



FranklinVets

Mastitis INSIGHTS

AUGUST 2025

Welcome to our Mastitis Insights Newsletter!

Mastitis remains a critical concern in the dairy industry, and staying informed is key to effective prevention and management. We're here to keep you ahead of the curve with the latest updates, expert tips, and practical strategies to help you stay prepared and proactive.

In this update, we discuss:

- Rethinking blanket DCT
- Latest on Dry Cow Antibiotics and Teat Sealant Use
- Metacam & Mastitis – what you should know
- Controlling Mastitis – what bugs are we seeing?
- Bismuth residues in milk
- Point of care Mastitis kits – What are they? Should I get one?
- Keeping bacteria out of the udder – the role of Teatscoring
- Teatsealing roundup

While it is almost impossible to eliminate mastitis in dairy cows, the average herd can save about \$20,000 per season by improving mastitis control, definitely food for thought.

Stay safe out there and if you have any questions, please contact your local Franklin Vets Clinic.

Regards
The team at Franklin Vets.

Rethinking Blanket DCT

Blanket DCT involves treating every cow with antibiotics at dry-off, regardless of her infection status. While this might seem like a safe bet, it can contribute to antibiotic resistance, making mastitis harder to treat when it does occur. In New Zealand cattle, 85% of antibiotics are used to treat and prevent udder infections. This is why it is the most important area to focus on improving.

If we're seen to be overusing antibiotics, external regulators will step in with stricter policies that limit our options. An example of this is a new 2025 law in Spain, which requires a prescription for every antibiotic treatment, meaning a veterinary examination of the patient, a trip to the local pharmacy and a record loaded on a government database. We all feel it is important that animals are treated as quickly and effectively as possible. If we want the privilege of having access to these drugs on farm, we need to ensure we can show we are using them responsibly.

Using antibiotics to treat non-infected animals is not an effective or responsible way to use them.

The Case for Selective DCT

Selective DCT is the smarter, more sustainable and (when combined with a teatsealant) better approach to dry cow:

- It doesn't increase the risk of mastitis.
- It doesn't cause your Bulk Tank Somatic Cell Count (BTSCC) to rise year on year.
- It doesn't negatively impact the vast majority of farms.



DR BELINDA BORMAN
BVSc
Farm Vet, Taupiri



Teat sealants are awesome

Internal teat sealants protect your cows' udder more effectively than antibiotics.

- Lower rate of clinical mastitis in herds using teatsealants
- Lower BTSCC in herds using teatsealants
- Lower BTSCC in herds using teatsealants on first calving heifers.

Herd Testing

To make selective DCT work, you need data to identify which cows need antibiotics vs teat sealant alone. At a minimum, testing once within a month of drying off is necessary. We would strongly recommend that herds are tested at least twice per season (3 months post calving and within 1 month of dry off).

Protecting Our Industry's Reputation

Antibiotic stewardship isn't just about individual farm performance-it's about protecting the reputation and sustainability of the entire New Zealand dairy industry. By adopting selective DCT and using antibiotics responsibly, we can maintain consumer trust and avoid restrictive policies being applied to their use.

Latest on Dry Cow Antibiotics and Teat Sealant Use



DR DAVID HAWKINS
BVMSc
Veterinary Consultant,
Te Kauwhata

You are all aware of the recent moves towards selective therapy when treating cows at the end of the season, before drying off. We recognise that this has required a mindset shift for many of you, and this is a reality across the entire industry, not just at Franklin Vets. Here are some quick charts to see how we are tracking in this regard. In the past six years, following a rise in the proportion of cows treated with Dry Cow Antibiotic Therapy (DCAT) in 2020, we have seen a steady decline in the proportion of cows treated with DCAT. Suppose we assume that the average farmer has an annual average bulk milk somatic cell count (BMSCC) of 170,000c/ml. In that case, we might expect to treat approximately 30% of the herd at the end of the season with DCAT under our current criteria. So, while we have further to go, this suggests that across the practice, people are getting on board with using antibiotics more responsibly.

The use of some form of dry cow protection is important to prevent new intramammary infections (IMI) over the dry period. This reduces the risk of mastitis at calving and for the first month at least into the following lactation. Teat sealants (TS) play a significant role in this, and several studies have shown that they are more effective at preventing new infections than DCAT.

