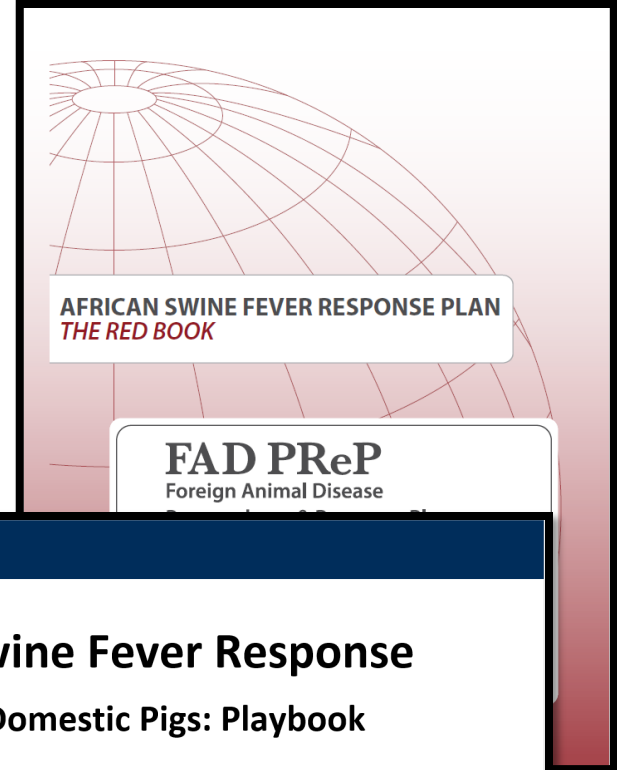




United States Department of Agriculture

# African Swine Fever Response Plan *The Red Book* Revision


July 2023



 Animal and Plant Health Inspection Service  
U.S. DEPARTMENT OF AGRICULTURE

**ASF Response Plan**  
Procedures for a Non-Infected Meat Harvest Facility  
in a Control Area  
May 15, 2023

**Note:** This ASF Response Plan is for a Meat Harvest Facility located within a Control Area that does not have an Infected Premises status and is intended to serve as a guide. This template is not for


 United States Department of Agriculture

**African Swine Fever Response  
Outbreak in Domestic Pigs: Playbook**

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nders

...ical access to key principles, resources,  
ent ASF response activities in domestic

 United States Department of Agriculture

**FAD PReP**  
Foreign Animal Disease  
Preparedness & Response Plan

# Purpose

## **The USDA APHIS ASF Response Plan: The Red Book (July 2023)**

- The continued spread of African Swine Fever (ASF) in Asia and Europe and into the Western Hemisphere has elevated preparedness activities in the United States.
- *The Red Book* revision, in combination with associated policy documents posted on [www.aphis.usda/fadprep](http://www.aphis.usda/fadprep), provides a comprehensive response plan for the United States in the event ASF is introduced into our country.
- The target audience is animal health emergency responders, Federal, State, local, and Tribal governments as well as industry partners.
- *The Red Book* does not replace existing regional, State, Tribal, local, or industry preparedness and response plans. 2

# What's new or expanded

- Addresses new policy for
  - Authorization for indemnity and depopulation response time
  - Trigger for a 72-Hour National Movement Standstill<sup>∞</sup>
  - Resumption of movement options at 'Hour 73'<sup>∞</sup>
  - Adopting standardized guidelines for harvesting establishments
  - National standardized permitting guidance for Control Areas<sup>∞</sup>
  - Restocking in a Control Area.
- Recognizes the Hispaniola ASF threat and describes the Protection Zone
- Includes a brief evaluation of the risk from *Ornithodoros* spp. tick as a vector
- Introduces and describes the Domestic Pig and Feral Swine Incident Playbooks<sup>∞</sup>
- References the U.S. Swine Health Improvement Program (US SHIP) and Certified Swine Sampler Collection Program
- Introduces the Meat Harvesting Facilities Plans, and the Off-site Rendering and Spray Dried Facility Plans
- Emphasizes the role of contact tracing plays in an epi investigation

<sup>∞</sup>Detailed companion policy documents also posted (or pending) at [www.aphis.usda.gov/fadprep](http://www.aphis.usda.gov/fadprep)

# ASF Response Goals

Detect, control, and contain ASF in swine as quickly as possible.

