



## **African horse sickness heading south**

Hi all

African horse sickness (AHS) was confirmed in Malaysia earlier this month, after an outbreak in Thailand – moving southwards. So in this newsletter we have a focus on horses.

Although our main concern with SDIs is cattle, stock horses are also an important part of the animal population on stations and a significant disease event – with multiple animals affected – would likely qualify. Check with me first if you have multiple sick horses and want to work up an SDI investigation.

If you do suspect AHS – call the Hotline on 1800 675 888.

Of course, Hendra is another critical differential for sick horses – the SDI this month was not a NABS SDI but involved a horse diagnosed with Hendra in Qld which is a good reminder about that disease.

The path challenge is a chance to test your gross path observation skills. We have one from Berrimah this time – thanks Ayrial.

We have repeated the info about the change to admin arrangements for SDIs this year, in case you missed it last newsletter. The main changes for private vets is 'where to send the invoice'.

Cheers Kev

Newsletter #23 (1 October 2020)

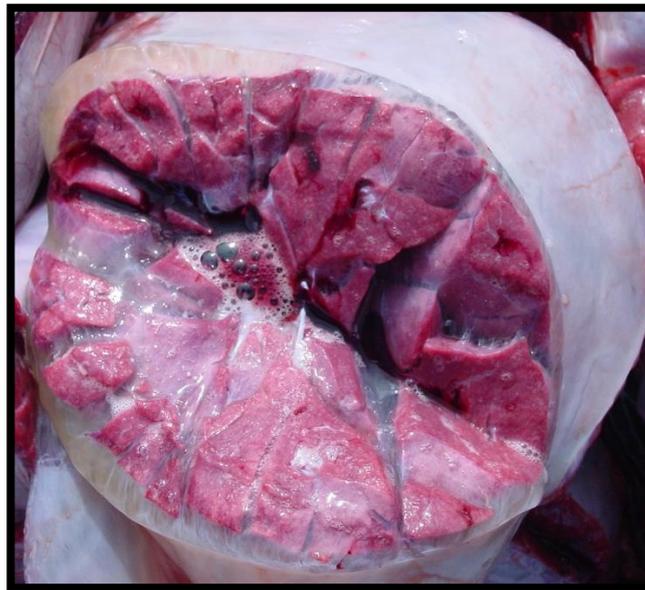
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## Gross path challenge - what do you see?

Describe what you see in the pictures below.

**Bovine lung [or could just as easily be equine lung]**  
(From: Ayrial Foster, Berrimah NT)

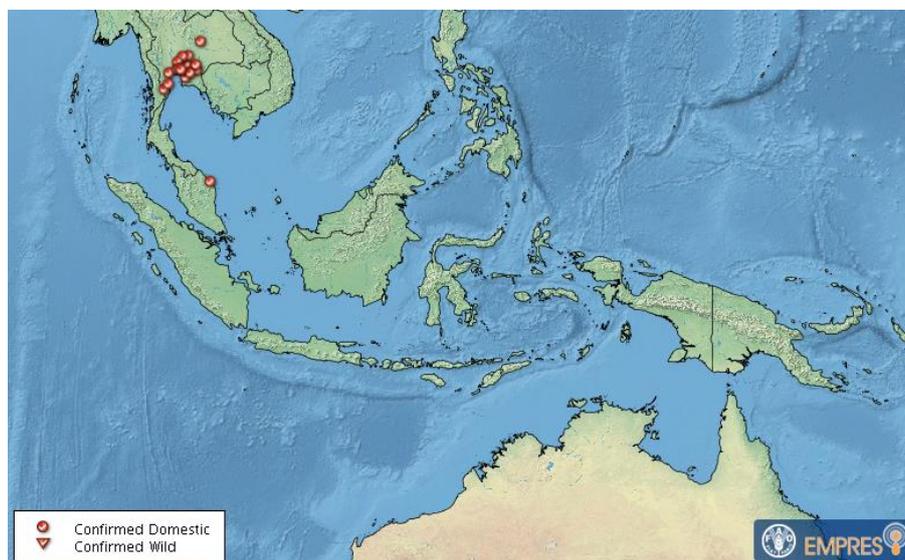


How did you go? - [Answer](#)

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## African horse sickness

Earlier this month (3rd Sept) African horse sickness (AHS) was confirmed in Malaysia. An outbreak of AHS had been reported earlier (March-June 2020) in Thailand.



