

# SARCOCYSTIS

## KEY MESSAGES

1. Sarcocystis costs the sheep industry an estimated \$5 million per year.
2. Losses at the abattoirs are due to trimming and condemnations.
3. The disease exists throughout southern Australia but is more common in Tasmania and Kangaroo Island in South Australia.

## What is Sarcocystis?

Sarcocysts are parasitic cysts found in the muscle of sheep. These small white cysts resemble grains of rice and are usually found on the oesophagus, tongue, diaphragm and muscle.

## Disease on farm

Sarcocystis has no impact on sheep health or productivity. Sarcocystis is a single cell parasite with a sheep-cat life cycle. Cats become infected when they eat infected sheep meat, often through scavenging carcasses. The parasite develops in the intestines of the cat and they produce large quantities of microscopic spores in their faeces. The life cycle continues when sheep ingest these spores on pasture or feed, eventually localising and developing into cysts in the muscle.

Unlike *Toxoplasmosis*, a gut parasite of cats that can cause abortion in sheep, cats don't develop immunity

to Sarcocystis and can become reinfected repeatedly throughout their lives.

## Risk factors?

Although Sarcocystis is present in low levels throughout Australia the highest prevalence is reported in Tasmania and Kangaroo Island. In Tasmania properties near towns appear to have a higher prevalence presumably due to the higher levels of wandering or feral cats.



Image provided by the Primary Industries and Regions South Australia (PIRSA)

## Disease picture at the abattoir

Light to moderately infected animals are trimmed with an average of 5.6 kg trimmed from the carcass. Heavily infected carcasses are condemned. In Tasmania around 18% of consignments are affected with *Sarcocystis* with an overall 3% of carcasses affected.

## Treatment

There is no treatment for affected sheep or cats.

## Prevention

Prevention is based on preventing cats becoming infected and contaminating pasture.

- Exclude cats from livestock feed areas.
- Do not feed domestic cats (and dogs) uncooked meat or offal and do not allow them to scavenge carcasses.
- Dispose of carcasses immediately so they cannot be accessed by scavengers, including cats.
- Control feral cats.

Although eliminating cats from the environment is sometimes advised it is often better to keep a well fed, stable, desexed population of cats on farm. Cats are territorial so eliminating them, leads to outside recruitment of breeding females which present a bigger problem with respect to toxoplasmosis, a disease more common in young cats which can cause abortions in ewes.



Image provided by Australian Wildlife Conservancy (AWC)

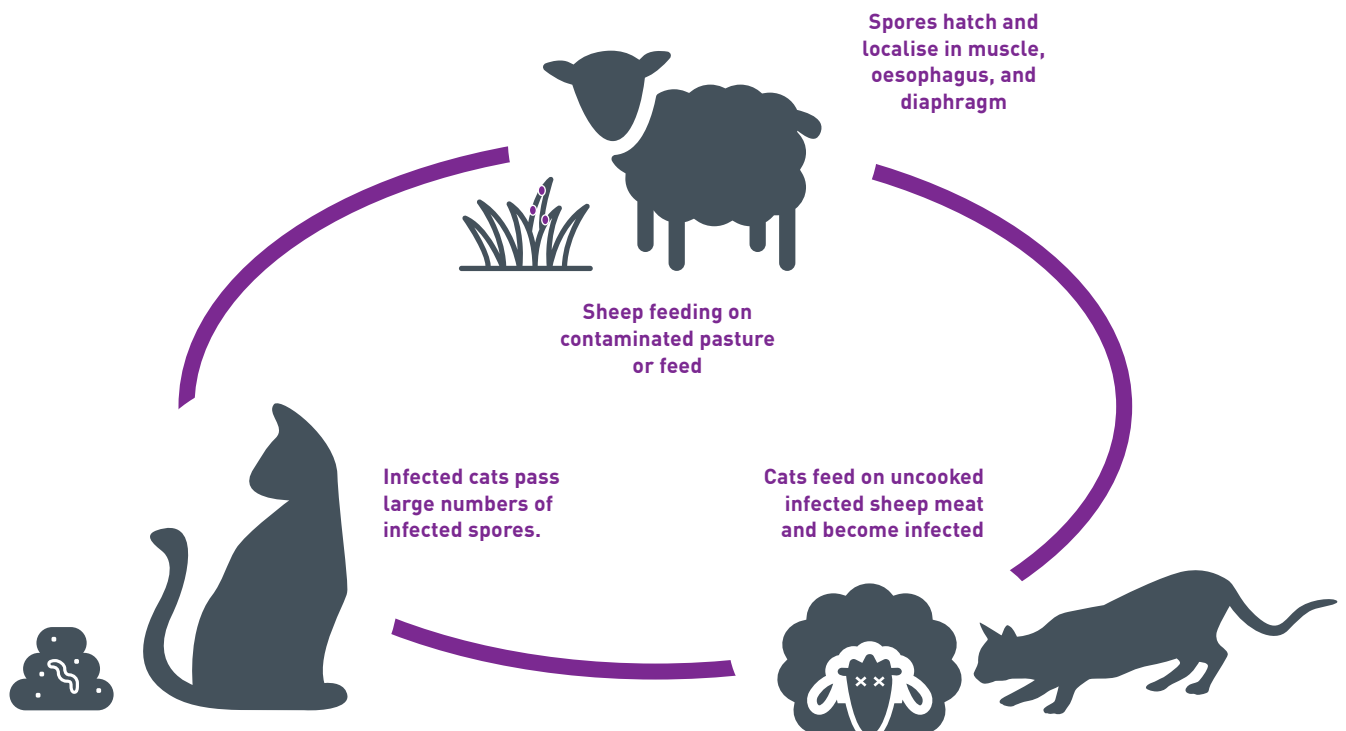


Figure 1 *Sarcocystis* life cycle.