Overview of Secure Food Supply Plans: Federal, State, Industry, and Academic Partnerships

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Overview

- Components of SFS Plans
- HPAI Response Plans
  - Eggs, Turkeys, Broilers
- FMD Response Plans
  - Milk, Pork, Beef
Foreign Animal Disease Diagnosed!

• Establish Control Area
  – Infected and Buffer Zone
  – Federal quarantine
  – **Movement by permit, risk assessment only**
  – Movement controls in place until FAD eradicated

• Secure Food Supply Plans working on business continuity for **affected**, not **infected** Monitored Premises
Monitored Premises
Monitored Premises

• Meet a set of defined criteria seeking to move susceptible animals or products out of Control Area by permit
  – Approved by IC
  – Surveillance
  – Testing
  – Biosecurity
  – Risk assessment

• **Business Continuity**
Secure Food Supply Plans During an FAD Outbreak

- Overall goals include:
  - Detect, control, and contain FAD as quickly as possible;
  - Avoid interruptions in animal/animal product movement to commercial processing from farms with no evidence of infection during a foreign animal disease outbreak;
  - Provide a continuous supply of safe and wholesome food to consumers; and
  - Maintain business continuity for producers, transporters, and food processors through response planning.

Minimize unintended negative effects of disease and disease response, while achieving response goals
- Control or eradicate disease without “destroying” the industry

Provide risk-based solutions derived from scientific data, national and international standards
- Ability to continue key operations of production of safe, high quality food
Common Components of Secure Food Supply Plans

• Voluntary pre-outbreak preparedness
• Biosecurity
• Surveillance
• Epidemiology questionnaires
• Movement permit guidance
• Risk assessments
  – Completed and in process
• Pre and Post-outbreak training

All funded by USDA National Preparedness and Incident Coordination
Secure Food Supply Plans
Movement from Premises with No Evidence of Infection

- Secure Egg Supply (2007)
  - High Path Avian Influenza (HPAI)
- Secure Turkey Supply (2010)
- Secure Broiler Supply (2011)
  - HPAI
  - Movement of birds, hatching chicks and eggs
Secure Food Supply Plans
Movement from Premises with No Evidence of Infection

• Secure Milk Supply (2009)
  – Foot and Mouth Disease (FMD)
  – Movement of milk, animals

• Secure Pork Supply* (2010)
  – FMD, Classical Swine Fever, African Swine Fever
  – Movement of animals

• Secure Beef Supply (2014)
  – FMD
  – Movement of animals

*Some funding also provided by National Pork Board
Managed Movement

• Extensive interstate movement of non-infected animals, animal products
• Consequences of stop movement great
  – Welfare, environmental issues, loss of protein for human population
• Rely HEAVILY on disease surveillance
  – Eggs, chickens, turkeys to market
  – Milk to processing
  – Pigs to market
  – Cattle to market
HPAI Response Plan

Eggs, Turkeys, Broilers
USDA APHIS FAD PReP
HPAI Response Plan

• 2015 Outbreak H5N2
• 2016 Outbreak H7N8
• All HPAI viruses contain H5 or H7
  – LPAI H5/H7 viruses may mutate to HPAI viruses
• Primary control in domestic poultry: stamping out
Secure Poultry Supply Plans

www.secureeggsupply.com
www.secureturkeysupply.com
www.securebroilersupply.com
Components of the Secure Egg Supply Plan

• The SES Plan includes:
  – Pre-event risk assessments
  – Voluntary preparedness biosecurity checklist, training, and audits
  – SES data portal (production data, PCR results)
  – C&D guidelines
  – Permit guidance
  – Sample permits
  – Epidemiological questionnaire
  – Surveillance guidelines
    • RRT-PCR testing; 5 or 11 dead bird samples per 50 dead; per house on premises
Poultry Biosecurity Training Materials

This site offers educational materials (in English and Spanish) for the poultry industry to support implementation of biosecurity recommendations identified in the Checklist for Self-Assessment of Enhanced Poultry Biosecurity. The materials are arranged by checklist item. The materials can be downloaded, printed and used as is. However, poultry Biosecurity Officers are encouraged to modify the resources to best meet the situation at their operations. Note, if the text appears shadowed / hard to read when previewing the file, download the file and open it locally. That should resolve the issue.