Eradicate ASF using strategies that seek to stabilize animal agriculture, the food supply, the economy, and to protect public health and the environment.

Provide science- and risk-based approaches and systems to facilitate Continuity of Business (COB) for non-infected animals and non-contaminated animal products.

- Achieving these three goals will allow individual livestock facilities, States, Tribes, regions, and industries to resume normal production as quickly as possible.
- They will also allow the United States to regain ASF-free status without the response effort causing more disruption and damage than the outbreak itself.

# ASF Epidemiological Principles

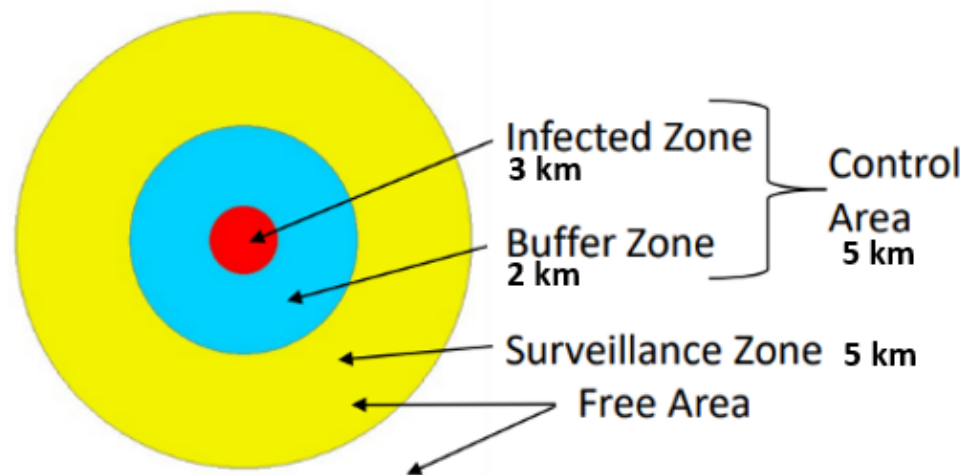
- Prevent contact between ASF virus (ASFV) and pigs through
  - the establishment of quarantines and Control Areas;
  - aggressive contact tracing, including premises epi-linked through a network relationship; and
  - enhancing biosecurity procedures that distance domestic pigs from feral swine.
- Stop the production of ASFV by mass depopulation (and disposal) of infected or exposed swine.
- Prevent the transmission of ASFV by vectors.
- Prevent ASFV from becoming established in feral swine populations.

# ASF Response Strategy

## Primary control strategy

Establish Control Areas around Infected Premises or infected feral swine locations.

- For ASF the minimum size for a Control Area is 5 km beyond the perimeter of the Infected Premises.
- Prevent virus from coming into contact with susceptible swine
- Supported by quarantine and movement controls with enhanced biosecurity.
- Contact tracing is emphasized



