

Updated Situation Assessment

African Horse Sickness in Thailand # 3

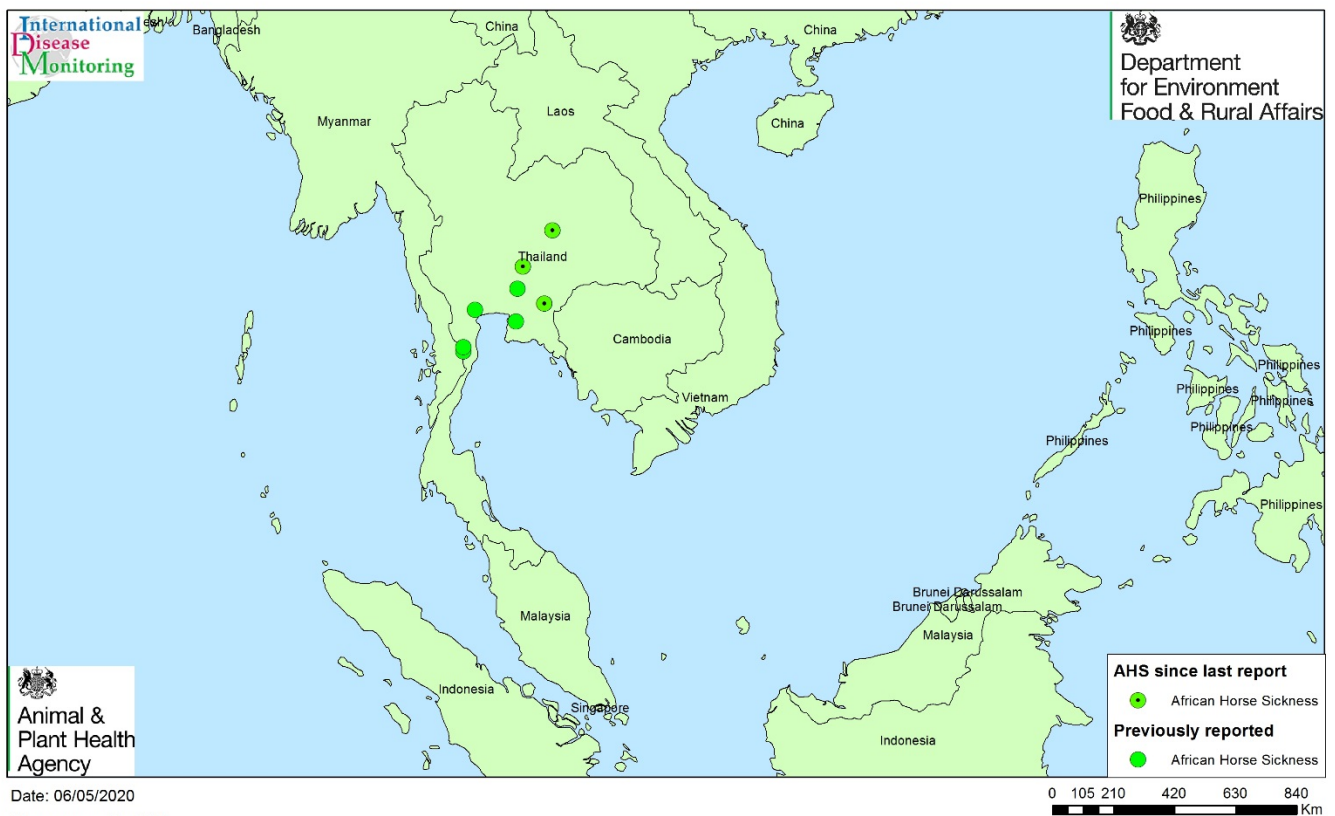
07 May 2020

Ref: VITT/1200 African Horse Sickness, Thailand

Disease report

Since our last report on 14 April

(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/879501/ahs-thailand-2020-update2.pdf), Thailand has reported three new outbreaks of African Horse Sickness (AHS), all in new provinces. Reported numbers of deaths of equids from the outbreaks in early April have been updated, and Thailand has begun vaccinating horses across the country.



African horse sickness in Thailand, March - May 2020

Situation assessment

On 17 April, a single case was reported in the Chaiyaphum province of Thailand (OIE, 2020). The infected horse died, but two horses remain on the premises in Khon Sawan, reportedly uninfected. Another outbreak was reported in Mueang Sa Kaeo, in the Sa Kaeo province which borders Cambodia, on 24 April. On a holding of 20 horses, four were reported to be infected and three of these died. On 01 May, 17 out of 30 horses were reported to be infected with AHS, in Muak Lek, in the Saraburi province. Of the 17 cases, nine were reported to have died. All three of these outbreaks are in the central area of Thailand, with no further reports close to the western border with Malaysia.