These HPAI Biosecurity Training Materials were produced by the Center for Food Security and Public Health, Iowa State University, College of Veterinary Medicine. The USDA, APHIS, Veterinary Services, Surveillance, Preparedness and Response Services, National Preparedness and Incident Coordination provided funding through a cooperative agreement to the Center for Food Security and Public Health to develop these materials.

We welcome your suggestions for improvement.

Biosecurity Officer

The first checklist recommendation is that “each production site (or integrated system) should have a Biosecurity Officer capable of designing and implementing effective biosecurity procedures”. The Poultry Biosecurity Officer Information Manual provides guidance for a Biosecurity Officer in accomplishing the other checklist items.

- Poultry Biosecurity Officer Information Manual | Biosecurity Officer Manual – en español

Training Employees and Other Personnel

Short video presentations are available for training purposes. The PowerPoint file for each presentation is also provided. The presentations can be downloaded and modified to better address specific factors at your production site.

Introduction
- Video (7 min. | Presentation | Video (7 min.) – en español | Presentation – en español

Do NOT Bring Avian Influenza to the Site
- Video (6 min.) | Presentation | Video (6 min.) – en español | Presentation – en español

Perimeter Buffer Area
- Video (8 min.) | Presentation | Video (8 min.) – en español | Presentation – en español

Line of Separation
- Video (8 min.) | Presentation | Video (8 min.) – en español | Presentation – en español
Biosecurity Information

• Self-Assessment
  – Whole farm biosecurity focused on preventing HPAI virus entry
  – Biosecurity Officer
    • Write the plan with assistance of veterinarian
    • Serve as point person on farm to oversee training, implementation, authority to ensure compliance

– Training
– 11 additional areas
FMD Response Plan

Milk, Pork, Beef
USDA APHIS FAD PReP FMD Response Plan

- 7 serotypes
- Vaccines not cross-protective
- Highly contagious to cloven-hooved animals
- 5 response options
  - Stamping out
  - Stamping out with emergency vaccination
    - Kill, slaughter, live
  - Vaccination to live
Phases and Types of FMD Response

- Strategies for response to, and management of, FMD outbreak will change as outbreak progresses.
- Depend upon magnitude, location and other characteristics of the outbreak.

www.cfsph.iastate.edu/pdf/phases-and-types-of-an-fmd-outbreak
Potential Phases of an FMD Response

Phases of FMD Response

- Heightened Alert Phase: FMD outbreak in either Canada or Mexico, but not U.S.
- Phase 1: From confirmation of the first case of FMD in the U.S. until reasonable evidence to estimate outbreak extent.
- Phase 2: Surveillance and epidemiology provide timely evidence of outbreak extent to support decisions by Incident Command.
- Phase 3: Recovery: surveillance and epidemiology indicates FMD is under control; plan implemented to recover disease-free status.
- Phase 4: U.S. declared free of FMD, possibly with vaccination.
Potential Types of an FMD Outbreak

- **Type 1:** Focal
- **Type 2:** Moderate Regional
- **Type 3:** Large Regional
- **Type 4:** Widespread or National
- **Type 5:** Catastrophic U.S.
- **Type 6:** Catastrophic North American

Size of FMD Outbreak (in terms of animals, premises, and jurisdictions affected)

Response Shifts from Emphasis on Stamping-Out to Emphasis on Alternate Strategies (duration of FMD response)
Secure Beef Supply
Plan: Brief Overview

Website: Coming soon...
Secure Beef Supply Partners

• SBS Steering Committee
  – Representatives of all phases of the beef industry
  – NCBA, AABP, AVC
  – Federal and State officials
  – Academia
    • Iowa State University
    • Kansas State University

• Funding began October 2014 from USDA APHIS Cattle Health Programs
• **Initial Goals**
  – Develop biosecurity performance standards and surveillance plans (herd health monitoring) for feedlots, transporters and packer/processors
  – To maintain finished cattle movement from feedlots with no evidence of infection in an FMD outbreak to and through packing and processing plants