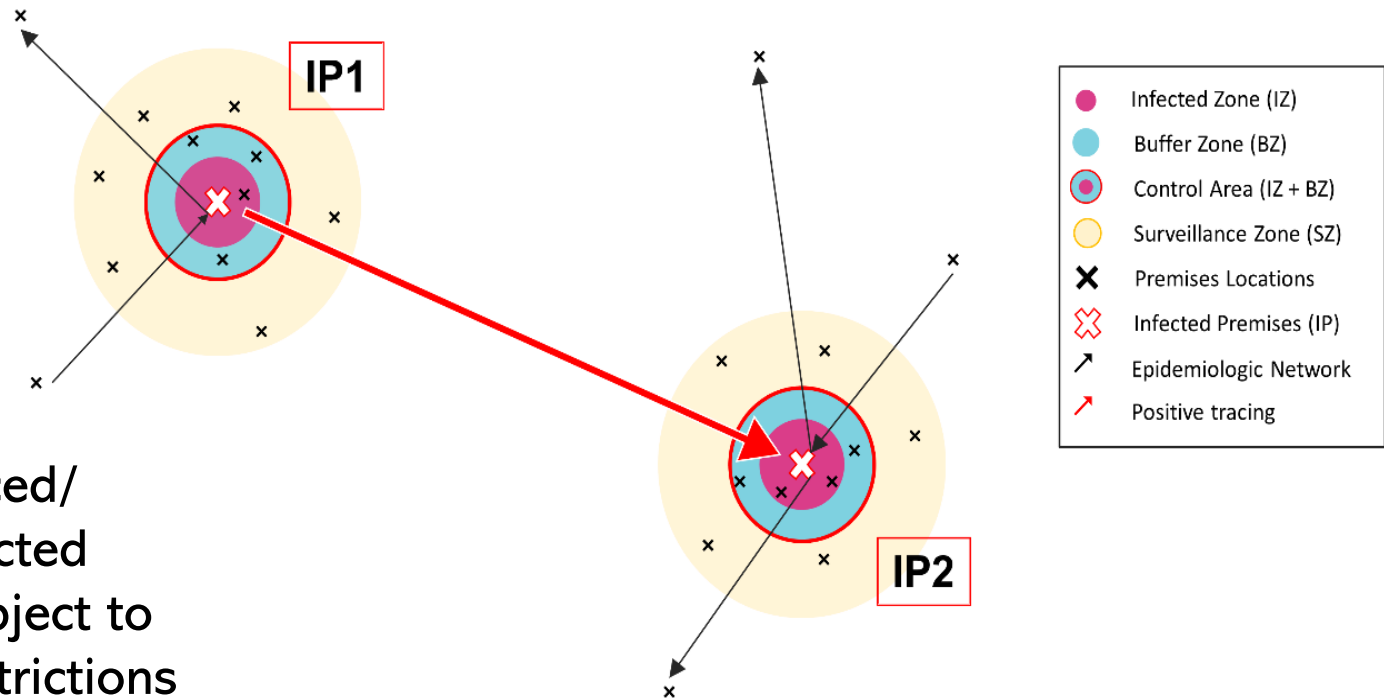
### Re: vaccination

Currently there is no vaccine approved for emergency use in the U.S.

# ASF Response Strategy

## Zones and Areas in relation to contact tracing

Contact tracing of epidemiologically-linked premises will be emphasized in order to rapidly detect new cases.



All premises traced/  
linked to an Infected  
Premises are subject to  
Control Area restrictions  
and diagnostic testing.

# ASF Response Strategy

## Primary eradication strategy: stamping-Out

- After the identification of an Infected Premises, all infected domestic pigs will be depopulated in the safest, and most humane way possible.
- As a general goal, APHIS recommends that depopulation and disposal activities be completed as soon as possible after approval for indemnity payment. That said, identifying a specific depopulation response time goal is not an absolute requirement.
- Assessing possible depopulation and disposal of swine on any farm location will require proper planning and resources to ensure health and safety of the owner, grower and responders, and proper planning and resources will be needed to ensure animal welfare.
- Depopulation and disposal of Infected Premises or Pigs must be conducted in a biosecure manner to prevent further disease spread.
- Feral swine found near ASF-infected domestic pigs may be depopulated.



# ASF Response Strategy

## Feral swine

1. Establish Control Areas around infected feral swine (location on the landscape).  
Note: Domestic pig premises in the feral swine Control Area will be subject to movement controls.
  2. Aggressively conduct thorough epidemiological investigations.
  3. Increase separation between feral swine and domestic pigs in the Control Area.
- The primary eradication strategy is the stamping-out of infected feral swine followed by population reduction.
  - A larger Control Area may be needed depending upon the estimated home range of the feral swine.
  - Additional essential activities include strategic population reduction, public outreach, targeted surveillance, and surveillance for dead pigs.

# Initial ASF Response Actions

## Detection in domestic<sup>∞</sup> pigs

Upon ASFV confirmation in domestic pigs by the National Veterinary Services Laboratories (NVSL) Foreign Animal Disease Diagnostic Laboratory, the Secretary of Agriculture will

- Take immediate steps to declare an Extraordinary Emergency;
- Issue a 72-hour National Movement Standstill;
- Authorize indemnity for depopulation of Infected Premises in conjunction with APHIS, State, and Tribal animal health officials according to the depopulation methods allowed by the American Veterinary Medical Association; and
- Authorize payment for virus elimination at a uniform, flat rate, based on the size of the affected premises.

