U.S. Pork Industry Guide to the Secure Pork Supply Plan
Does foot and mouth disease (FMD), classical swine fever (CSF) or African swine fever (ASF) cause disease in people like it does in animals?

- FMD, CSF or ASF are not public health or food safety concerns.
- Meat and milk processed from FMD-, CSF-, or ASF-infected animals is safe to eat/drink.
- FMD virus is not the same virus that causes hand, foot and mouth disease in humans.

More FMD information is available at FMDinfo.org.

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INTRODUCTION

If foot and mouth disease (FMD), classical swine fever (CSF) or African swine fever (ASF) is confirmed in the United States, movement restrictions for susceptible livestock will be put into place by Regulatory Officials (local, state, tribal and federal officials, as appropriate). The restrictions are designed to control the spread of these highly contagious animal diseases by animals, animal products, vehicles and other equipment. Officials will set up regulatory Control Areas (areas where premises are quarantined and movement is restricted) around infected premises and movement of livestock will only be allowed by permits. For a permit to be issued, Regulatory Officials will require premises to demonstrate certain criteria that reduces the risk of disease spread from the movement. Permitting guidance can be found in the Secure Pork Supply (SPS) plan for continuity of business.

The SPS plan provides opportunities to voluntarily prepare before a foreign animal disease (FAD) outbreak. This will better position pork premises with animals that have no evidence of infection during the outbreak to move animals to processing or another pork production premises under a movement permit.

FMD, CSF and ASF are not public health or food safety concerns. Meat will remain safe to eat.

HOW CAN I PREPARE?

Review the information in this handout and at securepork.org to learn about the components of the SPS plan. Here is a highlight of the steps producers can take:

- Request a national premises identification number (PIN) from the office of your State Animal Health Official (most commonly state veterinarians). Verify that the address associated with the PIN reflects the actual location of the animals.
- Keep movement records of animals, people, equipment and other items.
- Write and implement your enhanced site-specific biosecurity plan.
- Train caretakers in biosecurity.
- Train caretakers to monitor for FMD, CSF or ASF.
- Be prepared to collect samples: oral fluid, nasal swab and blood.

Why are FMD, CSF and ASF the diseases included in the SPS plan?

FMD, CSF and ASF are all very contagious animal diseases that will severely limit trade with other countries if detected in the United States.
ACQUIRING AND USING THE PREMISES IDENTIFICATION NUMBER (Prem ID or PIN)

What is a premises identification number (PIN)?
A PIN is a unique identifier that includes a valid 911 address and a set of matching coordinates (longitude and latitude) reflecting the actual location of the animals on the premises.

How do I get a PIN?
A PIN can be requested from the office of your State Animal Health Official (find via securepork.org).

What if the address associated with my PIN is not correct?
If the address with your PIN does not reflect the actual location of the animals, contact your State Animal Health Official to resolve the issue.

Can one PIN be used for animals owned by the same person, but housed in multiple locations?
PINs serve as a method of locating animals in a Control Area during an outbreak and are also included on movement permits. It is important that the PIN reflect the actual location of the animals (latitude, longitude). If you have multiple or adjoining locations with animals, contact your State Animal Health Official for guidance on how many PINs may be needed.

Why is a PIN important during a foreign animal disease outbreak?
In an outbreak, a PIN will allow producers to be notified if they are in a regulatory Control Area, which will speed up a response. A PIN also is required when requesting a movement permit. When added to diagnostic laboratory submissions, it can help link test results and other important information to a premises, which may allow a permit to be issued sooner.

Should I be utilizing my PIN before an outbreak?
In preparing for an outbreak, the PIN should be included on movement records and diagnostic sample submissions. Labels containing a barcode of your PIN can be printed at lms.pork.org/premises.
KEEPING MOVEMENT RECORDS

FMD, CSF and ASF virus can spread on contaminated vehicles, equipment and even on people’s clothing and footwear. In an outbreak, producers may be asked by Regulatory Officials to provide accurate trace-back information to identify potential virus exposure. Maintaining accurate records for animal movement, feed, supplies, equipment, personnel and visitors enables producers to provide accurate trace-back information.

How can I prepare prior to an outbreak?

- 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 also may be acceptable. If needed, sample movement logs can be found at securepork.org.

