



## WA livestock disease outlook

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### Recent disease investigations



#### Sheep losses in the South-West due to pregnancy toxaemia

- A vet investigated ewe deaths (2%) and illness (2%) in a large breeding flock.
- Sheep that died were in good condition in late pregnancy or with 2-week-old lambs.
- The sheep were found weak, recumbent and died within 48 hours.
- Increased ketones (beta hydroxybutyrate, BHB) in the blood and vitreous humour supported a diagnosis of pregnancy toxaemia (ketosis).
- Given recent dry weather conditions affecting feed availability, more cases are expected this winter.
- Consider pregnancy toxaemia if late pregnant/early lactating ewes present with depression, anorexia, weakness, recumbency, neurological signs, death. Signs may be worse following stress.
- **Differential diagnoses:** cerebral abscess, acidosis, hypocalcaemia, nutritional myopathy in primiparous ewes, meningitis and the exotic disease, scrapie. (Subsidies may be available to the vet and producer where appropriate samples are submitted for testing under the National Transmissible Spongiform Encephalopathies (TSE) Program.)
- **Key diagnostic samples:** 10mL blood in lithium heparin tube (antemortem), 2mL vitreous humour in plain tube (postmortem) in addition to base tissue sample set.
- Read more on the Department's [pregnancy toxaemia webpage](#).



#### Selenium deficiency associated with abortions, stillbirths in South-West beef herd




- A total of 14 late-term abortions and stillbirths occurred in a beef herd of 380.
- The animals had been drenched with selenium but no regular monitoring of selenium in the blood to prevent under- and over-supplementation had been carried out.
- Selenium is an important mineral in maintaining pregnancy. Consider selenium deficiency if low productivity, infertility, retained foetal membranes and abortions in adult cattle, and nutritional myopathy, poor growth and a reduced ability to mount an immune response in young cattle.
- **Key diagnostic samples:** 10mL blood in lithium heparin (antemortem), fresh liver and fixed skeletal and heart muscle (postmortem).
- **Differential diagnosis:** Testing of these cows supported WA's freedom from the exotic disease, *Brucella abortus*, a significant cause of abortion overseas.
- Read more about [selenium deficiency in cattle](#).



#### Death at a sheep feedlot attributed to listeriosis

- A mature ewe was found recumbent with neck ventrally flexed and apparent vestibular signs.
- Laboratory examination of the sheep brain confirmed the presence of the bacteria, *Listeria monocytogenes*, which had resulted in encephalitis. The bacteria can infect sheep through oral mucosal damage caused by rough feed. The bacteria may be present in the environment or in poorly prepared silage. Management of these factors helps to reduce the likelihood of infection.
- Consider listeriosis as a potential cause of neurological signs in sheep and cattle.
- **Key diagnostic samples:** fixed brain and 2cm fresh spinal cord.
- **Differential diagnosis:** Testing of the brain also ruled out a TSE. TSEs are exotic to Australia and there is a [national testing program](#) to support producers and vets in ruling out this condition which can cause neurological signs similar to Listeria infection.

## In winter, be on the lookout for:

Disease	Typical history and signs	Key diagnostic samples:
<b>Mastitis in sheep</b> 	<ul style="list-style-type: none"> <li>• Most commonly seen in with ewes raising multiple lambs or high milk producing breeds, including Poll Dorset and Suffolk.</li> <li>• May be subclinical or cause severe damage to udder.</li> <li>• Cross-suckling of mastitic ewes may spread infection and cause pneumonia in lambs.</li> <li>• Report signs of mastitis in addition to lamb deaths, conjunctivitis and arthritis to your <a href="#">Department vet</a> for testing for the exotic disease contagious agalactia.</li> </ul>	Antemortem: <ul style="list-style-type: none"> <li>• 20mL chilled milk in sterile jar</li> </ul>
<b>Cobalt and vitamin B12 deficiency</b>  	<ul style="list-style-type: none"> <li>• Plant and climate factors affect cobalt availability, which is required for the synthesis of vitamin B12 in ruminants.</li> <li>• Stock agisted in the South West that originated further north may not have been routinely treated for cobalt deficiency in the past and may be particularly susceptible to deficiency in winter and early spring.</li> <li>• Signs in growing cattle and sheep include anaemia, illthrift and scaly ears. Cattle may have a rough, pale coat and pica.</li> <li>• Sheep are more susceptible and may also have weepy eyes and produce small lambs.</li> <li>• A vitamin B12 response test in animals showing clinical signs in susceptible areas can help to identify deficiency.</li> <li>• Read more about <a href="#">cobalt deficiency in sheep and cattle</a>.</li> </ul>	Antemortem: <ul style="list-style-type: none"> <li>• 10mL blood in LithHep from 5 or more sheep</li> </ul> Postmortem: <ul style="list-style-type: none"> <li>• Liver – fresh, chilled (for vitamin B12 testing) and fixed.</li> </ul>

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

## Updated materials for Johne's disease in cattle

Updated webpages and factsheets on [Johne's disease in cattle](#) and the [Johne's Beef Assurance Score](#) are available now on the Department website, [agric.wa.gov.au](http://agric.wa.gov.au) – search on 'JD'. If you have any queries about JD in cattle, contact your nearest [Department field veterinary officer](#) or email [Bruce.Twentyman@agric.wa.gov.au](mailto:Bruce.Twentyman@agric.wa.gov.au).

## Keep up to date with livestock biosecurity with *Fit to trade* bulletin

The [Fit to trade](#) bulletin promotes government, industry and producer partnership across the biosecurity systems that protect and enable WA's livestock businesses to trade into domestic and international markets. The bulletin is produced by the Department of Primary Industries and Regional Development. To view the current edition or to subscribe, go to [agric.wa.gov.au/newsletters/ftt](http://agric.wa.gov.au/newsletters/ftt).

## Disease investigations – providing evidence to protect 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. The **WA livestock disease outlook** for vets summarises recent significant disease investigations by Department of Primary Industries and Regional Development vets and private vets. Data from these investigations provide evidence that WA is free from these diseases and supports our continuing access to markets.

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

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