

“Ovis” in lambs continues to decline – but we can do better

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Recommendations to veterinarians

Veterinarians servicing the sheep industry are encouraged to:

1. Advise farmers to treat all dogs on their properties with praziquantel based products every four weeks.
2. Advise farmers to ensure that dogs are not fed (and do not have access to) untreated sheep or goat meat.
3. Encourage farmers to exercise control of visiting dogs such that they do not carry a risk of transferring Ovis infection.
4. Provide sheep farmers who do not send lambs to abattoirs with advice of Ovis control for the good of the industry.



Note heart (top photo) and section of hind limb (lower photo) with multiple white focal lesions of *Cysticercus ovis*.

Situation

The voluntary control of Ovis (Sheep measles, *Cysticercus ovis*) supported by farmers, veterinarians, the meat industry and Ovis Management Ltd (OML) continues to be effective, with the prevalence of lesions identified in slaughtered lambs decreasing to approximately 0.6% in the 2013–14 season. The prevalence in lambs from 88% of suppliers was below 1% and fewer than 2.3% forwarded lambs with a prevalence of greater than 3%. These data are consistent with there being infected dogs on very few farms.

Exporters are recognising benefits from the decrease in *C. ovis* lesions in lambs and on the local market that decrease has allowed supermarkets to put finely sliced roast lamb in their delicatessen cabinets at the top end of the price range. The trends are favourable but the meat industry is keen to see the prevalence of *C. ovis* continue to decline.

A recent survey found that

1. All respondents indicated that they took measures to avoid the feeding of untreated sheep or goat meat to dogs;
2. Over 95% of respondents said that they treated dogs for removal of *Taenia ovis*. Fewer than 60%, however, treated dogs at monthly intervals. Some say that they have received veterinary advice to treat their dogs once every three months.;
3. Few farmers exercised measures that would be effective in preventing Ovis being brought onto their farms by visiting dogs.

Veterinarians supplying drugs for the purposes of controlling Ovis infection in dogs are encouraged to recommend that farmers (and other dog owners near, or on, farms) treat their dogs every four weeks (or every month). The pre-patent period for *T. ovis* in dogs can be within 35 days. While the risk of dogs becoming infected within a day or two after dosing may be small, the fecundity of the parasite is such that shedding of eggs for a short time has the potential to result in infection of large numbers of lambs.

The average prevalence of *C. ovis* in lambs sold by

breeders who do not send lambs to the abattoirs (i.e. lambs sent to the works by “finishers) is three times higher than the average prevalence in lambs bred, finished and sent directly to the abattoirs. This, almost certainly, is because those not sending lambs to abattoirs have no knowledge of the prevalence of *C. ovis* in their lambs and, commonly, receive no encouragement to follow Ovis-related best practices. OML is, currently, working with the meat industry to identify means of communicating with sheep farmers who do not forward lambs for slaughter. Many veterinarians servicing the sheep industry may know of farmers who do not send lambs for slaughter. Providing advice on Ovis control to these farmers is likely to be helpful in improving the over-all control of Ovis.

Investigating longevity and wastage in commercial ewe flocks

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We are conducting a research project at Massey University looking at productive longevity and wastage in commercial ewe flocks, funded by Beef and Lamb New Zealand.. There is currently a lack of research and data related to longevity and wastage in New Zealand sheep flocks, an issue which is potentially a significant cost to our farmers and the sheep and beef industry. Anecdotally it is believed that ewe mortality lies in the range of 5-10% per annum. However, this is not accurately known.

Ewe wastage is a combination of both mortality and premature culling. Premature culling is where a ewe is culled prior to the potential end of her productive lifespan; either to slaughter, direct sale, or via slaughter on-farm. Ewe wastage, and the associated reduced productive lifespan is costly to farmers as they have to retain (or purchase) more ewe replacements to keep flock numbers constant. There is also the direct cost of on-farm mortality in that cull value is not obtained. Also the reproductive performance of ewes tends to increase as they get older, so having an unnecessarily high proportion of young ewes has a production cost. If ewes are dying over the lambing period (as the majority seem to) there is also the loss of potential lambs.

In this study we EID tagged around 12,000 hoggets, some of which were mated while some were not, some being up to “target” mating weights of 40kg while others

were not. We have then been following these hoggets and collecting lifetime data on them. Weights and BCS have been collected four times a year (pre-mating, pregnancy scanning, set-stocking and weaning). We have also been collecting pregnancy-scanning results, wet/wet-dry data, dates and reasons for culling and where possible tags are being collected from ewes that die on farm. On one farm we have also conducted post-mortems on around 50 ill-thrifty ewes each year to identify reasons for poor BCS.

We have more data collection to do and are also planning a more intensive study investigating ewe mortality and the genetic component to longevity and wastage.

If anyone has done any studies or flock investigations in commercial flocks from which data on ewe longevity and wastage could be extracted, or records related to selection of ewes for premature culling from commercial flocks, that would be very useful.

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