Secure Food Supply Plans

Why you need to evaluate biosecurity before an outbreak
Overview

• Business continuity planning
• Movement by permit only
  – Biosecurity
  – Surveillance
• Response strategies
Secure Poultry Supply Plan (SPS) is a translation of the science in the Secure Egg (SES), Turkey (STS) and Broiler (SBS) plans into a harmonized permitting approach that can be used in the event of a disease outbreak such as highly pathogenic avian influenza (HPAI). When a product is moved using the SPS, the permit guidance for that product, which comes from the SES, STS or SBS, spells out the criteria that must be met to meet the movement’s risk rating.
Secure Food Supply Plans

Movement from Premises with No Evidence of Infection

• Secure Milk Supply (2009-2017)
  – Foot and Mouth Disease (FMD)
  – Movement of milk

• Secure Pork Supply* (2010-2017)
  – FMD, Classical Swine Fever, African Swine Fever
  – Movement of animals

• Secure Beef Supply (2014-2018)
  – FMD
  – Movement of animals

Funded by USDA APHIS
*Some funding also provided by National Pork Board
Tools for Control of FAD

• Stop Movement
• Biosecurity
• Stamping Out
• Trace back/Trace forward
  – 2 incubation periods prior to outbreak
• Rapid Diagnostics
• Vaccination
  – Vaccinate to kill/Vaccinate to live
Secure Beef Supply Planning

- Stop Movement ➔ Managed Movement Working Group (WG)
- Biosecurity ➔ Biosecurity WG
- Trace back/forward
  Rapid Diagnostics ➔ Surveillance WG

Goal: Facilitate movement of animals with no evidence of FMD infection
What If...

Feedlot
Stocker/Backgrounder
Packing plant
Dairy
Farrowing
Livestock Movement to National Western Stock Show

Source: Data from CO Dept of Ag, displayed by IIAD’s AgConnect
Restarting Animal Movement
Managed Movement of Animals

• Movement Permits issued by Regulatory Officials
  – Permitting decisions for Control Area
    • Characteristics, status, movement risk

DRAFT
Managed Movement of Cattle in the U.S. in a Foot and Mouth Disease Outbreak
April 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 goal is 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, the highest priority is to take all measures possible to prevent disease spread, to stamp out the disease as rapidly as possible, and to resist any attempts to estimate the United States as an FMD-free country. In an extensive outbreak of FMD, the highest priority is to ensure 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 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, 2010), 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, feedlots, and dairies) and also provides a significant number of animals for beef harvest. Extensive movement of animals occur between these different types of production phases through a variety of marketing channels. At any given time, approximately 13% of the total cattle inventory are being fed in feedlots. Approximately 100,000-250,000 head per day complete the finishing phase in feedlots and are transported for processing at a beef packing plant.

Chronological Management of Cattle Movement
Managing the cattle movements in an FMD outbreak could be approached in a way similar to how air traffic was managed immediately after the September 11th terrorist attacks. All airline flights that had not taken off were held on the ground until the authorities could characterize the extent of the assault. Planes in the air were landed as quickly as safely allowed. Once all the planes landed safely, no
Managed Movement of Animals

- Packers, Processors essential to business continuity plans
  - FMD not a public health, food safety risk
  - Animals passing ante- and post-mortem inspection by FSIS safe and wholesome for human consumption
  - Processing healthy animals in facility
    - Eliminate virus amplification, further spread
    - Reduces need for carcass disposal
  - Biosecurity for employees, truck drivers prior to, after leaving plant
Participation in the SFS Plan

Prior to an Outbreak
• Request a National Premises Identification Number (PIN)
• Develop Enhanced Biosecurity Plan
• Designate Personnel to Conduct FAD Surveillance
• Maintain Movement Records

Once FAD Diagnosed
• Implement Enhanced Biosecurity Plan
• Conduct Surveillance
• Provide Epidemiological Information
**SFS Plan: Premises ID**

