

Ref: VITT1200/CSF-LUX

CLASSICAL SWINE FEVER

IN

LUXEMBOURG

Date approved: 26 August 2003

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1. TERMINOLOGY

For the purpose of this qualitative hazard assessment to the UK animal health, the following terminology¹, presented in alphabetical order, is used:

Terms used as adjectives to qualify likelihood estimate	
Average	The usual amount, extent, rate
Extremely	Outermost, furthest from the centre; situated at either end; the highest or most extreme degree of anything
High	Extending above the normal or average level
Insignificant	Unimportant; trifling
Low	Less than average, coming below the normal level
Negligible	Not worth considering; insignificant
Significant	Noteworthy; important; consequential

¹ Quoted from: Murray, N. (2002). Import Risk Analysis: Animals and Animal Products. New Zealand Ministry of Agriculture and Forestry, PO Box 2526, Wellington, New Zealand

2. CLASSICAL SWINE FEVER - LUXEMBOURG

2.1 Disease Report

On 14 August 2003, the Luxembourg Veterinary Services Department informed OIE² and the European Commission³ of an outbreak of classical swine fever (CSF) in domestic pigs on a breeding/fattening pig farm located in Buschrodt, County of Redange (Fig.1)

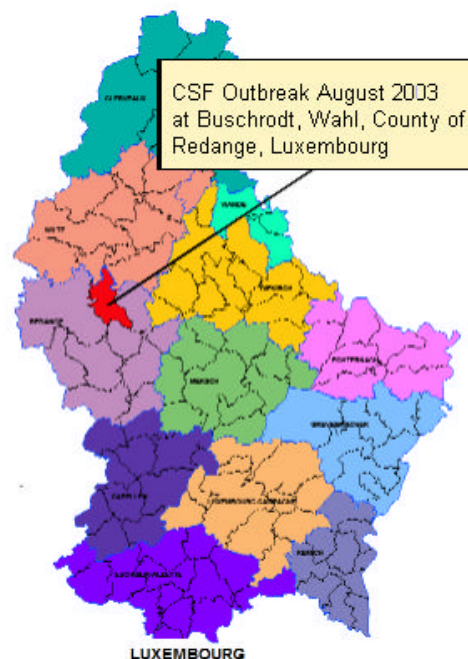


Fig.1. Luxembourg – location of CSF outbreak in domestic pigs (August, 2003)

The disease (refer to Annex 2 – fact sheet) was notified on 12 August 2003, and confirmed by laboratory testing on 13 August 2003. There are 1095 pigs on the affected farm. Initial epidemiological investigation indicates that a possible source of infection may be contact with wild boar. This is substantiated by a positive laboratory result at the same day from a wild pig killed at 3km distance from the affected farm.

Comment: The population of wild boar in Europe has increased substantially in the past decades as a likely result of deliberate introduction for hunting purposes; decrease/lack of predators, increased fertility due to availability of food (e.g. feeding by hunters during winter, kitchen waste) and cross-breeding with domestic pigs, and good adaptability to the changing biotope⁴.

²OIE (2003). Classical swine fever: in domestic pigs. Disease Information, Vol.16, No.33, 15 August 2003

³ European Commission, (2003). EC Health & Consumer Protection Directorate-General, Brussels, D(03)CSF-LUX001, 14 August 2003.

⁴Laddomada, A.(2000). Incidence and control of CSF in wild boar in Europe. Veterinary Microbiology, 73, 121-130.

2.2 Trade information

2.2.1 Live pigs

The IAHD electronic records indicate that there have been no live pigs imported from Luxembourg.

2.2.2 Trade in meat/meat products

Intra community trade in meat/meat products is not subject to border inspection controls or electronic notification of consignments. In case of CSF outbreaks, affected Member States are required to enforce EU rules in protection and surveillance zones (refer to section 3)

3. RESTRICTIONS IN PLACE

3.1 Situation in Luxembourg

In late 2001, Luxembourg reported classical swine fever (CSF) in six wild boar found dead in eastern region at the border with Germany. At the beginning of 2002, the Commission approved the Luxembourg plan for the CSF eradication. The use of a live attenuated CSF vaccine (C strain) for immunisation of feral pigs has been authorised by the Luxembourg authorities.

In 2002, ten outbreaks of CSF occurred in domestic pigs. Epidemiological investigation indicated that five cases were primary outbreaks linked to contact with wild boar, while the other outbreaks were secondary. Since early July 2003, Luxembourg has reported no cases of CSF.

Since mid 2002, EU rules have prohibited the export of live pigs, pig semen, embryos and ova from Luxembourg.

Following the most recent outbreak of CSF, Luxembourg has applied disease control measures in line with EU rules (section 3.2). In addition, movement of live pigs is not allowed within the country, except for pigs destined for immediate slaughter.

