



## Keep on doing NABS SDIs

Hi all

I'm pleased to report that the NABS program Reference Group have agreed to continue support for the practice packages while they seek funds for a longer-term arrangement.

So, from our point of view, it's 'keep on doing NABS SDIs' as we have been until further notice. This is positive endorsement of how important the veterinary network in Northern Australia is for our overall biosecurity status.

A couple of recent SDIs had aqueous humour submitted for analysis. Even in autolysed carcasses ocular fluids can provide useful diagnostic information, so we've included some tips from the labs. And remember to get samples from multiple animals wherever possible – two is always better than one!

A quick update on African Swine Fever – in previous newsletters we noted its rapid spread in China. Now it's throughout Vietnam, in North Korea and Hong Kong. Let's hope it doesn't reach Australia. Follow-up any reports of pig disease events.

Cheers Kev  
Newsletter #12 (21 June 2019)



## Seven breeders found dead within 36 hours of mustering

In April 2019 in west central Queensland a mob of breeders in light to poor condition (average BCS 2.5) were mustered to brand/wean their calves and then let into laneways around the yards. The next morning 7 were found dead with no obvious signs of struggling. 4 were clustered in a corner and the others spread out. The rest of the cows were let into the paddock and no further deaths occurred.

Necropsy was conducted on two of the carcasses about 24 hours after death. Autolysis was advanced and the main findings were a slightly engorged spleen with dark (brown) blood. Inspection of the laneway showed some trampled weeds including *Portulaca* (pigweed).

Aqueous humour biochemistry revealed markedly low calcium and elevated urea. Acute oxalate poisoning was suspected based on these results and the presence of the pigweed.

[Read more](#)



---

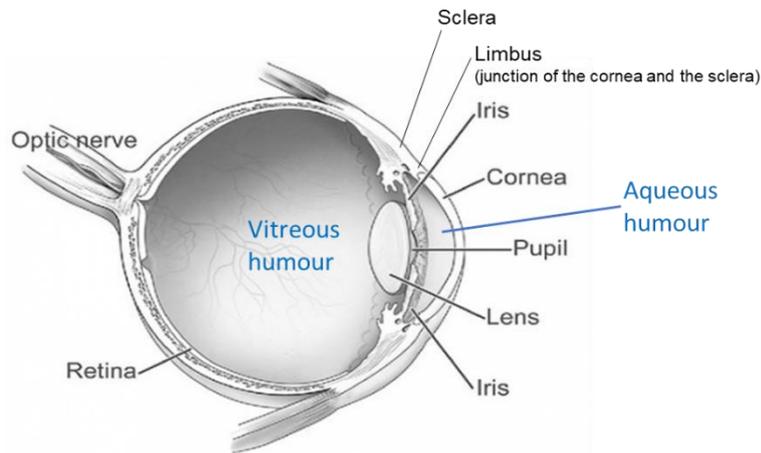
## Ocular fluids can assist in diagnosis of sudden death

Ocular fluids can provide clinical chemistry information to help diagnose causes of sudden death, including: urea and nitrate/nitrite poisoning; cyanide poisoning; pregnancy toxaemia/ketosis (beta hydroxybutyrate); ruminal acidosis (D-lactate); hypocalcaemia; and hypomagnesaemia.

The eye is relatively isolated and protected so you can collect aqueous and/or vitreous humour that is of value in an investigation for up to 48 hours after death.

*Note:* Ocular fluid biochemistry should not be used as a sole diagnostic criterion but as an adjunct to other information about the animal sampled. Results must be considered in relation to clinical history, gross pathology and the estimated time of death. Reference ranges are not available for many analytes, but extreme values are likely to be useful indicators of a particular disease or exposure to a toxin.