UN FAO – African Horse Sickness in region YTD (23 Sept 2020)

AHS is transmitted by *Culicoides* species midges and is not contagious between horses. With respect to Australia, the capacity of endemic *Culicoides* species (especially *C. brevitarsis*) and mosquitoes to transmit the AHS virus is not known.

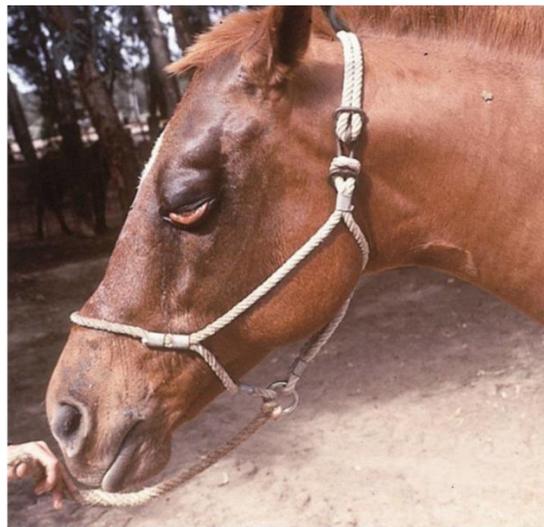
Exotic *Culicoides* species have been identified on several occasions in various locations across northern Australia, presumably blown across on north-westerly winds during monsoonal weather. If exotic *Culicoides* blown across to Australia are carrying the AHS virus, then there is potential for it to establish in endemic species.

### Features of AHS:

- Incubation period is 3 days to 2 weeks (usually < 9 days)
- Mortality rate can be 50 to 95% in horses and lower (10%) in donkeys.
- 4 main manifestations:
  - **Pulmonary** - acute fever, followed within a day or two by the sudden onset of severe respiratory distress.
  - **Cardiac** - fever and oedematous swellings in the supraorbital fossae and eyelids which spread to involve the face, tongue, intermandibular space, laryngeal region, and sometimes the neck, shoulders and chest. Cardiac failure.
  - **Mixed** – range of respiratory and cardiac signs above
  - **Horse sickness fever** - is an important subclinical form of the disease characterised by undulating fever. Other signs are mild and it rarely results in death.
- It is not zoonotic



Source: World Horse Welfare



Source: Reuters

### What's currently happening.....:

- **Insect traps** are deployed throughout Australia as part of the National Arbovirus Monitoring Program (NAMP). They monitor for incursions of exotic *Culicoides* species that can spread bluetongue virus (at least one of which can also carry AHS virus).
- **Trials on endemic *Culicoides* species** are in progress to establish their capacity to feed on equids and be competent vectors for AHS.
- **Mapping of horse & donkey distribution** across northern Australia to understand risks and susceptible populations.
- **Vets and producers being alert** to significant disease events in horses or donkeys.

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### Sick horse, dead horse – what's on the list?

On a northern Queensland coastal property, a horse was observed dull and standing still on Friday afternoon in its usual paddock at the back of the house. The horse was not seen by the owners on Saturday. On Sunday morning the horse was seen to be depressed with rapid breathing. The veterinarian was called in on Sunday afternoon.

The sick horse was the only horse on the property. It had not moved off the property since it was brought in few years ago. The property backs onto a national park and the owner had observed some feral horses nearby. Severe storm activity had flooded the creek on the property with explosive mosquito activities in past few weeks. The horse spent a lot of time around the forest along the creek. The horse was vaccinated for tetanus but not Hendra virus.