- Completing a practice questionnaire, available at securepork.org, will help producers get a feel for what it is like to provide the information needed in an outbreak. The information will be used by Regulatory Officials to determine the scope of the outbreak. It can be daunting to provide a lot of detail on short notice, so practicing in advance of the outbreak situation will help.

- Tracking movement information prior to an outbreak helps to ensure producers will be better prepared to provide information to Regulatory Officials when requested during an outbreak.
ENHANCED BIOSECURITY:
The role of the biosecurity manager and writing the biosecurity plan

Stringent biosecurity measures are essential to prevent entry of diseases into a herd. Existing biosecurity plans for pork production sites may offer protection against endemic diseases, but heightened precautions are needed for foreign animal diseases. Writing, implementing and assessing enhanced biosecurity plans will help prevent exposing animals to FMD, CSF or ASF.

The enhanced biosecurity recommendations outlined in the *Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals Raised Indoors* are based on known exposure routes of FMD, CSF and ASF. This document emphasizes four concepts that all pork production sites must implement to help protect their animals from endemic diseases and to be prepared in the event of a FAD outbreak in the United States:

1. Designating a biosecurity manager,
2. A written site-specific enhanced biosecurity plan,
3. A defined perimeter buffer area, and
4. A defined line of separation.

Who is a biosecurity manager and what is their job?

A biosecurity manager is an individual designated by the site owner/manager (or is the same person). He/she is responsible for developing the site-specific enhanced biosecurity plan with the assistance of the herd veterinarian (if the biosecurity manager is not a veterinarian) and ensuring biosecurity training of, 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.

How can I prepare prior to an outbreak?

- Review the items in the *Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals Raised Indoors*.
- Assign a biosecurity manager who will work with the veterinarian to develop a site-specific, enhanced biosecurity plan to address each item in the checklist. Additional resources, including the *Information Manual for Enhanced Biosecurity for Pork Production: Animals Raised Indoors* and biosecurity templates, are available at securepork.org to assist in writing the biosecurity plan.
- Implement biosecurity measures in the site plan that can be implemented prior to an outbreak.
- Be prepared to share your plan with State Animal Health Officials prior to an outbreak (if requested).

Note: Additional documents for pigs raised outdoors are being developed.

Already have a biosecurity plan?

Compare your existing biosecurity plan to the checklist items and make sure that all the items are included in your site-specific plan. If they are not all included, enhance your biosecurity plan.
ENHANCED BIOSECURITY: The Perimeter Buffer Area (PBA) and the Line of Separation (LOS)

Perimeter Buffer Area (PBA)
A perimeter buffer area is an outer control boundary around the buildings to limit movement of the virus near animal housing. The PBA should be set up so that caretakers can perform duties within it during the course of their daily tasks and so that routine deliveries occur outside of the PBA as much as possible. The PBA needs to be clearly defined in the biosecurity plan and clearly marked around animal buildings on the premises.

Entry to the PBA is restricted to controlled PBA access points. Each PBA access point needs to be clearly marked with a sign and protected with a suitable barrier (e.g. cable, gate, rope). Vehicles moving through the PBA access points must be cleaned to remove visible contamination and then disinfected. All individuals and equipment moving through PBA. Access points are required to follow specific biosecurity measures.

Line of Separation (LOS)
The Line of Separation is a control boundary to prevent movement of virus into areas where susceptible animals can be exposed. For animals raised indoors, the walls of the building housing the animals form the LOS. The LOS needs to be defined in the biosecurity plan and clearly marked on the premises.

Animals, people or items only cross the LOS through clearly marked and controlled LOS access point(s) following appropriate biosecurity measures.

Each LOS access point should be clearly marked with a sign in a language understood by all entering. Equipment, people and items crossing through the LOS access points follow specific biosecurity measures. While the load-out area is a LOS access point, it should not serve as an entry point for personnel when possible. All movement (animals, equipment, people) across the LOS are recorded and available for review on request.
BIOSECURITY TRAINING

The biosecurity plan can only work if EVERYONE on the site follows it ALL of the time, which requires training and education. To build a biosecurity culture on the farm, everyone on your farm must understand why certain procedures matter and the potential fallout if they aren’t followed. This training not only benefits the animals in their care, but provides job security for caretakers.

Effective training can be done through one-on-one or group sessions – whatever works best for the individuals and their learning style. Some production sites already may have a biosecurity training approach. Forms to document training and additional resources are available at securepork.org.