<sup>∞</sup>A detection of ASFV in feral swine will not necessarily trigger the listed actions unless there is an epidemiological circumstance related to domestic pigs requiring such action.

# Initial ASF Response Actions

## Coordinated public awareness campaign

APHIS will establish a Joint Information Center (JIC) to organize, integrate, and coordinate information to ensure consistent messaging.

Legislative and Public Affairs (LPA) and the USDA Office of Communications will invite State, local, and industry communicators to participate.

In addition to standard messaging regarding human health and food safety, APHIS has messaging specifically for producers.

- Protect your herd with good biosecurity practices and be vigilant in reporting signs of illness to your veterinarian, or State or Federal animal health official.
- Update your biosecurity plan and implement an ongoing African swine fever training program for personnel.
- Restrict access to production sites.
- Enhance employee biosecurity practices.
- Ensure strict movement-of-animal protocols.
- Prevent feed contamination and control wildlife, rodents, and flies.
- Put in place proper carcass disposal and manure management practices.

For more information on fighting African swine fever, visit [Protect Our Pigs](#)

# Initial ASF Response Actions

## Regulatory movement controls

A temporary hold order, a quarantine and/or some type of stop movement will be immediately issued on a premises by State authority, or Tribal authority, upon strong suspicion of ASF on a premises.

- Confirmation of ASF by NVSL is not necessary for States or Tribes to implement quarantines and/or movement controls.
- Each State has different quarantine authorities; thus, each State's animal health emergency response plan should describe implementation.
- Due to the highly-integrated swine industry, it will be necessary to consider swine networks, which often include interstate movements.

# National Movement Standstill

A National Movement Standstill is a **complete stop in movement of live swine or swine deadstock**, interstate or intrastate, across the U.S. mainland. Its purpose is to

- Allow States, Tribes, and industry to gather critical information for a unified approach to an ASF response.
- Inhibit further virus transmission before effective disease control measures can be successfully implemented.
- **It does not include feed deliveries, swine germplasm, or pork and pork products.**
- Applicable for a detection of ASF in domestic pigs; A detection of ASFV in feral swine will not necessarily trigger the listed actions.
- Additional details and the draft Federal Order are posted at the FAD PReP ASF site: *Declaration of Extraordinary Emergency & 72-hour National Movement Standstill.*

# Resumption of Movement

## 'Hour 73'

- Prior to the end of the 72-hour period, at approximately 48 hours, APHIS VS will confirm the anticipated end of the standstill order or announce any intention to extend it.
- The release of a National Movement Standstill does not mean that *all* movement restrictions have been lifted. States will have issued initial quarantines and established Control Areas, as necessary, to contain and control disease spread.
- Options for Hour 73 include lifting, partially lifting, or extending the Standstill; however, APHIS intends to exempt swine to slaughter movements from any extension of the Standstill in Free Areas.
- Additional details are posted at the FAD PReP ASF site: *Hour 73 Response Options*.

# Response: Critical Activities

## Sampling & diagnostics

- Forty-nine National Animal Health Laboratory Network (NAHLN) laboratories are approved for ASF testing to meet diagnostic test surge capacity.
- To aid in sample collection capacity, many states have instituted a Certified Swine Sample Collector training program.
  - Category II accredited veterinarians will train producers, caretakers, and industry partners how to properly collect samples from swine for diagnostic and surveillance purposes.
  - Program standards are available at [securepork.org](http://securepork.org).
- Approved sample types include whole blood, tonsil, spleen, lymph node, spleen swab, blood swab, dried blood spot. Certain sample types can be pooled up to 5 pigs per pen/room/barn.

# Response: Critical Activities

## Diagnostic testing

- Confirmatory diagnostic testing will be performed at NVSL's Foreign Animal Disease Diagnostic Laboratory (FADDL), with NVSL's Diagnostic Virology Laboratory providing support during an outbreak.
- Depending upon the sample type submitted, tests performed to determine the presence of ASFV may include
  - agent detection: PCR (3 hour) and virus isolation (14-21 days);
  - agent confirmation and characterization: genome sequencing (2-4 days); and
  - antibody detection: Ab ELISA (2-3 days) and immunoperoxidase technique (2-3 days) tests.
- Currently, individual pig sampling is the only validated method to detect ASFV. NVSL is diligently working to evaluate aggregate methods, such as rope sampling.



