

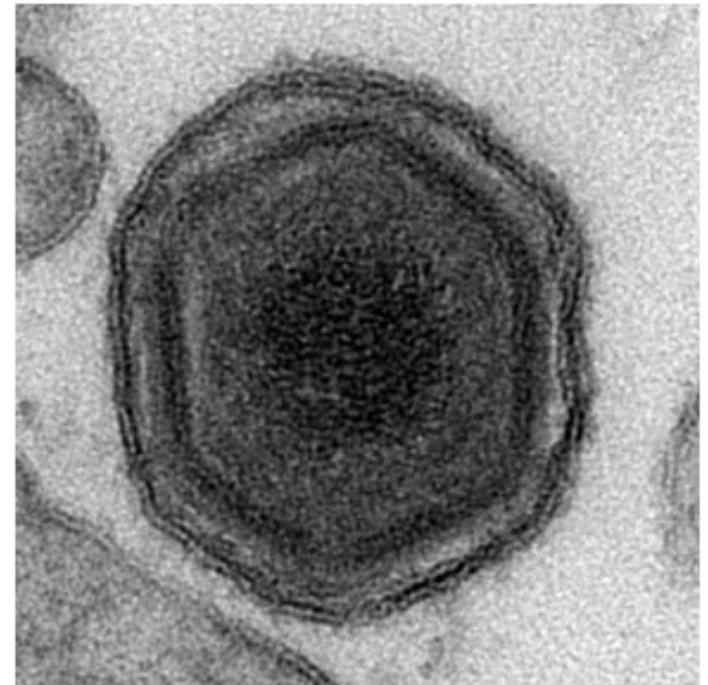
Local Impacts of ASF in the US

Jeff Kaisand, DVM
State Veterinarian



African Swine Fever (ASF)

- Only member of the genus *asfivirus* in the family *Asfarviridae*
- Probably a tick virus with pigs as accidental hosts
- Enveloped, double-stranded DNA virus



Very Stable in Environment

- Stable at pH 3.9-11.5
- Heat stable
 - 56°C for 70 minutes (132.8°F)
 - 60°C for 20 minutes (140°F)
- Survives at least
 - 11 days in feces (room temp)
 - 1 month in soiled pig pens
 - 70 days-blood on wooden boards
 - 15 weeks in putrefied blood
 - 18 months in blood at 4°C
- Survival in pork products
 - 15 weeks in chilled meats
 - 300 days in cured hams (Parma hams)
 - 15 years in frozen carcasses
 - 150 days in boned meat (39°C)
 - 140 days in salted dried hams



Host Range: Pigs & Ticks

- Domestic swine
- Feral swine
- Soft ticks
 - Replicates in soft ticks
 - Some in US



How long can soft tick colonies
remain infected?
For up to 4 years!!



Clinical Signs

- Morbidity/mortality varies
- High fever (105-107°F/ 40.5-42°C)
- Erythema, anorexia, bloody diarrhea
- Huddling, tremors, seizures
- Abortions
- Vomiting, diarrhea that may be bloody
- Ocular discharge
- Chronic weight loss



