

African Swine Fever (EXOTIC DISEASE)

African Swine Fever is absent from New Zealand and is a Notifiable Disease. If you suspect a case of African Swine Fever contact the MPI Notifiable Disease Hotline at 0800 80 99 66

The recent Asian outbreak of African Swine Fever (ASF) is one of the largest animal disease outbreaks in history resulting in over 3.7 million pigs being culled in Vietnam and China. Smaller outbreaks have also been reported in Hong Kong, Taiwan, North Korea, Cambodia, Mongolia and most recently in Laos.

Would you know what to look for if it arrived in New Zealand??? Did you know, ASF could arrive from illegally imported pork products coming from infected countries?

Transmission:

The disease can be transmitted through direct contact with infected animals, ticks, or indirect contact via fomites including infected meat products.

Clinical signs:

Clinical signs vary depending on the virus virulence.

Acute outbreaks:

- Anorexia
- Pyrexia
- Listlessness
- Incoordination
- Cutaneous hyperaemia
- Haemorrhages on the skin (especially the ears and flanks)
- Hyperpnoea
- ± Vomiting, diarrhoea, dehydration and ocular discharge



Leukopenia may be seen in a CBC. Morbidity and mortality are high and can reach 100%.

Subacute or chronic disease:

- Abnormal respiration
- Abortion

Mortality is low.

Gross Lesions:

- Petechial and ecchymotic haemorrhages may be present in the skin, kidneys, lymph nodes, serosal and mucosal surfaces, epicardium, endocardium, larynx, urinary bladder, gall bladder and lung.
- Oedema (*pulmonary oedema)
- *Hydrothorax
- *Hydropericardium
- *Ascites
- Liver and spleen may be congested
- Spleen is often enlarged, friable and have many infarcts
- Meningeal and brain congestion

*Lesions that are often seen with ASF and rare with CSF

Gross lesions are similar to those seen with Classic Swine Fever (CSF; also exotic to New Zealand). Haemorrhages and oedema are usually more severe than with CSF.

Tissues to collect for diagnosis:

LIVE pigs: Serum and Whole blood (EDTA or Heparin)

DEAD pigs: Spleen, lymph nodes, tonsil, bone marrow, lung, and kidney.

References:

Neumann EJ, Ramirez A, and Schwartz KJ (editors). Swine Diseases Manual. Fourth Edition. American Association of Swine Veterinarians. Iowa. 2009

OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2019. www.oie.int/standard-setting/terrestrial-manual/