND OUTREACH**
1. Develop an education and orientation package for new FASGCC members
2. Use available technology and web tools to deliver FASGCC news, resources, and information to a wide public and private sector audience
3. Define the risk reduction toolkit and processes for FASGCC members and partners
4. Engage SSTT partners in strengthening regional coordination
5. Expand the FASGCC hierarchy and membership roles
6. Formulate a process to track progress and report accomplishments

**LEVERAGE AND PROMOTE TOOLS AND RESOURCES**
Future Directions

- Outreach Efforts
- Information Sharing
- Operating in Parallel
- Co-funding – Sharing of Resources
- Co-creation & Co-programming
- Co-ownership & P3 Models

Achieving a Secure & Resilient Food & Agriculture Sector
PPD-8: National Preparedness

A secure and resilient Nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk.

Defined by the capability target measures of the core capabilities within the mission areas of prevent, protect, mitigate, respond, and recover.

Mission Areas & Core Capabilities

Defense of food and agriculture is identified as an element in the definition of “protection”
Prevention

Capabilities necessary to avoid, prevent, or stop a threatened or actual act of terrorism within the United States.

- Intelligence & Information Sharing
  - Partnerships with law enforcement
  - Local Joint Terrorism Task Force
  - Fusion Center
- Forensics & Attribution
  - Laboratory capability and capacity (e.g., NAHLN, NPDN, FERN)
- Interdiction & Disruption; Screening, Search, & Detection
  - Inspections of passenger baggage, conveyances, and cargo
  - Customs and Border Protection: National Targeting Center
- Many of these activities also support protection capabilities

If You See Something, Say Something™
Cross-Sector Collaboration

- Partnership with FBI and EPA to support multi-sector workshops
- Collaboration at the local level to promote coordination between water utilities, public health, food and agriculture, emergency management, and law enforcement
- Upcoming workshops to be announced

Protection

Capabilities to safeguard the homeland against acts of terrorism and manmade or natural disasters.

- Steady-state and enhanced steady-state activities including:
  - Access Control & Identity Verification
    - Credentialing
  - Intelligence & Information Sharing
  - Interdiction & Disruption
  - Physical Protective Measures
  - Risk Management for Protection Programs & Activities
    - Select agent program
  - Screening, Search, & Detection
    - Biosurveillance
  - Supply Chain Integrity & Security
    - Secure Food Supply
Mitigation

Capabilities necessary to reduce loss of life and property by lessening the impact of disasters.

- For the Food & Agriculture sector mitigation highlights the importance of activities that promote resilience including:
  - Community Resilience
  - Long-term Vulnerability Reduction
  - Risk & Disaster Resilience Assessment
  - Threat & Hazard Identification

Vulnerability Assessments

Risk Analysis  Biosecurity
All-Hazards Planning
Strategic Partnership Program
Agroterrorism

• FDA, USDA, DHS, and FBI collaborated with industry and states in a joint initiative to:
  • Validate and identify critical infrastructure and key resources within the food and agriculture system
  • Identify early indicators and warnings
  • Identify research and development needs
  • Identify mitigation strategies
• 36 Assessments completed
## Response

**Capabilities necessary to save lives, protect property and the environment, and meet basic human needs after an incident has occurred.**

- Public Information & Warning
  - Messaging and crisis communications
- Environmental Response / Health & Safety
  - Carcass disposal
- Critical Transportation
- Infrastructure Systems
- Mass Care Services
  - Nutrition and food assistance (D-SNAP)
  - Multi-agency coordination for animal response
- Evacuation & emergency sheltering
- Operational Communications
- Public & Private Services and Resources
- Public Health & Medical Services
  - Animal/veterinary health
  - One Health
- Situational Assessment
  - Operating status
  - Disaster assessments

## Emergency Support Functions

- ESF #1 – Transportation
- ESF #2 – Communications
- ESF #3 – Public Works and Engineering
- ESF #4 – Firefighting
- ESF #5 – Emergency Management
- ESF #6 – Mass Care, Emergency Assistance, Housing, and Human Services
- ESF #7 – Logistics Management and Resource Support
- ESF #8 – Public Health and Medical Services
- ESF #9 – Search & Rescue
- ESF #10 – Oil and Hazardous Materials Response
- ESF #11 – Agriculture & Natural Resources
- ESF #12 – Energy
- ESF #13 – Public Safety & Security
- ESF #14 – Long-Term Community Recovery
- ESF #15 – External Affairs

- Biological Incident
- Catastrophic Incident
- Food & Agriculture Incident
- Mass Evacuation
- Nuclear/Radiological Incident
ESF-11: Agriculture & Natural Resources

- Federal Coordinator = USDA
  - Nutrition assistance
  - Animal and plant disease and pest response
  - Food safety and security
  - Natural and cultural resources and historic properties protection and restoration
  - Safety and well-being of pets

Recovery

Capabilities necessary to help communities affected by an incident in recovering effectively.