Incubation Period

- 3-15 days after contact with ASF infected pigs

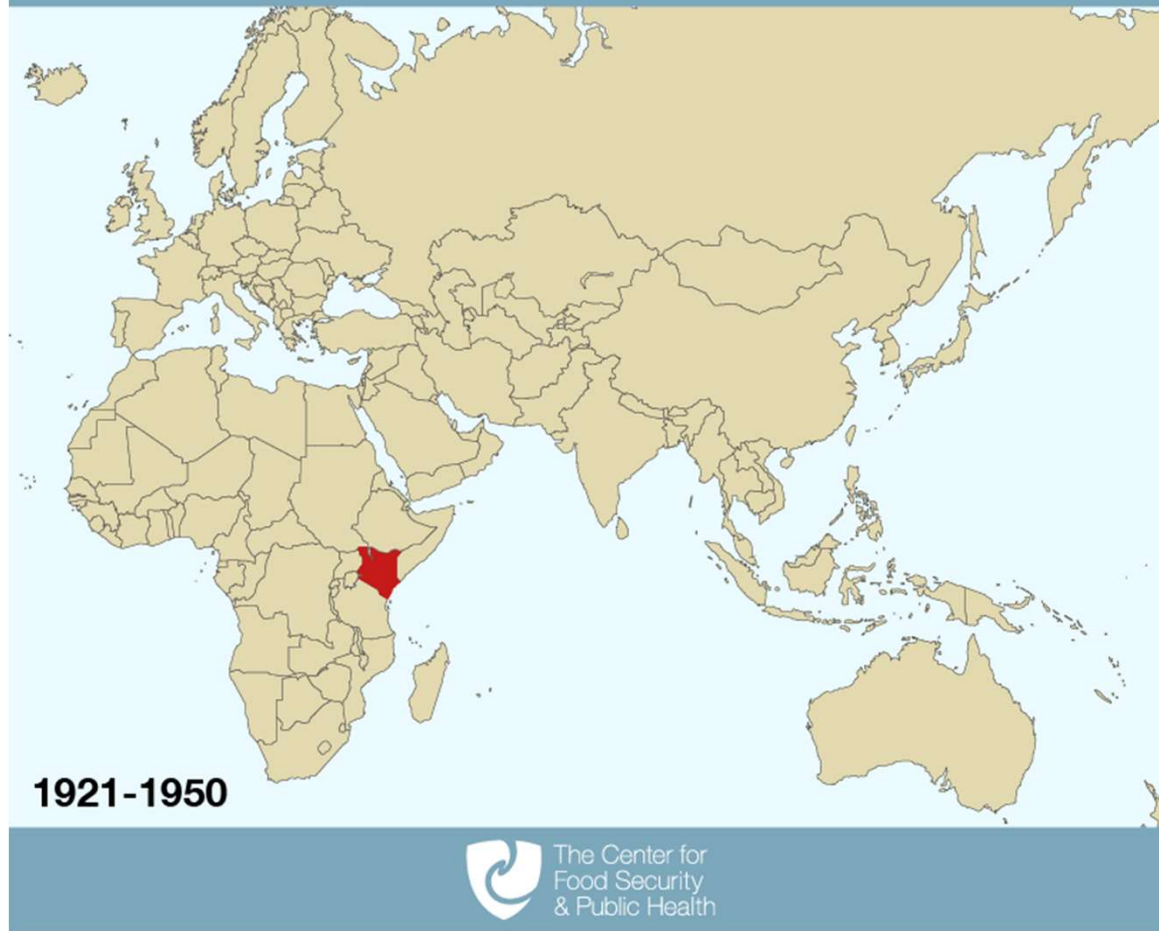


Transmission

- Introduction into domestic swine by feeding garbage/swill contaminated with pork scraps
- Blood contaminated sources
- Direct contact and fomites
 - Animals
 - People
 - Vehicles
 - Equipment
 - Feed



African Swine Fever Spread



IOWA DEPARTMENT OF
**AGRICULTURE &
LAND STEWARDSHIP**

For planning purposes only. This information is subject to change in the event of a real disease outbreak.

