



Supporting your success

WA livestock disease outlook

Veterinarian edition | March 2017

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.

Prioritising personal protective equipment (PPE)

Several recent livestock disease cases have highlighted the need for veterinarians to assess the risk to their health and safety when examining livestock. The minimum recommended PPE for postmortems in livestock includes overalls, safety eyewear, facemasks, disposable gloves, and impervious boots. PPE used to examine animals that pose a biosecurity risk should be secured for disposal or decontaminated before leaving the affected property. Consult the [AVA Guidelines for Veterinary Personal Biosecurity](#) for more information about reducing your personal health risk. The [website](#) also has printable biosecurity checklists for site visits.

Recent significant cases submitted to DAFWA Diagnostic Laboratory Services

Case data from February to March 2017

Sudden death of six heifers in the Great Southern

- Six Angus heifers from a mob of 175 bought from a saleyard in the previous month died suddenly with four found dead within a week. One of the dead heifers had blood in the nasal passages.
- Given the history of sudden death and bloody discharge from a body cavity, testing for the [reportable disease](#) anthrax with an immunochromatographic test (ICT) and anaerobic culture was performed and the results were negative. Laboratory testing also ruled out *Theileria*.
- The vet did not postmortem the animal. Anthrax is a potentially fatal zoonotic and postmortems can increase the risk of infection and release more spores into the environment.
- Anthrax spores can live in soil for up to 50 years and in animal bones for up to 200 years. The risk of an outbreak is higher after heavy rainfall. Anthrax last occurred in WA in 1994 but it has been reported recently in Queensland, New South Wales and Victoria.
- Extreme care must be taken when handling animals suspected of dying from anthrax. People can contract cutaneous anthrax from handling infected animals and animal products and inhalation anthrax from inhaling aerosolised spores. The DAFWA website has a [sampling guide](#) for animals with signs of anthrax. Minimal non-invasive sampling and personal protective equipment are vital to reduce the risk of transferring disease and to protect personal health. Anyone exposed to anthrax should immediately contact their doctor.
- To report suspicion of anthrax, call your [DAFWA vet](#) or the emergency disease hotline on 1800 675 888.

Read more on [anthrax](#) on the DAFWA website at [agric.wa.gov.au](#).

Melioidosis in alpacas in the Avon Valley

- Laboratory testing confirmed melioidosis as the cause of death of more than 30 alpacas on a property.
- Affected animals, of a range of ages, presented with ataxia, abortions and respiratory distress with brown or bloody oral and nasal discharge. Postmortem revealed severe, acute necrotising pneumonia.
- The bacterium that causes melioidosis, *Burkholderia pseudomallei*, can live in soil and water for long periods. Soil disturbance and recent heavy rainfall are thought to have contributed to this outbreak.

- Melioidosis is endemic in tropical regions of Australia. It has been diagnosed in the Gidgegannup, Chittering and Toodyay areas on rare occasions since 1966 and can infect multiple species.
- Melioidosis is most commonly contracted from contaminated soil and water but has the potential to be zoonotic. People are unlikely to contract melioidosis from animals, however those in contact with animals that may be infected are advised to wear PPE and minimise exposure to the animal and environment.
- Although it is not a reportable disease in livestock, [melioidosis in people](#) must be notified to the WA Department of Health. Report suspected cases or exposure to the WA Health Metropolitan Communicable Disease Control service on 9222 8588 or 1300 623 292.

Read more on [melioidosis in animals](#) on the DAFWA website.

Bacterial pneumonia in sheep following shower dipping

- Five days after shower dipping, 4% of a mob of adult ewes had weakness, lethargy, fever, swollen fetlocks, rapid breathing and nasal discharge. Some were found dead.
- A postmortem on two sheep in condition score 2.5 or better found they were in early gestation exhibiting severe pleuropneumonia. Histopathology confirmed severe, fibrinosuppurative bronchopneumonia.
- Samples taken from the lungs for microbial culture showed a heavy, mixed bacterial infection with various opportunistic bacteria (*Trueperella pyogenes*) and pathogens (*Salmonella* and *Clostridium* sp.).
- The *Salmonella* isolated was typed as *Salmonella* Typhimurium, a zoonotic organism.
- No sheep dipped on the first day became sick. The sump was not emptied and no fresh chemical or water added before dipping on the second day. As sheep that became sick had been dipped on the second day, the most likely source of infection was inhalation of dip fluid aerosol contaminated with bacteria.
- *Salmonella* Typhimurium is the most common type of *Salmonella* in WA. Usually it causes fever, diarrhoea and abortions in sheep. Outbreaks occur following faecal contamination of feed and water points coupled with stressful events like cold, wet weather or high stocking densities.
- Several serotypes of *Salmonella* are exotic to WA and [reportable](#) including *S. Abortus equi* (horses), *S. Abortus ovis* (sheep) and *S. Enteritidis* and *Pullorum* (poultry).

Read more on parasite control at [paraboss.com.au](#) and more on [Salmonella](#) on the DAFWA website.

In early autumn, be on the lookout for:

Disease	Typical history and signs	Key samples
Pink eye in cattle (infectious kerato-conjunctivitis) Read more about pink eye on the DAFWA website	<ul style="list-style-type: none"> • Common in summer/autumn and spread by flies. Stress, dry, dusty conditions and UV damage in combination with <i>Moraxella bovis</i> result in disease. • More often seen in younger stock, affects one or both eyes, is contagious and painful. • Signs include light sensitivity, blepharospasm, epiphora, corneal ulceration and decreased productivity. • Treatment and prevention methods include antibiotics, reducing fly populations and dust/UV exposure, isolating affected/brought-in animals, eye patches, tarsorrhaphy and vaccination. 	Antemortem: <ul style="list-style-type: none"> • Diagnosed based on clinical signs and history Conjunctival/lacrimonal swab: <ul style="list-style-type: none"> • Confirm with microbial culture
Ketosis in cattle To learn more about ketosis, search ' ketosis in cattle DAFWA video '	<ul style="list-style-type: none"> • Occurs when energy demand is greater than energy intake. • Signs include a sudden drop in body condition, milk production and appetite, usually 2–8 weeks post-calving. Breath/milk may smell like acetone. In some cases, there can be neurological signs. • Check for poor diet, metabolic or gastrointestinal conditions. • Conditions that damage the liver such as lupinosis and grazing Paterson's curse and other toxic plants will increase susceptibility. • Short-term treatments include glucose IV, glucocorticoids and propylene glycol. 	Antemortem: <ul style="list-style-type: none"> • Cow-side ketone test (milk or urine) • Li Hep blood to investigate metabolic disease

Note: include base samples and any clinical or gross lesions in submissions. For advice on sample submission, 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.

We welcome feedback. To provide comments or to unsubscribe, email michaela.mcarthur@agric.wa.gov.au

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