

Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals with Outdoor Access

September 2019



Indoor vs. Outdoor Biosecurity Checklist

Production sites with pigs that remain inside a building with a roof and walls (including curtain walls with screens) that exclude birds and other wildlife use the **Self-Assessment Checklist for Enhanced Pork Production Biosecurity: Animals Raised Indoors**. (Pigs on these sites may only have outdoor access when being moved between buildings.) Other production sites that do not fit these criteria should **use this checklist** for animals with outdoor access.

Target Audience

This checklist and corresponding Information Manual for Enhanced Biosecurity are written for pork production sites where the animals are raised outdoors or have access to outdoor lots. The biosecurity measures apply to:

- Sites with pigs raised with access to the outdoors, including 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.
- Pigs on 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. Operations with susceptible species raised with access to the outdoors may have more difficulty preventing an FAD exposure depending on their proximity to infected premises and the presence of wildlife in the area. This document emphasizes four concepts that all pork production sites with animals that have access to the outdoors should 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. Defined Lines 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) 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 (buildings, pastures, and dry lots etc.) associated with the premises. The animal housing should be described including seasonal changes such as movements from a pasture to a building with an outdoor lot as the seasons change. 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 (www.aphis.usda.gov/aphis/ourfocus/animalhealth/traceability/state-pin).

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

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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 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) when applicable, Line(s) 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. The Biosecurity Manager is capable of implementing all the biosecurity measures included in the written plan if an FAD is diagnosed in the U.S.

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 Manager(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

Designated Parking Area

There is a clearly marked, designated parking area outside of the PBA (or LOS when PBA not present), away from animal areas, for vehicles that will not enter the PBA or cross the LOS 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 and animal pens to limit movement of the virus near animals. 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 housing on the premises. Establishing a PBA around animals on pasture may not be possible. In that case, removing animals from pastures after an FAD outbreak anywhere in the U.S. would help protect them from becoming infected.

- 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 one or more operational, clearly marked, and equipped C&D station ready to be used in the event of an FAD outbreak. The C & D station has 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 in a manner that prevents exposure of susceptible animals (either on or off the premises of origin) to disease agents and meets state and local environmental regulations. Care should be taken to ensure 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 biosecurity plan includes one or more LOS. These lines establish a control boundary around, or within, the premises to limit movement of virus into areas where susceptible animals can be exposed. The LOS is clearly defined in the biosecurity plan and is clearly marked on the premises. Animals, vehicles, people, or items only cross the LOS through clearly marked and controlled LOS Access Points(s), following appropriate biosecurity measures. Pigs are prevented from nose-to-nose contact with livestock on adjacent premises or with pets and wildlife, especially feral swine. Pigs do not have access to streams, waterways, or run-off water that may have come from other premises.

- In place In progress Not in place

Maximize Distance between Susceptible Livestock on Adjacent Premises

The distance is maximized between susceptible livestock on adjacent premises, and steps to do so have been coordinated with owners/operators of these premises.

- In place In progress Not in place

LOS Access Point(s)

Entry to the operation is restricted to a limited number of controlled LOS Access Points. These LOS Access Points are protected with a suitable barrier (e.g. gate, cable, rope) to prevent unauthorized vehicles from entering. Each LOS Access Point is clearly marked with a sign in a language understood by all entering. Vehicles moving through an LOS Access Point are cleaned to remove visible contamination and then properly disinfected. 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, vehicles, equipment, people) across the LOS are recorded and available for review upon request. Deliveries not essential to the operation are made outside the LOS at a designated area indicated on the premises map.

- 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 or LOS, otherwise entry is prohibited. 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 or cross the LOS 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 on foot or exiting their vehicle inside 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 who cross an LOS Access Point on foot or exit their vehicle inside the LOS ensure that visible contamination on their footwear, clothing or exposed skin does not enter or exit the operation, following the 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 previous 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 or cross into the LOS.

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

Control measures are in place to limit interaction between pigs and other animals (deer, feral pigs, rodents, raccoons, dogs, cats, etc.)

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

Additional Resources

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