



NGFA Guidance on Foreign Animal Disease Prevention, Preparedness and Response

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Foreign Animal Diseases – Prevention, Preparedness and Response

Introduction

Given the 2018 outbreak of African Swine Fever (ASF) virus in China and the disease's subsequent spread to numerous other countries, the potential role that feed and feed ingredients may play in the transmission of ASF and other foreign animal diseases (FAD) has come under increased scrutiny. Some scientific studies have demonstrated that feed products may be inoculated with ASF virus and transmit the disease to animals under controlled conditions. However, significant data gaps currently exist about what role such products may have in transmitting disease and these gaps are being further evaluated by regulatory agencies and industry stakeholders.

The purpose of this document is to provide feed and feed ingredient manufacturers and suppliers with information that may be used to develop plans to minimize the introduction and spread of pathogenic animal viruses, such as ASF, and prepare for and respond to a potential FAD outbreak within the United States.

FAD Prevention

Feed facilities should implement biosecurity plans to minimize the potential for introduction and spread of animal diseases that are appropriate for their operations and that meet customer needs. Diseases like ASF virus may potentially be spread through a variety of vectors, such as people, equipment and possibly grain and feed products. An appropriate biosecurity plan should address potential disease vectors that are applicable to the facility and its operations.

Following are some suggested questions to consider when developing and implementing a biosecurity plan. Note that some questions may not be applicable to a given facility.

A. General Issues

1. Are the boundaries identifying biosecure and non-biosecure areas of the facility clearly marked?
2. Is access by visitors (e.g., guests, contractors, service providers, etc.) appropriately controlled within the facility? Are visitor areas clearly designated, and access limited to such areas (e.g., use of signs, visitor logs/instructions, entry locks, etc.)?
3. Are appropriate personnel hygiene procedures implemented for employees and other individuals who are involved with feed, feed contact surfaces and/or feed

packaging materials (e.g., use of disinfectant foot baths, dedicated footwear, disposable outerwear, etc.)?

4. Are procedures implemented that address the potential for facility employees owning or working with livestock and/or poultry?
5. Is it appropriate for the facility to obtain a premise identification number from state authorities to help facilitate response in case of an animal disease outbreak?

B. Inbound Feed, Ingredients and Receiving Activities

1. Are feeds, ingredients or components of ingredients received by the facility manufactured or packaged outside the United States within foreign countries with heightened risk of animal disease? If so, are mitigation strategies necessary to reduce risk?
2. Are there heightened disease risks associated with the receipt and/or use of animal-based ingredients? If so, are mitigation strategies necessary to reduce risk?
3. Are methods in place to ensure that feeds and ingredients received into the facility adhere to established specifications, including those related to biosecurity requirements?
4. Are biosecurity protocols implemented for conveyances and associated personnel that deliver feeds and ingredients to the facility?
 - i. Are biosecurity standards and practices for inbound trucks, railcars and other conveyances appropriately communicated to transport companies (e.g., contract provisions, facility signage, verbal instructions, etc.)?
 - ii. Are conveyances used to haul inbound feeds and ingredients also used for hauling livestock or poultry? If so, are mitigation strategies necessary to reduce potential risk?
 - iii. Are methods used to verify previous loads hauled by the conveyance and limit the potential for unsafe cross-contamination?
 - iv. Are conveyances appropriately clean and free from undesirable contamination upon arrival at the facility?
 - v. Is access by conveyance drivers/personnel to the remainder of the facility beyond the receiving area appropriately limited?
 - vi. Are appropriate biosecurity practices implemented for drivers/personnel present in the feed/ingredient receiving area while unloading (e.g., disinfectant foot baths, dedicated footwear, etc.)?

5. Is the truck/rail receiving pit covered when not in use and when conveyances move over the pit grate before unloading?
6. Is overflow of bulk feeds/ingredients to areas around the receiving pit minimized? If overflow does occur, are contaminated feeds/ingredients appropriately disposed?
7. Are feed and ingredient traceability records (one-step back, one-step forward within the distribution chain) established and maintained?
8. Are packaged feeds and ingredients stored and used on a first-in, first-out basis?

C. Feed Manufacturing

1. Are biosecurity protocols implemented for employees and other individuals that enter facility manufacturing areas?
2. Is an effective pest control program in place?
3. Is an effective housekeeping/dust control program in place?
4. Are procedures implemented to minimize the accumulation of ingredients and feed throughout manufacturing areas and dispose of contaminated products appropriately?
5. Are feed traceability records (one-step back, one-step forward within the distribution chain, including linking ingredients to finished products within the manufacturing process) established and maintained?

D. Feed Delivery

1. Are outbound feeds distributed on a first-in, first-out basis?
2. Have customers of outbound products provided biosecurity protocols for delivery (e.g., instructions to limit delivery access to specific areas of customer farm/facility, requirements for delivery personnel clothing/equipment, etc.)?
2. Do trucks and other conveyances that haul finished feed also haul livestock, poultry or other products that present biosecurity risks? If so, are mitigation strategies necessary to reduce risk?
3. Do truck drivers use appropriate biosecurity clothing/equipment when accessing delivery sites?
4. Are clothing and equipment used by truck drivers at the feed delivery site handled and stored in a manner to prevent contamination of the truck or other biosecure clothing and equipment?

5. Does feed delivery occur in accordance with a biosecurity pyramid that categorizes delivery sites according to health status and hierarchy within the system?
6. Are protocols established to clean and disinfect, as necessary, feed delivery conveyances and other equipment as appropriate (e.g., vehicle undercarriage/tires/cabs, feed carts, pallet jacks, etc.)?
7. Are feed and other items (e.g., pallets) from a farm or other locations returned to the facility? If so, is the returned feed or item evaluated for appropriate disposition?
8. Are records established and maintained to document feed delivery sequence and farm/customer locations?