# Response: Critical Activities

## Surveillance

- In 2022, APHIS added ASF to its existing classical swine fever (CSF) surveillance plan to form a Swine Hemorrhagic Fevers Integrated Surveillance Plan.
- Since then, well over 50,000 specimens from various types of domestic pig production facilities and slaughter plants have been tested for ASF and CSF, all were negative.
- APHIS is working to further detail parameters of surveillance planning for control and eradication of ASF—from day one of a response through declaration of disease freedom.
- As this work progresses, guidance will be posted to the FAD PReP ASF site.

# Response: Critical Activities

## Zones, areas, and premises designations

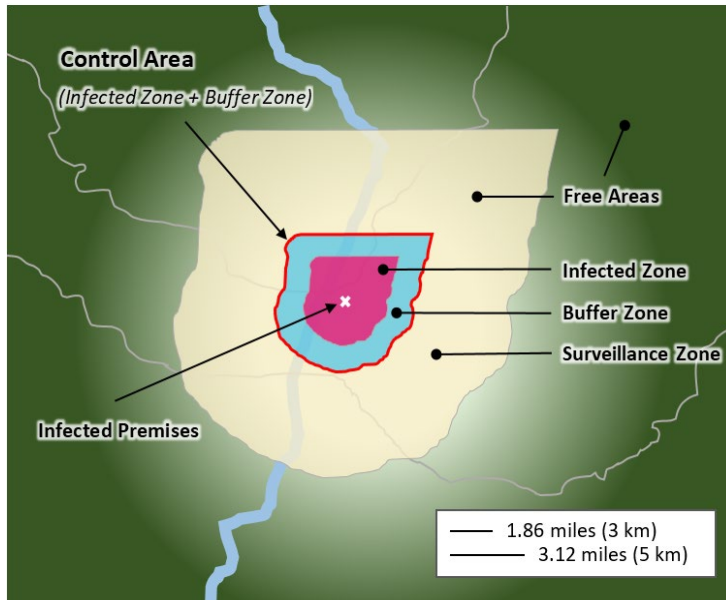
- Unified Incident Command establishes an initial Infected Zone and a Buffer Zone when the index case is identified.
- Zone, area, and premises designations may include
  - 1) epidemiologically linked Contact Premises that are not all in the same or contiguous geographical area; and
  - 2) areas that reflect home ranges of feral swine populations.
- The perimeter of the Control Area should be at least 5km beyond the perimeter of the closest Infected Premises or Infected Pig.
- The boundaries of the Control Area can be modified or redefined when tracing and other epidemiological information becomes available.

# Response: Critical Activities

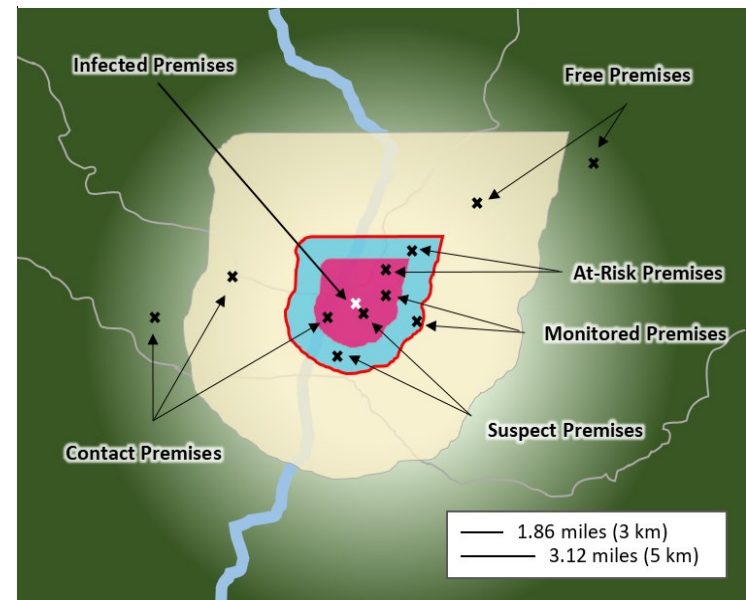
## Zones, areas, and premises designations example