As the proportion of DCAT-treated cows decreases, to prevent new IMIs, the proportion of TS-treated cows should increase if we are to provide a better level of protection against mastitis in our herds. The year 2020 was one where we saw herds opting for combination therapy in large numbers. For a couple of seasons following the move to more selective treatment, several farms elected not to use TS and only use DCAT in part of their herd. As expected, we have seen increased mastitis as a rule in those situations. It is good to see that the use of TSs is on the rise. However, if we assume that 30% of the herd being carried through the dry period is likely to require DCAT, then our target would be at least 70% of the herd receiving TS.

FIGURE 1
The proportion of cows treated with dry cow antibiotics (DCAT) at drying-off across the Franklin Vets client base.

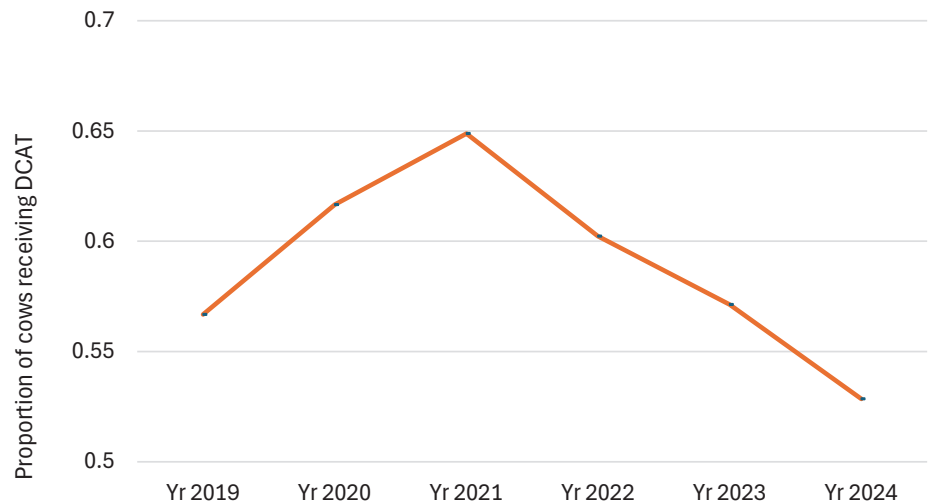
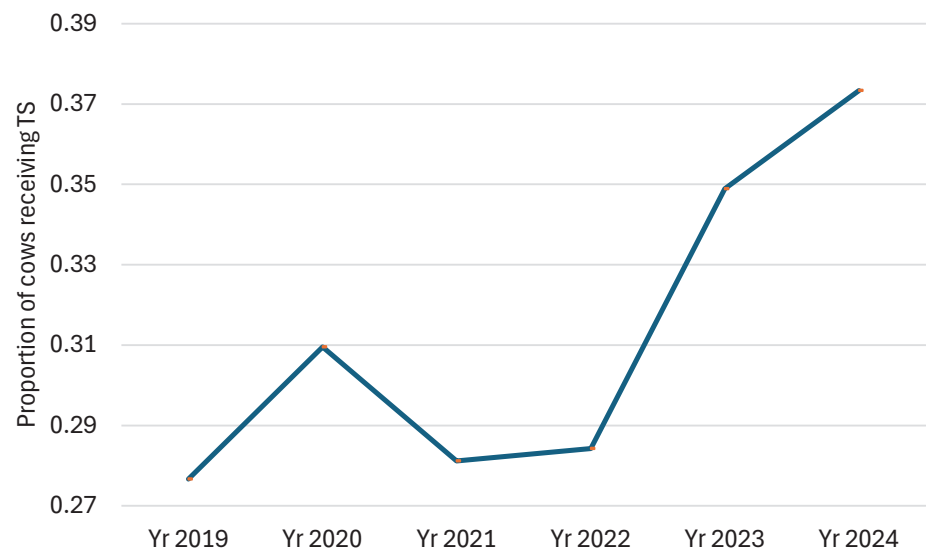


FIGURE 2
The proportion of cows treated with teat sealants (TS) at drying-off across the Franklin Vets client base.



