

Secure Pork Supply (SPS) Plan for Continuity of Business



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Introduction

Foot and mouth disease (FMD), classical swine fever (CSF), and African swine fever (ASF) are highly contagious foreign animal diseases (FADs). FMD virus infects pigs and other cloven-hooved livestock, including cattle, sheep, goats, and deer. CSF virus and ASF virus only infect pigs. FMD and CSF were eradicated from the United States many years ago and ASF has never infected pigs in this country. These diseases are present in many other countries and cause severe animal production losses. However, FMD, CSF, and ASF are not public health or food safety concerns. Industry, state and federal officials have worked collaboratively with swine disease experts to develop response plans should one of these FAD viruses infect susceptible animals in the United States. Response strategies for controlling and stopping the spread of these animal diseases will include stopping movement of susceptible animals and their products, rapid identification of infected animals, strategic depopulation with proper disposal, and vaccination. Responsible Regulatory Officials (local, state, tribal, and federal officials, as appropriate) have the authority and responsibility to establish regulatory Control Areas around FAD infected premises and to manage animal and animal product (semen) movement within, into, and out of the Control Area.

Purpose of the Secure Pork Supply Plan

The goal of the Secure Pork Supply (SPS) Plan is to provide a workable business continuity plan for pork premises with no evidence of the FAD infection located in a regulatory Control Area and allied industries that is credible to Responsible Regulatory Officials. Continuity of business (COB) for the swine industry revolves around the ability to move animals located within a Control Area to slaughter and processing facilities and between production premises. Officials must balance the risks of allowing movement of animals to slaughter and processing facilities and between production premises against the risk of not allowing movement.

Participation is voluntary. Having the SPS Plan implemented prior to an FAD outbreak enhances coordination and communication between all stakeholders. It is intended to speed up a successful FAD response, and eventually enable the issuance of animal movement permits after the extent of the outbreak is understood. This will support COB for pork producers and allied industries who choose to participate.

The SPS Plan is the result of a multi-year collaborative effort by industry, state, federal, and academic representatives. Funding for its development was provided by USDA Animal and Plant Health Inspection Service (APHIS) and the National Pork Board. The SPS Plan provides guidance only. In an actual outbreak, decisions will need to be made by the Responsible Regulatory Officials and the industry based on the unique characteristics of the outbreak.

The **purpose of this document** is to provide a succinct overview of the SPS Plan and related resources for industry stakeholders and Responsible Regulatory Officials. It facilitates pork industry preparedness for, and response to, an FMD, CSF, or ASF outbreak.

Response Guidance Documents

There are several guidance documents for Responsible Regulatory Officials to use in an FAD outbreak and the SPS Plan aligns with them.

- **Strategic guidance for responding to FMD, CSF, and ASF** in the United States can be found

in the following *Foreign Animal Disease Preparedness and Response Plan (FAD PRoP)* documents:

- *Foot-and-Mouth Disease Response Plan: The Red Book*
www.aphis.usda.gov/animal_health/emergency_management/downloads/fmd_responseplan.pdf
 - *Classical Swine Fever Response Plan: The Red Book*
www.aphis.usda.gov/animal_health/emergency_management/downloads/csf_responseplan.pdf
 - *African Swine Fever Disease Response Strategy*
www.aphis.usda.gov/animal_health/emergency_management/downloads/asf_strategies.pdf
 - *Ready Reference Guides*, which accompany many of the detailed documents and material below, offer quick summaries of the information for training and educational purposes.
www.aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management/ct_fadprep_readyreferenceguides
- Strategies for a managed response to an FMD outbreak will change as the outbreak progresses (phase) and will depend upon the magnitude (type), location of the outbreak, vaccine availability, and other characteristics. These **pre-defined phases and types of an FMD outbreak** are described in the guidance document *FAD PRoP Classification of Phases and Types of a Foot-and-Mouth Disease Outbreak and Response*. This document helps facilitate the development of adaptable emergency response and business continuity plans for the U.S. livestock industry in the event of an FMD outbreak in North America.
www.aphis.usda.gov/animal_health/emergency_management/downloads/phases-and-types-of-an-fmd-outbreak_2013.pdf

