



# ASF: Biosecurity and Early Detection



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Swine Disease Eradication Center

## Current status

African swine fever (ASF) is one of the most severe diseases of pigs, having a drastic impact on the pig industry. Since 2007, ASF has spread from the Caucasus region to eastern European countries. It then continued to spread westward affecting domestic pig and wild boar populations (Fig.1). Just recently, it has made its first incursion into Asia, where China, a major pork producers worldwide, reported its first outbreak.



Figure 1: updated distribution of ASF in Europe (Sept 2018)

## How ASF is spread

ASF virus is highly stable and temperature resistant and can persist in the environment for a long time<sup>1</sup>.

**Due to the absence of an effective vaccine, introduction and spread of ASF onto domestic pig farms can only be prevented by strict compliance with biosecurity measures.**

Main mechanism of spread<sup>(2,3)</sup>:

- Direct pig-to-pig contact, including contact with wild pigs.
- Movement of infected live animals.
- Contaminated vehicles and other fomites, clothing, footwear, any other equipment
- Workers and visitors
- Consumption of contaminated feed (swill feeding)
- Contact with infected animal products
- Improper disposal of manure and dead animals.
- Slurry
- Genetic materials
- Ticks

## Biosecurity reminders

In order to avert ASF spread:

- Ensure biosecurity protocols are up-to-date and commit to their implementation every day.
- Check with your feed supplier about the ingredients used in your feed.
- Use disinfectants (specifically labeled for ASF), after removal of organic material.
- Implementation of periodic internal audits for biosecurity protocols.
- Reinforce staff biosecurity training.
- Proactively follow industry best management practices if hosting international visitors or traveling abroad.
- If you notice any difference in pigs' health, call your veterinarian practitioner immediately.

## Early detection highlights

Early signs you may notice include:

- Increase in the number of dead pigs with purple ears & other parts of the body, fever, diarrhea.
- Sudden increase of morbidity and mortality.

Some ASF strains can start shedding long before the onset of clinical signs. Be aware of the fact that ASF can have a much milder presentation in the field than what it is traditionally expected, misleading the early clinical diagnostic.

## Immediate actions

- Prepare your farm for enrollment in the Secure Pork Supply. Resources instructions can be found at [www.SecurePork.org](http://www.SecurePork.org)
- Fill out a FAD Preparation Checklist for your arm. It can be found at [www.pork.org/fad](http://www.pork.org/fad)
- If you suspect of a case, contact XXX immediately.

## Additional Information:

1. OIE Technical Disease Card - African Swine Fever, 2018.
2. Jurado C et al. (2018). Relevant Measures to Prevent the Spread of African Swine Fever in the European Union Domestic Pig Sector. Front. Vet. Sci. 5:77.
3. Bellini, et al.(2016). Preventive measures aimed at minimizing the risk of African swine fever virus spread in pig farming systems. Acta Veterinaria Scandinavica, 58, 82.

*This fact sheet is meant to provide basic information. For specific health concerns please contact your physician or veterinarian. Updated 2018*