

CLASSIC SWINE FEVER (hog cholera)

Animal Group(s) Affected	Transmission	Clinical Signs	Severity	Treatment	Prevention and Control	Zoonotic
Swine	Direct contact with body secretions, feeding uncooked infected pork products, mechanical vectors (flies, vehicles, people), <i>in utero</i> .	Acute: sudden death, ataxia, cutaneous cyanosis, necrosis of ear tips. Chronic: failure to thrive, dermatitis. Congenital: fetal mummification, cerebellar hypoplasia, congenital tremors.	Highly contagious. Can range from mild disease in chronic infections to severe disease and sudden death in acute infections.	None	Prevention: Vaccination utilized in some countries, control pig movements, serosurveys, do not feed uncooked pork. Control: test, slaughter, quarantine, disinfect.	No

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Susceptible animal groups: Domestic and wild swine; endemic in wild boar in parts of Europe.

Causative organism: Classic swine fever virus (CSFV) is an RNA virus in the genus Pestivirus within the family Flaviviridae. Strains can range from low to high virulence. Related to bovine viral diarrhea virus and border disease virus of sheep. Also known as hog cholera.

Zoonotic potential: No

Distribution: CSFV is present in Asia, the Caribbean, Madagascar and Mauritius, South and Central America and parts of eastern and western Europe. Areas considered free of CSF include the US, Canada, New Zealand, Australia, continental Africa, and several countries in central Europe.

Incubation period: 2-15 days

Clinical signs:

Acute disease (high virulence strains) – sudden death, depression, pyrexia, anorexia, ataxia, constipation followed by diarrhea and vomiting, ocular discharge, cutaneous cyanosis, necrosis of ear tips, muscle tremors, convulsions.

Chronic disease (low virulence strains) – dullness, anorexia, failure to thrive, dermatitis.

Congenital disease – stillbirth, fetal mummification, cerebellar hypoplasia, congenital tremors, failure to thrive.

Post mortem, gross, or histologic findings: Petechial hemorrhages in kidney, urinary bladder, and larynx; enlarged hemorrhagic lymph nodes; splenic infarcts; encephalitis; button ulcers in cecum (chronic disease); cerebellar hypoplasia (congenital disease).

Diagnosis: Agent identification – virus culture, fluorescent antibody test, immunoperoxidase procedure, ELISA, RT-PCR.

Serology – neutralization peroxidase-linked assay, fluorescent antibody virus neutralization, ELISA.

OIE prescribed test for international trade – neutralizing peroxidase-linked assay, fluorescent antibody virus

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neutralization test, ELISA
Material required for laboratory analysis: Tissues (tonsil, lymph node, spleen, kidney, distal ileum), blood, serum.
Relevant diagnostic laboratories: Foreign Animal Disease Diagnostic Laboratory, Plum Island, New York.
Treatment: No effective treatment.
Prevention and control: Prevention – USDA/APHIS has a surveillance program to prevent reintroduction of the disease. Vaccination is utilized in some countries. Control pig movements and implement serological surveys to detect carrier pigs. Do not feed uncooked pork products. Control – Depopulation of infected pigs, disinfection of premises, quarantine of the area and control of pig movement.
Suggested disinfectant for housing facilities: 2% sodium hydroxide, 1% formalin, sodium carbonate, strong iodophors.
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: Report suspicious cases to the USDA/APHIS Area Veterinarian in Charge, who will dispatch a Foreign Animal Disease Diagnostician to investigate the case and collect samples for testing.
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
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CLASSIC SWINE FEVER (hog cholera)

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