

Leptospirosis

A survey of exposure

An extensive study across the local area looking at the prevalence of Leptospirosis exposure in cattle herds, sheep flocks and feral pig populations was recently completed by Local Land Services in conjunction with Zoetis.

This was the first study focusing on cattle in the area in 45 years, the first in Australia relating to sheep and the most intensive look at feral pig prevalence to date.



The survey commenced in December 2011 and ran for a period of 12 months. The majority of samples were collected from the Central West, North West and Central North regions, with a small number of samples also collected from the Darling and Lachlan regions.

A comprehensive report has been produced as a result of this initiative, which will be publicly available in the near future.

What is Leptospirosis?

Leptospirosis or 'Lepto' is an infectious bacterial disease. There are hundreds of strains of Leptospirosis, but the two that affect livestock production are *Leptospira hardjobovis* (harboured and spread by cattle) and *Leptospira pomona* (harboured and spread by feral pigs).

Leptospirosis can cause late term abortions in pregnant cattle, and illness or death in calves.

Did you know?

Leptospirosis is a zoonotic disease (transmittable to humans) posing a risk to human health when working with infected stock. Infected humans develop persistent flu like symptoms. If you think you may have Leptospirosis, please see your doctor.

It is also an occupational hazard for other stock handlers such as abattoir workers and veterinarians.

How is it spread?

The disease can be spread between animals in a number of ways including:

- Infected animals contaminating the surrounding environment. The bacterium is excreted in the urine, contaminating pastures, water supplies and the soil;
- In the right conditions, the bacteria can live in the environment for several weeks, exposing stock to infection for long periods of time. It prefers warm moist soil, the surface of fresh water supplies and muddy conditions.

The disease can spread from animals to humans through the following:

- Via broken skin such as cuts and abrasions;
- Handling of aborted foetus and afterbirth or assisting during calving without gloves;
- Poor hygiene practices; not washing hands properly after contact with livestock; and
- Indirectly via infected water or soil.

What are the signs?

Common signs of Lepto in cattle include:

- Increased number of abortions across the herd. This generally occurs in heavily pregnant cows (at least 5 months in calf);
- Mastitis with the udder generally returning to normal in 10-14 days even without treatment;
- Development of 'redwater', usually in calves. Calves as young as two weeks can become infected, excreting reddish-brown discoloured urine;
- Rough, dry coat;
- Increased lethargy and rapid breathing;
- Discolouration of membranes in the mouth or vagina usually a pale yellow colour;
- High fever in calves; and
- Death may occur in severe cases.



Cattle may be infected and shed Leptospirosis in their urine without showing symptoms of the disease.

The most accurate way of detecting Lepto is through blood testing or examination of freshly aborted fetuses or afterbirth, carried out by your veterinarian.

Veterinary assistance is required if you think you may have an outbreak of Lepto.

Management

Prevention of Leptospirosis is strongly recommended rather than treatment.

Recommended management strategies for control include:

- Implementation of a vaccination program;
- Purchasing vaccinated stock with an animal health statement to reduce the risk of introducing infection into your existing herd;
- Feral pig control;
- Avoid running cattle on poorly drained areas or paddocks which receive run off;
- Always wear gloves and a mask when there is a chance you may come into contact with cattle urine or are handling feral pigs; and
- Wash your hands well after handling stock.

Vaccination

Introducing an effective vaccination program offers the best protection against the disease. It is advisable to consult with your veterinarian before commencing a vaccination program.

Points to consider with vaccination include:

- Handle and store the vaccine according to label recommendations;
- Ensure needles are sharp and clean and equipment is calibrated to the correct dosage; and
- Vaccines should always be administered sub-cutaneously (under the skin).

Further information

Central West Local Land Services District Veterinarians can offer you advice on disease diagnosis.

To find out more, contact us on 1300 795 299 or scan the quick response code and visit our website:

