

Mycoplasma bovis update 4th Aug 2017

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What is *Mycoplasma bovis*?

- *Mycoplasma bovis* is a type of bacteria. It is found almost globally in cattle populations, but up until two weeks ago it was considered exotic to New Zealand.
- It is resistant to almost all antibiotic treatment.
- It does not possess a cell wall like most bacteria. This makes it quite fragile outside of the cow. It is destroyed by drying, UV light, heating and is very sensitive to most disinfectants.

What is the situation?

- *Mycoplasma bovis* has been confirmed on two Van Leeuwen Group properties as at the 3rd of August.
- These farms are the 'Tainui Farm' situated on Barnetts Rd and the 'Dog Kennel Rd Farm' in the Morven/Glenavy district.
- All 16 of the Van Leeuwen properties have been placed under movement restriction.

What does it cause?

- *Mycoplasma bovis* is known to cause incurable septic arthritis, incurable mastitis, pneumonia, middle/inner ear disease (calves) and late gestation abortion.
- In the case of the Van Leeuwen farms:
 - they have seen numerous cases of non-resolving septic arthritis. Almost all have occurred in the fetlock joint in the front legs. The joints have been very swollen and the cows non-weight bearing.
 - the mastitis cases are occurring predominantly in freshly calved/ cows. These cows were noted to be developing "firm, rubbery udders" during the dry period. The affected cows at calving have had swollen (but non-painful), firm udders at calving. When stripped they could only produce very small quantities of "melted butter" type fluid.
 - The affected cows have been calving 2-3 weeks prematurely. About one third of these calves were born dead. Others were alive but smaller than would be expected - even at 3 weeks premature. Many of them had contracted tendons.
- The cost to an individual naive herd which becomes infected with *Mycoplasma bovis* are enormous

How did it get here?

- The simple answer is we don't know at this point and may never know?
- The possibilities though include imported frozen semen, or fomites carried into the country on/in clothing or equipment which were not effectively disinfected.

- It is also possible that the Van Leeuwen Group farms are not the initial herd to be infected here, just the first to have it detected.

What is the risk of spread?

- Introduction of infected cows into a new herd poses a major risk, as spread via milking machines is an efficient means of transfer.
- Cow 'nose to nose' contact over a boundary fence and within a herd is another significant risk. *Mycoplasma* can be spread through inhalation of aerosols.
- Of lower risk (but not to be ignored) are faeces and other body fluids being transferred between farms by contractors and visitors and stock trucks.

What Actions are being taken?

- Active surveillance has been occurring since the 25th of July 2017.
- The Van Leeuwen properties have been given a Restricted Property status, which stops stock movement other than allowing cows to return from run-off properties on a truck dedicated to Van Leeuwen Group.
- Herds that have adjoining borders with the 16 Van Leeuwen properties are being tested as well as any other herds where casual contact may have occurred – i.e. over the fence during a walk back from winter grazing block.
- Testing may involve samples from the bulk milk tank as well as blood testing, milk sampling and nasal/vaginal swabs from individual animals.
- Continuous testing is likely to occur until a good representation of that herd has been tested and enough time has elapsed to provide reasonable confidence that a herd is clear.
- Any other farms have stock displaying signs of disease are encouraged to contact their vet.

How long does it take test results to come through?

- Both PCR tests and Antibody tests are being performed on bulk milk, mastitis samples, nasal/vaginal swabs and bloods. Tests may take up to a week to run. It is important to note that in these early stages a negative result does not necessarily mean the farm is clear.

How can I manage risk to my farm?

- Please refer to the separate document on managing risk and biosecurity. These will also be available on our web site and Facebook account.

What do I do if I suspect *Mycoplasma bovis*?

- Please contact one of our vets immediately to discuss what you are seeing.

- **Our Vet Centre vets are taking biosecurity very seriously. We are cleaning and disinfecting after every call and using disposable calving gowns for obstetric work.**
- **Our vets have not been involved in the servicing or testing of the infected Van Leeuwen properties.**