African horse sickness

How to spot the disease

www.defra.gov.uk

This document has been produced by Defra in conjunction with the Government/Horse Industry Working Group on African horse sickness.

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Department for Environment Food and Rural Affairs

Throughout this document, the term "horse" will be used to refer to horses and ponies and the term "donkey" will be used to refer to donkeys, mules or any other hybrids. When the term "equine" is used, it refers to all horses, ponies, donkeys, mules, zebras and hybrids.

The term "vet" will be used to refer to a veterinary surgeon.

What is African horse sickness?

African horse sickness (AHS) is caused by a virus that is transmitted by midges and infects horses, donkeys and zebras. Horses are most severely affected by AHS. Donkeys are less affected and zebras are least affected, often showing minimal signs of disease. There are nine different strains (serotypes) of the AHS virus. The severity of clinical disease varies between each strain but it is likely that an outbreak of AHS involving any serotype could have a major impact on the equine population.

African horse sickness does not affect humans, so there are no human or public health implications.

An outbreak of AHS could result in death or severe illness in a large proportion of susceptible horses and donkeys that become infected. In addition, measures to control disease would include animal movement restrictions which could have a major impact on the equine industry by preventing animals moving to competitions or moving around the country for other reasons.

African horse sickness is not currently found in the UK. The virus is known to be present in certain areas of Africa.

This leaflet provides some facts on the disease, and advice on what you should do if you suspect your horse, donkey or zebra has AHS.

Culicoides spp. (Midge)
Picture courtesy of Vector-borne disease programme, Institute of Animal Health

How is African horse sickness transmitted?

AHS virus cannot be transmitted directly from horse to horse (or directly between any equine animals). Virus transmission between horses, donkeys and zebras occurs via small insect vectors known as midges (*Culicoides* species). The virus can also be mechanically transmitted through transfusion of infected blood products or through unhygienic practices (e.g. use of contaminated surgical equipment or hypodermic needles). It is unknown whether AHS can be transmitted by semen or ova from infected animals.

Dogs can become infected with AHS through eating meat from an infected horse, donkey or zebra.

What is the risk of African horse sickness reaching the UK?

We currently believe there is a very low risk of an AHS outbreak occurring in the UK. A qualitative risk assessment has been performed by Defra and can be found at:
http://www.defra.gov.uk/animalh/diseases/notifiable/africanhorse/index.htm

AHS could enter the UK through importation of infected horses, donkeys or zebras, importation of infected blood products or entry of infected midges into the UK. It is believed that infected midges are not present close enough to the UK to be blown in by the wind; however they could enter the UK along with imported plants, flowers or other products. It is against the law to import horses, donkeys or zebras into the UK (or any other part of the EU) from any AHS affected country (except from the AHS free area in South Africa from which horses can be imported).

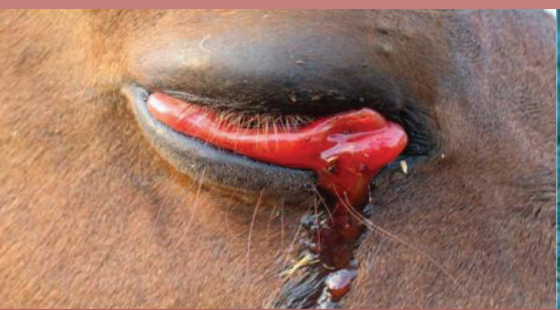
Illegal importation of horses, donkeys or zebras from AHS infected regions could result in AHS incursion into the UK. We are not aware of any reports of the introduction of AHS into a non-infected country due to illegal movement of infected horses, however this possibility cannot be excluded.

All horse, donkey and zebra owners and keepers should take great care when importing animals and should ensure that the conditions for import into the EU have been fulfilled rigorously, to protect both their own interests and those of other owners and keepers.

Clinical signs in horses and ponies:

Horses and ponies are very susceptible to AHS and infection will usually result in signs of severe clinical disease followed by death in 50-95% of those infected. Clinical signs may include:

- fever (often over 40°C)
- respiratory distress
- coughing
- copious nasal discharge
- swelling of the head, particularly above the eyes
- colic
- sudden death



Oedema (swelling) around the eyes.

Copious nasal discharge.

Pictures courtesy of Vector-borne disease programme, Institute of Animal Health

As AHS is not currently found in the UK, our equine population has no immunity against this disease and it is likely that severe clinical signs and high mortality will be seen in horses and ponies in the initial stages of any outbreak.

