

# FAQs

## ERYSIPELAS ARTHRITIS IN SHEEP

**Erysipelas arthritis in sheep causes damage to the joints and results in production losses. It is often seen in outbreaks affecting either lambs or weaners. As a number of different types of bacteria or viruses can cause arthritis, veterinary consultation is required for an accurate diagnosis.**

### What is Erysipelas arthritis?

Erysipelas arthritis is observed in newborn lambs, after marking/mulesing, or less commonly, post-dipping. The bacterium enters through a wound or via the umbilicus in newborn lambs. It then spreads throughout the body which may cause a fever, then localises within the joints. Affected joints become hot, swollen and painful. Lambs may initially appear stiff but later develop lameness, and have difficulty rising and walking. The knee, elbow, hock or stifle joints are most commonly involved. Whilst some lambs will recover over 2-3 weeks, up to 20% will sustain joint damage as a result, and have ongoing lameness.

The disease can cause significant loss of production from poor weight gain and reduced wool production in lame lambs and failure to thrive in lambs with chronic arthritis.

### What causes the disease?

Erysipelas arthritis is caused by the bacterium *Erysipelothrix rhusiopathiae*. The bacterium survives in soil and is commonly found throughout Australia. It is thought to be present in sheep yards and sheep camps.

The disease may occur in sporadic outbreaks, but some properties seem to be affected every year. Outbreaks tend to occur after management interventions such as marking or mulesing.

### What are the signs of infection?

Lambs appear depressed, they may be reluctant to stand and walk, and appear lame or may have a hopping gait. The infected joints are hot and swollen.

### How is it diagnosed?

Definitive diagnosis requires veterinary investigation to isolate the causative organism as there are a number of other bacteria and viruses which can cause similar signs. Samples may be taken from affected joints for laboratory assessment.

### How is it treated?

Veterinary advice should be sought on appropriate treatment strategies. Antibiotic treatment may be effective in early stages of the disease but may not be economic on a flock level. Response to treatment is minimal in sheep that develop chronic arthritis.

### How is the disease prevented?

Ensuring a high standard of hygiene at lamb marking and mulesing can assist in preventing infection. It is recommended that these procedures be carried out in temporary yards and the instruments should be disinfected between animals. Lambs should be placed on their feet after release from the marking cradle. Vaccinators should be boiled to sterilise before use and needles changed regularly.

Eryvac™ Vaccine can be used to control Erysipelas arthritis. Vaccination of ewes prior to lambing with Eryvac™ will provide passive transfer of immunity to newborn lambs via the colostrum. This will provide immunity in the lambs for up to 8 weeks.

### Recommended vaccination schedule

Previously unvaccinated ewes will require 2 initial doses of the Eryvac™ vaccine. It is suggested that the first dose be given at the time of joining, and the second dose 4 weeks prior to the expected start of lambing. Ewes should then be given an annual booster 4 weeks prior to lambing to provide ongoing immunity. A 1mL dose of Eryvac™ vaccine is given on all occasions.

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