- Get PremID or PIN
  - Dept of Ag and Land Stewardship
  - 911 address
  - Latitude, longitude

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**Premises Identification Number Application (Print Legibly)**

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**Iowa Department of Agriculture and Land Stewardship**

- [Download Premises ID App](http://www.iowaagriculture.gov/animalIndustry/pdf/premiseIDapp2.pdf)
Enhanced Biosecurity
Biosecurity in Outbreak

• Producers responsible for protecting their herd

• Routine levels of biosecurity will not protect against highly contagious FAD virus
  – Recognize biosecurity is expensive, inconvenient for people
  – Losses from infection expensive, inconvenient, potentially trade damaging
Enhanced Biosecurity Checklists: Beef, Milk, Pork

www.securemilk.org

Self-Assessment Checklist for Enhanced Biosecurity for FMD Prevention: Dairy

1. Biosecurity Manager and Written Plan

The Biosecurity Manager is identified for the operation. The individual is responsible for developing biosecurity plans with the assistance of a veterinarian if they are not a veterinarian. Ensuring biosecurity training, or communicating biosecurity measures, with all individuals who enter the operation, the Biosecurity Manager has the written authority to ensure compliance with biosecurity protocols and take corrective action as needed.

In progress

2. Training

The Biosecurity Manager and essential personnel are trained at least annually about the biosecurity measures necessary to keep FMD out of the herd. The Biosecurity Manager informs individuals entering the operation of the biosecurity measures they are to follow in a manner they understand. Individuals are aware of biosecurity concepts and procedures that apply to their specific areas of responsibility. The biosecurity plan describes the training required before entering the operation.

In progress

3. Protecting the Feedlot

The biosecurity plan includes an L.O.S., which is established as an outer control boundary around, or within, the premises to limit movement of virus into areas where susceptible animals can be exposed.

In progress

Enhanced Biosecurity Checklists: Beef, Milk, Pork

www.securebeef.org

Self-Assessment Checklist for Enhanced Biosecurity for FMD Prevention: Beef Feedlots

1. Biosecurity Manager and Written Plan

A Biosecurity Manager is identified for the feedlot. The individual is responsible for developing biosecurity plans with the assistance of a veterinarian (if they are not a veterinarian) and ensuring biosecurity training, or communicating biosecurity measures, with all individuals who enter the feedlot. The Biosecurity Manager has the written authority to ensure compliance with biosecurity protocols and take corrective action as needed.

In progress

2. Training

The Biosecurity Manager and essential personnel are trained at least annually about the biosecurity measures necessary to keep FMD out of the herd. The Biosecurity Manager informs individuals entering the operation of the biosecurity measures they are to follow in a manner they understand. Individuals are aware of biosecurity concepts and procedures that apply to their specific areas of responsibility. The biosecurity plan describes the training required before entering the operation.

In progress

3. Protecting the Feedlot

The biosecurity plan includes an L.O.S., which is established as an outer control boundary around, or within, the premises to limit movement of virus into areas where susceptible animals can be exposed.

In progress

Enhanced Biosecurity Checklists: Beef, Milk, Pork

www.securepork.org

Self-Assessment Checklist for Enhanced Pork Production Biosecurity for Animals Raised Indoors

1. Biosecurity Manager and Written Plan

A Biosecurity Manager is identified for the site. The individual is responsible for developing the biosecurity plan with the assistance of a veterinarian (if the Biosecurity Manager is not a veterinarian) and ensuring biosecurity training, or communicating biosecurity measures, with all individuals who enter the site. The Biosecurity Manager has the written authority to ensure compliance with biosecurity protocols and take corrective action as needed.

In progress

2. Training

The Biosecurity Manager ensures that all individuals entering the site are informed of biosecurity measures they are to follow. Animal caretakers undergo more extensive training. The training must be ongoing, and individuals are continually informed about biosecurity measures. The Biosecurity Program ensures that all caretakers, and essential personnel on the farm are aware of and understand the biosecurity measures in the biosecurity plan.

