



African Swine Fever (ASF)

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African Swine Fever is extremely contagious and is deadly in domestic and feral swine of all ages. African Swine Fever has multiple strains ranging from highly pathogenic to less virulent. The introduction of any strain into the U.S. will result in a complete collapse of the export market and catastrophic economic loss to the entire American pork industry.

Transmission of ASF can be through direct contact between infected pigs or indirect contact with contaminated objects such as clothing, vehicles, and equipment. Vectors such as ticks also can transmit the disease as can feeding uncooked pork. There is no threat to humans as ASF is not zoonotic.

Research efforts across the globe are focused on developing a commercially available vaccine for the swine industry. Currently, there are no cases in the United States, though ASF has spread across Asia, Europe, the Caribbean, and the Pacific.

There is no treatment for ASF, but there are signs and symptoms to watch for. Early diagnosis of ASF is essential for control. Immediately report animals that show signs of ASF.

Signs of African Swine Fever

- High fever
- Decreased appetite and weakness
- Red blotchy skin or skin lesions on ears, abdomen, and legs
- Cyanosis (bluish or purplish coloring of the skin)
- Diarrhea
- Vomiting
- Coughing and difficulty breathing
- Abortions
- Sudden death

Clinical signs of ASF are very similar to Classical Swine Fever (hog cholera), and the only way to know the difference is through diagnostic testing. Contact your local veterinarian or the state veterinarian for testing. If you suspect an introduction of ASF in your pigs, stop all movement of animals and people until a health official has visited your farm.

Procedure for Positive Cases

If you see signs of ASF in your herd:

- 1. Quarantine** – Quickly isolate any animals with signs of illness and restrict the movement of swine and people on and off your farm.
- 2. Report immediately** – Call your herd veterinarian or the North Dakota State Veterinarian's Office at 701-328-2655.
- 3. Eradicate** – Work with the North Dakota State Veterinarian's Office and federal veterinarians on a depopulation and disposal plan for all the affected and exposed pigs.
- 4. Disinfect** – Clean and disinfect all equipment, tools, clothing, boots, vehicles, and facilities.

Procedures for Feral Swine

Since ASF affects all members of the pig family, feral swine can play a significant part in the spread of ASF in the United States. Maintaining proper separation between domestic and feral swine can decrease the probability of spreading ASF and other diseases. Keep feed stored where it cannot get contaminated by wildlife or rodents.

In North Dakota, feral swine are reported and removed from the wild. If ASF is detected in the U.S., each state will develop a wildlife management plan to address the transmission of ASF in feral swine as soon as possible after the identification. The plan will aim to mitigate transmission pathways and prevent the introduction or spread of ASF in the feral swine population.

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Biosecurity

Biosecurity is a set of management practices that are designed to prevent the introduction or spread of disease agents in your herd or production facility. Following standard biosecurity protocols for both your facilities and employees/visitors can help keep your farm and others safe.

Everyone raising swine should have a biosecurity plan in place to prepare for and prevent disease outbreaks. Biosecurity is a team effort and everyone, whether you raise swine or not, needs to be vigilant when traveling and when encountering diseased animals.

Biosecurity Guidelines

- 1. Restrict access to the farm.** Limit access to essential people. Create one or more lines of separation as a boundary to help prevent the movement of the virus into animal areas and require those who are crossing these lines to complete an entry logbook.
- 2. Discuss prevention practices regularly.** Continually update and enhance the biosecurity plan with the help of your herd veterinarian. Make sure that everyone who works or visits the site understands and follows the protocol.
- 3. Enhance employee biosecurity measures.** The virus can be brought onto your farm through clothing, shoes, and equipment. Shower and change into clean clothing and boots before crossing the line of separation.
- 4. Have strict animal movement protocols.** Quarantine all pigs and semen before introduction to the current herd, and make sure that all are verified to have no foreign animal disease. Clean and disinfect all equipment and vehicles entering and leaving your site.
- 5. Prevent feed contamination and control wildlife.** Make sure that feed is delivered, stored, and fed in ways that will prevent contamination. Prevent all animals, including birds, from contact with pigs, and maintain a rodent and fly control program. Properly dispose of dead animals so they don't attract wildlife or other scavengers.
- 6. Don't eat in animal areas.** Keep outside food products away from animals. The virus can survive for months in pork and pork products and can be a source of virus spread.

Immediately report animals that show signs of ASF. You can report to your herd veterinarian, the North Dakota State Veterinarian's Office at 701-328-2655, or federal animal health officials. You also can call the USDA's toll-free number at 866-536-7593 for testing and investigation.

["Select Animal Disease Personal Protective Equipment Chart"](#) (NDSU Extension V2129) contains minimum PPE recommendations for specific diseases, including ASF. Refer to ["Select Animal Disease Disinfectant Chart"](#) (NDSU Extension V2128) for disinfectant options.



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Proper Disposal

Every state will need to develop a disposal plan if ASF is detected in the U.S. In North Dakota, producers will need to work with the North Dakota State Veterinarian's Office to consider a site-specific depopulation and disposal plan.

Food Safety

ASF is a viral disease that only affects pigs and is not a human health or food safety concern. Properly prepared pork products are safe for people to eat. Always adequately cook pork to a safe internal temperature. Fresh cuts should be cooked to 145°F, while ground pork should be cooked to 160°F.

Resources

- [ND State Board of Animal Health](#)
- [USDA Animal and Plant Health Inspection Service](#)
- [National Pork Board](#)
- [U.S. Swine Health Improvement Plan](#)
- [American Veterinary Medical Association](#)
- [World Organization for Animal Health](#)

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