Mycoplasma bovis
August 2017

NZVA Society of Dairy Cattle Veterinarians recommendations for biosecurity and hygiene on farm and between farms – special notice for Mycoplasma bovis risk.

Best practice biosecurity
The areas of Highest Risk of introduction of Mycoplasma bovis:
• Don’t introduce animals from outside your own herd without assessing the risk.
• Don’t bring in used milking equipment from other farms that have not been thoroughly sterilized. e.g. test buckets, milking gloves, herd testing equipment etc.
• Avoid importation of milk from other farms for feeding calves.
• Don’t allow cattle to have ‘Nose to Nose’ contact over boundary fences.
  o If you want you can place your own boundary fencing – 3-5 m from a perimeter.
  o Talk to your neighbours if you plan to walk stock down your road or back from your run-off, so they can place their own animals out of the way.

The Lower Risk for introduction scenarios:
• Equipment and clothing used on other properties which has been in contact with animals.
• Vehicles which have driven on other farms paddocks and laneways.
• Vehicles which have been used for the transportation of stock.

Mycoplasma is a fragile bacterium, which does not withstand heat, UV rays and drying. It is killed by most disinfectants. Below is listed some biosecurity best practice that everyone can implement on their farms.

Veterinarians and other visitors to farms
• Cleaning:
  o Wash face, forearms and elbows with hot soapy water before leaving the farm. Hot soapy water will be effective to remove Mycoplasma bovis off the skin.
  o Use footbath provided by the farm whenever possible.
• Clothing:
  o Have spare clean overalls available in the vehicle or use disposable overalls/calving gowns which are to be left on farm. Put dirty gear in a bin or bag in your vehicle.
  o Carry a clean bucket, scrubbing brush and disinfectant in the vehicle to clean your boots, wet weather clothing and equipment thoroughly at the end of the farm visit.
    ▪ Most disinfectants will be effective in killing Mycoplasma bovis – e.g. Virkon, Trigene or 0.2% Citric acid (the mixing rate to get a 0.2% solution is 1 teaspoon per litre of water). Important – Do not use alkali.
and acid disinfectants in a similar area – e.g. lime and citric acid as they will neutralise each other.
  
  - Wear warm clothing under overalls so that they remain clean.
  - Rubbish:
    - Leave dirty gloves, disposable overalls/calving gowns and rubbish on farm in the rubbish container supplied by the farmer.
  - Vehicles:
    - Remain on the tanker track with your vehicle and use farm vehicles to move around the farm if necessary.
    - Keep vehicles visibly clean by removing organic matter with high pressure hoses and brushes. Ideally do this on the tanker track areas. Then spray vehicles with disinfectant using a backpack sprayer. Disinfectant which is suitable for vehicle paint is Virkon and 0.2% citric acid. The two step process is important i.e. remove all organic matter first before applying disinfectant. Cleaning is especially important if the vehicle has been off the tanker track and on the farm.

On farm recommendations
  - Tanker tracks
    - Tanker tracks should remain clean zones so no stock movement across the tanker track should be allowed to keep it clean from effluent which trucks will drive over. No grazing of stock on the tanker track area.
    - The placement of stock holding pens should minimise the travel of trucks onto the farm and should not go through areas of effluent or stock grazing areas.
  - Transport across the farm:
    - If practical, transport all tradespeople and contractors across the farm and cow lanes using farm vehicles – i.e. leave visitor vehicles on the tanker track.
  - Cleaning and hygiene:
    - Have foot baths filled with disinfectant and scrubbing brushes available for visitors/contractors to use when they come on and off your property. A dry cow bin would suffice for this purpose. Change the water and detergent regularly.
    - Set up a Disinfection Point on your Farm. Ideally this would be situated on the tanker pad.
    - Have clean hot water available for effective cleaning.
    - Consider having staff leaving their protective clothing on farm at the end of day. Consider using disposable gloves routinely on farm and not just when milking.
    - MPI recommends the following for a vehicle/equipment disinfection station
      - Approved disinfectant
      - Wash cloths
      - Scrubbing brushes
      - Rubbish bags/bins
      - Protective clothing / gloves
      - Water blaster and/or high-pressure hose
      - Backpack type sprayer unit
    - Recommended Disinfectants (suitable for vehicle paint-work):
      - 1% Virkon S
      - 0.2% Citric acid. The mixing rate to get a 0.2% solution is 1 teaspoon per litre of water.
      - Important – Do not use alkali and acid disinfectants in a similar area – e.g. lime and citric acid as they will neutralise each other.
- Cleaning and disinfection is a two-part process.
  - Remove the dirt and faeces and other organic matter from vehicles, equipment and people that have been in contact with animals first.
  - Next disinfect thoroughly with disinfectant in a backpack sprayer.