### Domestic Pigs

*Zones and Areas*



*Premises*



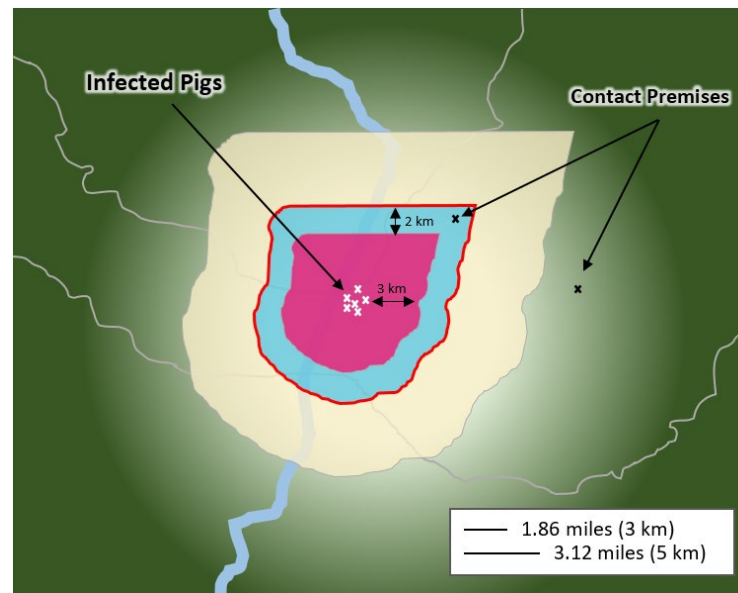
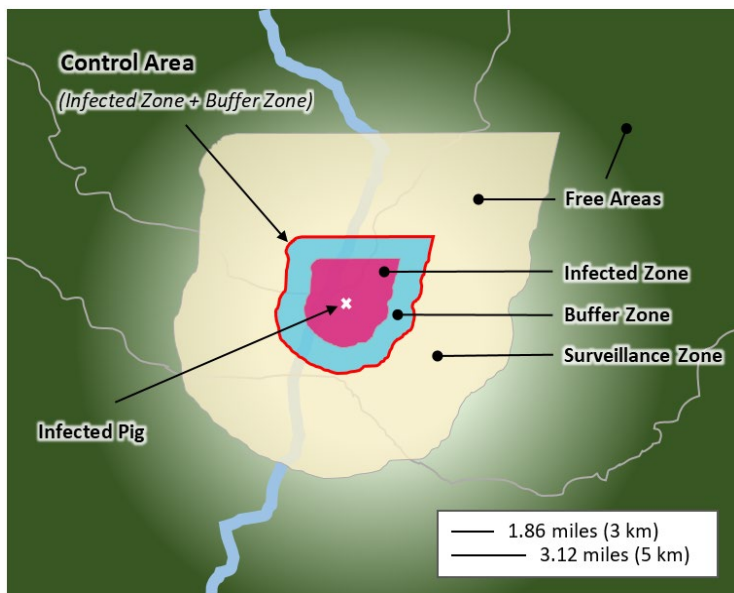
# Response: Critical Activities

## Zones, areas, and premises designations example

### Feral Swine

Zones and Areas

Pigs\*



\* The minimum Infected Zone is 3km; however, when multiple pigs are found nearby on the landscape the Infected Zone will be adjusted to incorporate all pigs, which potentially can result in a larger Infected Zone.

# Response: Critical Activities

## Quarantine and movement control

- By restricting movement of infected swine, swine products, and contaminated fomites, quarantine and movement control can aid in controlling and eradicating ASF during an outbreak.
- States, Tribes, and APHIS officials must weigh the risk of disease transmission against the need for critical movements (e.g., feed) and business continuity.
- The Emergency Management Response System 2.0 (EMRS2) is the official system of record for permits and permitted movements made into, within, and out of a Control Area.
  - Specific permits aid in controlling and containing the FAD outbreak for infected premises.
  - Continuity of business (COB) permits facilitate continued producer operations for non-infected premises.
- For more on permits during an ASF outbreak, see Manual 6-0.

