# African Swine Fever

**Fact Sheet compiled by:** Cora Singleton  
**Sheet completed on:** 1 March 2011; updated 1 October 2012.  
**Fact Sheet Reviewed by:** Pat Morris, Alex Ramirez

**Susceptible animal groups:** Swine. Warthogs (*Phacochoerus aethiopicus*), bushpigs (*Potamochoerus porcus*), and giant forest hogs (*Hylochoerus meinertzhageni*) act as reservoir hosts in Africa. Ticks of the genus *Ornithodoros* are considered the natural arthropod host.

**Causative organism:** African swine fever virus is a large icosahedral DNA virus, the only member of the genus *Asfivirus* in the Asfarviridae family.

**Zoonotic potential:** No

**Distribution:** Africa, parts of Europe (Spain and Portugal), the Caribbean

**Incubation period:** 3-19 days; acute form 3-7 days.

**Clinical signs:** Acute disease – Pyrexia, severe depression, weak hind legs, ocular discharge, erythema, cyanotic skin blotching, extensive hemorrhages, diarrhea, cough, convulsions. High mortality.  
Chronic disease – Pyrexia, depression, emaciation, joint swelling, pneumonia, necrotic skin patches, abortion. Low mortality, persistent viremia.

**Post mortem, gross, or histologic findings:** Widespread petechial and ecchymotic hemorrhages (lymph nodes, kidneys, skin, larynx, urinary bladder), dark red to purple areas on skin, occasional button ulcers in cecum, enlarged spleen.

**Diagnosis:** Agent identification – Culture, hemadsorption test, fluorescent antibody test (FAT), PCR; serology – ELISA, indirect fluorescent antibody test (IFA), immunoblotting test, counter immunoelectrophoresis. OIE prescribed test for international trade – ELISA (alternative IFA)

**Material required for laboratory analysis:** Contact regulatory agencies prior to collecting and shipping samples which should include tissues (lymph node, kidney, spleen, lung) and blood (serum and EDTA-anticoagulated whole blood).

**Relevant diagnostic laboratories:**  
Foreign Animal Disease Diagnostic Laboratory  
USDA-APHIS-VS-NVSL-FADDL  
40550 Route 25 (for packages)  
Orient Point, NY 11957

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| Domestic and wild pigs and peccaries | Direct: oral and nasal routes, skin wounds.  
Indirect: feeding uncooked infected pork products, fomites or bites of soft ticks (*Ornithodoros* spp.). | Acute: pyrexia, weak hind legs, cyanotic skin, hemorrhages.  
Chronic: emaciation, joint swelling, abortion. | Inapparent disease to acute death. | None | Prevention: no vaccine, control soft ticks, do not feed uncooked pork.  
Control: test, slaughter, quarantine, disinfect. | No |

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**Animal Group(s)**  
**Affected**

**Transmission**

**Clinical Signs**

**Severity**

**Treatment**

**Prevention and Control**

**Zoonotic**
Treatment: No effective treatment.

Prevention and control: Prevention – vaccines are not effective. Prevention includes control of pig movements and implementation of serological surveys to detect carrier pigs; control of natural reservoirs (soft ticks); and avoidance of feeding uncooked pork products. Control measures include depopulation of infected pigs, disinfection of premises, area quarantine, and control of pig movement.

Suggested disinfectant for housing facilities: Sodium hydroxide, hypochlorites, formalin, sodium carbonate, ortho-phenylphenol, iodine compounds.

Notification: Reportable to the USDA/APHIS through the State Veterinarian or the federal Area Veterinarian in Charge. The disease is also reportable to the World Organization for Animal Health (OIE).

Measures required under the Animal Disease Surveillance Plan: Foreign animal disease – reportable.

Measures required for introducing animals to infected animal: Not recommended.

Conditions for restoring disease-free status after an outbreak: Infections must be reported to USDA/APHIS for management.

Experts who may be consulted: USDA State Veterinarians or federal Area Veterinarians in Charge

References: