



## **SELWYN RAKAIA VET SERVICES LTD**

**P.O.Box 52, Dunsandel. Phone (03) 325-4444, Fax (03) 325-4442**

### **Mycoplasma bovis disease, infection, or an organism of little consequence?**

The government and industry funded phased eradication program for *M. bovis* is underway. This program could take up to 10 years to achieve eradication if it succeeds. If unsuccessful we will continue farming with *M. bovis* on NZ farms. At present we cannot be sure how widespread *M. bovis* is and so investigations are continuing. This includes further bulk milk testing from dairy farms and tonsillar swabs collected from beef cattle in the meat works. This means we are now farming with *M. bovis* in NZ at least for the foreseeable future.

### **How do we recognise M bovis disease and how severe could it be?**

Almost all infected properties in NZ have not seen any clinical disease. This is good news and not surprising as bacteria typically only cause disease when animals are stressed or immunocompromised. We need to continue ensuring our herds are looked after to a high standard of animal husbandry, minimising the chance of *M. bovis* and other infectious diseases.

When clinical signs due to *M. bovis* are present in cows these are most likely to be severe lameness with swollen joints and severe multi-quarter mastitis. The disease in calves presents as ill-thrift, respiratory disease and lameness. Some calves may have a head tilt.

*M. bovis* is still a notifiable disease so if farmers see cattle with these signs they have an obligation to seek veterinary advice. The disease can only be confirmed with the appropriate laboratory diagnostic tests which are completed by MPI at no cost to the herd owner.

### **Do we need to consider changes to NZ farm systems now we have M. bovis?**

#### Calf rearing (waste milk management)

Waste milk is likely to be contaminated with *M. bovis* on infected properties. If *M. bovis* becomes endemic in New Zealand infected herds will need to consider acidifying or pasteurising waste milk to stop spread to young calves. In herds that are free of *M. bovis* we recommend continuing with your usual systems for handling waste milk. In most cases this will involve feeding this milk to older calves on the farm of origin. While some uncertainty still exists around the distribution of *M. bovis*, waste milk should remain on the farm of origin and not be sold to calf rearing operations off farm.

#### Grazing off farm

Off farm grazing with groups of animals from multiple farms is a way to spread *M. bovis*. If you want to avoid bringing *M. bovis* and other pathogens into your herd this practice should be carefully considered. You may want to do some due diligence

on the in-contact animal groups and a biosecurity assessment of the grazing property.

#### Milking cows

The best way to minimise the risk of clinical disease in an infected herd is through good stock husbandry practices e.g. fully feeding cows, optimal herd health programs and minimising stress and overcrowding. This is particularly important if using housed systems which are believed to be an added risk factor for developing *M. bovis* disease.

#### Bulls

Bulls present a special risk for spreading *M. bovis* with the added risk of venereal spread. In the current environment you may want to consider a mating program without the use of bulls. The currently available tests cannot guarantee a bull or group of bulls is free of *Mycoplasma*. Synchronisation programs can make this easier but come with extra costs. Talk over the options with your advisors or vet.

#### Biosecurity

A high level of biosecurity is difficult under our farming systems however you may want to use the Dairy NZ biosecurity WOF template to check your farm and herd biosecurity. Discuss any questions around biosecurity with your vet or advisors.

#### Disease prevention

*M. bovis* disease is often more severe in the presence of other diseases, particularly BVD virus which is very damaging to the immune system of the calf and cow. You may want to review your overall herd animal health plan with your vet.

#### Buying in stock

Purchased stock is the most likely way to bring in *M. bovis* and other pathogens. If this cannot be avoided gather as much information on the herd of origin as possible to help give you confidence the animals are healthy. The laboratory tests at this stage cannot guarantee freedom from *M. bovis*.

*M. bovis* is now present in every country except Norway. It has no human health or trade implications and is generally not considered a very significant pathogen compared to other micro-organisms that can affect cattle. The New Zealand strain of *M. bovis* is one that has not been recorded elsewhere although it has some genetic similarities to European and American strain types. This is one of the reasons our government has decided to attempt eradication, something that has never been attempted before.

The number of animals with disease symptoms in NZ has only been a tiny fraction of the number exposed and this is also typical of *M. bovis* overseas. The clinical disease in cows on the VLG farms near Waimate where *M. bovis* was discovered was very severe. This type of severe scenario has also been seen overseas although is not the typical presentation in infected herds.

As time goes on we will discover whether *M. bovis* in NZ is really a significant disease, a sub-clinical infection or just another bacterial organism of little consequence.

Donald Arthur – BVSc, Dip A ACVP

*Practise Owner at Selwyn Rakaia Vet Services Limited*