

Ram Epididymitis

(*Brucella ovis*)



South Dakota

Animal Industry Board

What is Ram Epididymitis (*Brucella ovis*)?

Brucella ovis (*B. ovis*) is a bacterial disease that affects sheep. *B. ovis* is an economically important cause of epididymitis, orchitis and impaired fertility in rams. A flock infected with *B. ovis* may experience decreased pregnancy rates due to ram infertility, abortions, and increased lamb mortality at lambing time.

Unlike most species of *Brucella*, *B. ovis* is not known to infect humans.

Distribution:

The disease was first described in New Zealand and Australia and has since been reported from many sheep-raising areas of the world including the US.

Transmission:

The disease is transmitted through three pathways: ram-to-ram, ram-to-ewe, and ewe-to-ram. The primary means of transmission is by direct contact among rams or from recently infected ewes by venereal and oral-nasal routes. The bacteria can survive in the vagina of an infected ewe for at least two months and is shed in vaginal discharges and milk. Rams often become persistently infected, and will intermittently shed *B. ovis* in semen for 2 to 4 years or longer.

Clinical Signs:

Rams

- Poor semen quality due to epididymitis and/or orchitis.
- Palpable lesions in the epididymis and scrotum.
- Testicular atrophy in later stages of the disease.

Ewes

- Abortions and placentitis.
- May give birth to weak lambs that die soon after birth.

Recommendations on control and prevention:

1. Buy virgin rams that have tested negative.
2. Test all rams for *B. ovis* prior to breeding.

3. Cull any *B. ovis* positive rams.
4. Prior to breeding season, perform breeding soundness exams annually on all rams and cull all rams with semen abnormalities, epididymitis, or that fail the exam.
5. If *B. ovis* is diagnosed in your flock:
 - Retest all rams in the flock 45 to 60 days after the initial test and the remove the infected ram(s).
 - Cull all open ewes, any ewe that aborts and any ewe that does not lamb.

Ram Epididymitis Control - SD AIB Regulations:

Import Requirements:

- A Certificate of Veterinary Inspection (CVI) with a SD telephone import permit must accompany the shipment.
- Rams 6 months of age and older MUST be tested NEGATIVE for *Brucella ovis* by the ELISA test within 30 days prior to entry, or originate from a *Brucella ovis* free flock with a test record within the past year.
- Individual official identification must be listed on the CVI.

Intrastate movement:

- All rams 6 months of age and older that are sold, loaned, or leased within the state for purposes other than immediate slaughter must test negative for *B. ovis* within 90 days prior to movement or come from a *Brucella ovis* free flock.

SD *Brucella ovis* free flock certification:

Establishing a *B. ovis* free flock:

All rams 6 months of age and older in the flock must be tested negative by two blood tests 45 to 60 days apart.

Maintenance of a *B. ovis* free flock:

Blood test with negative results on:

1. All rams 6 months of age and older prior to addition into the flock.
AND
2. All rams 6 months of age and older in the flock, annually.



CONTACT INFORMATION

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