Livestock Notifiable Disease Factsheets

African Horse Sickness

If you suspect signs of any notifiable disease, you must immediately notify a Defra Divisional Veterinary Manager.

Symptoms

African horse sickness is a highly fatal and infectious disease, which affects horses, mules and donkeys. It is caused by an orbivirus, and there are nine strains of the virus. The disease is not directly contagious between horses, and is present (endemic) in sub-Saharan Africa. The disease has spread as far north as morocco and the Middle East. Zebras and elephants may be infected without showing signs of disease. Dogs can also be severely infected by the virus, usually by eating infected horsemeat.

Recent outbreaks in Spain were probably related to imports of infected zebras from Africa.

Spread

The spread of disease is influenced by climatic conditions which favour the spread of carrier insects (vectors) including warm, moist weather and high rainfall, as well as spread by wind dispersal. It is likely that the virus persists (overwinters) in other, unknown species in Africa when the insect is not active. This explains why the disease does not persist in other countries following an outbreak.

Clinical signs

- The per-acute pulmonary form with a short incubation period of from three to five days and with 95 per cent mortality. The main symptoms are of acute pulmonary embarrassment, the animal literally drowning in its own serous exudate.
- The sub-acute cardiac form which has an incubation period of from seven to fourteen days and with a mortality rate of around 60 per cent. This form of the disease is characterised by oedernatous swellings over the head and eyelids, lips, cheeks and under the jaw. Death results from cardiac failure.
- The acute or mixed form. This is a combination of the previous two types with an incubation period of from five to seven days and the disease shows itself initially by mild pulmonary symptoms followed by the typical oedernatous swellings of the cardiac form.
- Horse sickness fever. This is the mildest form, characterised by a febrile (very active and nervous) reaction with low temperatures in the morning rising to a high peak in the afternoon.

Post mortem

Blood samples from up to five horses showing high temperatures can be taken to diagnose this disease. These vary with the form of the disease. - from severe and extensive fluid in the lungs, including froth in the airway, to petecial haemorrhages in the heart and gut and hydropericardium in the cardiac form.

GB Legislation

The Infectious Diseases of Horses Order 1987. African Horse sickness is included in the Specified Diseases (Notification and Slaughter) Order 1992 to implement the slaughter requirements of EU Council Directive 92/35/EEC which lays down control rules and measures to combat African horse sickness [1]. Imported horses from at-risk countries outside the European Union are routinely tested for African horse sickness.

The severity of disease and the controls to monitor and restrict movement of horses could significantly affect the Equine Industry in the United Kingdom, particularly in southern UK, where this disease is most likely to occur.

EU Legislation

Council Directive 92/35 provides for compulsory notification, and the setting up of a protection zone of least 100 kilometres radius around and infected premises. This, together with a surveillance zone of at least a further 50 kilometres, would have to remain in force for at least 12 months.

References

[1] Official Journal of the European Community: No. L157, 10.6.92 p.19).

Information current of June 16, 2005