In progress

3. Protecting the Pig Herd

Site Entry

Entry to the pig production site is restricted by a limited number of entry points. Each entry point is equipped with a gate or suitable barrier (e.g. cattle) which is locked when the facility is not attended. A lock block barrier is not possible at the site entrance (such as when a house uses the same driveway). Visitors must present restricted access of unauthorized vehicles to the pig production facilities following this plan.

In progress
Biosecurity Manager

– Familiar with facility
– Develops plan with veterinarian
– Communicates biosecurity measures
– Monitors to ensure compliance

Site-specific biosecurity plan

– Reviewed annually, as changes occur
– Includes labeled premises map
Enhanced Biosecurity Checklists: Beef, Milk, Pork, Poultry

1. Biosecurity Manager & Written Plan
2. Training
3. Protecting the [Feedlot] Operation
   – LOS, Access Point(s), C&D station, designated parking area
4. Vehicles & Equipment
   – Non-animal, livestock truck/trailer
5. Personnel
   – Prior to arrival, entry logbook, biosecure entry/exit procedures
Enhanced Biosecurity Checklists: Beef, Milk, Pork, Poultry

6. Animal Movement
   – Incoming, pre-movement isolation period, contingency plan for interrupted movement, loading/unloading animals

7. Animal Product Movement
   – Semen, embryos, eggs, [milk collection, feeding dairy products, milk disposal]

8. Carcass Disposal

9. Manure Management

10. Rodent, Wildlife, Other Animal Control

11. Feed
Implementing Enhanced Biosecurity Plan

• Once plan is written
  – Absence of FAD in U.S.:
    Decide which items to implement
  – FAD diagnosed in U.S.:
    Prepare to implement ALL items
  – Located in FAD Control Area:
    Officials may require ALL items
Establish a perimeter

- Outdoor raised animals
  - More difficult to protect from exposure
- Indoor raised animals
  - Walls of the building
  - Area around the building
Outdoor raised animals

**Line of Separation (LOS):** outer control boundary to minimize contamination near animals; separate off-farm from on-farm movements of vehicles, people, animals

Indoor raised animals

**Line of Separation (LOS):** walls of building separate animals from all possible sources of infection

**Perimeter Buffer Area (PBA):** outer control boundary to minimize contamination near animal building(s); separate off-farm from on-farm movements of vehicles, people, animals
Line of Separation (LOS)
Line of Separation
3. Protecting the Herd

• Cleaning & Disinfection Station
  – Inclement weather (cold, storms)
  – Sheltered C&D area
  – Off-site location
  – Alternate delivery options
    • Auger feed across LOS
    • Dedicate drive paths
    • Load animals at perimeter using on-site trailers hauling to off-site trailers
Cleaning & Disinfection Station
5. Biosecure Entry Procedure
Challenges to Overcome

- Enough truck washes with clean water washouts
  - Not recycled water
- Location of truck washes
- Time involved to effectively clean

- Hauling pigs, then cattle
  - Potential spread of FMD virus
  - Both susceptible
- Swine industry cleans, disinfects, bakes trailers
  - Kills viruses
Biosecurity Resources
Recently Released

Enhanced Biosecurity for Cattle on Pasture

www.securebeef.org
Biosecurity Plan Templates

[NAME OF OPERATION] Enhanced Biosecurity Plan for FMD Prevention in [STATE]

Updated: [DATE CREATED OR UPDATED]

This Biosecurity Plan is based off of the Secure Beef Supply (SBS) Plan Self-Assessment Checklist for Enhanced Biosecurity, [NOVEMBER 2017] and was developed using guidance from the SBS Information Manual for Enhanced Biosecurity for FMD Prevention: Cattle on Pasture. All documents are available at www.securebeef.org. In our plan below, all items have been implemented except those indicated which will be implemented prior to requesting an animal movement permit.