E. Service Activities (Sales/Nutritional/Technical Support Occurring at Farm Sites and Other Locations)

1. Do support personnel use appropriate biosecurity clothing/equipment when visiting farms or other locations?
2. Are clothing and equipment used during service activities handled and stored in a manner to prevent contamination of service vehicles or other biosecure clothing and equipment?
3. Are procedures implemented to avoid farm visits in the event that an animal disease outbreak does occur?
4. Are protocols established to clean and disinfect, as necessary, support vehicles and other items as appropriate (e.g., undercarriage/tires/interiors, sampling equipment, etc.)?
5. Are records established and maintained to document site/location visits and movement of service vehicles?
6. Are biosecurity protocols established for meetings with customers and other external personnel?

FAD Preparedness and Response

In the event of a FAD outbreak in the United States, the U.S. Department of Agriculture (USDA) will coordinate a response with federal, state and local authorities. The response will be focused on three areas: 1) determining the nature of the disease outbreak; 2) initiating an appropriate response to contain the disease; and 3) eliminating the disease.

- 1. Nature of Disease Outbreak:** State and federal animal health officials will work to determine the size and scale of the animal disease outbreak. These investigations will include documenting the movement of traffic in and out of the affected farm(s) and submitting diagnostic samples to laboratories for testing.

Feed facilities associated with affected farms will be expected to provide records related to movements of feed delivery trucks, and other service vehicles and personnel.

- 2. Containment of Disease:** Once a FAD has been established in the United States, state and federal animal health officials will work to contain the disease on the site(s) where it was diagnosed. Key components to containment include: 1) movement standstill orders; 2) area/zone designations; and 3) effective animal disposal.

- **Movement Standstill Orders:** Federal and state regulatory officials likely will issue a standstill order for a broad geographic area to limit disease spread and to facilitate a rapid evaluation of the epidemiology of the outbreak. The standstill order also will include a grace period to allow animals already in transit to be placed. After the initial standstill order time has passed, officials will decide whether to extend the standstill period or let movement resume for unaffected areas. Because the standstill may be in place for an extended time, animal producers may need to manage their animals without moving them for several days to weeks.
- **Area/Zone Designations:** At the time movement resumes, infected premises will be quarantined, and the Infected Zone, which encompasses the perimeter of all infected premises and suspect premises, will be designated. A Buffer Zone(s) also will be established on the outside of the Infected Zone(s). The Infected Zone plus the Buffer Zone is designated as a Control Area. In addition, Surveillance Zones are established that are outside and along the borders of Control Areas.

The size of zones and areas will be determined by the FAD regulatory officials and circumstances of the outbreak, and may be modified or redefined as necessary as circumstances change. However, the following minimum zone and area sizes are established for most FADs:

- ❖ **Infected Zone:** The Infected Zone perimeter should be at least 3 kilometers (approximately 1.86 miles) beyond perimeters of presumptive or confirmed infected premises.
- ❖ **Buffer Zone:** The Buffer Zone perimeter should be at least 7 kilometers (approximately 4.35 miles) beyond the perimeter of the Infected Zone. The

perimeter width generally is not less than the minimum radius of the associated Infected Zone, but may be much larger.

- ❖ Control Area: The Control Area perimeter should be at least 10 kilometers (approximately 6.21 miles) beyond the perimeter of the closest infected premises.
- ❖ Surveillance Zone: The Surveillance Zone established outside and along the borders of the Control Area should have a width of at least 10 kilometers (approximately 6.21 miles), but may be much larger.

Premises within the Control Area that are not infected with the FAD nor had contact with the infected premises also will be quarantined. All premises in the Control Area will be expected to implement enhanced biosecurity practices. Unaffected premises will be allowed to move animals and animal products off their sites, but likely will need a movement permit to do so.

Feed facilities delivering feed within Control Areas also will be expected to implement enhanced biosecurity practices. Following are suggested questions to consider pertaining to enhanced biosecurity practices:

1. Is someone designated within the facility to be responsible for communicating to employees and other relevant individuals appropriate disease alert information?
 2. Are there options for the affected farm(s) to shuttle feed from the feed delivery truck to the feed bins to minimize cross-contamination risk?
 3. Are there enhanced biosecurity protocols to utilize for clothing and/or delivery equipment if feed facility personnel and equipment do need to enter an affected premise?
 4. Is there additional capacity to clean and disinfect, as appropriate, feed delivery trucks/equipment (undercarriage/tires/cabs, feed carts, pallet jacks, etc.) on a more frequent than normal basis?
- **Effective Animal Disposal:** Regulatory authorities will establish and require use of procedures to properly dispose of animal carcasses and materials associated with livestock production. Animal producers on infected premises will work with federal and state officials to conduct carcass disposal in a timely, biosecure, and environmentally responsible manner.

3. **Disease Elimination:** Disease elimination includes cleaning and disinfection of infected premises. There are various methods of cleaning and disinfection that may be used in response to disease outbreaks. These methods include steam cleaning, pressure washing, shoveling, vacuuming, sweeping out bulk materials, chemical disinfection, and physical methods such as heat, ultraviolet light or desiccation. Determination of the appropriate method will depend on the site, the disease, and size and scale of the outbreak. While it is likely most cleaning and disinfection efforts will be focused on livestock production, transportation and packing plants, feed facilities also may be involved in cleaning and disinfection of their facilities and equipment. USDA has approved various disinfectants for use against FADs.

Additional Information

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