



SDI arrangements 2020

Hi all

We made our target. When all the approved Significant Disease Investigations for 2019-20 were tallied – there were 87 – so the bar below turns green!

Over this period there has been terrific commitment by the NABS network vets to respond to cases where multiple animals present with NABS-important syndromes.

Quality histories and full work-ups with gross PMs are the other bars we have set and will continue to reinforce. As an example - the Lab report from the most recent SDI had a note:

This submission has been flagged as 'an excellent job done' by the specimen room staff. Samples from the different animals were clearly labelled in separate bags and neatly presented with matching neatly written paper work. THANK YOU.

For the rest of 2020, our focus on doing SDIs remains the same. There will be a new arrangement for receiving the subsidy – through the state/territory jurisdictions. Alert me to any case you think may be an SDI. Once it is complete I will inform the state/territory contact for payment - see below for the details.

The SDI in this newsletter is an interesting 'possible Jejunal Haemorrhagic Syndrome' – I wonder if we will see this as an emerging syndrome in cattle?

Cheers Kev

Newsletter #22 (24 August 2020)

NABS SDIs (private and govt)

87
Done

85
Target
June 2020

Rectal haemorrhage and sudden death – possible JHS?

In May 2020 in FNQ, 13 of 700 adult Jersey and Holstein cows presented with severe milk drop, with 4 dead within 24 hours of showing signs.

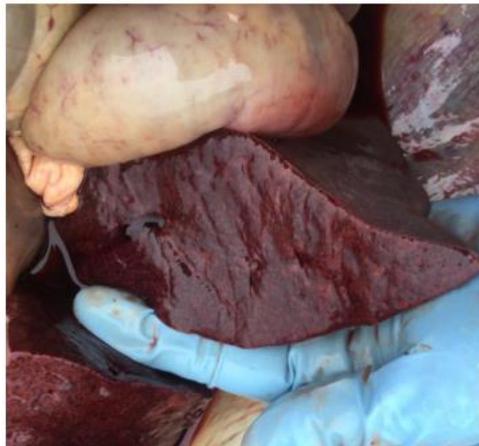
The cows were lethargic, had abdominal respiratory effort, low rumen fill and aimless wandering. Signs progressed to abdominal kicking, hypersalivation and lateral recumbency in severely affected cases.

On clinical exam, mucous membranes were pale, heart rates were increased and small blood clots were found in the rectum. Some cases died.



Two cows were necropsied and both had petechial and ecchymotic haemorrhages across all serosal surfaces. There was distension of the small intestine (especially ileum) with thick, frank blood coating the mucosal surface (no large clots) and diffuse mottling of the cut surface of the liver.





Field differential diagnoses were: Jejunal Haemorrhagic Syndrome (JHS), salmonellosis and acute hepatic toxicity - possibly Acute Bovine Liver Disease (ABLD). Bracken fern and Lantana poisoning occur in the area but did not fit the case description.

The herd was fed pasture and grain during milking. There was no access to silage and no changes had occurred in the grain ration. The pastures were heavily grazed and it was noted that weeds and lower branches of rainforest species had been eaten in paddocks bordering the rainforest.



Full samples were submitted to the lab from both cows necropsied, and blood and faeces were submitted from a clinically affected case that survived.

- All three had elevated liver enzymes, especially GLDH.
- There was severe, acute haemorrhagic necrosis of both livers with histopath suggestive of a toxæmic/septicaemic process.
- Clostridium perfringens was isolated from both small intestines.
- Intestines, lymph nodes and faeces were salmonella negative.
- Faeces had no coccidia or cestode eggs and a low level of strongyle eggs.

The diagnosis was suspect JHS.

Recommendations: This disease event was characterised by liver damage and haemorrhage. The producer was concerned about ongoing production losses (in clinically and subclinically affected cows) and the potential for future outbreaks. In the absence of a definitive diagnosis the following recommendations were made:

1. Reduce herd size to decrease grazing pressure and minimise the feed gap heading into winter months.
2. Vaccinate adult cattle with 5 in 1. Although it is not believed to be the primary cause of death, Clostridium novyi and Clostridium perfringens were both isolated on post mortem, and likely contributed to disease pathology.

No further cases have occurred - it's now a watching brief.

Gross path challenge - what do you see?

Describe what you see in the picture of a lamb oesophagus, from Rick Last DPIRD WA. Tip: See Shirley Turner's Masterclass Guide to Gross PM Descriptions for cues to descriptions (below).