Scope of Biosecurity Plan

Describe the Premises:

- National Premises Identification Number (Prem ID or PIN): [PIN] (request from the office of the State Animal Health Official)
- Premises Address: [A VALID 911 ADDRESS]
- Premises GPS Coordinates: [LATITUDE, LONGITUDE]
- Animals* on primary premises: [ALL SPECIES] and [NUMBER OF ANIMALS]
- Animal housing types: [E.G. BUILDINGS, PASTURES, DRY LOTS]
- Other business operations on premises? [YES OR NO]
  - If yes, what? [E.G. VEGETABLE STAND, SALE OF FEED, FERTILIZER, OR COMPOST; HOSTING FARM TOYS]
- Secondary premises** locations: [LIST THE PINs, 911 ADDRESSES, OR GPS COORDINATES (LATITUDE, LONGITUDE) WHERE ANIMALS ASSOCIATED WITH THIS OPERATION RESIDE (E.G., AFFILIATED FARMS)]
  - Will be provided if this premises is located in an FMD Control Area
  - *Work with your State Animal Health Official to determine if separate PINs are needed for all of your associated premises.

*Animals that are susceptible to FMD include cattle, pigs, sheep, and goats. For biosecurity guidance for dairy cattle and pigs, see www.securebeef.org and www.securepork.org.

**Work with your State Animal Health Official to determine if separate PINs are needed for all of your associated premises.

Biosecurity Manager and Written Plan

The designated Biosecurity Manager for this premises and their contact information follows:

NAME:
PHONE: [XXX-XXX-XXXX]
EMAIL: [EMAIL ADDRESS]

In the event the Biosecurity Manager is away from the operation, their designate’s contact information is:

NAME:
PHONE: [XXX-XXX-XXXX]
EMAIL: [EMAIL ADDRESS]

The Biosecurity Manager’s contact information is posted [DESCRIBE WHERE LOCATED].

[PERSON ONE NAME] and [PERSON TWO NAME] have the written authority to ensure compliance with biosecurity protocols and take corrective action as needed.

Personnel

Prior to Arriving at the Feedlot

The Biosecurity Manager ensure that everyone crossing the LOS on foot or exiting their vehicle inside the LOS has been instructed to arrive at the feedlot

- with a clean vehicle interior (free of all animal manure/excrement) that has not become contaminated by soiled clothes, footwear, or other items.
- having showered and wearing clean clothing and footwear since last contacting susceptible animals.
  - For individuals that work with animals and live on-site, showering and changing into clean clothing/footwear before leaving the house is required.
  - For individuals living off-site, after showering and changing into clean clothes and footwear, they must NOT contact animals, live or dead, or facilities where they are held prior to arrival at the feedlot.

Essential personnel who will travel to cross the LOS during an FMD outbreak include:

- 
- 

These individuals have a signed Employee and Visitor Arrival Agreement on file agreeing to follow our biosecure entry procedures (described below).

Entry Logbook

Everyone crossing the LOS Access Point(s) completes the entry logbook, which is located ________, unless they are a scheduled worker.

The entry logbook is monitored by __________________________ on the feedlot to ensure accurate completion.

The contact information and work schedule records for all workers are maintained and posted _________________.

Biosecure Entry Procedure

All individuals crossing the LOS on this feedlot must:

- Ensure that the inside of their vehicle is clean (free of all animal manure/excrement) prior to arrival and has not become contaminated by soiled clothes, footwear, or other items.
- Ensure they have showered and changed into clean clothes and footwear prior to arrival on the feedlot.
  - For individuals that work with the animals and live on-site, showering and changing into clean clothing/footwear before leaving the house is required.
  - For individuals living off-site, after showering and changing into clean clothes and footwear, they must NOT contact animals, live or dead, or facilities where they are held prior to arrival at the feedlot.

☐ Put on feedlot-dedicated clothing and footwear at the LOS Access Point, OR
☐ Put on clean coveralls/protection overwear and disposable or disinfectable footwear at the LOS Access Point or when they exit their vehicle on the cattle side of the LOS; AND

www.securebeef.org
Biosecurity Posters

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