

TOP FARMERS KNOW-HOW AUDIO SALMONELLA IN SHEEP



WHAT IS SALMONELLA?

- Bacteria that live inside carrier animals (this is the main source of spread of Salmonella)
- Can survive in the environment for weeks to months
- Can infect all kinds of animals including humans (zoonotic disease)
- Many different strains, two most prevalent in sheep:
 - › Hindmarsh (primarily affects the gut)
 - › Brandenburg (primarily causes abortions)
- All types of Salmonella can cause outbreaks and deaths
- Once Salmonella is established in a flock, it cannot practically be eliminated

Salmonella Hindmarsh (gut-affecting)

- Has been in New Zealand since at least the late 1940's
- Sudden death is often the first sign of an outbreak
- Outbreaks tend to occur in times of stress and deaths may continue sporadically for months
- Seasonal disease, occurring from late summer through early winter (most often over mating)
- Outbreaks most commonly seen in intensively managed and well-fed flocks
- Case rates and mortality varies with flock immunity (average approximately 1% mortality) may accumulate to significant numbers
- Occurs nationwide

Salmonella Brandenburg (abortive)

- First outbreaks recorded in 1996
- Causes late term abortions, sickness and death
- Occurs in late pregnancy (early spring)
- Outbreaks are sudden and escalate quickly
- Up to 15% can abort and up to 50% of aborting ewes can die
- As of 2021 only seen in the South Island

SALMONELLA VACCINATION

- Salvexin®+B is the only Salmonella vaccination for cattle and sheep in New Zealand
- It contains four strains of *Salmonella*: Hindmarsh, Brandenburg, Typhimurium and Bovismorbificans
- For preventative vaccination give two shots in the first year (sensitiser & booster at least 4 weeks apart), 2nd shot should be at least 2-3 weeks before the risk period
- Annual booster is required for ongoing protection
- In the face of an outbreak:
 - › **Hindmarsh / Gut-affecting:** Vaccination should be as early as possible to reduce stock losses
 - › **Brandenburg / Abortive:** Vaccination is not recommended in the face of a Brandenburg outbreak unless advised by your vet
- The most practical time to vaccinate for sheep farmers
 - › **Gut-affecting:** between weaning and mating
 - › **Abortive:** between rams in/out and scanning

MANAGEMENT PRACTICES TO MINIMISE SALMONELLA RISK

- Reduce stress (gradually introduce diet changes, lower stocking densities)
- Manage birds and pests to keep them from spreading Salmonella
- The most common way Salmonella is introduced to a farm is through healthy looking carrier animals (cattle, sheep etc.). Higher risk practices include:
 - › Off-farm grazing
 - › Intensive feeding
 - › Purchasing/leasing stock
 - › Shared boundaries/stock yards
- Farms at risk of Salmonella should consider preventative vaccination

TOP FARMERS **KNOW-HOW** AUDIO SALMONELLA IN SHEEP



MANAGING AN OUTBREAK

- Practice strict biosecurity between affected mobs and other groups of sheep on the property
- Involve your vet to take samples and confirm the diagnosis
- Isolate sick animals/flocks
- Monitor at-risk groups closely
- Treating individual sick animals is not usually practical
- Use strict hygiene practices when handling sick animals or working in their environment
- Prevent vulnerable (old, young, pregnant or sick) people from having contact with animals and their environment
- Use disinfectant and wear gloves, overalls and gumboots when handling at-risk animals
- Contain and/or destroy contaminated material e.g. limit sick animal movement and bury foetuses, placenta and carcasses as soon as possible
- For gut-affecting disease vaccinate all stock with Salvexin®+B as soon as possible under veterinary guidance (ensure a sensitiser & booster is given to previously unvaccinated animals and an annual booster given to all other animals)
- For abortive form, spread sheep out and consider a preventative vaccination programme next year.

Don't wait for Salmonellosis to strike.



Vaccination reduces the impact of an outbreak and minimises production losses. Protect your flock with Salvexin®+B

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