Since our first report on the initial outbreak reported in Pak Chong, in the Nakhon Ratchasima province, the number of horses officially reported to have died in this area has increased to 414 out of 440 cases. Unofficial sources report these to be race horses. Number of deaths reported from the outbreaks in Hua Hin, Damoen Saduak and Cha-am (described in our last report) have increased to 19, 6 and 27 respectively. This brings the total number of reported equine deaths due to AHS in Thailand to 484 out of 508 cases, giving a high case fatality rate of around 95%.

Reports suggest that in addition to a number of cross-breed horses, many Thai ponies, which are an ancient breed and close to extinction, are affected by the current outbreak. These horses are essential to the livelihoods of their owners, impacting on financial hardship already being experienced as a result of the COVID-19 pandemic (BEVA, 2020).

Vaccination against AHS began in Thailand on 19 April 2020. Priority for vaccination was given to the 560 horses kept across Thailand for their supply of immunoglobulins which is used for the treatment of rabies and snake bites. Other horses within 50km of the outbreaks in affected provinces, were vaccinated from 20 April. Horses are being tested by PCR and serology before vaccination to ensure it is only given to healthy horses which have not been previously infected. As of 01 May, a total of 2,911 horses were reported to have been vaccinated across nine provinces in Thailand (OIE, 2020).

All movements of equids within 150km of the outbreaks have been restricted. Local charities within Thailand are raising funds to secure the purchase of midge-proof netting for use by horse owners. Although many are currently using mosquito nets, these are proving unsatisfactory as the holes they contain are too big to prevent entry of midges (BEVA, 2020). China's agriculture ministry are reportedly planning to start sampling horses along its southern borders to check for the disease (Reuters, 2020).

Thailand has OIE official free status, and was approved to export registered horses to Europe as a Group G country and re-entry following temporary admission for competitions. The export certificate requires that entry is only allowed from areas that are free of AHS. Certificates for Thailand have been suspended under Implementing Regulation (EU) 2020/485.

Conclusion

African Horse Sickness (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. AHS 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). Within the UK, *C. obsoletus* is a potential vector, having been implicated in transmission of AHSV in Spain (Mellor and Hamblin, 2004).

Culicoides species of midge are known to breed in moist and muddy areas enriched with organic material. As such breeding areas can be quite extensive, the application of insecticidal sprays in the environment outside of stables, is not advisable. High quality stables with minimal entry points for *Culicoides* and openings protected with insecticide impregnated netting has been proven to be effective in reducing the risk of AHSV transmission. Horses can also be treated with insect repellents, which would reduce the number of infected midges biting a horse and insecticides, which would kill feeding *Culicoides*, preventing onwards transmission of virus from infected horses. These products are sometimes used in combination to reduce the risk of both initial infection and onwards transmission of AHSV. Polyvalent live attenuated vaccines for AHSV are commercially available and may be used in the event of spread. In addition, limiting the time that horses are outside to avoid peak times of midge activity (usually dawn and dusk) is also being recommended to reduce the biting rate.

The source of virus causing the current outbreak in Thailand is not known, but there are at least nine different serotypes of AHS, with different geographical distribution. Serotyping of four samples from the first reported outbreak confirmed the serotype of the virus as AHS-1 (OIE, 2020). This serotype has not before been identified in outbreaks outside of Africa.

The impact of disease in a country previously declared free of AHS, will have consequences for export and the sale of horses used for sport and racing. The most effective measures for lowering the risk of AHSV spread are to reduce equine movements, minimise the likelihood of insect bites and the use of preventative vaccines.

The import requirements for equidae into the EU do not allow the direct movement from countries where AHS is endemic. Therefore, the risk of disease arriving in the UK through legal trade from these areas, is considered to be negligible. When AHS jumps to a new region outside the endemic areas, because case fatality is usually high in a naïve population, we would expect reporting to be swift and any recent imports to be notified to the EU immediately.

The likelihood of importing a horse incubating AHS from an area which has recently reported disease and which is approved for export into the UK is considered to be very low. The geographical distribution of AHS in SE Asia is currently unknown and epidemiological investigations may be hindered by the strain on veterinary services

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caused by African swine fever and the COVID-19 restrictions. We will review the situation when more information becomes known.

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