Thanks to our farmers supporting the combined dairy industry, veterinary profession and medical profession's direction, we are making significant

progress towards our "Judicious use of antimicrobials..." goals.

On a final note. This means you will be able to use antibiotics well into the future.

Metacam and Mastitis:

What You Should Know



**DR JORDAN
McGIMPSEY**
BVSc (Dist)
Farm Vet, Taupiri

It's well understood now that mastitis isn't just a production headache – it's a painful inflammatory condition. The term "mastitis" literally means inflammation of the udder, and like any inflammation, it brings heat, swelling, and pain. You'll often notice changes in milk, a shift in the cow's temperament, or a difference in how she moves.

That's why many farmers reach for an anti-inflammatory alongside antibiotics when treating mastitis. But did you know that adding Metacam to the mix might do more than just help with the cow's comfort?

Beyond Pain Relief – Metacam's Broader Impact

Mastitis affects more than just welfare – it's linked to lower reproduction rates and higher culling numbers. Studies have shown that giving a single shot of Metacam alongside antibiotic treatment can:

- Lower somatic cell counts
- Improve cure rates faster than antibiotics alone
- Increase the chance of achieving a bacterial cure the first time around.

Less Antibiotic Use, More Effective Treatment

Adding Metacam has been proven to reduce:

- The need for repeat antibiotic treatments
- Overall somatic cell counts
- Total on-farm antibiotic usage.

Healthier Cows, Better Repro Outcomes

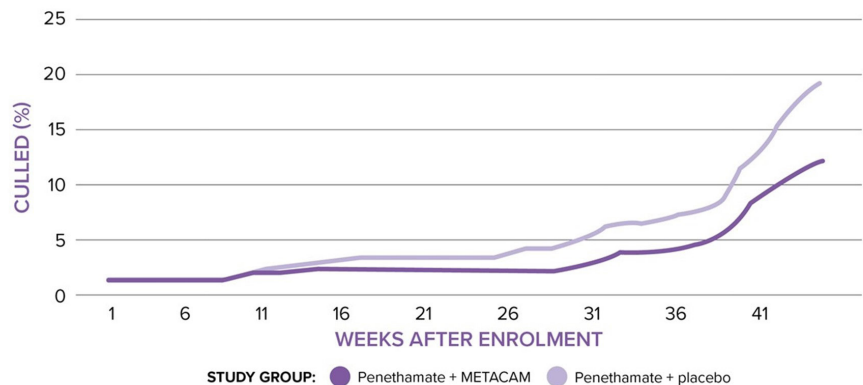
In trials comparing antibiotics alone to antibiotics in conjunction with Metacam, Metacam resulted in:

- **10% higher Conception** rates after the first service
- **9% more cows** were in-calf by the six-week mark
- Reduced losses from culling.

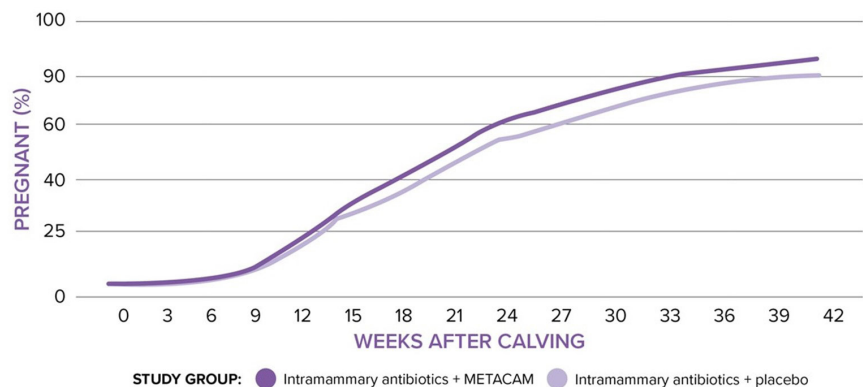
Try the Mastitis Cost-Benefit Calculator Using real data from MINDA records, a cost-benefit calculator has been built to apply European research findings to New Zealand conditions. It gives conservative estimates on how concurrent treatment with Metacam can improve outcomes for your herd.



