

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

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## Target Audience

This checklist and corresponding Information Manual for Enhanced Biosecurity are written for pork production sites where the animals are raised in enclosed animal buildings. The biosecurity measures apply to:

- Sites with several buildings or just one as long as all the pigs are raised indoors.
  - This includes sites with other susceptible species (e.g. cattle, sheep, and goats) kept on the premises.
- All individuals delivering to, servicing, or working on the site including family members and/or non-family employees responsible for animal care and husbandry.
- Sites that have **never been infected with or vaccinated for** foot and mouth disease (FMD), classical swine fever (CSF), and African swine fever (ASF).

## Introduction

In the event of a foreign animal disease (FAD) outbreak in the United States (U.S.), maintaining business continuity for the pork industry is critical to the agricultural economy, food security, as well as animal health and well-being. The goal of the Secure Pork Supply (SPS) Plan is to provide a workable business continuity plan for pork producers that have pigs with no evidence of the FAD infection and associated industries that is credible to Responsible Regulatory Officials (local, state, tribal, and federal officials, as appropriate). In an actual FAD outbreak, decisions will be made by Responsible Regulatory Officials based on the unique characteristics of each outbreak.

**During an FAD outbreak, it is the producer's responsibility to keep their animals from becoming infected, focusing on what they can control on their site.** Biosecurity approaches are both structural and operational. Structural biosecurity is built into the physical construction and maintenance of a facility. Operational biosecurity involves management practices designed to prevent the introduction and spread of disease agents onto or off of the production site. An FAD will test the effectiveness of operational biosecurity practices because successful implementation of these practices depends on the awareness and behavior of individuals on the site.

The three foreign animal diseases of concern for the SPS Plan are 1) foot and mouth disease (FMD), 2) African swine fever (ASF), and 3) classical swine fever (CSF), also known as hog cholera. All three diseases are highly contagious and have a high impact on animal health and international trade; however, none of these diseases pose a food safety or public health concern.

Existing biosecurity plans for pork production sites may offer protection against endemic diseases but heightened precautions are needed for FADs. The enhanced biosecurity recommendations outlined in this document are based on the known exposure routes for the three FADs of concern. 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 an FAD outbreak in the U.S.:

1. A Biosecurity Manager,
2. A written site-specific enhanced biosecurity plan,
3. A defined Perimeter Buffer Area, and
4. A defined Line of Separation.

This enhanced biosecurity checklist and the corresponding Information Manual for Enhanced Biosecurity can be used to develop a site-specific, written, enhanced biosecurity plan. All pork production sites must designate a Biosecurity Manager; this is item number 1 in the checklist below. The Biosecurity Manager develops the enhanced biosecurity plan PRIOR TO an outbreak; the plan addresses items 2-10 on this checklist. The biosecurity plan describes the scope of the operation, contains forms for documentation of training and signatures, explanations of procedures and signage used on the premises, and protocols written and communicated effectively in languages that are fully understood by the individuals responsible for implementation.

The biosecurity plan should describe the strategy for how each item could be implemented (supplies needed, changes in management practices, etc.). 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. If producers have not implemented all of the items in the biosecurity checklist (such as a Cleaning & Disinfection Station at the entrance to the Perimeter Buffer Area) prior to the outbreak, they should implement them immediately when an FAD is detected in the U.S., Mexico, or Canada. If their production site is located in an FAD Control Area, Responsible Regulatory Officials will likely require that all of the items on the checklist, and possibly others, be implemented before animal movement is permitted.

## **Scope of Biosecurity Plan**

Each premises must have its own biosecurity plan. Begin by defining your premises, clearly describing the animals (all species) and animal housing associated with the premises. Animals connected to the operation but reared at another site and accessed via a public road may be considered a separate premises, have a separate Premises Identification Number (PIN), and therefore, a separate biosecurity plan. Biosecurity plans for premises owned/managed similarly may have significant overlap. A PIN will be required to request 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. Request a PIN from the office of your State Animal Health Official.

Other businesses, animal or non-animal related, operated from the same premises should also be accounted for in the biosecurity plan. Some animal or animal product related examples could include sale or distribution of compost, feed, or a petting zoo. Non-animal examples could include seed sales or a repair shop. Keep this in mind when completing the checklist and writing the biosecurity plan.