Clinical signs:

- Body temperature at 40°C
- Difficult breathing
- Nasal discharge
- Sweating
- Oedema of the supraorbital fossae and eyelids
- Petechiae of the conjunctivae

Differentials based on the history and signs included a number of emergency animal diseases (EADs): Hendra virus infection, African horse sickness, infection with Australian bat lyssavirus and anthrax.

Other non-EAD differentials considered included: snake bite, toxic plants and chemicals, endotoxaemia, acute fulminating colitis, pneumothorax. Monensin toxicity and adverse drug reaction were considered unlikely given there was no record of monensin or drug exposure.

**In consideration of the risk of Hendra virus infection, the consulting veterinarian wore PPE to collect samples for Hendra virus exclusion testing and provide symptomatic treatment.**

Samples submitted: blood (plain, EDTA), swabs (nasal, oral, rectal).

Laboratory findings: Hendra virus positive

The horse was found dead on Monday morning. Horse was buried on site on Tuesday and decontamination completed with supervision of the vet.

Immediate recommendations to the owner involved care around decontamination. For horses owned in the future recommendations: Hendra vaccination a must, and exclusion of access to grazing beneath forest trees.

[Read more](#)



*Source: Tweed Daily News*

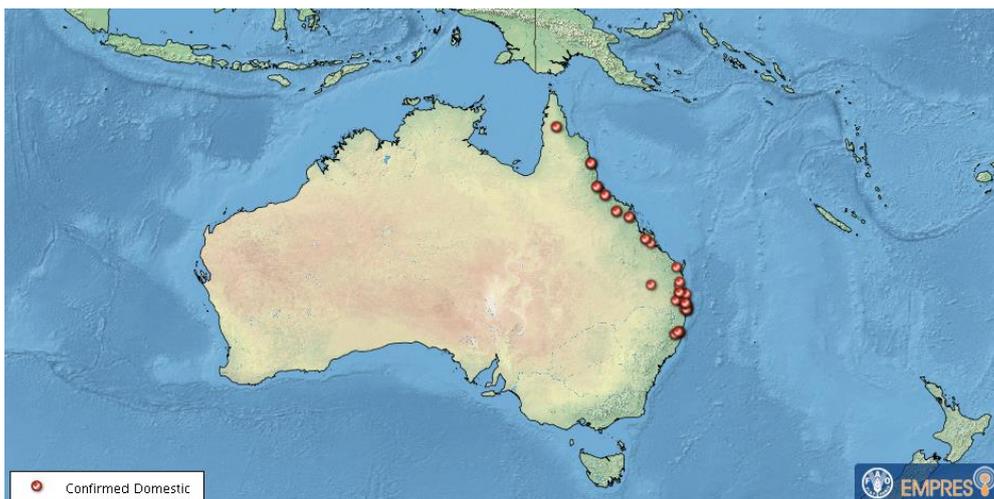


## Hendra virus (HeV)

Hendra virus (HeV) can produce life-threatening illness in horses and humans.

- Flying foxes are a natural reservoir for HeV, and do not show any signs of illness when infected.
- It can cause a range of clinical signs in horses and should be considered where there is an acute onset of clinical signs and rapid progression to death associated with respiratory and/or neurological signs.
- Horses can shed the virus before they show clinical signs.

The seriousness of HeV as a zoonotic disease requires the use of rigorous biosecurity and safety measures.



UN FAO – Hendra all cases confirmed (23 Sept 2020)

[More about HeV](#)

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## SDI subsidy guidelines for 2020

There are some new arrangements for support for Significant Disease Investigations from the Northern Australia Biosecurity Surveillance (NABS) network. The basic process will remain in place (as below). The financial subsidies will now be administered through the state/territory jurisdictions, with little change for the frontline vets other than where to send the invoice. Here are the details:

