### **Preliminary Outbreak Assessment**

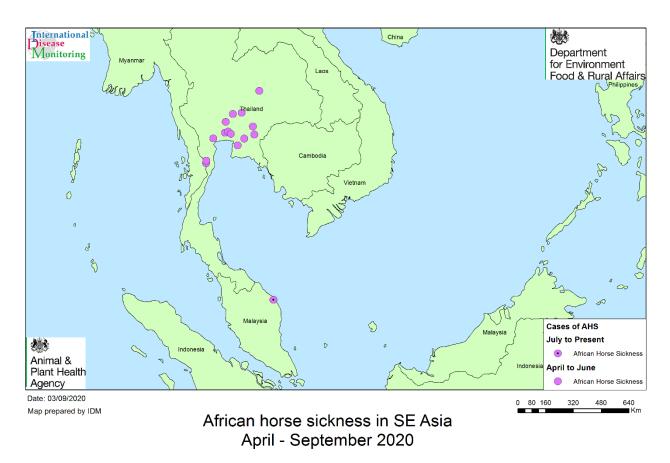
# African Horse Sickness in Malaysia

3 September 2020

Ref: VITT/1200 African Horse Sickness, Malaysia

### **Disease report**

Malaysia reported an outbreak of African Horse Sickness (AHS) on 02 September, in five backyard horses in Terengganu, in the east of the Malay Peninsula. This is the first time that AHS has been confirmed in Malaysia, a country which has OIE official free status for AHS and is on the approved list for exports of equines to the EU.



## Situation assessment

On 02 September, the Malay authorities reported AHS in five backyard horses, four of which were reported as showing clinical signs in early August (lameness, difficulty breathing and fever). Blood samples were taken from the four clinically affected horses and sent to the Veterinary Research Institute (VRI) in Ipoh for diagnostic confirmation.

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Tests by RT-PCR of four horses were positive for African horse sickness virus (AHSV) RNA. A second round of sampling was conducted on 31 August 2020 with blood, nasal swabs and eye discharge samples taken, which tested positive for all five horses for AHSV, although the serotype has not yet been confirmed.

The source of virus is not currently known. Epidemiological investigation is ongoing and samples have been taken for serotyping. There are at least nine different serotypes of AHSV, each having different geographical distribution. Identification of the serotype may therefore give some indication as to the region from where the virus originated.

This outbreak follows the first report of AHS in Thailand, where 15 outbreaks of AHS-1 have been reported since March 2020, involving 604 horses of which 562 died. This represented the first incursion of AHS in SE Asia. It is, therefore, likely that the subtype in Malaysia will be the same as that circulating in Thailand. The distance between the nearest outbreaks in Thailand to this one in Malaysia is approximately 880 km but it is not clear whether this new "jump" has occurred as a result of a new incursion, movement of infected animals or movement of infected vectors.

Thailand has been applying vaccination to horses across 27 provinces and according to the latest OIE report, over 9,500 equidae have been vaccinated. The vaccination has so far focussed around the outbreaks in the Central, East and Western regions and not in the southern region (OIE, 2020).

AHS is a vector-borne viral disease, affecting all species of equidae. It has never occurred in the UK and the UK has OIE official free status. AHSV is transmitted by certain species of midges, most commonly *Culicoides imicola* (which is usually restricted to the southern parts of Europe, but otherwise found throughout Africa and Asia). Other possible vectors include *C. brevitaris*, *C. sonorensis* and *C. obsoletus* (present in the UK) (Mellor and Hamblin, 2004).

AHS is endemic in sub-Saharan Africa, but historically, outbreaks of AHS have been reported outside this region, on the Iberian Peninsula, North Africa, the Middle East, Cyprus, Turkey, Pakistan, Afghanistan and India. The disease, however, has not persisted in these areas. The severity of clinical signs depends upon the virus strain and host species. The fatality rate in horses can reach 90% in epidemics, but is less in mules and donkeys. Zebra usually do not show clinical signs, but act as reservoir hosts of infection. Virus circulation is usually seasonal and associated with hot and humid weather and abundance of the arthropod vectors. Commercial vaccines against AHSV are available, but are not approved for use in the EU.

Malaysia (the Peninsula region only) is approved to export registered horses (which include FEI sport horses and studbook horses) to Europe as a Group G country (Commission Implementing Regulation (EU) 2018/659) for permanent export, temporary admission and re-entry of such horses following temporary admission for competitions is

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permitted. The export certificate requires that entry is only allowed from areas that are free of AHS and the Annex will be changed to reflect the new status of Malaysia.

Based on a search of the EU Trade Control and Expert System (TRACES), there have so far been no equines imported to the UK from Malaysia during 2020, to date.

#### Conclusion

The import requirements for equidae into the EU do not allow the direct movement from countries where AHS is endemic. Therefore, the risk through legal trade from these areas is considered to be negligible. When AHS incursions occur in a new region outside the endemic areas, the case fatality is usually high in naïve equine populations. In such circumstances the detection and reporting of new cases would be swift and any recent equine imports are required to be notified to the EU immediately.

The likelihood of importing a horse incubating AHSV from an area which has recently reported disease and which is approved for export into the UK is therefore considered to be **very low**. The unknown geographical distribution of AHSV in south-east and eastern Asia at this point in time is however a potential source of uncertainty. Also, the ongoing epizootic of African swine fever, together with CODID-19 in the area, may impact on the effectiveness of the veterinary service to detect and report on livestock diseases. We will review the situation when more information becomes known.

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#### References

All disease reports are available from the OIE WAHIS database.

Mellor, P.S. & Hamblin, C. (2004) African Horse Sickness. Vet Res. 35: 445-466.

OIE (2020).

https://www.oie.int/wahis 2/temp/reports/en fup 0000035568 20200828 160002.pdf

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