



Toxoplasmosis

Connecting people in the business of sheep

KEY MESSAGES

- Cats are the primary host of the disease-causing parasite *Toxoplasma gondii*.
- All infected cats can spread toxo.
- Toxoplasmosis can infect humans — with the potential to cause abortion in pregnant women, foetal abnormalities and encephalitis in immune compromised people.
- Toxoplasmosis in sheep can cause abortion or stillbirth of lambs — particularly in maiden ewes that have not developed any immunity to *T. gondii*.
- Toxoplasmosis is fatal to a number of Australian herbivorous marsupials: including bandicoots, wombats, possums, wallabies, and also to birds.

What is toxo?

Toxoplasmosis is a disease caused by the parasite *Toxoplasma gondii*. Cats are the primary host in the life cycle of the parasite and they can carry the parasite indefinitely without any subsequent health impacts.

Other mammals and birds (including Australian marsupials) can become intermediate hosts by eating feed contaminated with *T. gondii* eggs (shed in cat faeces) or cyst-infested muscle tissue of other intermediate hosts (see Figure 1).

Economic impacts

Toxoplasmosis can cause early or late abortion in sheep and producers may only notice the disease impacts as a low lambing percentage.

Sometimes ewes will give birth to live lambs, but infected lambs will be small, weak and non-viable.

Toxoplasmosis infection resulting in abortion is most often seen among 'non-immune' sheep,

including maiden ewes infected during their first pregnancy.

Parasite lifecycle

The lifecycle of toxoplasmosis is a bit like the chicken and the egg scenario — it's a bit difficult to see which comes first (see Figure 1). The important thing is to try and break the cycle.

Diagnosis in sheep

Tests can be carried out on dead lambs and placenta where toxoplasmosis is suspected. Blood samples can also be taken from ewes to test for an immune response to the parasite.

Treatment and prevention

Generally, after animals have been exposed to *T. gondii* once, immunity occurs and protects animals throughout their life.

There is no vaccine in Australia for *T. gondii*. Control is best achieved by excluding feral and domestic cats from contaminating stock feed where possible.

Other common causes for sheep abortions include listeriosis, salmonellosis and campylobacter.

Dispose of livestock carcasses through burial or burning to reduce disease spread.

Prevention of infections in humans

Pregnant women and immune compromised people should avoid contact with cat faeces and wear gloves when handling any material that could be contaminated with *T. gondii* eggs.

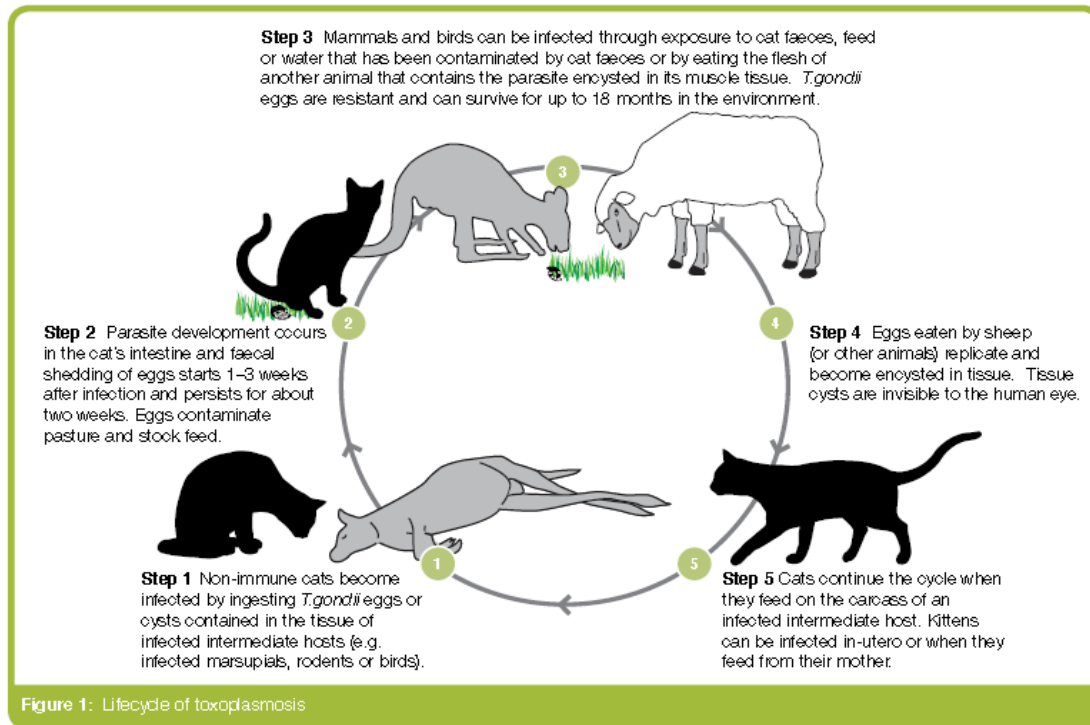
Take care when handling uncooked meat from sheep or wild game animals. Cook all meat well to kill any *T. gondii* cysts.

CONTACT

Ian McFarland

M: 0437 659 353 • E: Ian.McFarland@sa.gov.au

Connecting people in the business of sheep



For further information

Contact your local veterinary practitioner, livestock consultant or local PIRSA Animal Health Officer.

FOR ANY SIGNS OF UNUSUAL OR SERIOUS ANIMAL DISEASE, PLEASE CALL THE 24/7 DISEASE WATCH HOTLINE: 1800 675 888.