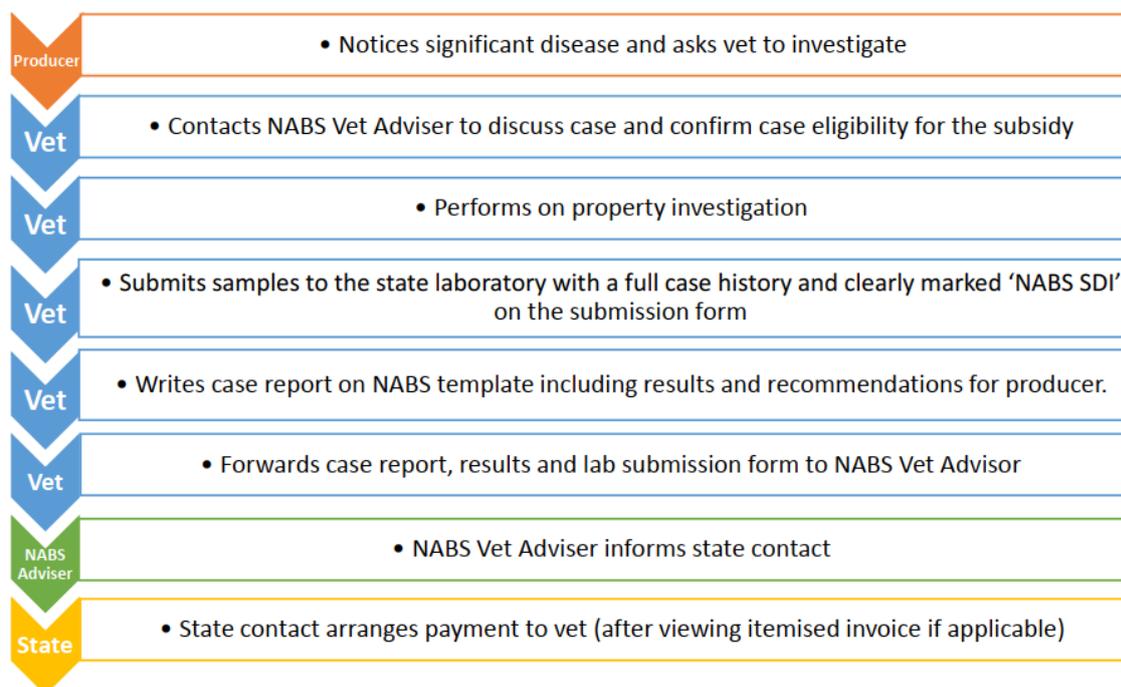
### Support available:

- Up to \$2000 per case to subsidise costs specifically associated with disease investigation, including:
  - Professional fees including for repeat visits
  - Mileage including for repeat visits
  - Lab testing costs where not already subsidised
  - Freight costs for samples
- \$300 per animal incentive payment may also be paid to the producer where TSE is excluded from an eligible case under the Bucks for Brains project (maximum \$600 per case).

### Case eligibility

- ✓ Significant disease in livestock, or other species as approved by NABS Vet Adviser
- ✓ Property located within the NT or north of the Tropic of Capricorn in QLD and WA (note: potential SDIs further south in WA or Qld may be considered on a case by case basis in consultation with NABS Vet Adviser and relevant state contact).
- ✓ Veterinarian commits to undertaking a full investigation which includes:
  - Consideration of emergency animal diseases and appropriate sampling for their exclusion
  - Submission of a full set of quality, diagnostic samples and thorough case history to the relevant state laboratory.
  - Provision of a written report to the producer which contains results and recommendations.
  - A debrief with the NABS Vet Adviser at the case closure.

### Steps and responsibilities



### Payment arrangements - send invoices to:

- QLD Derek Lunau [derek.lunau@daf.qld.gov.au](mailto:derek.lunau@daf.qld.gov.au)
- NT Lil Stedman [elizabeth.stedman@nt.gov.au](mailto:elizabeth.stedman@nt.gov.au)
- WA Graham Mackereth [Graham.Mackereth@DPIRD.wa.gov.au](mailto:Graham.Mackereth@DPIRD.wa.gov.au)

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Newsletter sent on Kevin's behalf from the team at Harris Park Group