Campylobacter MA Ewe Booster — PILOT STUDY UPDATE

Inactivated vaccines, such as Campyvax4®, stimulate immunity for relatively short periods. After the primary course of sensitiser and booster in the first year as a maiden ewe, annual booster vaccination is necessary to maintain immune memory and increase antibody levels prior to the risk period of pregnancy.

For mixed-age ewes, a Campylobacter booster is an important annual consideration. In the current economic climate, you need to know that vaccination can deliver a positive return on investment — as well as helping protect against abortion storms.

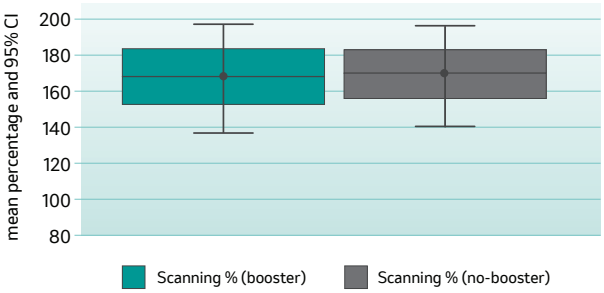
A study commenced in October 2024 to investigate the effect of giving a Campyvax4® booster to mixed-age ewes prior to mating.

Early results from the 2025 season show a promising increase in tailing performance on farms where mixed-age ewes received a Campyvax4® booster prior to mating.

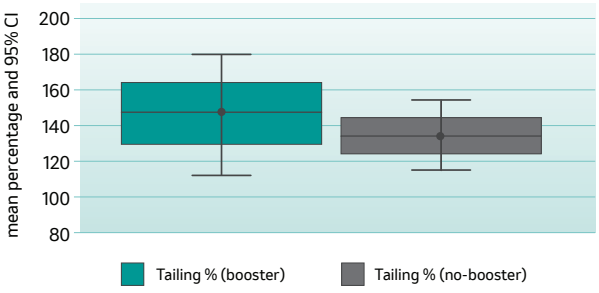
Most farmers place strong importance on tailing percentage and lamb survival, not just scanning percentage. More lambs tailed is an important driver of better farm revenue.

Summary of results

2025 Scanning — Campyvax4® booster vs no booster



2025 Tailing — Campyvax4® booster vs no booster



No difference was seen in scanning results in 2025 following a MA ewe booster pre-mating.

Compared to previous years, lambs tailed in 2025 increased by 9% on farms where the MA ewe booster was given.

- On these study farms, a MA ewe booster vaccination resulted in a 12% numerical gain in lambs tailed (147% vs 135%).
- This was equivalent to an additional 314 lambs per study farm.

For an average NZ farm with 2000 MA ewes mated and currently tailing 131%, and at a lamb price of $150/head, this could equal an extra 118 lambs per 1000 MA ewes mated, or an extra $35,400 in additional lambs in total.

This study continues for another year, as seasonal changes can influence scanning and tailing results.
Final results are expected early in 2027.

To find out more, visit www.sheepvax.co.nz or talk to your veterinarian.

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A practical "back-of-the-envelope" working based on the Pilot Study

The pilot study results can also be looked at in simple farm-business terms. The example below uses the 9% increase in lambs tailed reported in the pilot study and applies it to an average New Zealand farm scenario.

This is not a guaranteed result for every farm. It is a practical way to discuss what a similar improvement in lambs tailed could mean, using ewe numbers, lambing percentage, lamb value and vaccine cost.

Example, based on this *pilot study data (9%):

Number of ewes (all classes) mated in season = **2500 ewes**

MA ewes mated (excludes 20% replacement ewes) = (a) **2000 MA ewes**

Current lambing percentage for farm = (b) **131%**

Estimated numbers of lambs tailed to MA ewes currently = (a) x (b) = (c) **2620 lambs**

Estimated increase in number of lambs tailed to MA ewes = (c) x 9% = (d) **236 additional lambs tailed**

Value to the farm of a lamb = (e) **$150/head**

Return on MA booster vaccination: (d) x (e) = (f) **$35,400**

Cost per MA ewe per dose of Campyvax4® = (g) **$0.90/dose** excl GST

Investment cost of vaccinating all MA ewes with one booster prior to mating = (a) x (g) = (h) **$1,800**

ROI = Value of extra lambs tailed / Cost of booster doses to all MA ewes = (f) / (h) = **20 times ROI** approximate

To use in the field with a farmer

For a farm not currently boosting mixed-age ewes with Campyvax4®, use the farmer's own figures below to estimate the potential value of additional lambs tailed, then compare that value with the cost of giving one annual booster prior to mating.

Farm not currently boosting MA ewes with Campyvax4®

Number of MA ewes mated in season, with 1 annual booster prior to mating = (a) _____

Average lambing percentage for farm = (b) _____%

Estimated number of lambs tailed = (a) x (b) = (c) _____

Increase in number of lambs tailed to MA ewes = (c) x 9% = (d) _____ extra lambs tailed

Value to the farm of a lamb = (e) $_____

Return on MA booster vaccination: (d) x (e) = (f) $_____

Cost per MA ewe per dose of Campyvax4® = (g) $_____

Cost of vaccinating all MA ewes = (a) x (g) = (h) $_____

ROI = value of extra lambs tailed divided by cost of extra vaccine doses to MA ewes = (f) / (h) = _____ ROI

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