Clinical signs in donkeys and zebras and previously exposed horses and ponies:

Donkeys and zebras are relatively resistant to AHS and will generally show less severe clinical signs than horses and ponies. If an outbreak of AHS occurred in the UK, mortality rate in donkeys would be expected to be 5-10%, while mortality rate in mules would be significantly higher (50-70%). Mortality in zebras infected with AHS is unusual, however they can still become infected by AHS and act as a source of infection for more susceptible animals. In addition, previously exposed (or vaccinated) horses and ponies may also show less severe clinical signs. Clinical signs in such cases may include:

- fever (39°C - 41°C)
- loss of appetite
- mild laboured breathing
- oedema (swelling), frequently around, or above, the eyes

Zebras will often show no clinical signs of disease.

Facial swelling in a donkey with AHS
Picture courtesy of The Donkey Sanctuary

Vaccination

There is no vaccine for any serotype of AHS currently available in the UK or other parts of Europe. Vaccines available in Africa are not suitable for use in the UK.

A vaccine bank is being developed by the European Commission that will hold 100,000 doses of vaccine against seven different AHS serotypes. This vaccine will only be used in a strictly controlled manner in an emergency situation.

What do I do if I think my horse has African horse sickness?

African horse sickness is a very serious disease and is also notifiable. This means that if you or your vet suspects that your horse, donkey or zebra is infected with AHS you must report it to the duty vet in your local Animal Health office immediately. **Rapid reporting is important to help reduce the risk of AHS spread.** To find out the telephone number of your local office, call the Defra helpline on 08459 335577, or visit: http://www.defra.gov.uk/animalhealth

When a report of a suspect case is made to Animal Health, further investigation will be carried out to determine if the animal is infected with AHS. A blood test to confirm the presence of AHS is available. This test is used to confirm the clinical diagnosis in horses and ponies and to aid in the identification of infected donkey and zebra. Movement restrictions will be put in place to prevent horses, donkeys and zebras moving off the premises until test results are obtained. It is very important that horses, donkeys or zebras suspected of being infected with AHS are not moved from their current premises, unless directed to do so by an Animal Health Veterinary Officer, in order to help reduce the risk of disease spread.

Owners should make themselves aware of the clinical signs of AHS and contact their vet if they have any concerns that their horse may be infected. Further information about AHS can be found at: http://www.defra.gov.uk/animalh/diseases/notifiable/africanhorse/index.htm

What can I do?

Maintain good biosecurity

- Isolate and monitor recently imported animals.
- Remember clinical signs of AHS may not be seen in recently imported donkeys and zebra but may then be seen in horses in contact with these animals.
- Ensure all imports comply with the legal requirements and that all documentation for imported horses is complete and accurate.
- Do not share hypodermic needles between animals.

Monitor your animals carefully

- If you are concerned that your horse, donkey or zebra is unwell, you should inspect them closely (or have your vet inspect them), taking into account the clinical signs described for AHS.
- Your local veterinary surgeon can help diagnose AHS and differentiate it from other diseases.

Report any suspected cases immediately

- Rapid detection of AHS cases will help reduce disease spread and will aid disease control. It is essential that you report any suspected case of AHS to the duty vet in your local Animal Health office immediately.
- You must not move any horse, donkey or zebra on or off the premises if you suspect AHS is present.
- To find out the telephone number of your local Animal Health office, call the Defra helpline on 08459 335577, or visit: http://www.defra.gov.uk/animalhealth

Control the disease vector

- AHS is generally transmitted between animals via midges. See the Defra leaflet, "African horse sickness: Guidance on protection from vector attack", for further information. This is available at http://www.defra.gov.uk/animalh/diseases/notifiable/africanhorse/index.htm

In the event of an outbreak

- Further specific advice will be available from Defra: (www.defra.gov.uk) and information on AHS will also be available from the British Equine Veterinary Association (www.beva.org.uk).

For telephone and email enquiries for information on any aspect of Defra's work, the Defra Helpline can be contacted on **08459 33 55 77**.

The Helpline number is a local call rate number within the UK and is available between 9am and 5pm on working days.

From outside the UK the telephone number is **+44 (0) 20 7238 6951**.

There is also a minicom/textphone number for the deaf and hard of hearing: **0845 300 1998**.

The Helpline email address is **helpline@defra.gsi.gov.uk**

Front cover photograph: A horse suffering from African horse sickness. Courtesy of Vector-borne disease programme, Institute of Animal Health.

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