- Economic Recovery
- Health & Social Services
- Housing
- Infrastructure Systems
- Natural & Cultural Resources
- Community Planning & Capacity Building

SUCCESS FACTORS
- Effective Decisionmaking and Coordination
- Integration of Community Recovery Planning Processes
- Well-managed Recovery
- Proactive Community Engagement, Public Participation and Public Awareness
- Well-administered Financial Acquisition
- Organizational Flexibility
- Resilient Rebuilding
Tools and Resources

S-CAP

- Enable community partners to:
  - Build capacity to handle agricultural issues during an emergency or disaster
  - Improve networking among stakeholders who can plan for and respond to emergencies
  - Develop Community Agrosecurity Planning Teams to establish or enhance agrosecurity components within existing local emergency operations plans
- Based on the counties/jurisdictions represented at workshops conducted from 2009 through today…18.4 million inhabitants are more protected from negative effects of an agricultural disaster
Sector Table Top Exercises

- 2006 – Raleigh, Carolina – Intentional contamination of bottled water
- 2006 – Washington, DC - Foreign Animal Disease
- 2007 – Harrisburg, PA – Intentional contamination of animal feed resulting in human food contamination (primarily early response)
- 2009 – Oklahoma City, OK - Intentional contamination of animal feed resulting in human food contamination (more focused on late response and recovery issues)
- 2009 – Crystal City, VA – Federal follow-on to Oklahoma exercise
- 2010 and 2011 – Arlington, VA – Intentional contamination at food retail/food service locations in several major cities
- 2013 – Nuclear Reactors, Materials & Waste and Food & Agriculture Cross-Sector Workshop
- 2013 – Nuclear Reactors, Materials & Waste and Food & Agriculture Tabletop Exercise

Continuity of Business

- Preparedness
  - Work with industry stakeholders and experts to prioritize animal or commodity movements that have the potential to be affected by disease or the disease response
  - Establish a transparent and effective system for risk assessments, surveillance requirements, biosecurity procedures, and a permit process in order to promote stakeholder acceptance and compliance with regulatory interventions by Federal, State, and Tribal authorities

- Response
  - Implement an appropriate COB plan for affected industries or industry segment(s)
  - Work with industry and Incident Command to facilitate movement of non-infected animals and non-contaminated animal products from non-infected premises
Secure Food Supply

- Continuity of business plans and processes, like the Secure Food Supply projects, work with quarantines to…
  - Plan for the managed movement of non-infected animals and non-contaminated animal products from non-infected premises during an outbreak
  - Facilitate normal business operations, avoiding unnecessary economic consequences as well as animal welfare issues
  - Mitigate the risk of disease spread through risk assessments, surveillance, biosecurity, cleaning and disinfection, and other measures

- National and State/Regional Projects include:
  - Secure Milk Supply
  - Secure Pork Supply
  - Secure Egg Supply

FREE-B

FOOD RELATED EMERGENCY EXERCISE - BUNDLE

The FREE-B is a set of five (5) scenarios, (Bled Woes, How Sweet It Isn’t), Insider Addition, Stealthy Situation, and High Plains Habitation each of which contains a Facilitator’s Guide, a Lead Planner’s Guide and a Situation Manual.

The overarching objectives of FREE-B is to:
- Cultivate professional skills by learning how to work with dynamic, ad-hoc teams focusing critical food emergency incidents that threaten the safety of the public;
- Assess readiness (agency, facility, professional, department, authority, etc.) to effectively address a food contamination incident;
- Define roles and interactions with partners;
- Understand the purpose and objectives of federal, state, local, and industry organizations and how each provides resources to address different aspects of food contamination scenarios and/or
- Take appropriate, timely and effective steps to remediate emergency situations that are caused by intentional or inadvertent acts.

The FDA collaborated with the USDA APHIS and FSIS and the CDC in the development of the FREE-B.

The FREE-B is available online at: www.FDA.gov/ FoodDefense
Other Tools and Activities

NPDN  Strengthening Community Agrosecurity Planning Workshops
Economically Motivated Adulteration  FASCAT
Ag Screening Tools  CARVER+Shock
FARM Toolkit  Mitigation Strategies Database

Employees FIRST  FERN
Food Defense Plans

Vulnerability Assessments

Additional Resources

- U.S. Department of Agriculture
  - [http://www.usda.gov/disaster](http://www.usda.gov/disaster)
- Animal and Plant Health Inspection Service:
- Food Safety and Inspection Service:
- Extension Disaster Education Network:
  - [http://eden.lsu.edu/Pages/default.aspx](http://eden.lsu.edu/Pages/default.aspx)
- Food and Drug Administration:
  - [http://www.fda.gov/Food/FoodDefense](http://www.fda.gov/Food/FoodDefense)
  - [http://www.fda.gov/food/foodsafety/fsma](http://www.fda.gov/food/foodsafety/fsma)
- Laboratory Networks:
  - [http://www.fernlab.org/](http://www.fernlab.org/)
Questions for Consideration

• What does it mean to be resilient as an individual? Family? Community? Region? Sector? Nation?

• What are critical gaps to ensure a secure and resilient Food & Agriculture Sector?

• What are the policy gaps that will help us get there?

• How can we better leverage resources across the whole community to build and sustain preparedness?

Jessica Pulz
Chief, Resilience and Preparedness Division
USDA Office of Homeland Security & Emergency Coordination

202-260-3984
Jessica.Pulz@osec.usda.gov