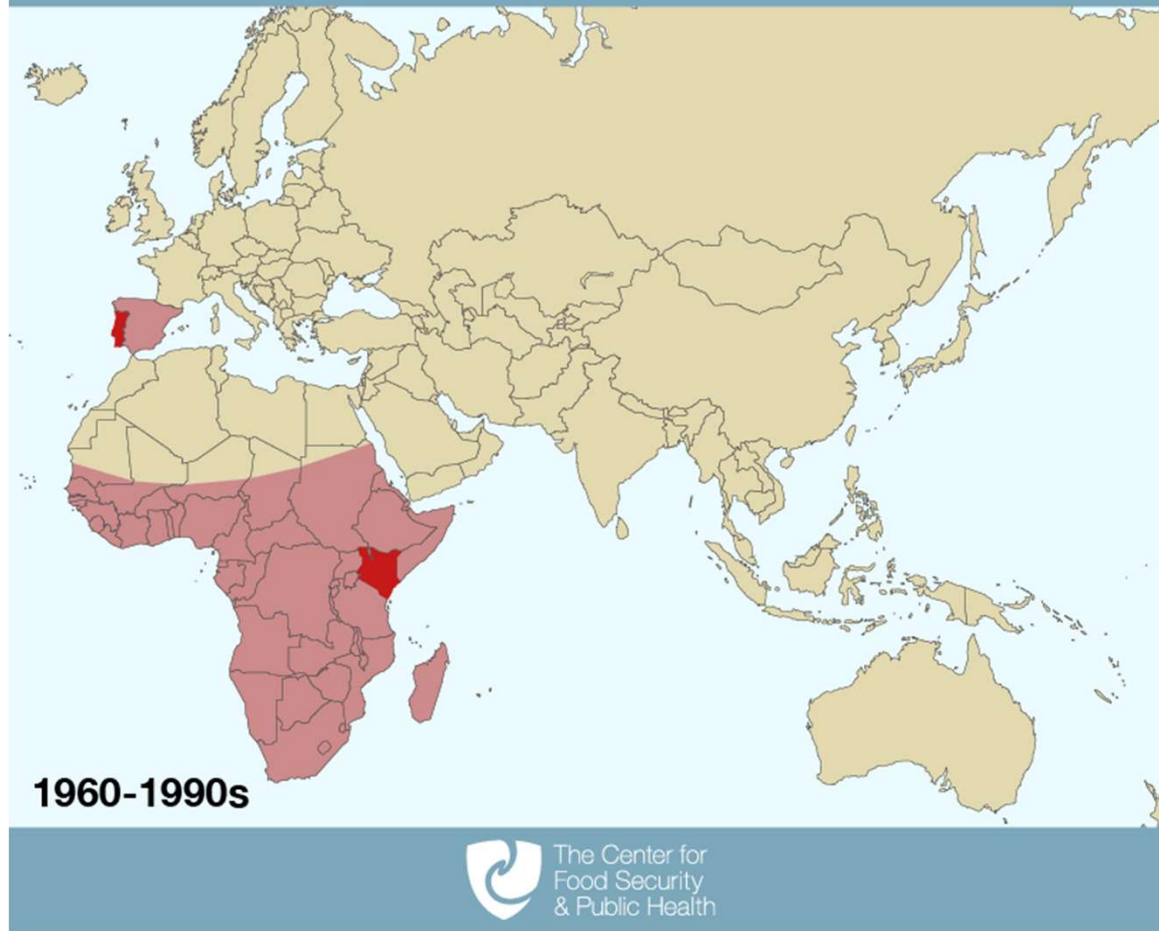
African Swine Fever Spread



IOWA DEPARTMENT OF
**AGRICULTURE &
LAND STEWARDSHIP**

For planning purposes only. This information is subject to change in the event of a real disease outbreak.

African Swine Fever Spread



IOWA DEPARTMENT OF
**AGRICULTURE &
LAND STEWARDSHIP**

For planning purposes only. This information is subject to change in the event of a real disease outbreak.

African Swine Fever Spread



Regulatory Disease

**Can't eliminate industry while
eliminating the disease, but we can't let
disease eliminate the industry.**

This interface is a fine line



IOWA DEPARTMENT OF
**AGRICULTURE &
LAND STEWARDSHIP**

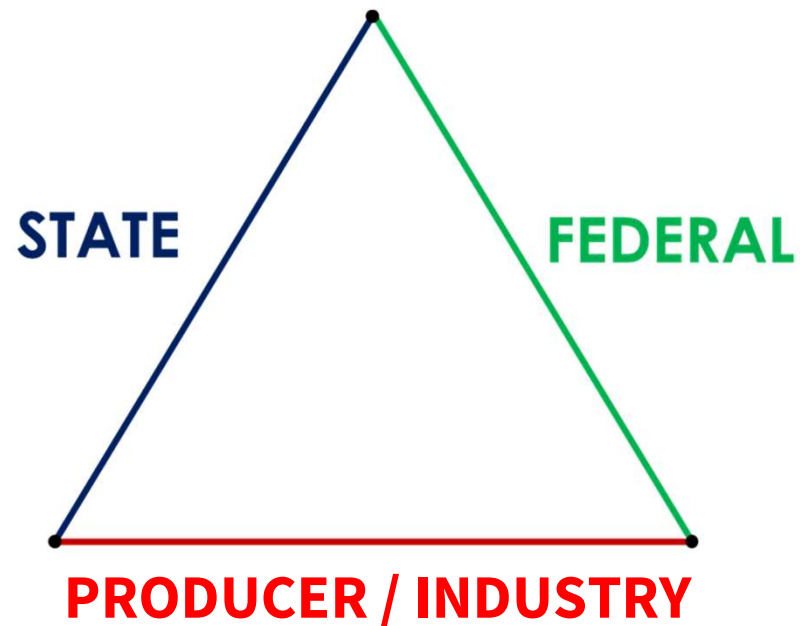
For planning purposes only. This information is subject to change in the event of a real disease outbreak.

