

CHANGES TO CLEANING AND DISINFECTION SPECIFICATIONS

Over the last year we have learnt a lot about how *Mycoplasma bovis* is transmitted. As we learn new information we are constantly reviewing how we do things in the response to ensure that we are making the best possible decisions for everyone. This review has resulted in a number of positive changes being made to the cleaning and disinfection specification.

Using the latest scientific information available, advice from international experts' assessment, and the evidence that we have gathered in the response so far, we have reviewed our understanding of how *M. bovis* is transmitted and the associated transmission risks.

We will continue to take a conservative approach to both cleaning and disinfection specifications. The changes we have made simplify what is done on farm, but they don't mean we are taking a less conservative approach.

We will continue to work closely with farmers, contractors, suppliers and other stakeholders to ensure they have all the information they need.

Summary of changes

The risk ratings for live cattle and un-pasteurised bovine milk and milk products have been lifted from **High** to **Extremely High**, as these are the known methods of disease transmission in New Zealand.

The following goods have had their risk rating reduced from **High**:

- Equipment or material from bovine milking or milk handling environments (**medium**).
- Bovine genetic material (**low**).
- Effluent/soil (**extremely low**).
- Driveways, laneways, and thoroughfares used for cattle and/or vehicles (**extremely low**).

Other previously **Medium** risk categories have been re assessed as **Low** or **Extremely Low**.

What does this mean?

These changes are good news for everyone. To date, we have been cautious with our cleaning and disinfection processes and we are confident that the requirements of cleaning and disinfection have been met. We now have a clearer picture of where the risks lie, meaning that we can focus our cleaning and disinfection efforts on what's really important. We will continue to work with affected farmers to deliver a farm specific Cleaning and Disinfection plan which corresponds with the situation on the farm in question. Overall, these changes mean that the time that farmers are engaged with the response will reduce.

60 day stand down period

The stand-down period is still required and offers added protection, helping to reduce the chance of cross-contamination or re-contamination while other areas are still undergoing C&D.

Disinfectant

Following an extensive review on disinfectants, we have broadened the number of disinfectants we can use to cover different situations. Hypochlorite (bleach), Chlorhexidine and Povidone-iodine are suitable for use. They were chosen based on their efficacy against *M. bovis*, relative safety and limited potential toxicity for humans involved in the C&D process, low cost, broad accessibility, and limited potential for adverse impacts on the environment.

Hypochlorite (bleach) is a very effective surface disinfectant, cheap and widely available. Bleach (1% available chlorine) is effective at specified contact times on any surface or equipment that has been cleaned.

Virkon is effective but very expensive. TriGene is likely to be effective, but limited information is available, it is expensive, and not as widely available as the recommended disinfectants.

Evidence supports the use of citric acid in the acidification of milk or other liquids in killing *Mycoplasma* species. However, there is more evidence to support the use of other disinfectants for surfaces, including published contact times. For this reason, guidelines have changed.

Soil and thoroughfares

Soil, driveways, walkways, laneways, and general thoroughfares do not require C&D, even if heavily contaminated with faeces. *M. bovis* is unlikely to survive in these environments and even if it did, it is extremely unlikely to make contact with a susceptible mucosal surface of cattle because they spend very little time in these areas.

Water troughs

Water troughs in milk and milk-handling environments (including calf-rearing areas) still require C&D and stand down.

Water troughs in areas outside of these can have either C&D or stand down. This is because the exposure to regular environmental conditions presents a much lower risk.

Vehicles transporting cattle

C&D of vehicles transporting cattle to a processing plant is not required between farms under movement controls when the animals collected are going direct to slaughter, and:

- the vehicle moves between properties with the same movement control status, or
- from a property with a lower status to higher.

Trucks transporting animals off movement control NODs only require cleaning. Disinfection is not required because most of these properties do not become RPs.

Transport is considered a 'stress' event for livestock increasing the likelihood of shedding *M. bovis* should the cattle be infected. *M. bovis* is more likely to survive in dirty trucks with or without faecal contamination.

Other vehicles

Vehicles that have not been in direct contact with cattle will not require C&D.

On-farm vehicles (e.g. quad bikes or tractors) that have been in contact with cattle still require stand down and/or C&D. This is because there is a risk that they may be contaminated with *M. bovis* from other sources (e.g. milk and respiratory secretions). Specific directions will be given directly to farmers under movement restrictions, these will depend on the farm status and risk assessment.

If you require further information, please contact MPI on 0800 00 83 33 or email info@mpi.govt.nz.

Biosecurity New Zealand

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