

African Horse Sickness

This disease is not present in Australia at this time.

African Horse Sickness is a variant of the Bluetongue virus which is principally carried and transmitted to horses by *Culicoides* species midges.

It is endemic in the Africa south of the Sahara, with periodic spread further north. It has also occurred in Egypt and the Middle East extending to Pakistan and India in the early 1960's, leading to the death of an estimated 800,000 equines. Spread also occasionally occurs from north Africa to the Iberian peninsula.

Although AHS is not directly contagious (ie it is not transmitted directly between horses), it can remain in infected horses for up to 18 days, enabling it to be transferred via the biting midges. It can also be contracted by dogs.

There are three classical clinical disease syndromes of AHS:

- Pulmonary
- Cardiac
- Mild

However, there is an overlap that makes these distinctions difficult and most cases are, to a greater or lesser degree, mixed in type. Up to 95% of infected horses die from Pulmonary AHS and this is the most likely form to be encountered in Australia. The fatal disease in dogs is usually of this form. Insecticides, repellents and screens to repel the vector midges are a crucial element in preventative horse management.



Clinical signs are:

- Incubation period is from 3-5 days for the most acute form, and up to 21 for the other forms.
- fever up to 42 degrees C.
- depression and sweating
- breathing difficulties, developing a wide based stance, neck extended, nostrils dilated.
- coughing which becomes more frequent and severe as the disease develops.
- discharge from the nose, frothy white, sometimes blood tinged.
- excessive salivation
- restlessness, unwillingness to stand, rolling and colic like behaviour.
- swelling of the eyes and/or head, sometimes extending to the chest and abdomen.



If AHS ever came to Australia blanket vaccination in a restricted area would be a valuable strategy in it's control to produce a barrier of resistant animal between infected and free zones and to prevent clinical disease. The aim would be to achieve and maintain a high level of population immunity.

There are at present 3 types of vaccine that could be considered – inactivated (killed), attenuated (live) and recombinant virus vaccines. At this time inactivated vaccine is the most likely option, with work on recombinant vaccines continuing to be developed.