

# SARCOSPORIDIOSIS AND EOSINOPHILIC MYOSITIS

## KEY MESSAGES

**Sarcosporidiosis is a parasitic infection with worldwide distribution in cattle.**

**Sarcosporidiosis reduces productivity by causing illness, abortion and stillborn calves.**

**Sarcosporidiosis causes an inflammatory condition in muscle which can require carcass condemnation at meat inspection.**

Sarcosporidiosis limits cattle productivity. However affected cattle may not develop clinical illness and in many instances, they will only have eosinophilic myositis or muscle cysts which can only be detected at meat inspection. Infection may cause fever, pneumonia, bleeding, anaemia, wasting, and possibly death. Pregnant cows may abort or give birth to stillborn calves.

Our knowledge on sarcosporidiosis in beef cattle in Australia is deficient, however studies have estimated the likelihood of infection in cattle ranges from approximately 90% in tropical areas to 60% in temperate regions, 30% in semi-arid regions, and 9% in arid regions.

## WHAT IS SARCOSPORIDIOSIS?

Sarcosporidiosis is a parasitic disease (*Sarcocystis spp.*) which occurs worldwide and affects many different animals including mammals, birds and marsupials. The disease in cattle causes cysts (usually microscopic) in the muscle (e.g. oesophagus, diaphragm and masseter muscle).

## DISEASE ON-FARM

Cattle become infected by sarcocystis by grazing on pastures or feed contaminated with the faeces of infected cats, dogs and/or foxes. Cats, dogs and foxes become infected through eating raw beef from an infected animal and then pass spores in their faeces. These spores can survive for a long time on pastures and in feed and are not affected by weather conditions.



## DISEASE PICTURE AT THE ABATTOIR

Sarcosporidiosis causes cysts (usually microscopic) in the muscle of cattle (e.g. masseters, oesophagus, diaphragm or heart). Sarcosporidiosis sometimes causes an inflammatory condition throughout the carcase (reddening of the muscle) known as eosinophilic myositis, which can require carcase condemnation at meat inspection. Data from one study estimated around 125 cattle carcasses are condemned in Australia each year due to eosinophilic myositis<sup>1</sup>. However, another study found that many more animals are infected with sarcocystis than can be detected by carcase inspection.

## TREATMENT

There is no effective therapeutic treatment for cattle.

## PREVENTION

To prevent sarcosporidiosis in cattle:

- cats, dogs and foxes must not have access to cattle carcasses, offal, or raw meat
- they should be kept out from areas where cattle are housed or feed is stored
- feed supplies should be covered.

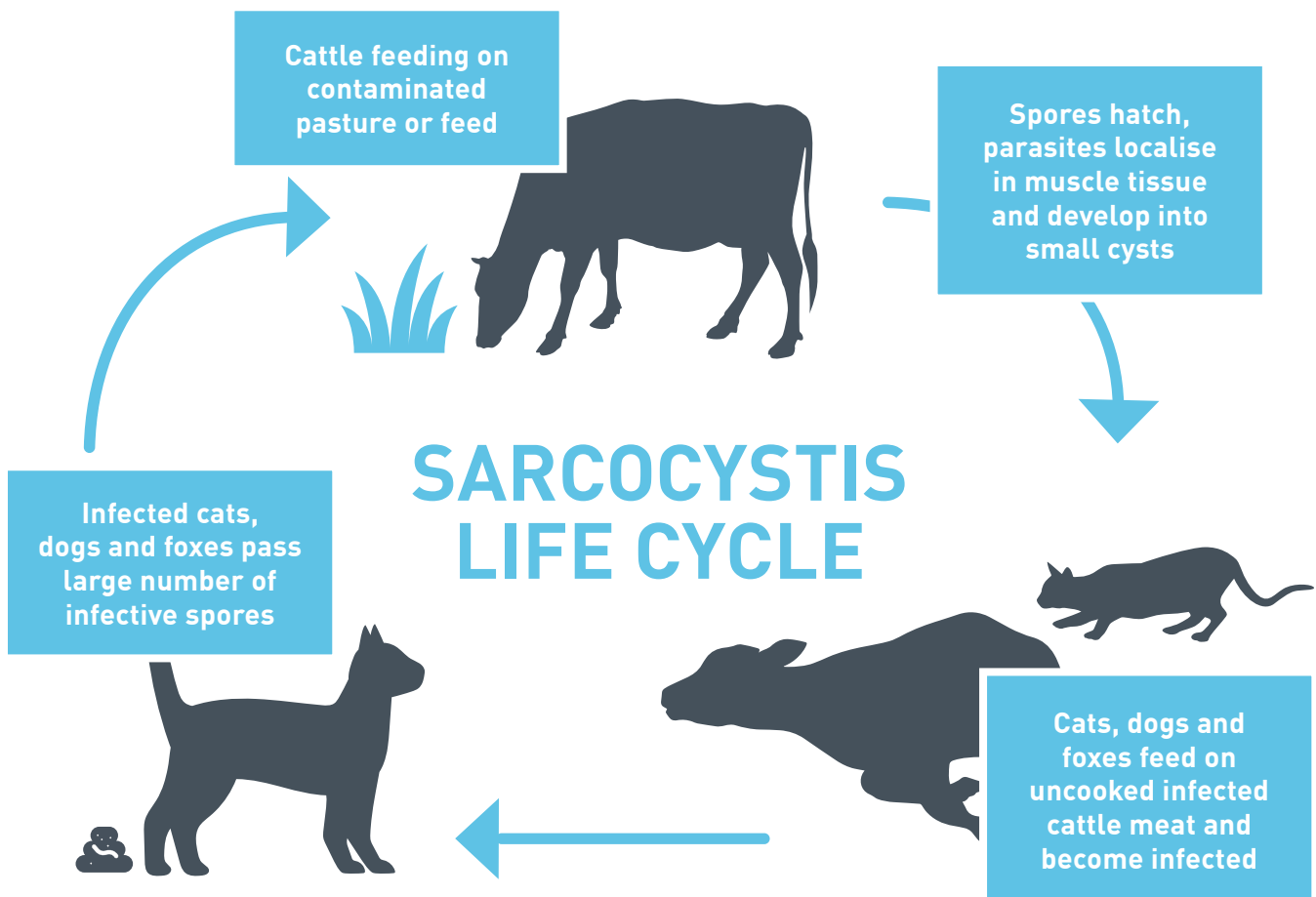


Figure 1 Life cycle of Sarcocystis spp. in cattle

1 MLA, 2015. Priority list of endemic diseases for the red meat industries.

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