# Response: Critical Activities

## ASF continuity of business permits

- Implementing a pre-movement isolation period (PMIP)—maintaining increased biosecurity on a premises in the days leading up to a swine movement—will reduce the risk of disease exposure.
- A PMIP combined with pre-movement diagnostic testing decreases the risk of moving infected but undetected pigs from a premises, compared to implementing testing alone.

(Based on University of Minnesota Secure Food Systems Team's within-herd (barn) ASF transmission model)

### PMIP Duration and Testing Frequency

- Implement heightened biosecurity standards on the entire premises for
    - 5 days before transfer movements
    - 3 days before movements to slaughter
  - Sample pigs for diagnostic testing twice within the PMIP, prioritizing dead and sick pigs.
- Specific permit criteria, templates, PMIP and test protocols are posted on the FAD PReP ASF site.

# Response: Critical Activities

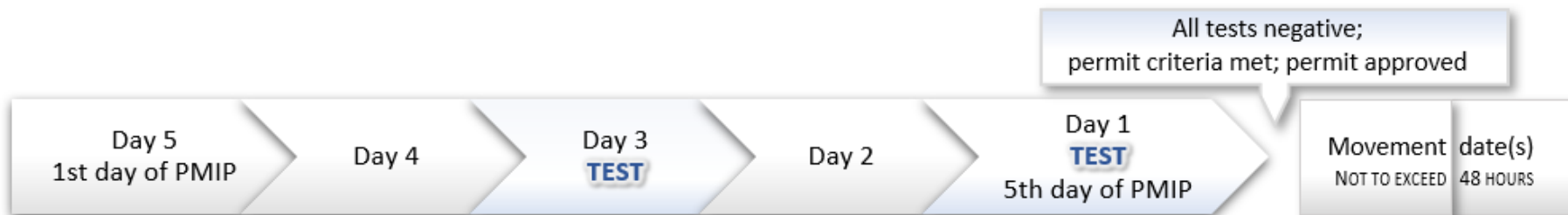
## ASF COB permit example, gilt movement

### Testing priority

1. Dead pigs
2. Sick pigs
3. Pigs in hospital/sick pens
4. General population

### Test at 3 days pre-movement and at 1 day pre-movement in a 5-day PMIP

Test all dead swine in each barn up to 31 samples. If testing of dead swine does not produce 31 samples for the barn, sample animals in accordance with the priority list above to meet the balance.



# Response: Critical Activities

## 3D (depopulation, disposal, decontamination)

- **Depopulation** will be conducted in accordance with the American Veterinary Medical Association guidance so that pigs are depopulated safely, quickly, efficiently, and humanely as possible.
- **Disposal** options may be limited.
  - composting may not be feasible with large amounts of biomass;
  - rendering resources may not be available;
  - burial poses significant challenges with environmental contamination and given ASFV persistence.
- **Cleaning and disinfection** or virus elimination activities should focus on eliminating the virus in the most cost-effective manner possible.



# Response: Critical Activities

## 3D (continued)

- **3D** options and methods each have their own logistical, environmental, or managerial challenges. APHIS, State officials, and subject matter experts will collaborate to determine best approaches.

Tools to help evaluate options may be found at [www.aphis.usda.gov/fadprep](http://www.aphis.usda.gov/fadprep):

- ✓ *3D Guidance—Option Matrices and Considerations*
- ✓ *APHIS Carcass Management website*

For **feral swine**, a wildlife management plan is developed and conducted within local laws and regulations. Management activities to control and eradicate ASF in feral swine must be conducted by trained personnel proficient in wildlife health, capture, restraint, biosecurity, and humane euthanasia.

# Response: Critical Tools

## National Veterinary Stockpile (NVS)

The NVS is in the process of building an inventory of supplies and equipment to aid in a response to an ASF outbreak. Available now:

- Diagnostic sampling supplies
- Mobile incinerators
- Electric stunners
- Captive bolt stunners and repair parts
- Manual and automated swine carcass carts
- Carcass bags
- Grinders
- Portable wash stations
- PPE
- Swine handling equipment, such as hog snares and sorting panels

# Incident Management

## *Domestic Pigs Playbook*

This playbook specifies approaches to comprehensive incident management for outbreak response in domestic pigs.