Percentage of cows culled



Percentage of cows pregnant



Find the calculator by following this link:
METACAM | Future Producers
<https://www.futureproducers.co.nz/products/metacam/>

If you have any questions about treatments for mastitis, contact your local Franklin Vets Clinic.

Controlling Mastitis

What bugs are we seeing?



DR DAVID HAWKINS
BVSc
Veterinary Consultant,
Te Kauwhata

This graph shows the types of bacteria we have grown in our lab over the past few years. We still see a lot of *Staphylococcus aureus*, a difficult bug to cure during lactation that spreads from cow to cow during milking; *Streptococcus uberis*, the bacteria most commonly infecting cows with clinical mastitis and that loves to live in muddy races and wet paddocks; and Coagulase Negative Staphylococci, bacteria that thrive when your teat-spray is not effective.

Understanding where the bacteria causing mastitis come from is the most important aspect of mastitis control. To take the guesswork out of improving your mastitis control, taking milk samples from cows affected with mastitis is critical. For high cell count (sub-clinical) mastitis, we can determine the right cows to sample from a herd test. But for clinical cases, once you have treated the cow, it is much harder to get a sensible diagnosis. Before treatment, strip a milk sample from clinical cases into a sample pottle. You can store this in the freezer and submit it for culture later.

Remember, if you don't collect any samples, it becomes harder for the correct advice to be given to improve mastitis control on farm. If you do, you can be confident that the advice given will lead to improved outcomes for you and your cows.

Services we offer:

Milk Quality Review

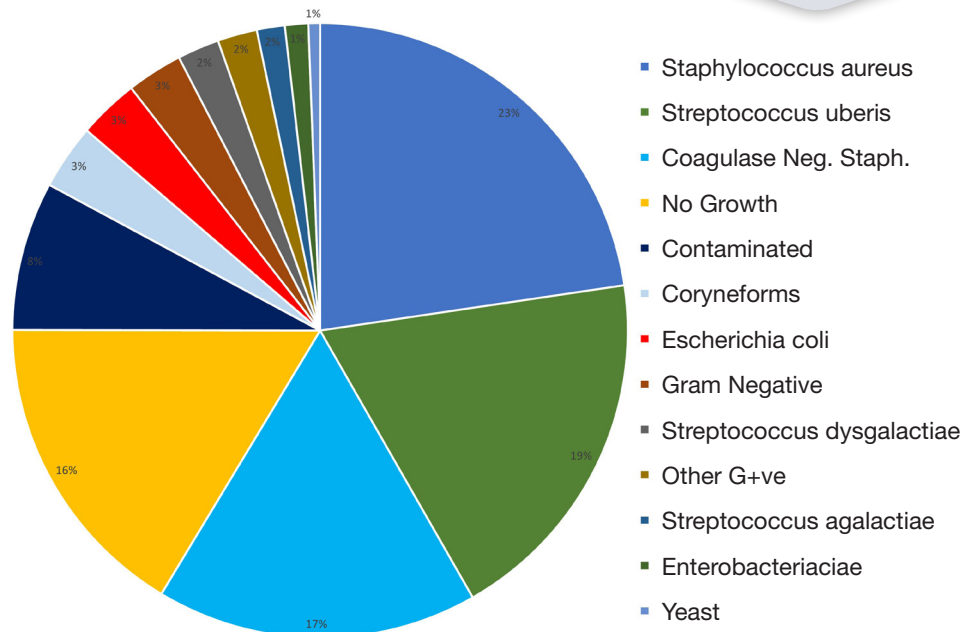
Completed annually, an overview of mastitis KPIs, determination of DCT and LCT policy, and identification of the need for further investigation.

Individual Cow Assessments

Farm visit, clinical examination and treatment

Teat scoring

Our trained techs score teats during milking to determine whether indicators of poor skin condition, congestion and teat end roughness (hyperkeratosis) are present. This can help identify key mastitis risks in your herd before they have a notable effect and is now part of the WelFarm program.



Milk Culture

Lab tests – Mastatest, Bioscreen and standard culture services. Identification of bacteria involved and the sensitivity to antimicrobials.

