Classical swine fever (CSF)

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Definition

A contagious infectious disease affecting wild and domestic pigs, caused by a pestivirus of the family Flaviviridae.

Geographical distribution

Haiti and the Dominican Republic, Germany, Austria, Brazil, Cuba, Spain, Indonesia, Madagascar, Mexico, Nepal, Philippines, Romania, Thaïland, Ukrainia, Vietnam.

Affected species

Solely domestic and wild pigs (eg wild boars) .

Pathogens

Modes of transmission

Source

Direct transmission

Indirect transmission

Environment, wind, clothing, instruments, swill, pig waste.

Mode of penetration

Oral, nasal, placental, genital.

Symptoms

Typical forms

 peracute form: "white plague", high fever, affected animals die before they have time to show signs of haemorrhaging.

Death

within six to 20 days

3. sub-acute or chronic form: same clinical signs as the acute form, but the disease develops more slowly and the animals are less severely affected, which enables a complication of bacterial origin as a result of immunodepression (respiratory, digestive or articular complications). Affected animals die within one to three months.

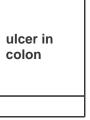
Atypical forms

The death rate is low and the signs subtle.

Asymptomatic forms

The animals are either cured or are IPI (immunotolerant persistently infected).

Lesions



The lesions resemble those of African swine fever. A laboratory diagnosis is required to distinguish between them. Care should be taken with the lesions caused by bacterial secondary infections, since they can complicate diagnosis.

Haemorrhagic lesions

Ulcers

In the digestive tract, particularly the caecum and colon. The ulcers are flat and non-perforating, except in the event of bacterial secondary infection ("boot button ulcers").

Leucopenia

Diagnosis

Clinical and necroscopic diagnosis

Suspicion in the event of a contagious disease affecting pigs of all ages, with different combinations of a high fever, ecchymoses on the skin and eye, digestive system, respiratory and nervous symptoms, leading to high mortality and ecchymoses. Abortions and stillbirths in the case of the atypical form.

Differential diagnosis

The clinical symptoms and lesions are the same as those of African swine fever, but classical

swine fever should not be confused with:

Laboratory diagnosis on live animals

* Serological diagnosis by seroneutralization or ELISA on blood sample: antibodies appear after three weeks and persist throughout the life of the animal. Blood samples should be taken from animals suspected of being cured 30 days after suspicion of infection.

Treatment

Defensive prophylaxis

Offensive prophylaxis

Vaccines

More information

Edwards 5. Classical swine fever. In Manual of standards for diagnostics tests and vaccines, 4th Edition, Office International des Epizooties.

Yes