



Focus Article: African Horse Sickness – the Disease Control Strategy of Great Britain

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The disease – Government's Reasons for Intervention

African Horse Sickness (AHS) is an exotic animal disease, which is internationally recognised as having the potential to cause severe damage to the equine industry through direct losses of susceptible animals, damage to related industries, and trade.

AHS is a fatal and infectious disease spread by certain species of midges, affecting horses, mules, donkeys and other equidae. The fatality rate in horses is very high, with severe clinical disease followed shortly by death in up to 95 per cent of those infected. Donkeys are more resistant to the disease, with less severe clinical signs and death expected in around 5 to 10 per cent of cases. African horse sickness is endemic in sub-Saharan Africa, and has also spread to Morocco and the Middle East.

New Legislation

New legislation in England and Scotland, with equivalent legislation expected shortly in Wales, provides Government with the legal powers to tackle outbreaks of AHS in Great Britain. The new African Horse Sickness (England) Regulations 2012 1 and African Horse Sickness (Scotland) Order 20122 provide effective and proportionate controls in line with the requirements of European legislation. They also allows the necessary flexibility required to adapt to the range of possible disease scenarios. The new Regulations are seen as a crucial step in improving our preparedness for this disease.

The Regulations themselves are published online and available for download from the legislation.gov.uk website.

What is a Disease Control Strategy and what does it do?

In parallel to the Regulations, a Great Britain Control Strategy document was drawn up by a group with members from the equine industry, academia, research organisations and the Government. It compliments the Regulations by explaining how the legal powers will be used in the event of an outbreak and by putting the regulations into easily understandable terms so that everyone can understand how Government will control an outbreak of AHS. It sets out procedures to be followed and restrictions that apply in the event of a suspected or confirmed outbreak of AHS. The document is published on the Gov.uk website.³

Options to be considered during the time of disease freedom and when disease appears in another European country or a third country

The disease is considered endemic in a number of African countries and cannot be currently found in Europe, although the disease has been recorded previously in Spain (1966, 1987-90), Portugal (1989) and Cyprus (1969).

In case the disease would appear outside of the area of its current geographical distribution, additional trade safeguard measures would be implemented to prevent further spread of the disease. The Control Strategy also recommends communications campaigns to raise stakeholder awareness of the clinical signs of the disease as well as stepping up surveillance activities in animals, vectors and meteorology.



What happens if AHS is suspected within Great Britain?

AHS is a notifiable disease and therefore any person (e.g. veterinary surgeon, owner, keeper etc.) who suspects AHS infection in a live equidae or its carcass, must immediately notify their local AHVLA Office. The contact details to the regional AHVLA Offices can be found online⁴. The Control Strategy gives a detailed description of the procedure to be followed when following up a reported suspicion of disease.

Following a report of suspected AHS on a premises, a Veterinary Officer will attend the premises and carry out a veterinary inquiry, if possible involving the owner or keeper of the animal and any veterinary surgeons looking after the suspect case.

For the duration of the investigation, the affected premises will be placed under official restrictions that serve as additional biosecurity measures preventing disease spread from a potentially infected place.

In some cases, the suspicion of AHS can be ruled out based on the findings of the inquiry. If however this is not the case, samples will be taken from the animal(s) and they will be couriered to an official testing laboratory. Restrictions will only be lifted from a premises if the outcome of the investigation is confirmed as negative by the AHVLA.

Confirmation of African Horse Sickness in Great Britain

Confirmation of the presence of AHS in a previously disease free country is based on laboratory test results and may involve a consultation of disease experts. Once disease is confirmed, domestic stakeholder groups and international organisations (OIE and EU) are informed.

In order to limit the spread of the disease and regain disease freedom as soon as possible, a range of disease control measures is described in the Strategy. As much as possible, these measures take into account the vector-borne nature of the disease and also the specifics of the susceptible animal population – equidae.

What measures can be used to limit the effects of the disease and to ultimately regain disease free status?

Upon confirmation of disease, large zones are placed around infected premises (IP). The inner ("control") zone will be at least 20 km in radius. It is included in the "protection zone" that has a minimum of 100 km radius around the IP, which again is included in the "surveillance zone" that goes at least a further 50 kilometres beyond the limits of the protection zone. The three zones together are sometimes called the "restricted zone". Multiple infected premises (IPs) will trigger multiple, sometimes overlapping zones.

The most important difference a "zone" brings is a restriction on movements. In the Control Zone no equidae movements will be allowed except under the authority of a licence. Movements of equidae may be allowed out of the Protection and Surveillance Zones to an area outside of all zones under the authority of a licence only. Movement within either zone PZ or SZ may be permissible, except where the horse shows clinical signs of African horse sickness on the day of move.

Apart from zoning, there are a range of further disease control measures described in the Control Strategy that would be applied on the infected premises and in the various zones around them. However, the involvement of an insect vector makes the control efforts more difficult.



In the early stages of the outbreak, Government will act rapidly to try to prevent the establishment of disease circulation in the vector population by euthanising infected horses. This however will only be done at the initial stage of an outbreak and only if it brings an epidemiological benefit.

If the outbreak cannot be stopped using this approach, killing further horses may not be the most appropriate or beneficial approach. In this situation Government, with the support of disease experts will focus efforts on other measures such as vector control, movement restrictions and possible vaccination.

Owners and keepers of equidae also have a vital role in the disease control efforts by complying with the various movement restrictions and applying the required level of biosecurity and vector control.

Will Government pay compensation for horses that are killed?

The new legislation provides for Government compensation to be paid for horses killed for disease control purposes, if they are killed but are later tested negative for the virus. No compensation is payable however for horses that are infected with AHS and are tested positive by the National Reference Laboratory for AHS. The compensation for a horse will be the value of the horse immediately before it was killed, but will not exceed £2500 in any case. Further details about how the value of the horse is established can be found in the Strategy.

The use of vaccination

Vaccination is currently prohibited in the whole of the European Union and it can only be practised as a disease eradication measure with the agreement of the European Commission and the other Member States. No AHS vaccine is currently authorised by the Veterinary Medicines Directorate for use in Great Britain. However, the option to use vaccination as an emergency measure would be considered and vaccines may be sourced once the serotype of the AHS virus causing the outbreak is known.

The Chief Veterinary Officer of the UK may permit the use of an unauthorised vaccine on an emergency basis.

Vaccination requires compliance with keepers of equidae and is also associated with further temporary restrictions as detailed by the Control Strategy.

Further work is being done on AHS vaccines with the aim to develop more advanced vaccines allowing the use of the so-called "DIVA Strategy" – by differentiating infected and vaccinated animals by laboratory testing.

How does a country become "disease free" again to allow unrestricted movements and the resumption of trade?

In order to regain disease freedom, the Government needs to gather and present a robust evidence base using surveillance data to demonstrate that AHS is no longer present in Great Britain. This may take some considerable time and effort and countries outside the EU may require further guarantees. The surveillance needs to include domestic equidae, vectors and non-captive equidae as well.

In case vaccination was used, the zones and restrictions must remain in place for at least 12 months after completion of the last vaccination.



The above short description of the various disease control efforts highlights the high burden AHS would have on Great Britain and the need for all involved to be aware of the importance of keeping disease out by following transport rules and keeping high standards of biosecurity but also to contact AHVLA immediately if the suspicion of AHS arises.

<http://www.legislation.gov.uk/uksi/2012/2629/made>

<http://www.legislation.gov.uk/ssi/2012/178/contents/made>

<https://www.gov.uk/government/publications/african-horse-sickness-control-strategy>

<http://www.defra.gov.uk/ahvla-en/disease-control/reporting-suspicions/>