

Some of the clinical signs in previously exposed or vaccinated animals include:

- Fever lasting 3 to 8 days
- Mild anorexia or depression
- Oedematous swelling above the eyes

What to do if you suspect disease

AHS is a **notifiable** disease. Any suspicions of the disease must be reported immediately to the local District Veterinary Office. Veterinary practitioners should, therefore, familiarise themselves with the clinical signs of the disease. Clotted blood and EDTA blood samples should be taken from the suspect animals, and submitted to the Central Veterinary Research Laboratory at Backweston for testing. No equidae can be moved to or from the premises until blood sample results have ruled out the disease. All equidae and other susceptible species should be kept indoors at peak midge activity to reduce the likelihood of infection. Suspect animals should be kept in isolation.

What happens if AHS is confirmed

Current EU legislation states that:

- Infected animals and animals with clinical signs on infected holdings must be destroyed
- A 20km radius infected area must be defined around the infected premises and vaccination of susceptible animals may be carried out in this area
- Restrictions must be applied on movements of equidae within and from a Protection Zone of 100 km radius and a Surveillance Zone of 150 km radius around the infected premises
- Animals should be confined indoors at times when the insect vector is active
- In certain situations destruction of the habitat of insect vectors should be carried out and use of insecticides is recommended.

Further information

In the event of an outbreak, further information will be provided on the Department of Agriculture's website at:

www.agriculture.gov.ie



Information on African Horse Sickness July 2011

Photo acknowledgements: Cover horse – Sean Ashe,
Page 3 horses with clinical signs – Institute for Animal Health,
Pirbright Laboratory, UK,
Page 6 donkeys – Patricia Kelly.

Reference number 6398



African Horse Sickness



Information Leaflet for Veterinary Practitioners

www.agriculture.gov.ie

Introduction

The purpose of this information leaflet is to increase industry awareness about African horse sickness (AHS). This is a non-contagious viral disease that affects all equidae (horses, ponies, mules, donkeys, zebras and other hybrids). There are 9 different serotypes of the virus. The virus is transmitted between horses primarily by midge bites and occasionally by mosquitoes and ticks. AHS does not affect humans.

Geographical distribution of the disease

AHS has never been recorded in Ireland. The disease is endemic in sub-Saharan Africa from where it has occasionally spread to North Africa, Europe, the Near East and Middle East. The most recent outbreaks in Europe were in Spain (1987-90) and Portugal (1989).

Possible routes of introduction

The main route by which AHS could be introduced into Ireland would be by importing an infected animal. The risk is considered to be low based on the fact that animals cannot be imported from Africa except from AHS free zones. Another possibility would be importation of infected blood or blood products. Although AHS could be introduced by infected midges blown in on the wind, this is unlikely given that countries with the disease are so far away.

The introduction of AHS into Ireland would have serious consequences for the equine industry, as a result of deaths of animals and movement restrictions.

Methods of transmission

The main method of transmission of AHS is via insect vectors i.e. midges of the *Culicoides* species. Transmission by other insects such as mosquitoes and biting flies can occur, but this is thought to be a minor method of infection. The midges that spread infection are most active between April and November in Ireland and are commonly found around farms. As the presence of the disease depends on the presence of the insect vectors, the disease is seasonal and would appear between July and November. Transmission via transfusion of infected blood or blood products and sharing needles or other surgical instruments can also occur.

Affected species

The AHS virus can infect horses, mules, donkeys and zebras. Zebras are considered the main reservoir in most regions of Africa and they are very often asymptomatic. Horses and mules are very susceptible and tend to develop severe clinical signs. Camels can also become infected although this is not very common. Dogs can become infected by eating meat from an infected animal, but they normally do not play a role in further transmission. They are regarded as dead end hosts.

Clinical signs

Clinical signs will vary in terms of severity depending on the species and previous exposure to the virus. Horses and ponies are very susceptible. In countries like Ireland where previous exposure to the virus is very unlikely, the mortality rate could reach 90% of infected animals.

Mortality rate in mules is around 50% and is much lower in donkeys (10%). In donkeys, zebras and previously exposed or vaccinated animals the symptoms may be less severe than in unexposed horses and ponies. Zebras are normally asymptomatic.

The most common clinical signs are:

- Acute fever
- Severe respiratory distress (e.g. spread fore legs, dilated nostrils, extended head)
- Facial swelling/oedema, usually in supraorbital fossae and eyelids, later in cheeks, lips, tongue, intermandibular space and sometimes the neck. No oedema in lower legs.
- Tachypnea
- Coughing
- Frothy nasal discharge
- Congested mucous membranes
- Petechial haemorrhages in conjunctiva
- Severe depression
- Sudden death



Frothy nasal discharge



Congestion and haemorrhage in the conjunctiva



Oedematous swelling in supraorbital fossae