

Equine Encephalosis

This disease is not present in Australia at this time.

Equine Encephalosis is a viral disease of horses in South Africa that can cause a severe illness with nervous signs or cardiac failure.

It is caused by a virus belonging to the orbivirus genus of the family Reoviridae. It is unrelated to African Horse Sickness Virus, but it is often initially mistaken for AHS, but the horses do not respond to any AHS treatments or vaccines. The virus was originally isolated in 1967 from horses showing central nervous signs and sudden death.

Outbreaks of equine encephalosis in South Africa have occurred at irregular intervals of two or more years. They show a seasonal pattern, occurring during the months December to June (Northern Hemisphere). The virus is spread by vector (biting insects) with *Culicoides imicola* assumed to be the major species responsible.

Only horses are known to be affected but the virus has been discovered in Zebras.

The incubation period varies from two to six days.

Common symptoms are:

- Fluctuating fever that lasts one to five days
- Varying degrees of listlessness
- Depressed appetite.
- Heart and respiratory rates increase
- Red/brown discolouration of visible mucous membranes.

Most infections are not life threatening with affected horses usually showing only mild clinical signs and recover uneventfully.

The mortality rate is generally less than 5%.

However, less common but more serious signs can include:

- Facial swelling
- Central nervous signs particularly loss of control or co-ordination of the hindquarters.
- Depression
- Frenzy
- Excitability – sensitivity to sound/noise
- Convulsions
- Respiratory distress
- Petechial haemorrhages in eye membranes
- Clear or blood-tinged nasal discharge
- Signs of chronic heart failure
- Pregnant mares usually abort



Facial Swelling and Petechial Haemorrhages in eye membranes

On post mortem lesions are attributable to severe damage of certain blood vessels. There is no Encephalitis. There is venous congestion, fatty degeneration of the liver, brain oedema and highly conspicuous enteritis especially in the small intestine. The heart may have lesions and appear flabby with a grey-white mottled or streaky appearance.