The following videos and materials (available in English and Spanish) provide caretakers with some of the information they need to be part of the herd health protection team. Remember to document all training.

Five Biosecurity Training Videos

1. Introduction to Biosecurity: Why it is important to follow biosecurity measures?
2. Do Not Bring Disease to the Site: Biosecurity measures to follow to avoid bringing diseases to a production site
3. Perimeter Buffer Area (PBA): What is the PBA and what are the biosecurity measures to follow when entering the PBA?
4. Line of Separation (LOS): What is the LOS and what are the biosecurity measures to follow when crossing the LOS
5. Biosecure Bench Entry

Biosecurity Signs

Several biosecurity signs have been made for use on pork production sites.

- Do Not Enter – Cross Only only at Biosecure Entry Point
- Authorized Personnel Only
- Biosecure Entry Ahead

Biosecurity Posters

These full-color 11" by 17" posters for educational use can be downloaded at securepork.org or ordered from the Pork Store at porkstore.pork.org.

- Producers and Employees: How to Protect Your Herd
- Attention Visitors: Visitors Are a Potential Biosecurity Risk

Photo Credit: USDA APHIS Foreign Animal Disease Diagnostic Laboratory and Alex Ramirez at Iowa State University College of Veterinary Medicine

**ATTENTION VISITORS**

VISITORS ARE A POTENTIAL BIOSECURITY RISK

Plastic bags are provided for discarding any food and wearing gloves before entering and after leaving the production site. The use of a plastic bag will reduce the introduction of contamination in a production site. Clean and disinfect essential vehicles and equipment used on the farm. Always follow farm policy concerning general hygiene. Take off jewelry and change into clean clothes and footwear before conducting work on the site. A clean changing area should be provided, and all employees should shower at home before and directly after work and after coming in contact with animals or areas where diseases are present.

Due to the unavailability of high quality SVD photos and considering that the lesions produced by FMD and SVD infection look similar, FMD and SVD should be differentiated by serology. A cerebrospinal fluid (CSF) sample should be submitted for diagnostic testing as soon as possible. "Erosion of tip of lower lip" and "Vesicle in interdigital area" are signs of SVD. "Blanched coronary band" and "Dewclaw interdigital ulceration at coronary band" are signs of FMD. Other signs of SVD include "Erosion of tip of lower lip", "Vesicle in interdigital area", "Erosion of dewclaws", "Erosion of coronary band", "Blanched coronary band", "Dewclaw interdigital ulceration at coronary band".

By following a few simple steps, employees can prevent disease introduction into a herd. Contact your veterinarian or State or Federal animal health authorities if you think a disease case has been observed. Due to the unavailability of high quality SVD photos and considering that the lesions produced by FMD and SVD infection look similar, FMD and SVD should be differentiated by serology. A cerebrospinal fluid (CSF) sample should be submitted for diagnostic testing as soon as possible. Not all countries are currently free of SVD and there may have been a recent increase in FMD cases in nearby countries. The USDA’s website:

securedpork.org
DISEASE MONITORING

Animal caretakers should be trained to recognize abnormal findings (clinical signs and/or changes in production parameters) associated with FMD, CSF and ASF, as well as be able to document that there is no evidence of these infections in their herd. Disease monitoring involves close observation, or surveillance of animals. Use the resources on securepork.org to help understand the clinical signs caused by these diseases. Looking for the clinical signs daily can help demonstrate no evidence of infection, so a movement permit can be requested in an outbreak.

- **Observe!** Learn how to recognize when animals look “off” due to FMD, CSF or ASF.
- **Record!** Prepare to keep records.
- **Report!** Develop an emergency action plan so everyone knows how to report abnormal findings during an outbreak.

Educational materials are available in English and Spanish at securepork.org. 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, as well as feed and water intake.

**Swine Health Monitors**

Producers are encouraged to designate one or more swine health monitors. They are people who normally look at the pigs and can recognize when something is off. Resources available at securepork.org will help swine health monitors find disease early or demonstrate no evidence of infection so a movement permit can be requested in an outbreak. Remember to document all training.
SAMPLE COLLECTION

Disease monitoring or surveillance of animals for FMD, CSF and ASF involves testing animals for disease. Producers can review the sample collection resources at securepork.org and discuss with their veterinarian to determine ifcaretakers are prepared to collect diagnostic samples in a large 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.