• FMD is not a public health or food safety concern
Working Groups

Six Working Groups (WG):
• Biosecurity
• Surveillance
• Communications
• Data Management
• Managed Movement
• Management of Infected Feedlots
Biosecurity

• Documents in development
  – Biosecurity Self-Assessment Checklist
  – Biosecurity Officer Information Manual
    • Incorporating biosecurity performance standards (BPS)
  – Biocontainment guidance should the premises become infected

• Creating unified materials across dairy, swine, and beef
Biosecurity Posters

- Farm activities
- Visitors with cattle contact
- Visitors without cattle contact
- English and Spanish
- Beef and Dairy

www.cfsph.iastate.edu
Surveillance

• Training materials for feedlot and processing plant personnel to identify lesions
  – Cattle health monitors
  – Ante & post-mortem

• Creating unified materials across dairy, swine, beef
  – North American Meat Institute forming task forces to address issues of concern

www.cfsph.iastate.edu
Managed Movement

• Beginning of an outbreak
  – Stop movement: No new movements initiated from the FMD Control Area
  – Cattle already on road need to go somewhere

• Restarting movement
  – Depends on the type (size) of outbreak
  – Contingency planning essential

DRAFT
Managed Movement of Cattle in the U.S. in a Foot and Mouth Disease Outbreak
February 2016

Purpose
The overall goal of a Secure Beef Supply (SBS) Plan is to maintain continuity of business (COB) for beef producers, transporters and processors in a Foot and Mouth Disease (FMD) outbreak and to provide a continuous supply of safe and wholesome beef products for consumers. This Working Group’s goals are to develop recommendations for managing movement of cattle and supplies in a manner that maintains COB of the beef industry while also reducing the risk of spreading the FMD virus.

The purpose of this document is to provide guidance to those tasked with making decisions regarding movements of animals and supplies in the beef industry during an FMD outbreak. This document will also highlight movement issues that warrant further discussion to facilitate disease outbreak planning and preparation efforts.

Introduction
At the beginning of an FMD outbreak, or with a small outbreak, the highest priority is to take all measures possible to prevent disease spread, to stamp out the disease as rapidly as possible and to reestablish the United States as an FMD-free country. In an extensive outbreak of FMD, the highest priority is to ensure a secure food supply for the nation and business continuity for food animal producers and associated industries. In an extensive outbreak, it will not be possible to stamp out all infected herds, especially on premises with large numbers of animals. It will be critical to appropriately manage movement of cattle and associated animal products to prevent the virus from spreading to other premises and facilitate recovery and return to FMD-free status.

With a total inventory of 98.4 million cattle (USDA, July 1, 2015), the U.S. has a robust cattle population and significant movements of cattle occur daily. The beef industry in the U.S. has many different types of settings for different production phases (e.g., cow-calf ranches, stockers, backgrounds, feedlots) and the dairy industry also provides a significant number of animals for beef harvest. Extensive movement of animals occurs between these different types of production phases through a variety of marketing channels. At any given time, approximately 13 million head (14%) of the total cattle inventory are being fed in feedlots1. Approximately 100,000-125,000 head per day complete the finishing phase in feedlots and are transported for processing at a beef packing plant2.
Management of Infected Premises

• Outbreak too large to depopulate
• Draft guidance documents addressing the multitude of issues to manage
  – Also a topic in Secure Milk, Secure Pork

• Input being sought on how best to:
  – Protect animal well-being through the use of best management practices,
  – Regain herd health and productivity as quickly as possible,
  – Minimize economic losses, and
  – Return the operation to FMD free status
For More Information

• Secure Egg Supply Plan: www.secureeggsupply.org
• Secure Turkey Supply Plan: www.secureturkeysupply.org
• Secure Broiler Supply Plan: www.securebroilersupply.org
• Secure Milk Supply Plan: www.securemilksupply.org
• Secure Pork Supply Plan: www.securepork.org
• Secure Beef Supply Plan: coming soon
• Secure Food Supply Plans: www.cfsph.iastate.edu/Secure-Food-Supply/index.php
Questions?

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