Center for Food Security and Public Health (CFSPH) Drafts of Phases and Types documents for CSF and ASF are also available:

www.securepork.org/Resources/Phases-and-Types-of-a-CSF-Outbreak.pdf
www.securepork.org/Resources/Phases-and-Types-of-ASF-Outbreak.pdf

- **Surveillance, epidemiology, and tracing techniques** will be utilized by Responsible Regulatory Officials during the outbreak to detect new cases, understand and adapt to the outbreak situation, and provide information for decision making and disease control procedures. The USDA has developed the *FAD PRoP/National Animal Health Emergency Management System (NAHEMS) Guidelines: Surveillance, Epidemiology, and Tracing*. These activities likely will lead to additional regulatory activities such as quarantine and movement controls.
www.aphis.usda.gov/animal_health/emergency_management/downloads/nahems_guidelines/nahems_sur_epi_trac.pdf
 - **Animal surveillance** methods to demonstrate a lack of evidence of FMD, CSF, or ASF virus infection to allow animal movement to support business continuity without spreading infection are described in *Surveillance Guidance to Support the SPS Continuity of Business Plan during an FMD, CSF, or ASF Outbreak* available at:
www.securepork.org/Resources/SPS_Surveillance-Guidance.pdf.
- **Quarantine and movement controls** are critical activities to control FADs. These approaches include establishing a Control Area around each infected premises and issuing movement restrictions for pigs and other susceptible animals and their products in a Control Area. The USDA has developed the *FAD PRoP/NAHEMS Guidelines: Quarantine and Movement Control* to describe these measures.
www.aphis.usda.gov/animal_health/emergency_management/downloads/nahems_guidelines/nahems_qmc.pdf

- **Continuity of business (COB)** activities for premises with no evidence of infection in a Control Area aim to minimize disruptions to commerce caused by quarantine and movement restrictions and decrease the economic consequences of an FAD outbreak. The USDA has developed *FAD PReP/NAHEMS Continuity of Business (COB) Guidelines*. These guidelines provide the basis for managed movement --which is an important component of business continuity--of animals with no evidence of infection and their products from within a Control Area in an FAD incident. www.aphis.usda.gov/animal_health/emergency_management/downloads/nahems_guidelines/cob_nahems.pdf
- **Emergency response management** during an FAD outbreak involves considerable amounts of data, including investigation records, premises identification numbers, individual animal and herd-level laboratory test results, movement permits, and resource allocation information. Producers in a Control Area will be required to have a National Premises Identification Number (PIN) to request movement permits in an outbreak. PINs are available from the office of your State Animal Health Official. States are encouraged to transfer their premises data into the USDA Emergency Management Response System (EMRS) prior to any outbreak. EMRS is the USDA APHIS official system of record for all animal health incidents; therefore, all data needed to request movement permits will need to be entered into EMRS. This greatly facilitates response efforts. For more information, refer to *USDA Premises Data Transfer to EMRS from External/State-Based Systems, June 16, 2016* at: www.aphis.usda.gov/animal_health/emergency_management/downloads/emrs_premisesdatatransfer.pdf and *Introduction to EMRS Ready Reference Guide, May 2016* at: www.aphis.usda.gov/animal_health/emergency_management/downloads/emrs_rrg_intro.pdf.

Managed Movement of Animals in an FAD Response

An effective strategy for managing FAD outbreaks involves stopping movement of susceptible animals and their products (semen) for a period of time. Movement restrictions will be put in place for the regulatory Control Area(s) to limit risk of disease spread by animals, animal products, vehicles, and other equipment. Movement will be by permit only which will be issued based on the risk posed by movement of that item and the site's ability to meet permit requirements. Production sites that follow the guidance in the SPS Plan will be better prepared to request a movement permit. At the beginning of an FAD outbreak, several days or weeks may be needed before the livestock industry, federal and state officials have sufficient knowledge of the extent of the outbreak to have confidence that animals with no evidence of infection can be moved safely without contributing to disease spread. A summary of movement permit guidance is provided in Table 1.

It is the Responsible Regulatory Officials' responsibility during an outbreak to detect, control, and contain the FAD as quickly as possible with the ultimate goal of eradication. Responsible Regulatory Officials managing the incident will make permitting decisions regarding the movements of animals and animal products (semen,) within, into, out of, and through Control Areas based on the unique characteristics of the outbreak, the status of the premises, and the potential risks and mitigations involved with the types of movement.