Bioscreen Cascade

Technician collected milk samples to identify the bacteria and sensitivity profiles behind high somatic cell count cows.

Antibiogram

This helps you understand whether you are harbouring resistant bacteria on your farm. It can change the way you treat your cows.

Heifersafe –teat sealing/ DCT insertion

Protect heifers from early-season environmental mastitis. Use our team to assist with the DCT application.

Early Season Milk Quality Report (MQR)

Determine the efficacy of Dry Cow Therapy, Teat sealant use in heifers, and identify chronically infected cows.

Mastitis Focus Review

Using the Mastitis Focus Report available in Infovet, the vet provides a more in-depth review of the farm's mastitis with a focus on new infection rates.

Healthy Udder Training

On-farm sessions for up to 8 farm workers focused on farm-level best practice mastitis control: Prevention, detection, treatment, use of screening tools such as RMT, Milking routine and environmental management to reduce mastitis risk.

Mastitis Data Analysis

Analysis of all available data on a farm's mastitis situation, including BMSCC, Herd Test, Clinical Mastitis, New Infection rates, and Bacterial data on file. This can be a prelude to a Milk Quality Consultation. It takes 1-2 hours, depending on the availability of information in Infovet.

Milk Quality Screening Visit

A cut-down version of the full Milk Quality Consultation. Checks teats, plant vacuum, teat-spray and management of the milking mob. Often a prelude to a Milk Quality Consultation. Usually confined to part of a milking rather than the whole milking.

Milk Quality Consultation

A comprehensive investigation of the underlying causes of mastitis on a farm, resulting in a plan to address these. Comprises a mastitis data analysis, a milking visit for the duration of milking, including a wet test of the milking machine, milk culturing equivalent to Bioscreen cascade or better, and a comprehensive written report.

Bismuth Residues in Milk

Just as when antibiotics were first used widely to treat dry cows for mastitis and processes had to be developed to manage the risks to food production of residues occurring in milk, the industry is now seeing the need to understand and manage the risks of teat sealant residues in milk.

Many of you will be aware of the Ministry for Primary Industries requirements coming into effect in late May 2025, which require milk

processors to test for the presence of bismuth in milk. At this stage, this is a monitoring test to determine the extent of any bismuth residues in milk and to understand risk factors that might increase these residues. At this stage, no penalties will be imposed on farmers who have residues identified.

Your milk processor will be able to tell you what the acceptable residue limits are, and testing will be operating from June to September. To reduce the risk of residues:



1

Manually strip each teat canal from top to bottom 10 – 12x to remove teat sealant

2

Withhold cows from the vat for at least 8 milkings (10 for heifers)

3

Check the filter sock after each milking for teat sealant flecks (white waxy material)

4

Check plant hot washes are adequate – hot water helps to remove bismuth from the plant

Point-of-Care mastitis test kits

What are they? Should I get one?

Point of Care (POC) mastitis tests generally refer to tests that you can run on farm to help identify the bacteria causing mastitis. They take the hassle out of getting the sample to the clinic for testing and can often give you an answer to the type of bacteria present within 24 hours. Some of the tests also allow you to understand whether the bacteria cultured are sensitive to the drugs you use.

This can help you make better treatment decisions on the fly, giving cows the best chance of curing the first time around. You can also collect meaningful information on where mastitis is coming from on your farm and work with your veterinarian to best address the relevant risks rather than guessing at what might be going on.

Currently, several options are available, and we can help you implement any of these.



Mastatest® – an on-farm, easy-to-use, cartridge-based test which provides results directly to your phone, telling you what the bug is and which of your veterinarian's treatment protocols are recommended for the cow.

Farm Medix® On Farm Lab – an on-farm mini-laboratory using colour-changing agar culture plates and social media support to assist farmers in diagnosing the bacteria behind the disease. Results come back to your phone, and you can apply your veterinarian's treatment protocols.

Dairy Smart Jupiter® – an on-farm mini-laboratory using colour-changing agar culture plates and a dedicated web-linked AI interface to identify bacteria behind the disease. Results come back to your email, and you can apply your veterinarian's treatment protocols.