**Collect from as many animals as you can in multiple sudden deaths.**



### How to collect / transport aqueous and vitreous humour

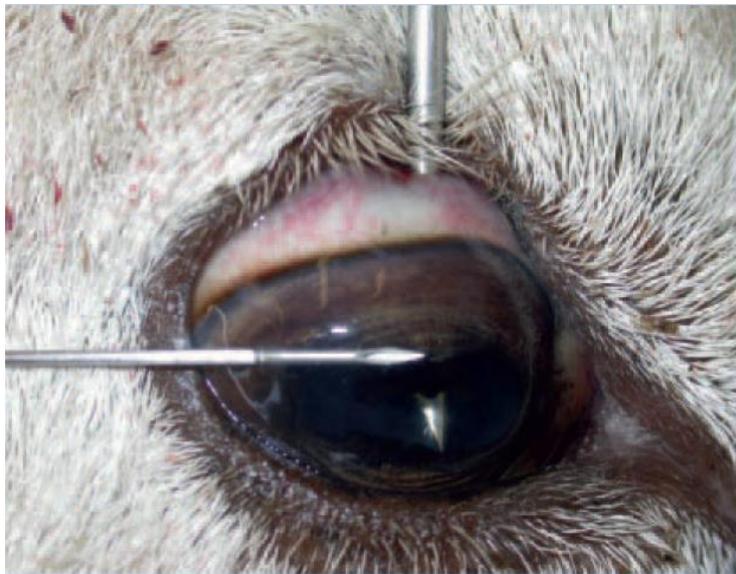


Photo credit Edwards, Foster and Livesey, 2009

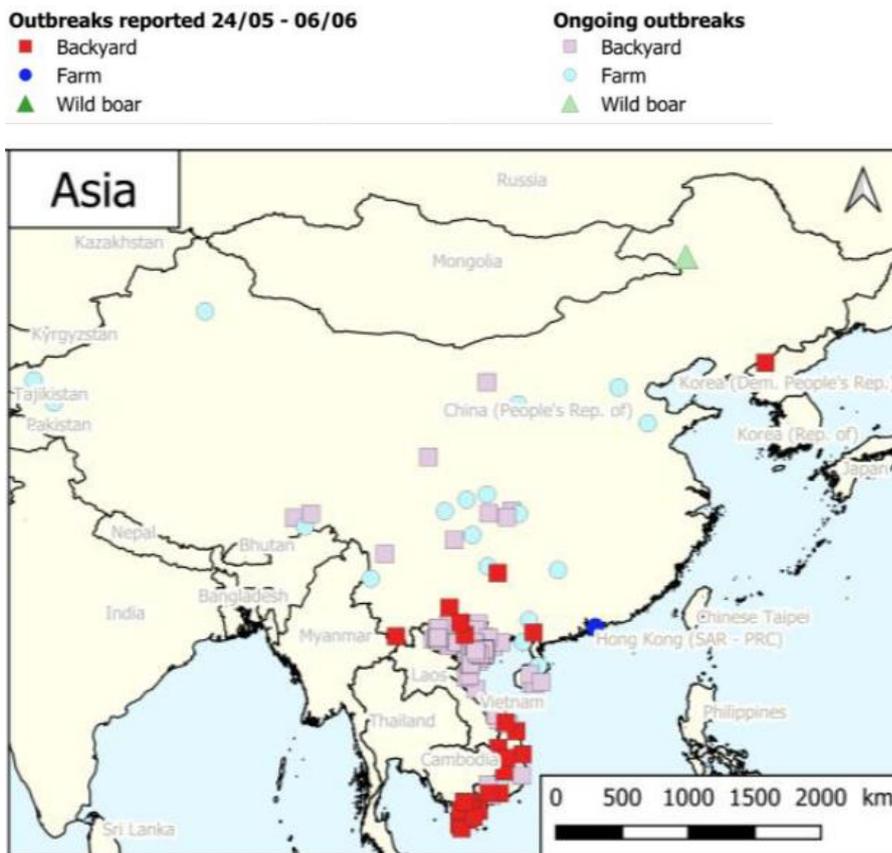
- Use an 18-gauge needle and 3 ml syringe. Use a syringe rather than a vacutainer to reduce the likelihood of getting tissue contamination of the sample (which can affect results).
- **Aqueous humour** - the watery contents of the anterior chamber. Insert the needle horizontally just below the cornea. Face the bevel of the needle towards the cornea, to avoid the iris.
- **Vitreous humour** – the gel-like contents of the posterior chamber. Insert the needle via the sclera into the centre of the globe behind the lens (the tip of the needle may be seen through the pupil). The needle and aspiration may need to be slightly adjusted to collect the viscous fluid.
- If there is blood contamination, start again on the other eye with a fresh needle and syringe.

- Transfer the samples to plain blood tubes (without anticoagulant) for transport. Choose as small a tube as you can to reduce the airspace above the sample (to avoid evaporation of analytes).  
Most samples should be chilled (for ruminal acidosis, ketosis, hypocalcaemia, hypomagnesaemia, salt poisoning, nitrate/nitrite).
- Immediately freeze sample for cyanide and ammonia testing. Alternatively, for cyanide testing, you can send the whole eyeball chilled.
- Label and send to the lab as soon as practicable.

[This guide](#) is in the Resources section on the NABSnet website

## African Swine Fever marches on

NABS network: follow-up any reports of pig disease events that you are alerted to.



From: OIE ASF Report #19, May 24 to June 6, 2019

[Further info](#) on ASF (video, producer fact sheet, DAWR bulletin) on the web

---

## NABS Admin - next few months

In the next two weeks NABS Admin will be in touch with clinic contacts directly (via email) regarding details of the extension of the practice packages. Any queries contact Lisa <[Lisa.Stevenson@agriculture.gov.au](mailto:Lisa.Stevenson@agriculture.gov.au)>.

---

Missed earlier newsletters? [read them here](#)

To subscribe: [join here](#)

---

### Happy to help

Let me know anything you'd like covered here or on the website

**Kevin Bell, NABS Vet Adviser**

Contact at: [nabsvetadviser@gmail.com](mailto:nabsvetadviser@gmail.com) / 0427 433 244

or visit [www.nabsnet.com.au](http://www.nabsnet.com.au)

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

---