Unified Command

- IDALS
 - Quarantine
 - Permitting
- USDA APHIS
 - Indemnity
 - Depopulation & Disposal
 - Virus eliminations
 - Cooperative agreements
 - Direct contracts
- Joint
 - Policies
 - Execution
 - Coordination



Triangle of Cooperation



Local Impacts of ASF in the US



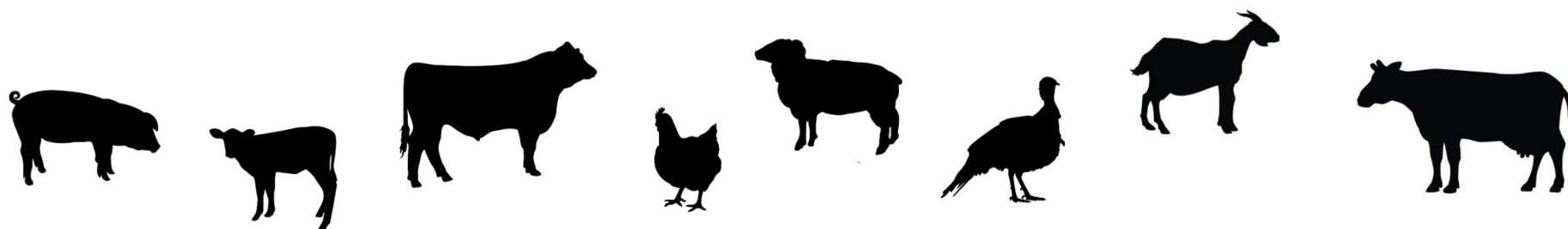
FAD Response Plan Steps

CONTAIN

- Quarantine
- Biocontainment
- Epi info – trace in/trace out

CONTROL, ELIMINATE

- Indemnity
- Mass Depopulation
- Disposal
- Clean & Disinfect



Producers, Responders, Veterinarians

Challenges in an FAD Response

- Unlike any other experience
- Long hours, lots of uncertainty
- Tough situations
 - Sick animals, no treatment
 - Depopulation



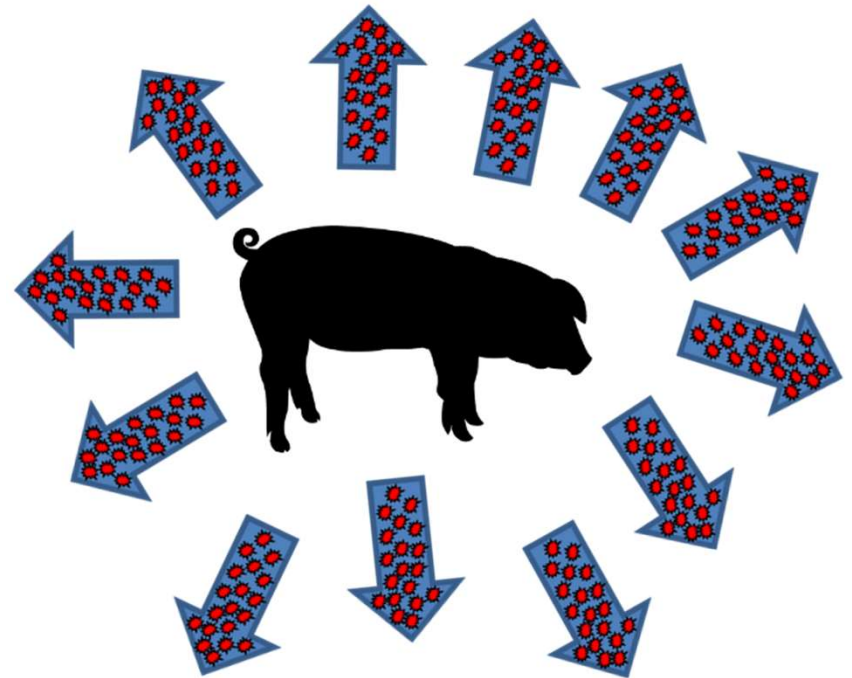
Control Area

- Control Area around infected premises
- Biocontainment procedures
- Restricted movements



Depopulation

- Difficult decisions
- Control spread
- USDA approval



Goal: 24 hours



IOWA DEPARTMENT OF
**AGRICULTURE &
LAND STEWARDSHIP**

For planning purposes only. This information is subject to change in the event of a real disease outbreak.