How can I prepare before an outbreak?

- Train designated individuals on each production site to collect oral fluid and nasal swab and blood samples. A veterinarian who is accredited by the USDA should lead this training. Producers should ask their herd veterinarian if they are accredited by the USDA. If they are not, establish a relationship with veterinarians who are accredited because they may be necessary for surveillance during an outbreak. A sample collection certification program is being developed.

- Have these designated individuals periodically practice sample collection and maintain sample collection supplies for the premises.

- Videos and handouts for oral fluid collection and handouts for nasal swab collection are available to assist in training (in English and Spanish) at securepork.org.

FREQUENTLY ASKED QUESTIONS: FADs and the SPS Plan

1. What is the benefit of the SPS plan?
The benefit is realized in a FMD, CSF or ASF outbreak when healthy animals are more easily permitted to be moved to the packer or the next stage of production. The SPS plan provides resources to help sites prepare ahead of time rather than during the chaos of an outbreak. This benefits the animals and those involved in the pork industry.

2. If the United States hasn’t had a case of FMD since 1929, why do we need to spend time and effort preparing now?
There is always a risk of FMD being introduced into the United States due to extensive international trade and travel. This highly contagious livestock disease is present in about two-thirds of the countries in the world. Research suggests that an outbreak of FMD, CSF or ASF in the United States could result in losses of $15 to $100 billion. The USDA and the National Pork Board value preparedness and have funded the Secure Pork Supply plan to help producers prepare.
3. How much does it cost to prepare as recommended in the SPS plan?
   The cost varies depending on your level of preparedness. Preparedness is similar to insurance. There is a cost investment relative to the assets that need protection. It is hard to put an exact dollar value on it, but preparing before an outbreak could be a great investment.
   • Requesting a premises identification number (PIN) is free.
   • Putting all of the biosecurity measures in place to keep FMD, CSF or ASF off a site can add cost. However, writing an enhanced biosecurity plan ahead of time costs very little.
   • Free resources for training employees about biosecurity and surveillance are available online.

4. What measures in the SPS plan will be required by my packer, state or the federal government?
   The SPS plan provides guidance only with opportunities to voluntarily prepare before a FMD, CSF or ASF outbreak. Each state can determine what guidance to use. Contact your state animal health official to discuss what might be required in an outbreak.

5. My pigs get shipped to another state. Do all states follow the SPS plan?
   The SPS plan was developed nationally and each state can determine what guidance to use. Contact your State Animal Health Official to discuss your animal movement needs and learn what might be required in an outbreak.

6. Do the biosecurity measures need to be audited?
   Some states are conducting audits or pre-certification prior to a FMD, CSF or ASF outbreak. This may involve visiting the site, reviewing the enhanced biosecurity plan and discussing animal movement on and off the site. This may become a component of the Pork Quality Assurance® Plus (PQA Plus®) site assessment.

7. Are there Secure Food Supply plans for other livestock?
   Yes, there are Secure Food Supply plans for beef and dairy cattle. The Secure Pork, Milk and Beef Supply plans were developed together, so recommendations are similar with species-specific differences where needed. More information is available on the Secure Milk Supply website and Secure Beef Supply website.

8. Who is a regulatory official?
   Regulatory officials are local, state, tribal and federal officials who have the authority and responsibility to respond to foreign animal disease outbreaks.

9. Where can I get more information about FMD, CSF and ASF?
   • FMD affects cloven-hooved animals, such as cattle, pigs, sheep and goats.
   • CSF and ASF affect only pigs.
   • FMD, CSF and ASF are not public health or food safety concerns.
   • Meat and milk are safe to consume.
   • More information is available at securepork.org, FMDinfo.org and at cfsph.iastate.edu.

10. Why aren’t animals vaccinated now for FMD, CSF or ASF before an outbreak?
    • Watch the 8-minute FMD Vaccination video at securepork.org.
      • Effective FMD vaccines do exist, but they are strain-specific (most strains require their own vaccine and do not cross-protect against infection from other strains, also known as subtypes).
      • There are many different strains of FMD circulating in the world, and it is hard to predict with certainty which ones will enter the United States.
    • Vaccinating for FMD or CSF has international trade repercussions, which would limit the ability of the United States to export pork.
    • An ASF vaccine is not available.