3.2 European Legislation

3.2.1 Summary

EU rules prohibit export of pig meat from defined areas (i.e. protection and surveillance zone around infected domestic pig holding), while meat products may be allowed subject to specified heat treatment. EU rules govern trade in live pigs, pig semen, embryos and ova from CSF affected Member States.

Classical swine fever in wild boar is controlled under EU rules in areas of Germany, Belgium, France, and the whole area of Luxembourg.

Biosecurity measures are specified to mitigate the risk of spread of classical swine fever from wild to domestic pigs.

3.2.1 Detail

Please refer to Annex 1

4. HAZARD ASSESSMENT FOR THE UK

Given the current outbreak of CSF in Luxembourg, the Veterinary Directorate consider at the present that with regard to:

4.1 Trade in live animals/genetic material

- The risk is negligible from legal trade, as trade in live pigs, pig semen, embryos and ova is not permitted from Luxembourg.

4.2 Trade in meat and meat products

- The risk from legal trade is negligible as trade in pig meat is governed by EU rules, which prevent exports of meat/meat products from pigs subject to protection or surveillance zone restrictions.

4.3 Illegal trade

- Although illegal movements of meat/meat products may pose a risk, the risk appears to remain unchanged for illegal trade given the limited nature of the outbreak and the continuing presence of the disease in a wild boar population.

5. CONCLUSION

The initial information indicates that the outbreak appears confined to a small area where relevant control measures have already been put in place in accordance with the EU rules.

The Veterinary Directorate continue to monitor the situation and will re-assess the hazard in light of new information to come.

Luxembourg has applied Community controls in the protection and surveillance zone around the infected holding. However, the fact that a limited outbreak exists in a Member State means the risk to the UK from CSF has marginally increased.

Richard Cawthorne
Deputy Chief Veterinary Officer (26/08/03)

Annex 1. CSF – Detailed EU rules

1.1 CSF in domestic pigs

EU requires Member States to follow Directive 80/217/EC. The control measures include clinical and laboratory examination, epidemiological investigation, stamping out of infected pigs that may include possible contacts, movement restrictions for live pigs/pig meat/fomites within zone surrounding the farm. The control zones are based on geographical and epidemiological principles and do not take into account national borders of the Member States. Following an outbreak in a domestic pig holding, two zones are established: a protection zone of 3km, and a surveillance zone of 10km around the infected holding. The rule allows for the formation of a buffer zone around the surveillance zone, if the situation warrants such a measure to be implemented. Should there be multiple outbreaks, a regionalisation approach is allowed to enable effective control measures to be applied to a defined area in order to prevent disease spread, and to allow trade from areas outside the controlled area.

EU rules prohibit export of pig meat from defined protection and surveillance zone around infected domestic pig holding. Export of meat products may be allowed subject to specified heat treatment. EU rules govern trade in live pigs, pig semen, embryos and ova from CSF affected Member States.

1.2 CSF in wild boar population

Following the detection of CSF in a wild boar population, EU rules require Member States to take the following measures:

1.2.1 Initial control activities

Initial disease control activities are primarily aimed at the domestic pig holdings within the infected area to prevent the spread of the disease to domestic pigs. An affected Member State is required to:

- a) Establish an expert group comprised of veterinarians, hunters, wildlife biologists and epidemiologists to assist the competent authority in defining boundaries of the infected area, including control measures to be applied within,
- b) Draw a specific eradication plan for the CSF control in wild boar (refer to section 1.2.2) to be approved by the Commission within 90 days following an initial outbreak of CSF.

1.2.2 Approved eradication plan

Subsequent to the initial control measures (refer to 1.2.1), a specific eradication plan for the CSF control in wild boar must be agreed with the Commission and other Member States and must include:

- The outcomes of previous activities carried out with the infected zone,
- A defined infected area that is based on results of epidemiological investigation related to geographical distribution of the disease, feral pigs population in the area, and existence of major natural or artificial obstacles to movements of feral pigs,
- Activities to determine number and location of meta-populations of feral pigs in and around infected area
- Epidemiological investigation and laboratory testing of feral pig population, including age-stratification,
- The measures to prevent contact between meta-populations of wild pigs, and measures taken to reduce their movement,
- Extensive experts consultation and agencies co-operation, including information campaign, primarily targeting hunters,
- Safe handling of laboratory samples,
- Safe disposal of dead feral pigs

1.2.3 Current protection measures

Eradication plans have been agreed for parts of Germany, France, Belgium and the whole of Luxembourg.

A specific safeguard decision requires Member States with areas subject to wild boar control measures to ensure that no domestic pigs are exported, unless they originate outside the specified restricted areas and come from a holding where no pigs from the specified restricted areas have been introduced during the 30-day period prior the despatch of the consignment.