Carcass Disposal

- Work with your local DNR office to determine disposal options
 - Locate local contact at <https://www.iowadnr.gov/fieldoffice> or
 - Call (515) 725-8694



Goal: On-Site Disposal



IOWA DEPARTMENT OF
**AGRICULTURE &
LAND STEWARDSHIP**

For planning purposes only. This information is subject to change in the event of a real disease outbreak.

Producers May Need Help From Neighbors

- Cleaning and disinfection supplies
- Help with euthanasia
 - Equipment (generator, CO², etc.)
 - Manpower
- Disposal resources
 - Equipment for burial or moving carcasses
 - Carbon material
- Moral support



Who Else May Be Impacted?

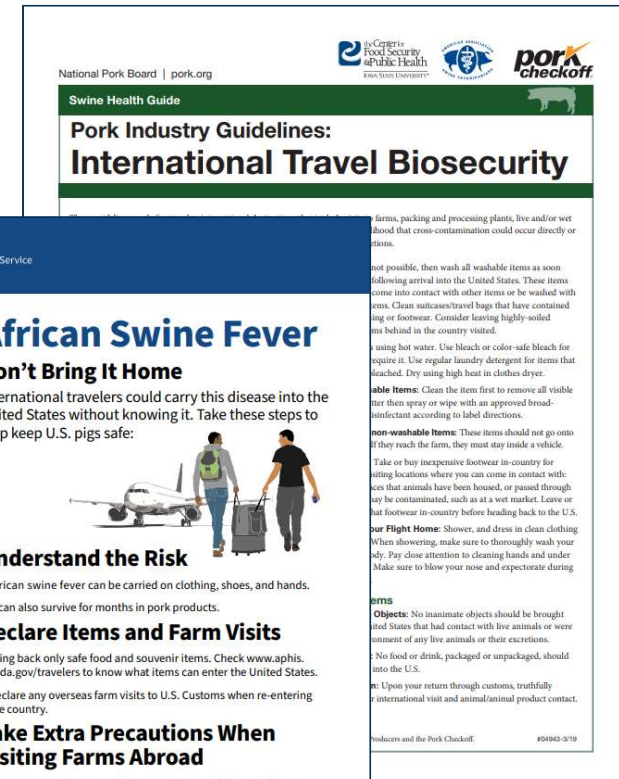
- Feed mills
- Shared labor/equipment
- Vaccination and load crews
- Record keeping and logistics personnel
- Veterinarians
- Trucking companies
- Local contractors (grinding, digging, etc.)



Photo courtesy: National Pork Board

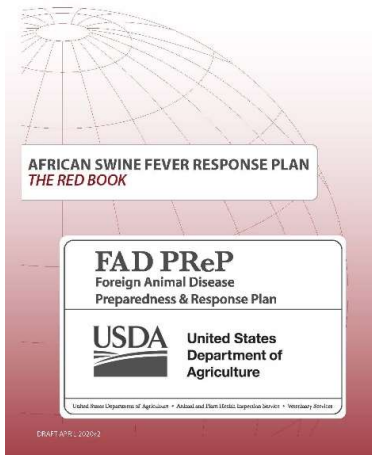
International Travel

- 5 nights downtime
- Wear different clothing into farms
- Wash and disinfect washable items
- If you visited a farm, throw away shoes before returning to the US



Producer Preparedness Activities & Resources

- Resources on IDALS Website
 - State and Federal FAD response plans



Iowa African Swine Fever State Response Plan

IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

This is a draft plan and is subject to change

November 11, 2019

Table of Contents:

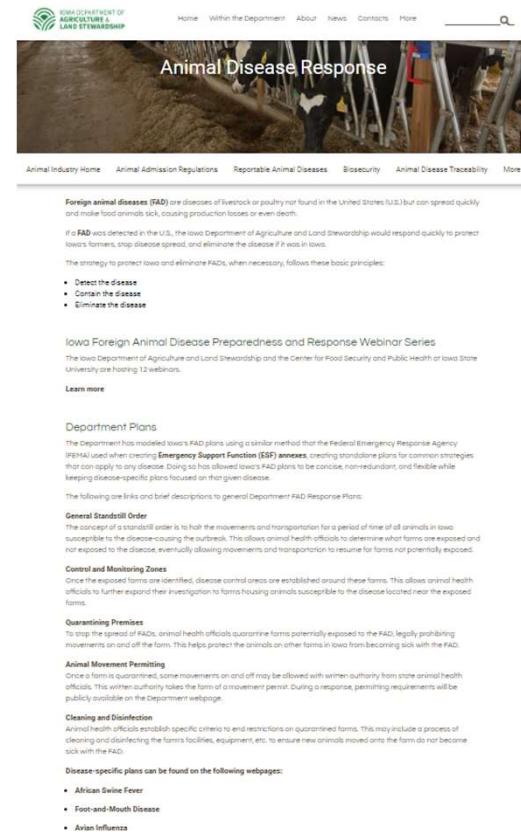
1. Introduction
2. Pre-Outbreak Actions
 - i. Biosecurity
 - a. General Recommendations
 - b. Outdoor Access
 - c. Personnel policies
 - Hunting
 - International travel
 - Clothing
 - Shower-in Shower-out
 - Outside food
 - Outside materials
 - d. Mechanical vectors
 - ii. Premises Registration
3. Classifications of an ASF outbreak in relation to Iowa
 - i. Continental ASF outbreak in Canada or Mexico but not in the U.S.
 - ii. Domestic Confirmation of the first ASF case in the U.S. but not in Iowa
 - iii. In-State Surveillance shows a positive case in Iowa or epidemiologic evidence proves a connection of an Iowa herd to an infected herd

Appendix 1: Standstill Order

Appendix 2: Epidemiological Investigation and Surveillance

Appendix 3: Mitigation

- i. Quarantine
- ii. Control Area
- iii. Perimeter
- iv. Mass Depopulation
- v. Carcass Disposal
- vi. Cleaning and Disinfection
- vii. Vaccination



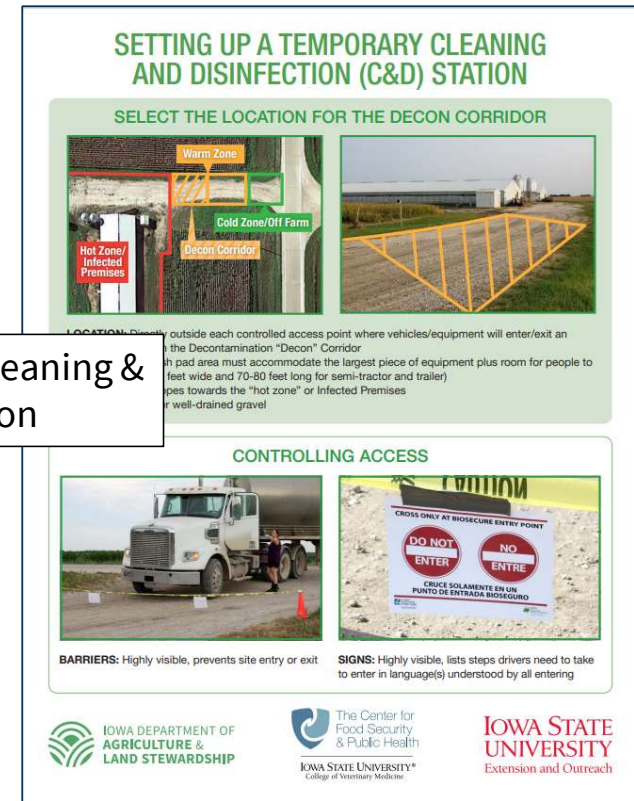
<https://iowaagriculture.gov/animal-industry-bureau/animal-disease-response>

Producer Preparedness Activities & Resources

- Resources on IDALS Website
 - State and Federal FAD response plans
 - Biosecurity resources



Resources to Set up a Cleaning & Disinfection Station



<https://iowaagriculture.gov/animal-industry-bureau/animal-disease-response>

Producer Preparedness Activities & Resources

- Resources on IDALS Website
 - State and Federal FAD response plans
 - Biosecurity resources
 - Priorities for record keeping

Premises Trace-In and Trace-Out Priority Ranking for Swine Facilities during Foreign Animal Disease Outbreaks

During a foreign animal disease outbreak, the Iowa Department of Agriculture and Land Stewardship will conduct epidemiological investigations examining any movement that could have potentially carried disease onto or off a swine facility during a minimum of the previous 30 days.

