# Classical swine fever (CSF)

Classical swine fever (CSF)

## **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.

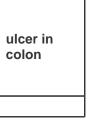
# Atypical forms

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.

Sí