

Equine Disease Alert

AFRICAN HORSE SICKNESS

9th September 2020



Malaysia

On the 27th August 2020, the Department of Veterinary Services in Malaysia confirmed an outbreak of African horse sickness (AHS) in the State of Terrenganu, in the Northeast of the country (see figure 1 below). The outbreak involved a small holding with 5 horses. This is the first time that AHS has been confirmed in Malaysia. An epidemiological investigation is ongoing into the source of the disease and samples have been taken for serotyping.

The first incursion of AHS in Southeast Asia occurred in Thailand in March 2020. Since then, there have been 15 further outbreaks reported in Thailand involving 604 horses of which 562 died.

There has been no introduction of horses into the EU from Malaysia since the 1st April 2020. On the 7th September 2020 the EU suspended the entry of any Equidae and their germinal products (semen, ova and embryos) from Malaysia.

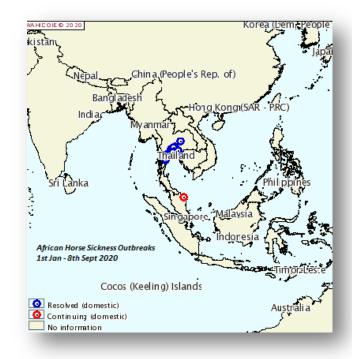


Figure 1: African Horse Sickness Outbreaks in Southeast Asia (1st January - 8th September 2020 courtesy of OIE)

African horse sickness – Disease Overview

- African horse sickness (AHS) is a serious and often fatal viral disease affecting all types of Equidae (Horses, donkeys, zebras etc) caused by the African horse sickness virus (AHSV)
- The virus is transmitted between equines by insect vectors, usually midges (Culicoides spp.)
 although mosquitoes, ticks and biting flies are occasionally involved in transmission
- AHS is endemic in the central tropical regions of Africa, from where it spreads regularly to Southern Africa and occasionally to Northern Africa

- Nine different serotypes of AHS have been described all of which can be found in Eastern and Southern Africa
- Serotypes 2,4 and 9 can be found in North and West Africa from where they have occasionally spread into countries surrounding the Mediterranean
- Commercial vaccines are available for AHS but none are approved for use in the EU
- There is no evidence that humans can become infected with any serotype of AHS virus

Clinical Signs

The incubation period is usually 7–14 days, but may be as short as 2 days. The disease presents in four different forms:

- 1) The pulmonary form characterized by high fever, depression, and respiratory symptoms. Affected animals will have trouble breathing, often coughing frothy fluid from nostrils and mouth as a result of pulmonary oedema. Respiratory failure and death will follow. This form of the disease has the highest mortality rate of up to 90% in affected horses (see figure 2 below)
- 2) The cardiac form Signs of disease start at day 7–12 after infection. High fever is a common symptom with conjunctivitis, abdominal pain and progressive difficulty breathing. Oedema occurs under the skin of the head and neck, particularly around the eye and under the jaw (see figure 3 below). Mortality rate is between 50 and 70%, and survivors usually recover within 7 days
- 3) <u>A mixed form</u> with horses showing symptoms of both the pulmonary and cardiac form
- 4) <u>Subclinical disease</u> seen in zebras and African donkeys. Infected animals may have a low-grade fever and congested mucous membranes. Affected horses usually survive this form of the disease

Figure 2: Nasal frothing



Figure 3: Oedema of eye



Risk to Ireland

- There has never been a case of AHS in Ireland
- The importation of Equidae and equine germinal products into the EU from countries affected by AHS is prohibited
- DAFM will continue to monitor the international situation

Further information

DAFM website:

https://www.agriculture.gov.ie/animalhealthwelfare/diseasecontrol/africanhorsesickness/

Information leaflet for vets:

 $\frac{https://www.agriculture.gov.ie/media/migration/animalhealthwelfare/disease controls/africanhorsesickness/AfricanhorsesicknessAHSLeafletVets.pdf$

Information leaflet for horse owners:

https://www.agriculture.gov.ie/media/migration/animalhealthwelfare/diseasecontrols/africanhorsesickness/AfricanHorsesicknessLeafletHorseOwners.pdf

European Commission:

https://ec.europa.eu/food/animals/animal-diseases/control-measures/african-horse-sickness_en

Contact details for RVOs available at:

https://www.agriculture.gov.ie/contact/

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