

African Swine Fever Virus

African Swine Fever Virus (ASF) is spreading throughout Asia and Eastern Europe.

Background:

ASF is a highly contagious viral disease of pigs, transmitted through direct contact between pigs as well as indirectly, through fomites (contaminated clothing, vehicles or equipment, insects such as flies), ingestion of contaminated meat and meat by-products, semen and can be maintained in a sylvatic cycle via *Ornithodoros* ticks (primarily in Africa). ASF virus can affect domestic and feral pigs of all ages. Clinically ASF can present as a peracute, acute, subacute or subclinical/chronic disease. Clinical manifestations include high fever (up to 42°C), inappetence, 'blotching' of the skin, incoordination, diarrhoea, vomiting and respiratory signs. Due to variability in virulence, the disease ranges from high morbidity and mortality (approaching 100%) to a milder form that may just result in seroconversion.

Veterinarians who suspect African swine fever in pigs must report it to the Local Land Services on 1300 795 299 or the Emergency Animal Disease Watch Hotline on 1800 675 888.

ASF virus is not zoonotic - humans are not at risk. Currently, there are no vaccines available.

The virus is highly resilient in most environmental conditions and at a wide range of pH levels. It is resistant to a number of commercially available disinfectants. ASF virus is not inactivated by thawing or freezing but can be inactivated in a liquid media by heating at 60°C for 30 minutes.

The specimens required for diagnosis of suspected cases include:

1. Whole blood in EDTA anticoagulant;
2. Samples of fresh tonsils, spleen, lymph nodes (gastrohepatic and mesenteric), lung, kidney, liver and ileum collected aseptically and kept chilled;
3. Clotted blood from animals suspected of having subacute or chronic disease;
4. A full range of tissues in neutral-buffered formalin.

These samples should be submitted to the NSW government diagnostic laboratory at Elizabeth Macarthur Agricultural Institute (EMAI) at Menangle. EMAI can be contacted on 1800 675 623 and samples submitted to Woodbridge Road, Menangle NSW 2568. Further details can be found at <http://www.dpi.nsw.gov.au/about-us/services/laboratory-services/customer-service>

Situation update:

ASF virus is endemic in most sub-Saharan countries and prior to 2007 had been previously been detected in parts of Europe and successfully eradicated with the exception of Sardinia. Since 2007 there have been ongoing detections of ASFV in the Caucasus region and Russia, extending to the Baltic countries in 2014.

On 3 August 2018, ASF virus was reported in China which has since reported at least 7 outbreaks. China produces approximately 500 million pigs per year, which accounts for about half the world's pig production. The virus has been traced to the sale of live pigs and investigators estimate the disease has been circulating in China since April 2018.

From early July 2018, ASF virus has been confirmed in south-east Romania, triggering an on-going stamping out process. On 27 August 2018, ASF virus was confirmed in the largest pig farm in Romania (second largest in Europe) with the planned culling of 141,000 susceptible pigs across 3 properties.

On 31 August 2018, the first case of ASF virus was reported in Bulgaria

Risk to Australia:

There have been no reported cases of ASF virus in Australia.

The Australian Government Department of Agriculture and Water Resources have reviewed the existing imports and pathways and believe that the risk of ASF virus is being managed by biosecurity risk management measures already in place. To manage the risk of ASF virus, meat must be treated under specific conditions to inactivate the ASF virus or sourced from ASF-free countries or zones.

These international events highlight the importance of maintaining good biosecurity practices on farm.

Further Information:

If you suspect a case of African Swine Fever, then call 1800 675 888

Biosecurity guidelines for pig producers – NSW DPI

<https://www.dpi.nsw.gov.au/animals-and-livestock/pigs/compliance-and-biosecurity/legislation/the-general-biosecurity-duty-and-pig-producers>

ASF virus factsheet – Centre for Food Security and Public Health

http://www.cfsph.iastate.edu/Factsheets/pdfs/african_swine_fever.pdf

Ausvetplan – African swine fever Version 4.1

<https://www.animalhealthaustralia.com.au/our-publications/ausvetplan-manuals-and-documents/>

© State of New South Wales through the Department of Industry, 2018. You may copy, distribute and otherwise freely deal with this publication for any purpose, provided that you attribute the NSW Department of Primary Industries as the owner.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (September 2018). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.