Mastigram® – a simple strip test that tells you whether the cow is infected with a gram-positive (treat with antibiotics + NSAIDs) or gram-negative (treat with NSAIDs) bacteria. The result is read on the farm just like you would read a COVID-19 test strip.



Implementing a POC system can provide control over your testing and treatment decisions. If you're interested in a POC testing system, consider consulting your local vet or contacting David Hawkins at the Te Kauwhata clinic to determine which system best suits your needs.



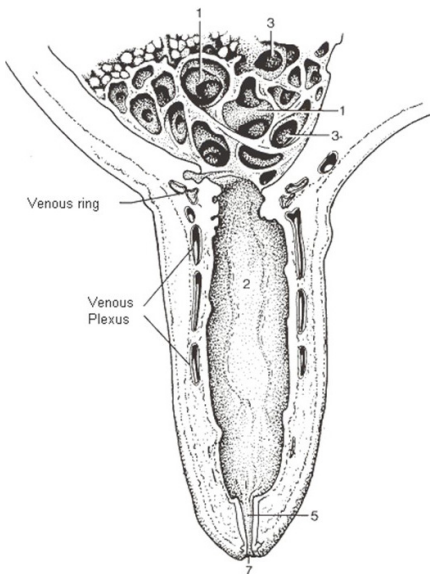
Keeping bacteria out of the udder

– the role of teat scoring



DR DAVID HAWKINS
BVSc
Veterinary Consultant,
Te Kauwhata

Mastitis control can be simply explained as keeping pathogenic bacteria where they belong – out of the udder! To do this effectively, the udder is an awesome bit of kit with plenty of state-of-



the-art technology in place to do just that. The teat is one of those key interfaces that, when healthy and functioning well, provides the cow's best protection against infection.

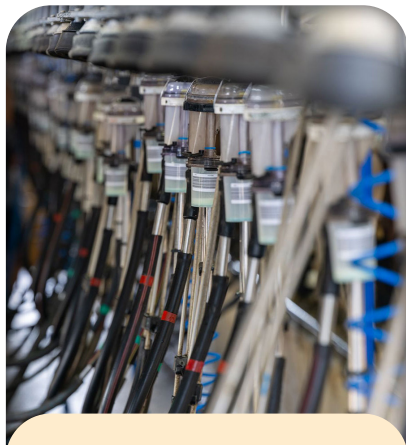
What do we mean by healthy and functioning well? Teats must have smooth, intact and supple skin for optimal resilience in the milking and paddock environments. Teats must have good blood flow and not be affected by congestion during milking. Teat ends must have a smooth orifice that can close effectively after milking and that does not harbour bacteria.

Most of us can pick up the big hoary changes that are sometimes seen on teats. However, it requires dedicated time and skill to identify the subtle changes that indicate the milking environment may be

increasing your herd's mastitis risk. This is where teat-scoring comes in.

We provide trained techs to score teats during milking to determine whether indicators of poor skin condition, congestion and teat end roughness (hyperkeratosis) are present. This can help identify key mastitis risks in your herd **before** they have a notable effect. You can do something early to prevent mastitis rather than wait for it to arrive and then try to deal with it.

Teatscoring is valuable at any time of the season, but is most useful in the early season. Book now to secure a teat score for your herd.



HERD TESTING FUNDING

If you're thinking of herd testing but haven't yet got around to it, this season is the season to get it underway. Industry funding is available to support herd testing this season. Call LIC or your local clinic to discuss further.

Teatsealing roundup

It was another successful season for our team, inserting over 36,000 tubes of teatseal into spring calving heifers! Each year, we have more clients seeing the benefits of teatseal in heifers pre-calving.

Teatseal, a non-antibiotic option, forms a barrier in the teat canal to prevent bacteria from entering the udder and causing infection. Mastitis can cause udder damage and ultimately keep milk out of the vat!

Excellent hygiene in the administration is essential when inserting teatseal. Our experienced



TERESA HIGGINS
Rural Vet Technician

tech team is available to train your staff, or if time poor, we can insert the teatseal for you.

This season also saw an increased number of cows inserted with teatsealant as part of the armoury protecting dry cows from mastitis over the dry period. Herd testing, identifying high SCC cows and recording mastitis cases can assist with identifying cows suitable for teatseal only.