Meanwhile, the affected Member states must also ensure the following controls are applied to pig holdings located in the specified restricted areas pending approval of the eradication plan in wild boar:

- Effective isolation of domestic pigs from feral pigs (e.g. prevention of physical contact and contact with waste),
- Implementation of biosecurity measures including cleaning and disinfection of pig holdings,
- Application of hygienic measures, including a possibility of temporary ban on specified movements with regard to people who may have been in contact with feral pigs,
- Laboratory testing of all dead pigs for the presence of CSF virus,
- Prohibition of bringing into a pig holding of any part of any feral pig, or equipment that have been in contact with wild pigs,

Annex 2. Classical swine fever – Fact sheet

2.1 Definition

Classical swine fever (CSF) (syn. Hog cholera, European swine fever) is an OIE List A disease. It is a highly contagious viral disease of pigs, generally resulting in high morbidity and mortality.

2.2 Which animals are susceptible and what is the outcome?

The only susceptible animals are domestic and wild pigs. The disease is fatal in most cases, particularly in its acute phase.

Young pigs are more severely affected than older pigs. Mortality rates in young pigs may reach 90%.

2.3 The disease

2.3.1 The virus

CSF virus is an RNA virus that belongs to the genus *Pestivirus*, family *Flaviviridae*. The virus is related to the bovine diarrhoea virus (BVD) and the border disease (BD) virus of sheep.

While relatively stable in excretions and fresh meat products (i.e. ham, salami, salami type products), the virus is readily destroyed by heat, detergent, lipid solvent, and common disinfectants.

2.3.2 Worldwide distribution

The disease was first observed in the USA at the beginning of 19th century. By the end of 20th century, the disease remains widespread in many parts of the world (Fig.1).

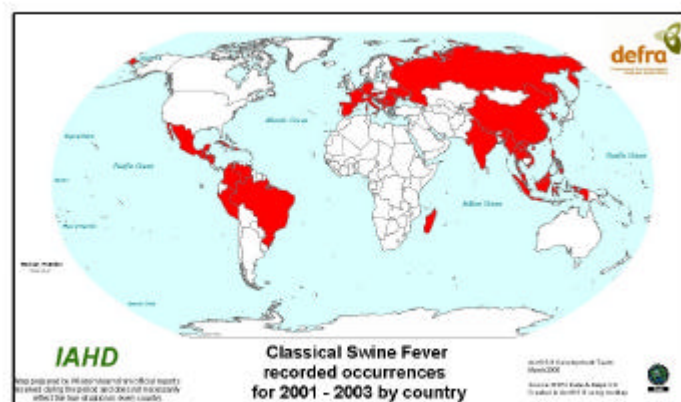


Fig.1. Classical swine fever – World situation (2001/2003)

2.3.3 What are the signs?^{5,6}

Two forms of the disease are recognised: acute and chronic. Regardless of the disease form, the animals are viraemic as long as they show clinical signs. Death may occur within 2-3 weeks after infection (acute form) or up to three months (chronic course). The incubation period for CSF is variable but is usually between five and ten days. In the acute form pigs develop a high temperature (40.5°C), then become dull and go off their food. Other symptoms seen can vary considerably, but may include some or all of the following:

- Constipation followed by diarrhoea
- Gummed-up eyes
- Coughing
- Blotchy discolouration of the skin
- Abortion, still births and weak litters
- Weakness of hindquarters
- Nervous signs including convulsions and tremors in new born piglets.

2.3.4 How is it spread?

The primary disease transmission route is ingestion of material containing the viable virus. The movement of infected pigs is a common method of spreading this disease. Apparently healthy pigs may be incubating disease and recovered pigs can excrete the virus for long periods of time. The virus can exist outside the pig for a long time and would require thorough cleaning and disinfection to be inactivated. The movement of contaminated vehicles, people, clothing, footwear and equipment can also spread disease.

The virus may also be present in wild boar population, and in some areas of Europe the disease in wild boar poses a constant threat to domestic pigs.

2.3.5 Public health – can people contract the disease?

There are no circumstantial or published literature data to suggest that people may be susceptible to the disease.

2.4 Disease Control measures

EU control measures for dealing with CSF are based on slaughter of infected pigs and various movement controls. EU rules includes provision for vaccination of domestic pigs, ideally with a marker vaccine to allow veterinary authorities to separately identify a vaccinated pig from an infected one. However, no such marker vaccine is currently available, although some drug companies are researching this area. If current vaccines were used to control the spread of disease then any vaccinated pig would be required to be slaughtered because pigs may remain infectious indefinitely. CSF controls include, among other control measures, permissive vaccination for CSF in wild boar as part of a wildlife disease control strategy.

⁵ Extract from: Moening, V. (2000). Introduction to classical swine fever: virus, disease and control policy. *Veterinary Microbiology*, 73, 93-102

⁶ Extract from: DEFRA (2003). Classical swine fever. Retrieved on 15 August 2003 from World Wide Web: <http://defraweb/animalh/diseases/notifiable/disease/classicalsf.htm>