



WA livestock disease outlook

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Recent livestock disease cases in WA

Weakness and deaths in ewes during lambing

- A total of 23 pregnant ewes presented with lethargy, recumbency and panting, with some progressing to death within 12 hours. The affected animals did not respond to treatment with electrolytes and glucose. Three of the ewes also had dystocias.
- The sheep had been on lupin and barley lick feeders for four weeks, and were trail fed prior to this. They had been vaccinated with a 6-in-1 vaccine (including clostridial diseases), drenched with a macrocyclic lactone within the last month, and recent [worm egg counts](#) showed a low parasite burden in the flock.
- Post-mortem of two ewes found them to be in good body condition and at different stages of pregnancy. There was an acute vasculopathy affecting the brain of one ewe, while the other was too autolysed for reliable interpretation.
- **Differential diagnoses:** [Anthrax](#) (reportable), 1080 or [lead](#) poisoning and [scrapie](#) where there are neurological signs.
- **Key samples:** in addition to the base sample set, fresh small intestinal contents (preferably ileal); fixed brain, 2cm of fresh spinal cord and dorsal cerebellum for TSE rule-out; peripheral blood and blood smears for anthrax rule-out. (Note: do not post-mortem an animal suspected to have died from anthrax; instead immediately contact the [laboratory](#) to discuss [safer sampling options](#) and to advise if samples are being sent.)
- Testing of the small intestinal contents returned a positive enterotoxaemia ELISA in the ewe with the vasculopathy. An exotic TSE was ruled out by histopathology.
- Follow-up investigation by the vet found that the younger ewes had been vaccinated against pulpy kidney in the previous year but the annual vaccination for older ewes had lapsed. The producer was also administering the initial vaccination course at two-week intervals instead of the recommended four weeks, which could explain losses in the younger animals.
- Read more on [enterotoxaemia \(pulpy kidney\) in sheep](#).



Fig 1: Collect 50mL of ileal contents for bacterial culture and enterotoxaemia ELISA.



Fig 2: Normal sectioned kidney. Not all cases of pulpy kidney will have visible kidney lesions.

Sudden deaths and lethargy in cows at calving

- Thirteen cows died and 57 were lethargic and recumbent in a mob in the South West. A second mob in a neighbouring paddock seemed unaffected.
- The cows had been grazing a paddock without supplementary feed, had been drenched three months ago, and were up to date with vaccination.
- On post-mortem, one cow in poor body condition showed pallor of the mucous membranes, gelatinised perirenal fat, a thickened abomasum, enlarged mesenteric lymph nodes, and bright yellow fat.
- **Differential diagnoses:** toxicity ([lupinosis](#), Paterson's curse), helminthiasis, [enterotoxaemia](#), [annual ryegrass toxicity \(ARGT\)](#).
- **Key samples:** cow-side ketone test in milk or urine, blood in lithium heparin, gastrointestinal contents and sections (fixed and fresh), faeces, liver (fresh and fixed) in addition to base sample set.

- On histopathology, the cow had a chronic abomasitis and enteritis with nematodes present in the abomasum, a severe hepatic lipidosis, and splenic haemosiderosis. Blood BHB (beta-hydroxybutyrate) and liver enzymes were markedly elevated, contributing to a diagnosis of [ketosis](#).
- The abomasal worm count was very high, including large numbers of L4 larvae, indicating a severe worm burden and pasture contamination which contributed to disease. It was recommended that these animals receive further drenching and monitoring by worm egg counts, as well as supplementary feeding. Information for drench management including resistance can be found on our [webpage](#).

In early winter, watch for these livestock diseases:

Disease, typical history and signs	Key samples
<p>Grass tetany in cattle</p> <ul style="list-style-type: none"> • Susceptible cattle are generally older, highly productive cows in their first four months of lactation, grazing grass pasture. • Signs may include twitching, convulsions, excitement, apparent aggression, stiff gait and sudden death. • Magnesium-deficient cattle normally present with clinically consistent signs for TSE and may be suitable for the TSE exclusion subsidy. See the TSE webpage or contact your DPIRD vet for details. • Read more on grass tetany in beef cattle. 	<p>Ante-mortem:</p> <ul style="list-style-type: none"> • Lithium heparin blood sample for magnesium and calcium <p>Post-mortem:</p> <ul style="list-style-type: none"> • Vitreous humour • Brain and spinal cord sections for TSE exclusion if neurological signs are present
<p>Arthritis in lambs</p> <ul style="list-style-type: none"> • <i>Erysipelothrix rhusiopathiae</i> is the most common cause of bacterial arthritis in lambs in WA. Lambs are most susceptible to infection soon after birth (via the umbilicus), at marking, mulesing and shearing. Any break or wetting/softening of the skin can allow entry of bacteria and development of arthritis. • Differentials include endemics such as footrot, foot abscesses, laminitis from grain overload, scabby mouth extending to the lower legs, rickets, white muscle disease and exotic diseases such as foot-and-mouth disease, bluetongue. • Read more on arthritis in sheep 	<p>Post-mortem:</p> <ul style="list-style-type: none"> • Swab of joint fluid/synovium in transport media for culture • Fixed joint capsule and muscle • Fixed bone/joint sample if lesions or deformity

Note: Include base samples and any clinical or gross lesions in submissions. For sample submission advice, contact your [DPIRD field vet](#) or the duty pathologist on +61 (0)8 9368 3351.

Useful resources

- Watch this short [video](#) to learn more about DPIRD's ewe abortion and newborn lamb deaths surveillance program and subsidised testing kits if your clients are experiencing losses during lambing season.
- Visit the [sampling and post-mortem resources for vets webpage](#) for helpful resources such as a [ruminant post-mortem bench aid](#).
- Last chance for vets to register for the upcoming [disease investigation and emergency animal diseases workshops](#) at South Perth, 23-25 June. Click [this link](#) for more details and how to register.
- DPIRD has posted a new webpage with resources and tools for producers for the [2018 Season](#).

Recent WA animal health media releases

- [Producer fined for footrot quarantine breach](#)
- [Targeted surveillance under way for Johne's disease in cattle](#)
- [Testing kits to lift lambing marking rates](#)
- [Sheep producers reminded to watch for pregnancy toxemia](#)
- [Stock owners urged to check hay for annual ryegrass toxicity](#)

Veterinary investigations support our livestock industries and access to markets

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. Data from livestock disease investigations provide evidence that WA is free from these diseases and supports our access to markets.

We welcome feedback. To provide comments or to subscribe to the monthly email newsletter, [WA livestock disease outlook](#), email waldo@dpiird.wa.gov.au

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