African Swine Fever: Biosecurity is the Key

Practicing biosecurity on your farm is the current best recommendation to keep your pigs healthy.

Knowing your feed source is imperative. Corn field at harvest, Iowa. Photo: E.Hines

Since the initial outbreak of African swine fever (ASF) in China in August of 2018, the world has been watching the spread of ASF throughout Asia with both great concern and great optimism. While markets outside of Asia wait to capitalize on potential new export opportunities, pig producers in the U.S. are keenly aware of the devastation that could occur if ASF is found in the domestic swine herd. For pig producers in the U.S., it is advantageous to watch the spread of this devastating disease in the Chinese and Asian swine herds, and to better understand the steps necessary to stop or prevent the spread of disease.

To gain an understanding of how to deal with ASF, and the work it would take to eradicate, some industry leaders are looking toward Spain for guidance. From 1957 to the 1990s, ASF wreaked havoc in Portugal and Spain, and today Spain’s swine industry is considered to have some of the strongest and most advanced biosecurity measures -- largely attributed to an increase in integration and modernization of facilities -- emphasizing the importance of biosecurity. This is particularly important as there is still no vaccine available for ASF.

Numerous swine industry partners have been working to aggregate resources for producers. Many of these resources can be found through the U.S. Department of Agriculture, the National Pork Board and Iowa State University. Among all these resources, a unified message continues to be put forth: prepare for foreign animal disease (FAD) through biosecurity. Having a plan to stop the spread of the disease is our greatest defense to keep our pork free of truly devastating swine illnesses. Practical biosecurity can be applied on any farm. Whether you raise your swine on concrete slabs or on pasture, practicing biosecurity in your herd will go a long way to keeping your pigs safe and reducing the spread of illnesses. This applies not only to ASF, but also to Classical Swine Fever (CSF or Hog Cholera), recently found in Japan and Brazil, or other FAD.

These practices include registering for a premises ID, registering with Secure Pork ahead of restricted livestock movements that come with an FAD outbreak, creating a practical biosecurity protocol (and following that protocol every day!). The current status of ASF monitoring and preventative actions suggested for U.S. pork producers can be found in a fact sheet published by the American Association of Swine Veterinarians, National Pork Producers Council, National Pork Board, and Swine Health Information Center. APHIS (USDA) has also posted the complete FAD response plan for ASF. Part of this focus has been to increase funding available for vaccine creation and increase the number of labs that are capable of testing for ASF. These efforts are being put in place to support good biosecurity practices and border security being implemented now.

In addition to practicing biosecurity through movements and tracking, spread of ASF may possibly be linked to feed ingredients. The outbreak of porcine epidemic diarrhea virus (PEDv) in the U.S. in 2014 has increased concern of feed ingredients as a possible mode of transfer for diseases. Research on the transfer of ASF through feed ingredients has found that ASF can survive for a substantial amount of time, up to 45 days in soybean meal. This new data emphasizes the importance of understanding feed biosecurity, and why you should have that discussion with your mill. Awareness of disease spread through all avenues to your farm are key to developing a sound and practical biosecurity protocol. There are numerous resources and key information available to producers when developing their biosecurity protocols. Below are further collection of these resources and contact information.
The summary of these resources is to

1. Report suspected illness: (PDA: 717-772-2852)
2. Be critical of feed ingredient sources: discuss biosecurity and feed safety with your mill.
3. Don’t feed pork products to swine at all. Pork products are currently thought to be the greatest risk for transferring the disease over long distances. Feeding animal products to livestock (‘garbage feeding’) is an activity that requires permitting in Pennsylvania. Contact the PDA for more information on garbage feeding: (PDA: 717-772-2852)
4. Keep wild swine populations away from domestic swine herds: setting up practical biosecurity protocols is imperative for controlling wild life disease vectors. Contact Elizabeth Hines (814-865-3267) or your veterinarian for assistance in building a biosecurity plan for your herd.
5. Prepare for the reaction in an FAD outbreak: PDA and USDA resources will actively work to stop the spread of FADs in domestic US swine herds. Learn more about regulatory response through the Secure Pork Supply website, by contacting your Regional State Veterinarian, or by contacting Penn State Extension Swine Specialist, Elizabeth Hines at 814-865-3267

As with most new threats, understanding the perspective of FAD threats and previous experiences of producers and experts can go a long way in understanding your best approach. Take a few moments to watch these videos to understand the risks of ASF, and the benefits received from preventative measures. The below videos are from presentations given at the 2018 Allen D. Leman Swine Conference, Minneapolis MN.

- **African Swine Fever – a real and present global threat**, Chris Oura
- **ASF experiences in a large commercial system**, Gustavo Lopez
- **Risk of ASF virus in feed and mitigation strategies**, Scott Dee
- **ASF awareness, prevention, and response efforts at the national level**, Patrick Webb

North American swine producers stand to benefit by keeping the regional herds free of FAD. This takes cooperation from all swine producers, large and small. If you have not already, utilize the resources available in this article to evaluate biosecurity of your herd and to do your part to keep FAD out of the U.S. and North America.

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