### **Acknowledgments**

This Secure Pork Supply (SPS) Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals Raised Indoors was developed by the Center for Food Security and Public Health (CFSPH), Iowa State University (ISU), College of Veterinary Medicine and representatives from the swine industry, state and federal agencies, and academia. This material was made possible, in part, by a Cooperative Agreement from the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). Additional funding was provided by the Pork Checkoff.

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## Recommendations for Biosecurity

Each self-assessment checklist item has three possible responses, described below. Implementation of each component is essential to prevent virus entry and protect the health and well-being of the animals on the site.

- **In place:** All items are addressed in the biosecurity plan and are, or are capable of being, implemented on the pork production site as evidenced by visual inspection or by signed and/or dated documentation, as applicable, or as described.
- **In progress:** Some, but not all, of the items are addressed in the biosecurity plan and are, or are capable of being, implemented on the pork production site as evidenced by visual inspection or by signed and/or dated documentation, as applicable, or as described.
- **Not in place:** The items have not been addressed in the biosecurity plan or are not capable of being implemented on the pork production site.

## 1. Biosecurity Manager and Written Plan

A Biosecurity Manager is identified for the site. This individual is responsible for developing the 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.

In place

In progress

Not in place

A site-specific, written, enhanced biosecurity plan has been developed and implemented by the Biosecurity Manager. It is reviewed at least annually and whenever the site goes through a change that affects biosecurity (expands, adds a new aspect of the business, etc.). The biosecurity plan clearly defines the scope of the operation and includes biosecurity for other susceptible species kept on the premises. The biosecurity plan includes a premises map labeled with the site entry, Perimeter Buffer Area (PBA), Line of Separation (LOS), access point(s), cleaning and disinfection (C&D) station(s), designated parking, and carcass disposal/pickup location. The map indicates vehicle movements (animal transport vehicles, deliveries, etc.) and carcass removal pathways. The Biosecurity Manager ensures that all individuals entering the site frequently (weekly or more often) have access to a copy of the biosecurity plan.

In place

In progress

Not in place

## 2. Training

The Biosecurity Manager(s) and essential personnel are trained at least annually about the biosecurity measures necessary to keep an FAD out of the herd; training is documented. The Biosecurity Managers(s) informs individuals entering the site of the biosecurity measures they are to follow in a language they understand. Individuals are aware of the biosecurity concepts and procedures that apply to their specific areas of responsibility. The biosecurity plan describes the training required before entering this site.

In place

In progress

Not in place

### 3. Protecting the Pig Herd

#### Site Entry

Entry to the pork production site is restricted by a limited number of entry points. Each entry point is protected with a gate or suitable barrier (e.g. cable) which is locked when the facility is not attended. If a locked barrier is not possible at the site entrance (such as when a house uses the same driveway), a barrier must be present restricting access of unauthorized vehicles to the pork production facilities within the site. Signage at the site entry conveys access is restricted.

- In place       In progress       Not in place

#### Designated Parking Area

There is a clearly marked, designated parking area outside of the PBA, away from animal areas, for vehicles that will not enter the PBA and have not been cleaned and disinfected.

- In place       In progress       Not in place

#### Perimeter Buffer Area (PBA)

The site has a PBA(s), which is established to serve as an outer control boundary around the buildings to limit movement of the virus near animal housing. The PBA is established so that individuals can perform duties within the PBA during the course of their daily tasks and so that routine deliveries occur outside of the PBA as much as possible. The PBA is clearly defined in the biosecurity plan and is clearly marked around animal buildings on the premises.

- In place       In progress       Not in place

#### PBA Access Point(s)

Entry to the PBA is restricted to a limited number of controlled PBA Access Points. Each PBA Access Point is 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.

- In place       In progress       Not in place

#### Cleaning and Disinfection (C&D) Station

There is an operational, clearly marked, and equipped C&D station with the means to remove visible contamination and then disinfect vehicles, equipment, and items needing to enter the PBA at a PBA Access Point. The C&D station is operated by individuals who have received documented training in proper selection and use of personal protective equipment and the principles of C&D. Runoff from the C&D station is managed following state and local regulations, ensuring it does not enter waterways, animal housing, or on-farm traffic areas. The biosecurity plan contains contingency plans for vehicle and equipment C&D in inclement weather.

- In place       In progress       Not in place

#### Line of Separation (LOS)

The site has one or more LOS, which is established as a control boundary to prevent movement of virus into areas where susceptible animals can be exposed. In many situations, the walls of the building housing the animals form the LOS. The LOS is clearly defined in the biosecurity plan and is clearly marked on the premises. Animals, people, or items only cross the LOS through clearly marked and controlled LOS Access Points(s), following appropriate biosecurity measures. Areas

contaminated after loading/unloading animals are cleaned and disinfected according to the biosecurity plan.

