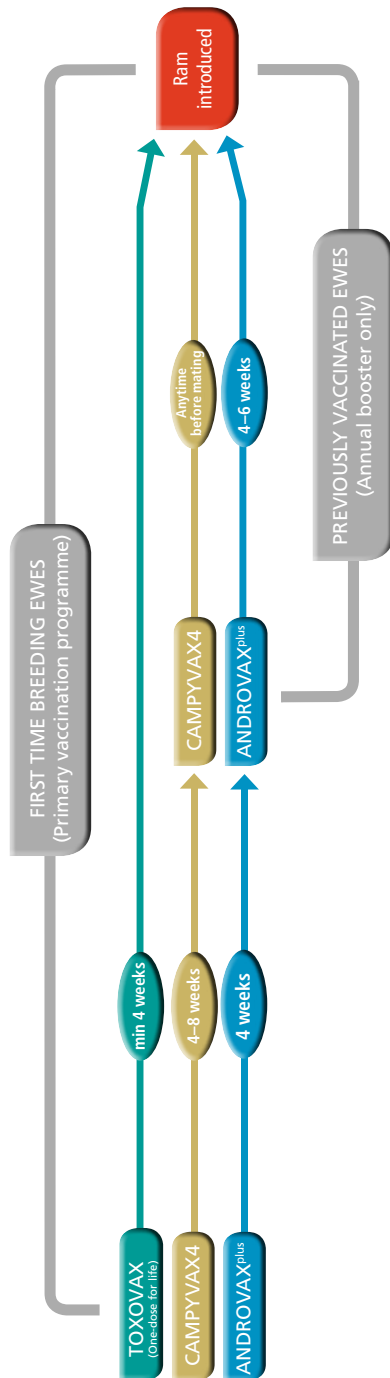


Recommended vaccination schedule



TOXOVAX – Lifetime protection and more lambs

Avoid the inevitable abortion losses with lifelong protection against Toxoplasmosis from a single dose.

Toxovax not only protects your ewes from Toxoplasma abortions, but also prevents unnoticed early losses. Vaccination with Toxovax increases lambing percentage by an average of 3% and decreases the incidence of dry ewes by an average of 14%.

Benefits of Toxovax:

- ▶ Prevention of abortions and stillbirths caused by Toxoplasma.
- ▶ Higher lambing percentages (average national increase of 3%).
- ▶ Incidence of dry ewes decreased by an average of 14%.
- ▶ More viable lambs with heavier birth weights.
- ▶ Economical, quick and effective.
- ▶ One dose gives lifetime protection.

Vaccination with Toxovax.

Healthy ewes can be vaccinated (once) at any time, up to 4 weeks before being put to the ram.

Order from your veterinarian at least four weeks in advance to ensure that you receive your Toxovax before ewe mating.

Prescription Animal Remedy (P.A.R) Class I. For use only under the authority or prescription of a veterinarian. Registered pursuant to the ACVM Act 1997, No: A4769, No: A9927 and No: A9535. ®Registered trademark. Schering-Plough Animal Health Limited, 33 Whakatiki Street, Upper Hutt. Phone: 0800 800 543. TOX-528-2009.

1 SHOT EQUALS LIFETIME PROTECTION

+

**BONUS
LAMBS**



TOXOVAX®

A threat to every farmer

Toxoplasmosis occurs throughout New Zealand. Every sheep flock can be affected by ongoing insidious foetal losses and abortion storms.

Because abortions (especially those in early pregnancy) are not always obvious, you may not be aware that *Toxoplasma* is on your farm.

Toxoplasmosis costs you in three ways:

- ▶ The loss of lambs by abortion; either by low-level unseen losses, or large-scale abortion storms.
- ▶ The birth of weak lambs, which fail to thrive, or die.
- ▶ The culling of fertile ewes, which because of undetected early abortion are presumed barren.

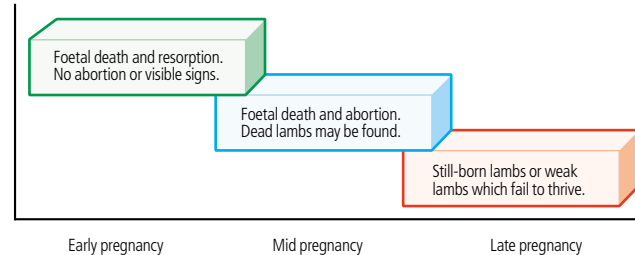
Toxovax is a single dose vaccine that provides breeding ewes with lifetime protection against the effects of *Toxoplasma*.

The effects of Toxoplasmosis

Toxoplasmosis in susceptible breeding ewes causes **abortions, stillbirths and neonatal deaths**. Research indicates that ewes infected with *Toxoplasma* in early gestation experience foetal death and resorption. This is often mistaken for ewe infertility and results in the unnecessary culling of otherwise fertile animals. Ewes infected in mid-gestation or later are likely to abort, or give birth to still-born or weak lambs that fail to thrive.

- ▶ Toxoplasmosis occurs everywhere in New Zealand. 100% of flocks tested as part of the FLOCKCHECK programme over the last 5 years have serological evidence of exposure to *Toxoplasma*.
- ▶ Ewe hoggets and two toothers are at most risk.
- ▶ Any ewe that contracts *Toxoplasmosis* during pregnancy is likely to lose her lamb/s.

Indications of infection differ depending on what stage during pregnancy a ewe contracts the disease:



If you have;

- ▶ a higher number of dry ewes at scanning than expected
- ▶ ewes with mummified foetuses at scanning
- ▶ aborted lambs found on the ground
- ▶ ewes that scanned in lamb but did not produce a lamb
- ▶ weak lambs

Toxoplasmosis is a likely cause of these problems.

The infection cycle of *Toxoplasma*

- ▶ Infection is caused by a parasite called *Toxoplasma gondii*.
- ▶ An essential stage of the *Toxoplasma gondii* life cycle occurs only in cats.
- ▶ The cat is exposed to *Toxoplasma* by eating infected meat, such as mice or birds.
- ▶ The parasite multiplies rapidly inside the cat and millions of *Toxoplasma* eggs (oocysts) are shed in its faeces.
- ▶ The cat is infective for 1 week, but the *Toxoplasma* oocysts can survive up to 18 months.
- ▶ The parasite spreads easily in hay, feed or soil. Sheep are infected by eating contaminated pasture or feed.
- ▶ Abortion can occur in ewes not previously exposed to *Toxoplasma*.
- ▶ The aborted material is eaten by another animal or bird, causing infection.

