Purpose

The recent spread of African Swine Fever (ASF) in Asia and Europe has elevated preparedness activities in the United States. *The USDA APHIS ASF Response Plan: The Red Book* (April 2020), has resulted from these ongoing efforts to prepare, in addition to VS Training and Exercise Program work for ASF. It provides a comprehensive response plan for the United States in the event ASF does encroach into our country.
Purpose (contd.)

The ASF Redbook does not replace existing regional, State, Tribal, local, or industry preparedness and response plans relating to ASF. Those plans should be aimed at more specific and detailed issues in an ASF response.

The USDA APHIS acknowledges that significant work remains to respond effectively to ASF and fully anticipates updates as new capabilities and processes become available.

FAD PReP
What is Included

Important aspects of the new ASF Response Plan:

• Provides USDA authorities and APHIS guidance specific to an ASF response.
• Includes an expansive chapter that discusses control and eradication strategies for both domestic and feral swine.
• Identifies specific response actions that will be taken if ASF is detected.
• Updates the USDA APHIS National Stop Movement guidance.
• Describes the initial 72 hour timeline for updated policy.
• Incorporates Network Based Controls (NBCs).
Also includes the following:

- Includes changes to surveillance guidance.
- Incorporates an extensive epidemiology section to include updates to zone, area, and premises designations specifically for ASF.
- Adds in an information management section.
- Adds in a continuity of business section, and references the Secure Pork Supply Plan.
- Expands information on feral swine management.
Target Audience

Animal health emergency responders, Federal, State, local, and Tribal governments as well as industry partners.
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.
ASF Response Goals (contd.)

- 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 swine. This is accomplished through the establishment of Control Areas, utilization of NBCs, and enhancing biosecurity procedures.

• Stop the production of ASFV by mass depopulation (and disposal) of infected and potentially infected swine.

• Stop the transmission of ASFV by vectors.

• Prevent ASFV from becoming established in feral swine populations.
ASF Response Strategy

• The primary control and eradication strategy for ASF in swine is the establishment of quarantines and movement controls with eradication by stamping-out.
  – Stamping-out is the depopulation of clinically affected and in-contact susceptible swine.
  – NBCs will be employed on traced Contact Premises in addition to the standard Control Area Approach.

• There is currently no effective vaccine available for ASFV in swine.

• Critical activities and tools must be implemented to successfully execute response strategies.
ASF Response Strategy

Stamping-Out Policy

- Infected Pigs will be depopulated in the quickest, safest, and most humane way possible.
- To be most effective in stopping disease transmission, it may be necessary to prioritize depopulation based on clinical signs and epidemiological information.
- Require a well-planned and proactive coordinated public awareness campaign.
ASF Response Strategy

Zones and Areas in Relation to NBCs

NBCs will target response resources to high risk epidemiologically-linked premises in an effort to rapidly detect new cases.

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

Control and Eradication of ASF – Domestic Swine

• **Primary Control Strategy** = establishment of Control Areas around Infected Premises
  – Focuses on preventing ASFV from coming into contact with susceptible swine.
  – Supported by quarantine and movement controls with enhanced biosecurity.
  – Minimum 5km Control Area (Infected Zone + Buffer Zone):
    • 3 km Infected Zone
    • 2 km Buffer Zone
    • Plus 5 km Surveillance Zone (in the Free Area).

• **Primary Eradication Strategy** = stamping-out
  – Feral swine found near ASF infected domestic swine may be depopulated.
ASF Response Strategy

Control and Eradication of ASF – *Feral Swine*

- **Primary Control Strategy** = establishment of Control Areas around Infected Pigs
  - Focuses on limiting viral spread and transmission through the establishment of Control Areas that encompass infected feral swine.
  - Minimum 5km Control Area (Infected Zone + Buffer Zone):
    - 3 km Infected Zone
    - 2 km Buffer Zone
    - Plus 5 km Surveillance Zone (in the Free Area).
  - A larger Control Area may be needed given that feral swine are free-ranging.

- **Primary Eradication Strategy** = stamping out followed by population reduction.
  - Immediate carcass removal and proper disposal is key in preventing the spread of ASFV through wildlife.
  - Implementation varies due to the differences between production based systems and wildlife.
Initial ASF Response Actions

Authorization for Response Activities

When the criteria for a presumptive positive ASF case have been met, the APHIS Administrator or VS Deputy Administrator can authorize APHIS personnel—in conjunction with State, Tribal, and IC personnel—to initiate certain response activities of the index case (Infected Premises or Infected Pig), including an epidemiological investigation of Contact Premises.
Initial ASF Response Actions

Authorization for Response Activities (contd.)

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

• take immediate steps to declare an Extraordinary Emergency;
• issue a National Movement Standstill of at least 72 hours with a detection in domestic or feral swine;
• authorize depopulation of Infected Premises; and
• authorize payment for virus eliminations at a uniform, flat rate, based on the size of the affected premises.
Initial ASF Response Actions

Coordinated Public Awareness Campaign

• Engages and leverages Federal, State, Tribal, local, and stakeholder relationships to provide unified public messages for all audiences.