1. Effectively manage a coordinated response
  2. Box the virus in to reduce transmission between domestic pig premises
  3. Eliminate the virus on infected swine premises.
  4. Prevent transmission between domestic pigs and feral swine
  5. Maintain continuity of business
  6. Ensure information flow and management
  7. Identify and maintain resource requirements
- For each of the approaches, the *Playbook* provides Key Principles alongside the Resources and Tools that may be employed.
  - Additional details will be posted at the FAD PReP ASF site: *ASF Response: Outbreak in Domestic Pigs: Playbook*.

# Incident Management

## *Feral Swine Playbook*

Similarly, this playbook specifies approaches to comprehensive incident management for outbreak response in feral swine.

1. Effectively manage a coordinated response
  2. Control the disease and reduce transmission across the landscape
  3. Quickly identify and report new cases
  4. Prevent transmission between domestic pigs and feral swine
  5. Ensure information flow and management
  6. Identify and maintain resource requirements
- For each of the approaches, the *Playbook* provides Key Principles alongside the Resources and Tools that may be employed.
  - Additional details will be posted at the FAD PReP ASF site: *ASF Response: Outbreak in Feral Swine Playbook*.

# Additional Response Plans

## Meat harvest facilities

*ASF Meat Harvest Facility Response Plans* were developed to address response needs unique to harvest establishments and related industries during an ASF outbreak.

The plans were developed in coordination with APHIS and the North American Meat Institute (NAMI)-led Slaughter Plant Working Group (SPWG) with participation from various Federal, State, and industry partners.

### Meat Harvest Facilities

- [Infected/Positive Meat Harvest Facility Template](#)  (May 15, 2023)
- [Contact Meat Harvest Facility \(Contact Premises\) in a Free Area Template](#)  (May 15, 2023)
- [Non-Infected Meat Harvest Facility in a Control Area Template](#)  (May 15, 2023)

Further, in collaboration with the North American Renderers' Association and North American Spray Dried Blood & Plasma Producers, the SPWG created **two additional ASF response plans** specific to Off-Site Rendering and Spray Dried Blood and Plasma facilities.

The Meat Harvest, Off-Site Rendering, and Spray Dried Blood/Plasma facility plans are posted at the [FAD PReP site](#).

# Ongoing Initiatives

## Secure Pork Supply (SPS) Plan

- The Continuity of Business Plan provides opportunities to voluntarily prepare before a disease outbreak.
- Materials for producers include guidance on site-specific biosecurity planning, disease monitoring, sample collection, and more.



## US Swine Health Improvement Program (US SHIP)

- The US SHIP, an APHIS-funded pilot project, promotes certification of healthy swine herds through the creation of standards that focus on biosecurity, traceability, and surveillance principles.
- Pork producers and packing facilities in participating States (32 as of early 2023) are able to enroll in the pilot program on a voluntary basis.
- Technical standards are in development for “safeguarding, certifying, and bettering the health of U.S. swine.”



# Supporting FAD PReP Materials

## Strategic Plans-Concept of Operations Documents

- *APHIS Foreign Animal Disease Framework: Roles and Coordination (FAD PReP Manual 1-0)*
- *APHIS Foreign Animal Disease Framework: Response Strategies (FAD PReP Manual 2-0)*
- *APHIS Foreign Animal Disease Framework: Incident Information Management and Reporting (FAD PReP Manual 3-0)*
- *APHIS FAD Investigation Manual (FAD PReP Manual 4-0)*
- *Permitted Movement (FAD PReP Manual 6-0)*



# Resources

- FAD PReP home page: [www.aphis.usda.gov/fadprep](http://www.aphis.usda.gov/fadprep)
- 3D Guidance—Option Matrices and Considerations: [https://www.aphis.usda.gov/animal\\_health/carcass/docs/asf-3d-summary-guidance.pdf](https://www.aphis.usda.gov/animal_health/carcass/docs/asf-3d-summary-guidance.pdf)
- APHIS Carcass Management website: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management/carcass-management>
- African Swine Fever (ASF) <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/swine-disease-information/african-swine-fever/african-swine-fever>