

Brucellosis

Strategic prevention

Ovine brucellosis (OB) is an infectious bacterial sheep disease caused by *Brucella ovis*. Rams infected with *B. ovis* suffer from inflamed reproductive organs (particularly the epididymis), impacting semen quality, making them sub-fertile or sterile.

OB cannot be cured. An integrated approach to preventing OB is essential and includes:

- buying rams with a National Sheep Health Declaration from studs accredited as OB-free
- developing and implementing a farm biosecurity plan
- establishing the OB status of your flock before introducing OB-free sires
- maintaining ram-proof fences to avoid visits from neighbours' rams
- if not sourcing rams from accredited studs, keep newly purchased rams separate and test before integrating into the flock
- keeping rams in small groups and separating younger rams from older rams
- isolating rams from ewes until their disease status is established as ewes can spread OB
- palpating rams' testicles to check for lumps before purchasing and before joining
- seeking veterinary advice if you notice lower lambing percentages, longer lambing periods or abnormal lumps in the testes.

Impact

The effect on flock fertility will depend on the number of rams infected and the severity of the lesions in the infected rams. In many flocks, the full effects of the disease are unrecognised as not all rams are infected. Impacts also can be masked by introducing new, fertile rams each year.

In flocks where OB is a problem, three main effects are seen:

1. **The lambing period is extended.** When infected, sub-fertile rams join ewes, the chance of conception is low. Many of these ewes return to service 17 days later. In some affected flocks more than half the ewes return to service. If ewes are only joined for six weeks, many ewes may fail to conceive.
2. **The lamb marking percentage is reduced.** This is usually seen in flocks where ram replacements are made only every 2–3 years or in flocks where replacement rams are infected at the time of purchase, for example, rams from infected studs or rams bought out of saleyards.
3. **Ram wastage is high.** Infected rams are culled after only one or two years in the flock.

Likelihood

Brucellosis is a common disease within rams. Purchasing rams from saleyards and non-accredited flocks significantly increases your risk.

Tactical response

The disease is transmitted during joining when a clean ram serves a ewe that has recently been served by an OB-infected ram in the same cycle. Rams also transmit the disease between themselves through homosexual activities.

Ewes, although fairly resistant to OB, can carry the infection for extended periods, resulting in abortions and discharge of the organism in the placenta, vaginal discharges and milk.

The effect on flock fertility depends on the percentage of infected rams and flock breeding management.

The effects of OB are often unrecognised, as rams often do not show signs of ill health, especially where marked fluctuations in fertility occur for other reasons.

Brucellosis can spread very rapidly through a ram team. If you feel any abnormalities during pre-joining ram exams, call your veterinarian immediately to get a diagnosis and management plan in place, if required.

Eradication

Poor biosecurity increases the likelihood of brucellosis infection. It only takes one infected sheep for the disease to be spread. Eradicate OB by identifying (through physical examination and blood testing) and culling infected rams and preventing infection in young rams.



TIPS AND INFORMATION

- Wean ram lambs early and segregate them from all older ram groups.
- Purchasing rams through OB-free accredited producers will limit the risk of introducing OB to your flock.

Resource links

[AWI Rams](#)

[MLA Ovine brucellosis](#)

[MMFS Tool 11.13 Diagnosis, control and eradication of important diseases](#)

New South Wales

[NSW Ovine Brucellosis Accreditation Scheme](#)

Queensland

[Ovine brucellosis](#)

South Australia

[Ovine brucellosis](#)

Tasmania

[Brucellosis in sheep](#)

Victoria

[Ovine brucellosis](#)

Western Australia

[Ovine brucellosis](#)