It is the producer's responsibility during an FAD outbreak to keep his/her animals from becoming infected, focusing on what producers can control on their production site. To facilitate business continuity (movement), producers will need to provide assurances to the Responsible Regulatory Officials that they are not contributing to the spread of disease nor putting their own animals at risk of exposure. Some movements carry more risk than others. Biosecurity will be paramount to limiting disease spread. An enhanced biosecurity plan increases individual preparedness to maintain COB in the face of an FAD outbreak. Producers should be ready to provide evidence that they have implemented all of the enhanced biosecurity measures recommended in the SPS biosecurity checklist when requesting an animal movement permit.

Additionally, producers should be prepared to manage their pig premises if they are not allowed to move

animals for several days or weeks. Such contingency plans will be important to implement during the timeframe Responsible Regulatory Officials are conducting appropriate surveillance to demonstrate a lack of evidence of disease and more confidence that an animal movement does not present a significant risk for disease spread.

Packers and processors are essential to the success of business continuity for the pork industry during an FMD, CSF, or ASF outbreak. FMD, CSF, and ASF are not public health or food safety concerns. Therefore, animals which pass ante-mortem and post-mortem inspection by USDA Food Safety Inspection Service (FSIS) are safe and wholesome for human consumption, even if they are in the pre-clinical or recovery stage of an FMD, CSF, or ASF infection. Many packing plants have on-site rendering capacity for non-edible products, so any virus in those products would be destroyed. Processing all healthy animals in the slaughter facility and in transit to the facility is the fastest way to eliminate virus amplification and further spread of FMD, CSF, or ASF. Processing preserves high quality protein for human consumption and reduces the need for carcass disposal. Processing healthy animals from a regulatory Control Area should continue even if FMD, CSF, or ASF infected animals are suspected or proven to already be in the packing plant. Product that has passed FSIS inspection is safe and wholesome for human consumption, and potentially may be released into commerce for human consumption.

Packing plant employees, truck drivers, and others who contact animals or their bodily fluids must observe proper biosecurity protocols to avoid transmitting the FMD, CSF, or ASF virus to susceptible animals when these individuals leave the plant. All personnel must be instructed on biosecurity steps to follow prior to and after leaving the plant.

For more information about managed movement of animals in an FAD response, please see *Factors to Consider in Implementing Controlled Movement of Swine in the U.S. to Reduce the Transmission and Impact of a Foot and Mouth Disease Outbreak*, available at: www.securepork.org/Resources/SPS-Plan_Update_AppendixD_ControlledMovt_28Jan2016.pdf.

Participation in the SPS Plan includes guidance for producers and packers (when requesting) and officials (when evaluating requests) for animal and/or product movement permits. There may be additional requirements depending on the scope of the outbreak. Following the guidance in the SPS Plan could enable movement sooner, once animal movement is resumed.

Participation in the Secure Pork Supply Plan

During an outbreak, premises in a regulatory Control Area that need to move animals with no evidence of an FAD infection may need to comply with the SPS Plan guidelines to request and receive a movement permit, provided their state participates in the SPS Plan. Responsible Regulatory Officials also may implement additional requirements depending on the scope of the outbreak. All interstate movements additionally must meet existing movement/state entry requirements in addition to these outbreak-specific conditions. Implementing the guidance outlined in the SPS Plan before an outbreak decreases the risk of disease spread as well as facilitating the eventual issuing of movement permits, for premises with no evidence of infection, and for allied industries.

To Prepare Prior to an Outbreak:

Request a National Premises Identification Number (PremID or PIN) from the office of your State Animal Health Official: Having a PIN facilitates requesting movement permits during an outbreak. A PIN includes a valid 911 address and a set of matching coordinates (latitude and longitude) reflecting the actual location of the animals on the premises. A PIN is required for both the premises of origin and premises of destination. When a premises becomes infected, all premises with the same PIN number will be considered to be infected. Generally, it is best to have separate PIN numbers for premises more than ¼ mile apart. Producers and packers are encouraged to validate their PIN with the National Pork Board to ensure their information on file accurately represents the location of the animals and not a mailbox at a residence or business affiliated with the animal premises. Validated PINs speed up communication and

response during an outbreak.

Implement enhanced biosecurity: Stringent biosecurity measures are essential to prevent entry of virus into each herd. Pig premises with animals raised indoors should review the items in the *Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals Raised Indoors*, (Biosecurity Checklist) and work with their veterinarian to develop a site-specific biosecurity plan addressing each item in the checklist. Additional documents for pigs raised outdoors are in development. The Biosecurity Checklist, *Information Manual for Enhanced Biosecurity for Pork Production: Animals Raised Indoors* and biosecurity templates (to assist in writing the biosecurity plan), and materials for educating individuals that work on the site (in English and Spanish) are available on the SPS website: www.securepork.org. A majority of the biosecurity measures in the Biosecurity Checklist should be implemented even in the absence of an FAD outbreak to prevent entry and spread of domestic diseases.

Designate individuals on production sites who will conduct surveillance and sample collection: The document, *Surveillance Guidance to Support the SPS Continuity of Business Plan during an FMD, CSF, or ASF Outbreak*, summarizes surveillance options for pig premises within a Control Area to demonstrate a lack of evidence of FMD, CSF, and ASF virus infection to support continuity of business movements. Designated individuals on each production site should be trained to collect oral fluid and nasal swab samples. Videos and handouts for oral fluid collection and handouts for nasal swab collection are available to assist in training (in English and Spanish) at: www.securepork.org/training-materials.php. Producers should ask their herd veterinarian if they are accredited by the USDA. If not, they should establish a relationship with one, as they may be a necessary component of surveillance during an outbreak. A veterinarian who is accredited by the USDA should lead this training. These designated individuals should periodically practice sample collection, and sample collection supplies should be maintained on the premises. The herd veterinarian should know which approved diagnostic laboratory within the National Animal Health Laboratory Network they can submit the samples to for testing during an FAD outbreak. Having designated individuals on the site trained and ready to collect and submit samples will enable the premises to start surveillance sampling as soon as they find themselves in a Control Area and are requested to submit samples. Diagnostic tests to be performed and sampling protocols may evolve throughout the outbreak based on new knowledge and technology. Protocol options for surveillance will be determined by Responsible Regulatory Officials.

Animal caretakers should be able to recognize abnormal findings (clinical signs and/or changes in production parameters) associated with FMD, CSF, and ASF, and be able to document that there is no evidence of an FAD virus infection in their herd through Active Observational Surveillance (AOS). Educational materials will be available soon in English and Spanish on the SPS website at www.securepork.org/training-materials.php. Materials include presentations, handouts, and posters that visually depict clinical signs of FMD, CSF, and ASF in pigs.

Record keeping templates also are available for sites that do not already have a system to document health observations, and feed and water intake.

Maintain movement records: Premises in a Control Area will be required to provide epidemiological information at the beginning of an outbreak to identify potential previous exposure to the disease. Maintaining accurate records of movement of animals, feed, supplies, equipment, personnel, and visitors enables producers to provide accurate trace-back epidemiological information. In addition, producers should maintain records of the names, addresses and telephone numbers of animal transporters (truckers), employed personnel, feed suppliers, etc. Maintaining electronic records is preferred when possible, but paper copies are also acceptable. If needed, sample movement logs can be found at www.securepork.org. The document *SPS Producer Information needed to Request a Secure Food Supply Movement Permit* highlights the type of information to record. This information will be used to determine the scope of the outbreak but it can be daunting to provide a lot of detail on short notice. Producers can use the *Secure Pork Supply Practice Questionnaire* to get a feel for what it is like

to provide the information needed in an outbreak. Both documents are available at www.securepork.org.

To Request a Secure Food Supply Movement Permit During an Outbreak

Before requesting a Secure Food Supply movement permit for pigs or semen, both the premises of origin and the premises of destination, including packing plants, need to have a National PIN, and the premises and State of destination need to be willing to accept the risk of receiving animals. Each premises requesting a movement permit must be registered through the office of their State Animal Health Official and/or established as a premises in the USDA's Emergency Management Response System (EMRS) before requesting a permit. For premises participating in the SPS Plan, permits should be requested through the EMRS Customer Permit Gateway or similar State-approved permitting request system that is capable of exporting data required for USDA APHIS EMRS during an outbreak, or vice versa. If a State elects to use their own information management system to handle permitting, the information must, in near real-time, be linked into EMRS, especially for interstate movements where approval of both origin and destination State must be granted and Unified Incident Command be informed. EMRS is the USDA APHIS official system of record for all animal health incidents (See: www.aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management/sa_emrs).