Ovine (Photo credit: Rick Last, DPIRD WA)

How did you go? [Answer](#)

<ul style="list-style-type: none"> ➤ Describe what you see, don't over-interpret ➤ Describe everything you notice as different ➤ Be methodical, have a system and stick to it ➤ Take photos, they add to (not replace) a good description 	<p style="text-align: center;">Location</p> <p>Organ - lobe/part Cranial / caudal / dorsal / ventral Left / right Distal / proximal External / internal Visceral / parietal</p>
<p style="text-align: center;">Number and extent</p> <p>Count if few, estimate if many Percentage of organ involvement Focal / multifocal Coalescing / diffuse</p>	<p style="text-align: center;">Colour</p> <p>Simple colours - use combinations eg yellow-brown Shades / degrees: dark, light, mottled, streaked, stippled</p>
<p style="text-align: center;">Size</p> <p>Measurements (mm/cm) Range Haemorrhages: Petechiae (1-2mm), ecchymoses (up to 2-3cm), purpura (if extensive), paintbrush (if streaked) Into space = haemotoma, into body cavity = haemothorax etc</p>	<p style="text-align: center;">Shape</p> <p>Ovoid / circular / conical / wedge-shaped / fusiform Irregular, linear Flat / raised / depressed Ulcerated / eroded Pedunculated / lobular / tortuous / laminated / clustered</p>
<p style="text-align: center;">Consistency and texture</p> <p>Soft (lips) / firm (nose) / hard (forehead) Fluctuant / fluid-filled / turgid Gas-filled / friable / crepitant Fluids: Viscous / mucoid / stringy Clear / cloudy Contents: Dry / inspissated / caseous / gritty / granular / gelatinous</p>	<p style="text-align: center;">Content</p> <p>Volume Colour Odour Consistency Clear / cloudy / colour</p>
<p style="text-align: center;">Findings may not be lesions</p> <p>Could be: normal / an artefact / PM change / parasitic / a lesion of no significance</p>	

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. Here are the details:

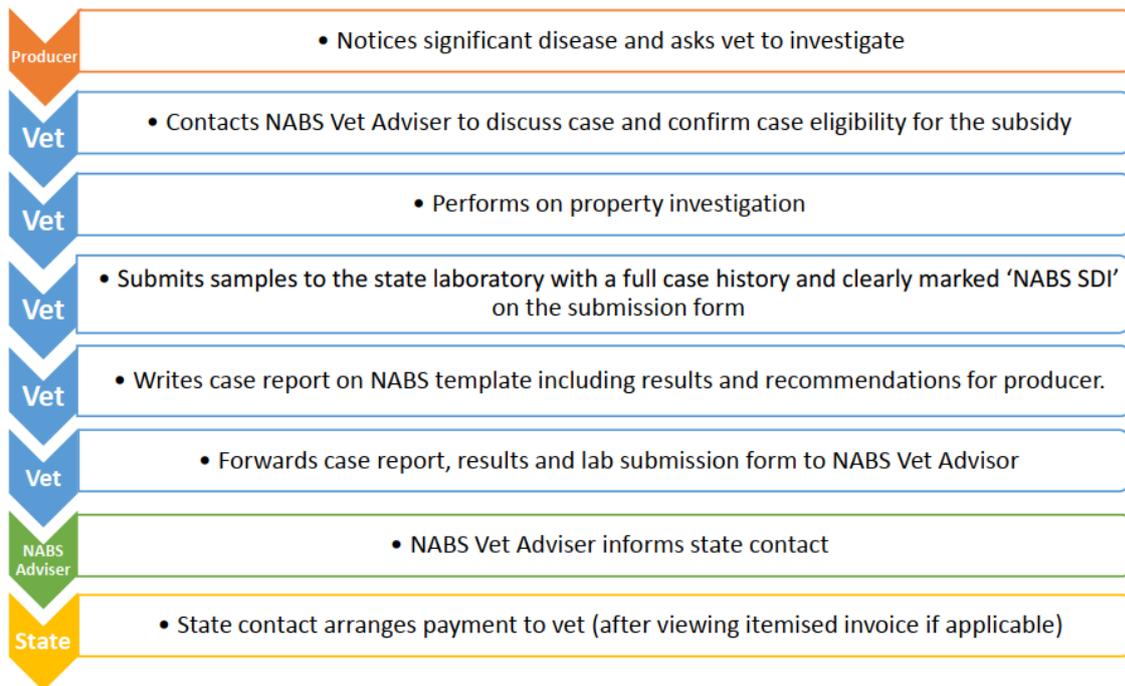
Current support available:

- 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



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Happy to help

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

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