

AFRICAN HORSE SICKNESS

What is the Cause?

A virus in the same family as Bluetongue virus (Reovirus)

How is it spread?

By midges, the same family of midges that cause Sweet-itch in horses. Infected midges biting a horse, give the virus to the horse. The virus cannot spread from horse to horse, directly. Midges biting an infected horse require a period of time above a minimum temperature to allow the virus to get into the salivary glands of the midge and therefore, be able to infect another horse.

What are the signs of disease in horses?

There are four recognised types of disease;

1. Sub clinical form – Fever and horse off colour for 1 – 2 days
2. Sub-acute form (Cardia or Dikkop form) – Fever, swelling of head, eyelids, neck, brisket and shoulders, Horses tend to die in less than 1 week
3. Pulmonary (Central or Dunkop form) – Fever, abnormal, laboured breathing, occasional cough and frothy/bloody discharge from nostrils, red conjunctival membranes in eye. Horses tend to die in less than 1 week
4. Combined cardiac and pulmonary forms.

In horses not previous exposed to the disease or not vaccinated, about 90% will die from the infection,

How do we prevent infection?

In areas where the virus is endemic, eg sub-Saharan Africa, a live attenuated (altered) vaccine is available. There are 9 serotypes (Strains) of the virus and the vaccine needs to have 7 of these strains in it to give complete protection. In areas where the virus is not endemic, a live attenuated vaccine is not suitable. The dead vaccine is no longer being made, so control is by culling the affected horses and establishing protection zones and movement bans (like Foot and Mouth control in cattle)

Since UK is free of African Horse Sickness, we prevent infection by testing horses that come in to the country, to ensure they are free from the virus. There is a risk of infected midges being brought in to the country on flowers, fruit or vegetables imported from endemic areas. Any suspicion of African Horse sickness has to be reported to DEFRA by law.

The most recent outbreak in Europe was in 1987-1990 in Spain and Portugal. We cannot be complacent since the African Horse Sickness virus is in the same family as the Bluetongue virus and the midges that transmit that virus were thought not to be able to survive in Northern Europe, but clearly they can, or the virus can use the midges that are already here.

The future:

There is work on-going to develop a suitable vaccine for use in non-endemic areas, but until that becomes available, constant vigilance is essential.