Further information on Secure Food Supply permits and permitted movements is available in the document *FAD PReP Manual 6-0: Permitted Movement*, available at https://www.aphis.usda.gov/animal_health/emergency_management/downloads/documents_manuals/fadprep_man6-0_permit-mvmt.pdf. It contains detailed information on the different types of permits and movements as well as thorough explanations of the permitting process.

Provide the following information (it will be recorded in EMRS):

- Permit class—where you want to move animals or animal products in relation to the Control Area (such as out of Control Area).
- Permit reason—why you want to move animals or animal products (such as direct to slaughter).
- Origin premises—premises location including validated National PIN must be entered in a State information system. For permits issued by EMRS or the EMRS Gateway, the National PIN must be entered into EMRS. (State information systems and EMRS will share data before or during incidents.)
- Destination premises—premises location including validated National PIN must be entered in a State information system. The destination premises must sign a statement that they understand the risk of accepting animals from the regulatory Control Area. For permits issued by EMRS or the EMRS Gateway, the National PIN must be entered into EMRS. (State information systems and EMRS will share data before or during incidents.)
- Item(s) permitted—category of what you want to move (feed, animals, manure, etc.).
- Item class—specifically what is moving (such as boars to slaughter).
- Duration/span of permit—first movement date, how long the permit is valid, and over what time period movements are expected to occur.

For any permitted movement, the Origin State can request documentation from the premises making the request, and attach that documentation to the permit request in EMRS or make the information available through a workable data management system. This documentation may include:

- Epidemiological information
- A completed copy of the Biosecurity Checklist and the site-specific biosecurity plan
- Written assurance by the producer of compliance with this Biosecurity Checklist or documentation of verification by a third party such as a SPS Verifier
- Information demonstrating normal health status for the animals on the production site involved

(such as swine health monitoring documents and/or Certificate of Veterinary Inspection signed by an Accredited Veterinarian at the time the animals are loaded)

- Diagnostic testing results from samples tested. When submitting samples for testing, it is imperative that the National PIN for the location sampled always is included with the diagnostic submission. (The recommended type and number of samples to collect and frequency of collection are being developed.)
- For animal movements to another production site, the destination premises must indicate that they understand and accept the risks associated with receiving the animals.

Completed movement permit requests will be reviewed first by the Origin State. The permit can be recommended for approval to the Destination State, not recommended for approval to the Destination State, or rejected. If approved by the Origin State, then the Destination State reviews and approves or rejects the permit. The destination premises also may have the ability to reject a permit. If the permit request is not approved, an explanation for denial will be provided. If approved, the producer will receive the approved permit (likely as an electronic PDF) from the appropriate official working to inform Unified Incident Command; it is also available for download directly from the EMRS Gateway. The permitted movement must comply with all requirements on the permit; all subsequent permitted movements associated with that permit must be submitted to and recorded in EMRS through the permit Gateway or State-approved data information system for permits.

Table 1. Summary of Movement Permit Guidance for Pigs or Semen located within a Control Area during an FMD, CSF, or ASF Response

Permitting Guidance for Movement of Pigs or Semen	Condition Met?
1. Traceability information is available (PIN, GPS Coordinates, and information on type and number of animals /quantity of semen to be moved)	Yes
2. Biosecurity measures listed in the Biosecurity Checklist are in place and acceptable to Responsible Regulatory Officials	Yes
3. Epidemiological information is acceptable	Yes
4. Destination premises and State are willing to accept the animals or semen	Yes
5. No evidence of infection based on surveillance	Yes
6. Permit guidance to move pigs or semen if all above responses are “Yes”	Consider Issuing MOVEMENT PERMIT

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Comments

Please send comments or suggested edits for improvement to: spsinfo@iastate.edu

Additional Resources

The Secure Pork Supply website has additional resources available at: www.securepork.org