During the investigation, the Department will review the records of all live animals, animal products, animal wastes, feed, equipment, personnel, as well as everything else (animal related or otherwise) that has moved on or off the premises. While not all movements have the same potential to spread disease, every movement must be reviewed to control disease spread. The Department recognizes that it will take time to gather these records. To make this more manageable the following classifications list the priority of which records should be quickly gathered.

High-Priority

- Entry and exit of live animals (i.e. any swine moving onto or off the premises, including transportation trucks)
- Entry of animal products (i.e. semen)
- Collection of mortalities ("deads") by rendering
- Entry of regular employees (i.e. those working on the farm on a daily or weekly basis)
- History of any international travel (both employees and visitors)

Medium-Priority

- Entry of visitors (tours, students, extended family, i.e. anyone)
- Entry of animal health professionals (i.e. veterinarians, veterinary technicians, etc.)
- Entry of equipment directly related to daily operations and swine production (i.e. equipment shared between sites, etc.)
- Removal of manure/waste
- Entry of repair/service personnel (i.e. electricians, plumbers, etc.)
- Delivery of feed

Low-Priority

- Delivery of fuel (i.e. propane, diesel, etc.)
- Removal of garbage
- Delivery of mail and packages
- History of other animals on the site (i.e. pets, wild animals, etc.)
- Entry of pest management personnel (i.e. rodent control, exterminators, etc.)
- Entry of grounds maintenance personnel (i.e. mowing, snow removal, etc.)

In the case of an outbreak, records will be reviewed in the order of highest priority first. However, if at any time someone knows of equipment, supplies, or personnel listed in the Medium or Low Priority groups that were in contact with other swine not located on their premises, they should be treated as High-Priority and immediately reported.

To streamline the process of gathering these records it is recommended that if possible, premises pre-identify one staff member or employee to be responsible for tracking listed movements. Designating specific people for tasks will increase the speed of gathering records. Regardless, it is recommended for every premises to create a plan on how they would report all movement records to the Iowa Department of Agriculture. When recording these records, the person responsible should also collect the names, addresses, contact information (including phone numbers and email address) of any third party coming on their premises.

Last updated 3/16/2020




IOWA DEPARTMENT OF
AGRICULTURE &
LAND STEWARDSHIP

Dr. Jeff Kaisand, State Veterinarian
(515) 281-5321
jeff.kaisand@iowaagriculture.gov

<https://iowaagriculture.gov/animal-industry-bureau/animal-disease-response>

Producer Preparedness Activities & Resources

- Resources on IDALS Website
 - State and Federal FAD response plans
 - Biosecurity resources
 - Priorities for record keeping
 - Draft movement permit



**IOWA DEPARTMENT OF
AGRICULTURE &
LAND STEWARDSHIP**

Mike Naig
Secretary of Agriculture

Wallace State Office Building • 502 E 9th St, Des Moines, IA 50319 • (515) 281-5321 • www.iowaagriculture.gov

Permit
Swine Moving from a Control Area Directly to Slaughter

Permit number*	
Date of issuance*	
Period permit is valid for*	
Animal type moving**	
Premises identification number (PIN) of origin of movement**	
Premises identification number (PIN) of destination of movement or 911 address**	
Name of person that collected samples***	
Electronic or hand signature of permit applicant****	

*To be filled in by IDALS

**To be filled in by owner or authorized agent of owner

***If not collected by an accredited veterinarian

****Must be submitted by owner or authorized agent of the owner of the swine.

Page 1 of 3

Producer Preparedness Activities & Resources

- Resources on IDALS Website
 - State and Federal FAD response plans
 - Biosecurity resources
 - Priorities for record keeping
 - Draft movement permit
 - Recorded webinars



<https://iowaagriculture.gov/animal-industry-bureau/animal-disease-response>

Questions?

Reporting

- Call IDALS
 - Office Hours: 515-281-5305
 - After Hours: 515-242-0247
- Call USDA
 - Office Hours: 515-284-4140
 - After Hours: 515-669-6043

