



Supporting your success

# WA livestock disease outlook

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## Reporting livestock disease protects our ability to trade

Australia's ability to sell livestock and livestock products depends on evidence from our surveillance systems that we are free of livestock diseases that are reportable or affect trade. To gather this proof of freedom, the Department of Agriculture and Food, Western Australia (DAFWA) investigates cases where livestock show signs of disease similar to reportable or trade diseases.

The *WA livestock disease outlook – for vets* is collated from information collected by DAFWA and private veterinarians as part of proving Australia's freedom from those diseases. In 2015/16, data from our surveillance systems allowed WA to access markets valued at \$2 billion.

## Recent significant cases submitted to DAFWA Diagnostic Laboratory Services (DDLS)

Case data from March to April 2017

### Rift Valley fever testing supports proof of disease freedom for export markets

- 15 Merino weaners died in a flock of 300 in the Great Southern.
- The animals showed progressive blindness and wasting leading to death.
- On postmortem, the rumen contents were yellow with a foul odour and the vet considered hypovitaminosis A, polioencephalomalacia or lupinosis as possible causes.
- Laboratory testing did not identify the cause of death, but low serum vitamin A levels in two sheep suggested that there could be a general deficiency among the flock. It was also recommended that paddocks be examined for *Stypandra* sp. or bracken ferns, which may cause blindness.
- Given the high mortality in young sheep, histopathology testing was undertaken to exclude Rift Valley fever (RVF) and to support Australia's claim of freedom from this disease. Histopathological changes in cases of RVF may include haemorrhage on serosal surfaces and in abdominal organs, liver necrosis, effusions in the thorax and abdomen, jaundice and intestinal inflammation.

RVF is an arthropod-borne virus that affects primarily cattle, sheep and goats but humans and camels are also hosts. It has never occurred in Australia but could enter the country via infected people, livestock or vectors. Signs include high mortalities in young animals, pyrexia, abortions, and bloody diarrhoea. To report unusual disease signs or high mortalities, contact your [local DAFWA vet](#) or DDLS on (08) 9368 3351 or the emergency animal disease hotline on 1800 675 888. See the DAFWA website for a list of [reportable diseases](#).

### Neurological signs in a young steer

- A one-year-old Murray Grey steer presented with paresis and ataxia and was subsequently humanely euthanased.
- A postmortem found a blood clot in the ventral dura mater of the cervical spine, which suggested the neurological signs were due to cervical trauma. Other postmortem findings included acute rumenitis and chronic colitis and enteritis with coccidia present.
- Other conditions ruled out on the basis of sample testing included annual ryegrass toxicity (ARGT), lead toxicity, polioencephalomalacia and disorders of calcium and magnesium.
- Incidental findings were able to assist the producer in identifying herd health issues. Rumenitis can occur due to excessive grain and coccidia and other parasites may be exacerbated by wet weather conditions and high stocking densities.

## Foot-and-mouth disease (FMD) excluded in a dairy cow in the South West

- A four-year-old dairy cow was found recumbent with an oral lesion. The cow had been ill-thrifty for three weeks since calving. There were reduced gut sounds, dry faeces and low body condition but no other significant findings.
- Given the presence of oral lesions, samples were taken to exclude FMD and vesicular stomatitis.
- There were no other signs of FMD such as sores around the feet and on the udder and there was no history indicating a likely introduction of FMD.
- Testing for FMD and vesicular stomatitis at DDLS and the Australian Animal Health Laboratory (AAHL) was negative.
- Subsequent samples taken from the cow at postmortem showed the likely cause of disease to be a post-calving bacterial metritis. Oral lesions were presumed to be due to trauma or burn.

[Foot-and-mouth disease](#) is an exotic, highly infectious viral disease that affects cloven-hoofed animals. Blisters may form in the mouth, nostrils, teats or interdigital areas. Vesicular stomatitis is another disease of cattle, pigs and horses that can cause blisters in the mouth and on teats and feet. Both diseases are reportable due to the devastating consequences of an outbreak in Australia. The producer who reported these signs to a vet helped to provide evidence that Australia remains free of FMD and vesicular stomatitis.

## In late autumn/early winter, be on the lookout for:

Disease	Typical history and signs	Key samples
<b>Scour worms in sheep</b>  Read more on <a href="#">sheep worm control</a>	<ul style="list-style-type: none"> <li>• Sheep may be carrying higher worm burdens due to early rainfall.</li> <li>• Scouring usually occurs once green feed is established.</li> <li>• High worm burdens in autumn are likely to result in significant worm problems in lambs during the spring.</li> <li>• Worm egg counts (WEC) performed in autumn can help to assess if drenching is required.</li> </ul>	<b>Performing a WEC:</b> <ul style="list-style-type: none"> <li>• <a href="#">Collect samples</a> from individual sheep – 5-10 faecal pellets in zip lock bags or sample jars, labelled and kept cool.</li> </ul>
<b>Grass tetany in cattle</b>  Read more on <a href="#">grass tetany in beef cattle</a>	<ul style="list-style-type: none"> <li>• Susceptible cattle are generally older highly productive cows in their first four months of lactation grazing grass pasture.</li> <li>• Signs may include twitching, convulsions, excitement, apparent aggression, stiff gait and sudden death.</li> <li>• Magnesium-deficient cattle normally present with clinically consistent signs for TSE and may be suitable for the TSE exclusion subsidy. See the <a href="#">TSE webpage</a> or contact your DAFWA vet for details.</li> </ul>	<b>Antemortem:</b> <ul style="list-style-type: none"> <li>• EDTA blood sample for magnesium and calcium</li> </ul> <b>Postmortem:</b> <ul style="list-style-type: none"> <li>• Vitreous humour</li> <li>• Brain and spinal cord sections for TSE exclusion if neurological signs present</li> </ul>
<b>Photosensitisation</b>  Read more about <a href="#">photosensitisation in livestock</a>	<ul style="list-style-type: none"> <li>• Photosensitisation can be due to ingestion of plants containing photosensitising compounds (primary) or as a result of liver damage (secondary). It is often first seen in autumn after green feed germinates.</li> <li>• Signs include jaundice, weakness, depression, severe irritation and/or swelling of face and ears and lameness.</li> <li>• Differential diagnoses include exotic diseases like bluetongue and FMD.</li> </ul>	<b>Antemortem:</b> <ul style="list-style-type: none"> <li>• Blood in LiHep</li> <li>• Pasture samples (shopping bag)</li> </ul> <b>Postmortem:</b> <ul style="list-style-type: none"> <li>• Fresh and frozen liver (75g), rumen content (250mL)</li> </ul>

Note: include base samples and any clinical or gross lesions in submissions. For sample submission advice, contact your DAFWA field veterinary officer, see the DAFWA [sampling and postmortem resources](#) webpage or phone the duty pathologist on +61 (0)8 9368 3351.

## Boosting WA's surveillance capacity

The International Conference on Animal Health Surveillance hosted by the New Zealand Veterinary Association in Rotorua in May explored how livestock industry participants can work together to achieve more effective and efficient surveillance. For details, see the [DAFWA](#) website or the [conference proceedings](#).

We welcome feedback. To provide comments or to unsubscribe, email [michaela.mcarthur@agric.wa.gov.au](mailto:michaela.mcarthur@agric.wa.gov.au)

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