- In place                       In progress                       Not in place

### LOS Access Point(s)

Crossing the LOS is restricted to a limited number of controlled LOS Access Points. Each LOS Access Point is 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 movements (animals, equipment, people) across the LOS are recorded and available for review upon request.

- In place                       In progress                       Not in place

### Securing the Buildings

Buildings are locked when no one is present.

- In place                       In progress                       Not in place

## 4. Vehicles and Equipment

### Vehicles and Equipment (non-animal transport)

All vehicles and equipment (not containing live animals) are cleaned and effectively disinfected prior to entering the PBA. Sharing of equipment with other sites is minimized.

- In place                       In progress                       Not in place

### Livestock Trucks/Trailers (Animal Transport Vehicles)

All empty animal transport vehicles that enter the PBA are effectively cleaned and disinfected prior to arrival at the site (outgoing loads) or before animals are loaded for delivery to the site (incoming loads).

- In place                       In progress                       Not in place

## 5. Personnel

### Prior to Arriving at the Site

Access is limited to individuals who are essential to the operation of the production site. Everyone crossing the LOS arrives at the site having showered and wearing clean clothing and footwear since last contacting susceptible animals. All individuals crossing the LOS have a signed agreement on file agreeing to follow these instructions.

- In place                       In progress                       Not in place

### Entry Logbook

Everyone crossing the LOS Access Point(s) completes the entry logbook, unless they are a scheduled worker. The entry logbook is monitored by an individual working on the site to ensure accurate completion. The contact information and work schedule records for workers are maintained.

- In place                       In progress                       Not in place

### Biosecure Entry/Exit Procedures

All individuals entering the PBA or crossing the LOS at a controlled Access Point follow a biosecure entry and exit procedure as specified in the biosecurity plan.

In place                       In progress                       Not in place

## 6. Animal and Semen (if Applicable) Movement

### Incoming Animals and Semen

Pigs and semen (if applicable) come from sources with documented, enhanced biosecurity practices and no current or recent evidence of an FAD infection. Semen is transported in containers whose exteriors can be cleaned and disinfected effectively to minimize the risk of virus transmission.

In place                       In progress                       Not in place

### Pre-movement Isolation Period

No animals from a regulatory Control Area are introduced onto the site for at least 7 days prior to moving any animals to another pork production site with susceptible animals.

In place                       In progress                       Not in place

### Contingency Plan for Interrupted Animal Movement

A plan exists to manage pigs in a biosecure manner on-site in the event animal movement is stopped for several weeks.

In place                       In progress                       Not in place

### Loading Animals

Animals leaving the production site only move in one direction across the LOS at an Access Point at any one time. Areas contaminated by individuals or animals after loading/unloading are effectively cleaned and disinfected according to the biosecurity plan.

In place                       In progress                       Not in place

## 7. Carcass Disposal

Dead animals are disposed of in a manner that prevents the attraction of wildlife, rodents, and other scavengers. Rendering trucks and other vehicles hauling dead animals to a common disposal site do not enter the PBA.

In place                       In progress                       Not in place

## 8. Manure Management

Manure is stored and removed in a manner that prevents exposure of susceptible animals (either on or off the premises of origin) to disease agents and meets state, local, and Responsible Regulatory Officials' requirements.

In place                       In progress                       Not in place

A plan exists for storing manure on-site in the event it cannot be permitted to move off-site during an outbreak.

In place                       In progress                       Not in place

## 9. Rodent, Fly, Wildlife, and Other Animal Control

### Rodent and Fly Control

Written rodent and fly control programs are in place and implementation is documented.

In place

In progress

Not in place

### Wildlife and Other Animal Control

Facilities are designed and maintained to inhibit all animals, including birds, from crossing the LOS and contacting pigs.

In place

In progress

Not in place

## 10. Feed

Grain and feed are delivered, stored, mixed, and fed in a manner that minimizes contamination. Feed spills are cleaned up promptly and disposed of to avoid attracting wildlife.

In place

In progress

Not in place

### Comments

Please send comments or suggested edits for improvement to: [spsinfo@iastate.edu](mailto:spsinfo@iastate.edu)

### Additional Resources

The Secure Pork Supply website has additional resources available at: [www.securepork.org](http://www.securepork.org)