



Farmnote

Taenia ovis (Sheep measles) infection in sheep

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Untreated dogs can transmit sheep measles

Taenia ovis (other wise known as *Cysticercus ovis*, or 'sheep measles') is a tapeworm parasite with the adult stage of the parasite found in the intestines of dogs while the intermediate or larval stage (the cysticercus) is found in the muscles of sheep. Sheep are infected by grazing pasture contaminated with the infective eggs that have been shed in dog faeces.

The intermediate stage in sheep is characterised by small cysts in the muscle tissue.

When these cysts are eaten by a dog, the adult parasite develops in the dog's intestine and the lifecycle continues.



Lifecycle of 'Taenia ovis'

Important disclaimer

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Sheep measles cysts in sheep muscle

Over time the cysts in the muscle degenerate and are no longer infective. They calcify and form a small nodule with a 'gritty' texture. This is the stage that is commonly known as sheep measles.

T. ovis does not present a public health risk: however these calcified cysts are unpleasant to eat and can result in carcasses being downgraded or even condemned at the abattoir. *T. ovis* infection also has the potential to impact on valuable export markets for Australian lamb and mutton.

Control *of T ovis* can be difficult on a single-farm basis. The basic rules for control are:

 Worm all dogs on the property with a wormer containing the active ingredient 'praziquantel' every 4 weeks.

- Any sheep meat fed to farm dogs must be properly cooked or frozen prior to feeding. Cooking and freezing inactivate the cysts.
- Lock dogs up when not working and at night to reduce the risk of scavenging of sheep carcasses.
- Dispose of dead sheep on farm by burning or burial so that they cannot be scavenged.
- Do not allow contractors dogs on farm unless they have been correctly wormed as above within the last 4 weeks. Sheep on a property where control of *T ovis* is good have no immunity to the parasite. The arrival of untreated contractors dogs on such farms has been associated with very high rates of *T ovis* infection in the sheep.

The intermediate or larval stage of *T* ovis has been shown to be carried some distance by flies, so control should be seen as a district issue. It is a good idea to co-ordinate your dog worming programme with your neighbours' dogs, and ensure dogs do not roam between properties.

Once a sheep is infected with T ovis the cysts are present for life. Therefore once you start a control programme in your dogs, you may continue to see sheep measles in sheep sent to abattoir for a while. With time and persistence however control can be achieved.

The lifecycle of *T ovis* is basically the same as that for *Echinococcus* (hydatid tapeworm). This parasite does have human health implications. Any program that controls sheep measles will also control hydatid tapeworm.