

# Key facts about *Mycoplasma bovis*

## What is *Mycoplasma bovis*?

- *Mycoplasma bovis* (*M. bovis*) is a bacterial disease.
- It is commonly found in cattle all over the world, including Australia. New Zealand was one of the last countries free of the disease until July 2017, when it was detected here.
- It can lead to serious health conditions in cattle and therefore constitutes an animal welfare and productivity issue.
- It spreads from animal-to-animal through close contact. Between farms it spreads by the movement of infected animals but may not show symptoms. It is potentially spread through contaminated equipment and by feeding untreated, infected milk to calves. It is not windborne.
- While some of the health conditions can be treated, affected cattle will always be carriers of *M. bovis*.
- The disease may be dormant in an animal, causing no health conditions at all. But in times of stress (for example: calving, drying off, transporting or while exposed to extreme weather) bacteria may be shed in milk and nasal secretions. As a result, other animals may be infected and become ill or be carriers themselves.
- *M. bovis* does not infect humans and presents no food safety risk. There is no concern about eating meat, and consuming milk and milk products made from pasteurised milk.

## How does it affect cattle?

- Untreatable mastitis in dairy cows.
- Severe pneumonia in up to 30% of infected calves (starting as a hacking cough).
- Ear infections in calves: the first sign typically being one droopy ear, progressing to ear discharges and, in some cases, a head tilt.
- Abortions.
- Swollen joints and lameness (severe arthritis/synovitis) in all ages of cattle.

Download the 'Signs to look out for' poster available at [www.dairynz.co.nz/mbovis](http://www.dairynz.co.nz/mbovis).

If stock show unusual levels of mastitis, abortions or present with arthritis or pneumonia, contact your veterinarian.

## Protecting your farm

The disease spreads in two ways: animal-to-animal contact and feeding infected milk to calves.

### Avoiding animal-to-animal contact

- **Secure boundary fences and prevent nose-to-nose contact with neighbouring stock**

Avoid grazing paddocks when your neighbour's cows are grazing in the adjacent paddock – or ideally create double fencing or outrigger fences.

- **Ensure cattle are not co-mingling with other herds at grazing**

Talk with your grazier about preventing animal-to-animal contact on the grazing block.

If you are accepting other animals onto your farm for grazing, make sure you keep these separate from your own cattle and maintain good records of how they were kept separate.

- **Transporting stock and NAIT**

Talk to your transporter about arriving with a clean truck and avoiding mingling with other stock when transporting. Always complete your NAIT records and make sure if you have had movement over the last month, that it is correctly recorded. Knowing where your cattle have been is crucial to understanding and preventing the spread of all diseases.

## Precautions for calf rearing

Calves can contract *M. bovis* by direct contact with infected cattle or by consuming milk from infected cows.

If you are sourcing milk from another farm for feeding calves, the following steps will help reduce the risk of calves getting *M. bovis* from milk.

1. Milk that has the lowest risk of containing *M. bovis* bacteria comes in three forms: calf milk replacer powder, pasteurised milk or acidified milk.
2. If you're feeding whole milk, consider the following:
  - a. Discard milk from cows under treatment for illness or mastitis, as it is much more likely to contain *M. bovis* than milk from healthy cows, so avoiding it is strongly recommended.
  - b. *M. bovis* is not killed by the addition of potassium sorbate preservative.
  - c. Yoghurt bacteria will give variable results and should not be relied on to kill *M. bovis* bacteria.
  - d. Pasteurisation will kill *M. bovis* if the machine is maintained and instructions followed.
  - e. Acidification with citric acid or propionic acid to a pH of 5 for 8 hours or a pH of 4 for 1 hour will kill *M. bovis*. Below a pH of 4, the milk becomes progressively unpalatable and calves will drink slowly or refuse to drink altogether.

## More information and support

For more information about *M. bovis* and on-farm biosecurity, visit:

- [www.mpi.govt.nz/bovis](http://www.mpi.govt.nz/bovis)
- [www.dairynz.co.nz/mbovis](http://www.dairynz.co.nz/mbovis)
- [www.beeflambnz.com](http://www.beeflambnz.com)

**Support is available** – if you have any questions or concerns, please get in touch with one of the following organisations:

**Rural Support Trust** 0800 787 254

**DairyNZ** 0800 4 324 7969

**Beef + Lamb** 0800 233 352

**Ministry for Primary Industries** 0800 008 333

**Federated Farmers** 0800 327 646



**Biosecurity New Zealand**  
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Manatū Ahu Matua