• Addresses the issues and concerns relating to food safety, public health, and animal welfare.

• Addresses issues and concerns rated to interstate commerce, COB, and international trade.

• Widely disseminated key communication messages to consumers and producers.

FAD PReP
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; therefore, 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.
Initial ASF Response Actions

National Movement Standstill

• Is a complete stop in live swine movement across the United States.
• Is intended to allow States, Tribes, and industry to gather critical information for a unified approach to an ASF response, while inhibiting further virus transmission before effective disease control measures can be successfully implemented.
• Is issued by USDA upon confirmation of ASF in commercial swine or feral pigs for at least 72 hours.
  – USDA will provide implementation guidance.
• Is effective only if all parties involved understand the reasons and goals, and have planned for it.
Response Critical Activities and Tools

- Diagnosis and Reporting
- Surveillance
- Epidemiological Investigation and Tracing
- Quarantine and Movement Control
- Continuity of Business
- Information Management
- Public Communication and Messaging Campaign
- Health and Safety
- Biosecurity
- 3D Activities
- Wildlife Management
- Indemnity

*These critical activities are covered in more detail in the FAD PReP Standard Operating Procedures and NAHEMS Guidelines.*
Response Critical Activities and Tools

Zone, Areas, and Premises Designations

• Unified Incident Command establishes an Infected Zone and a Buffer Zone within 12 hours of the index case. This Control Area may change as the outbreak progresses.

• Zone, area, and premises designations may include: epidemiologically linked Contact Premises that are not all in the same, or contiguous geographical area, and 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.
Response Critical Activities and Tools

Examples of Zone, Areas, and Premises Designations

Domestic Swine

Zones and Areas

Premises

1.86 miles (3 km)
3.12 miles (5 km)
Response Critical Activities and Tools

Examples of Zone, Areas, and Premises Designations

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 and Tools

3D (Depopulation, Disposal, Decontamination) Activities

- **Euthanasia or mass depopulation** will be conducted in accordance to the American Veterinary Medical Association guidance so that all affected swine are depopulated safely, quickly, efficiently, and humanely as possible.
  - The method used will depend on a variety of characteristics and incident considerations.
- Options for **disposal** are limited. For example, composting may not be feasible when there are large amounts of biomass; resources for rendering are currently limited. Burial poses significant challenges with environmental contamination and the ability of the ASFV to persist in the environment.
Response Critical Activities and Tools

3D Activities (contd.)

• **Cleaning and disinfection** activities should focus on eliminating the virus in the most cost-effective manner possible.
  – Cleaning is the removal of gross contamination, organic material, and debris from the premises.
  – Disinfection refers to the method(s) that are used on surfaces to destroy or eliminate ASFV.

• Each option has its own environmental, logistical, and managerial challenges. APHIS, State officials, and subject matter experts will collaborate to determine best approaches.
Response Critical Activities and Tools

Quarantine and Movement Control (QMC)

• By restricting movement of infected swine, swine products, and contaminated fomites, QMC can aid in controlling and eradicating ASF during an outbreak.

• 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.

• Based on science- and risk-based information, QMC includes permitted movement: for more information on permits during an ASF outbreak, please see Manual 6-0.
Response Critical Activities and Tools

Feral Swine Management

• Epidemiologists and wildlife experts will need to quickly assess the presence of feral swine populations in or near the area of infection.
• A wildlife management plan that addresses transmission of ASF in feral swine will need to be developed.
• ASF management activities would include, but are not exclusive to
  – survey and surveillance for feral swine presence,
  – control measures,
  – enhanced biosecurity measures to separate wildlife and domestic livestock,
  – stamping-out, and
  – population reduction.
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)
Supporting FAD PReP Materials

**Continuity of Business**

*Secure Pork Supply Plan*

- COB helps to facilitate agriculture and food industries maintain typical business, or return to business during a disease response, while the risk of disease spread is effectively managed.

- COB planning can help minimize unintended consequences on producers and consumers impact by ASF while still achieving the goals of disease response.

- The Secure Pork Supply Plan provides guidance on permitting the movement of swine from a Control Area during an ASF outbreak.
Supporting FAD PReP Materials

**NAHEMS Guidelines**
- Continuity of Business
- Biosecurity
- Quarantine and Movement Control
- Information Management
- Cleaning and Disinfection
- Disposal
- Surveillance, Epidemiology, and Tracing
- Health and Safety
- Personal Protective Equipment

- Mass Depopulation and Euthanasia
- Vaccination for Contagious Diseases
- Wildlife Management & Vector Control for FAD Response in Domestic Livestock
Sources

- FAD PReP home page: www.aphis.usda.gov/fadprep