

OJD – disease risk management

Animal Biosecurity Unit

Since ovine Johne's disease (OJD) was found in Australia in 1980, it has proven to be a costly disease. It spreads slowly, is difficult to detect early on, reduces weight gain and wool production and can kill about 10% of adult sheep each year if left unmanaged.

The following information can help you to protect your property and stock from OJD, and to minimise the impact of the disease on both you and your neighbours if your sheep are already infected.

What is OJD?

OJD is a wasting disease that can cause significant mortalities in sheep. It transmits very easily between neighbouring flocks and over long distances by the movement of infected animals.

Sheep become infected by eating pasture or drinking water that is contaminated with the bacterium that causes OJD.

OJD has a long incubation period, usually more than two years, but eventually a number of infected animals will develop obvious signs of the disease. This means that they start to rapidly lose condition, and usually die within the next 3–6 months.

There is no cure for the disease. Infected animals, and especially clinical cases, shed large numbers of Johne's bacteria in their dung which then contaminates pasture and water and passes the infection on to other stock.

How can I deal with this disease?

The strategies to prevent OJD entering your flock, and to minimise the impact of the disease if your flock is already infected, can be divided into two categories.

1. Reduce the risk of the disease entering your flock:

- Buy or agist sheep that have high Assurance Based Credits (ABC) as declared on a signed Sheep Health Statement (see Primefact 664).

- Avoid sheep straying on and off your property by maintaining fences.
- Work together with your neighbours to reduce risk.
- Start a vaccination program in your own flock.
- Vaccinate any non-vaccinated restockers on arrival.

2. If already infected, reduce the level of infection in your sheep:

- Vaccinate all restocker lambs at marking.
- Test to monitor levels of infection.
- Vaccinate any older sheep that have not had high exposure.
- Optimise natural immunity by:
 - ensuring adequate ewe and lamb nutrition;
 - ensuring good weaner nutrition and growth;
 - having an effective worm control program.
- Prepare 'low risk' lambing and weaning paddocks. Six weeks' destocking has been shown to dramatically reduce contamination levels, particularly over summer.
- Graze young sheep separately from older sheep.
- Yard younger sheep before older sheep, or use portable yards for young sheep.
- Cull any test-positive or 'high risk' mobs from your flock.
- Dispose of clinical sheep as soon as possible.
- Fence off high risk areas such as low-lying wet ground to avoid grazing them, especially with young sheep.
- Reticulate water from a clean source (e.g. bore water) to avoid sheep watering from contaminated dams.
- Avoid feeding supplements on the ground.
- Purchase or agist only low-risk (vaccinated) restockers.



- Minimise sheep straying by maintaining boundary fences.
- Work together with your neighbours to vaccinate and reduce risk.
- Progressively destock and decontaminate sections of your property. Restock with sheep that have a high level of ABC points as declared in writing on a signed Sheep Health Statement.

How important is vaccination?

Vaccine trials have indicated that OJD vaccine:

- reduces deaths by 90%;
- reduces shedding of the OJD bacteria in dung by 90%;
- reduces the number of sheep shedding by 90%.

Vaccination is the best strategy for producers with infected flocks. This means vaccinating all restocker lambs at lamb marking. This should be the backbone of any management plan.

It is also worth vaccinating any hoggets or adult sheep that have not been heavily exposed to Johne's bacteria.

Overseas experience and recent Australian research both indicate that it is also very important to adopt additional strategies that reduce the exposure of susceptible lambs and weaners. That way, you give the vaccine the best chance of working effectively in your flock.

The information in this Primefact was adapted from the previous *OJD Information sheet 6* by Therese Wright, Policy Officer, Animal Biosecurity Unit.

Further information

For more information go to www.ojdinfo.nsw.gov.au

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