MPI *Mycoplasma bovis* Response: Your property has been identified for surveillance

Your property and herd has been identified as being of interest in the work to find out where cattle disease *Mycoplasma bovis* is present. This is most likely because our tracing work has revealed that you have either supplied animals to, or received animals from a farm that is infected with the disease or under suspicion of having it.

This document contains information on what will happen and contact details for support and additional information.

Full information about the disease is on the MPI, DairyNZ and Beef+Lamb New Zealand websites; **www.mpi.govt.nz** or **www.dairynz.co.nz** or **www.beeflambnz.com**. All veterinarians have also been supplied with technical information and your vet will be able to help you answer any questions.

THE SURVEILLANCE PROCESS

Testing of a herd is done on live animals, at post mortem, or both. Post mortem samples may be collected from animals that have died naturally or which have been slaughtered.

LIVE ANIMAL TESTING

Live animal testing is done primarily by collecting blood from selected animals in the herd but may also include swabs taken from mucous membranes (e.g. inside the nose or vagina). The animals must be NAIT tagged and registered in the NAIT database. Not all animals in a herd are necessarily tested, and this will vary depending on the size of the herd.

In the case of dairy operations, milk from the vat and discard milk tank may be collected to test the whole herd.

The surveillance team will contact you to schedule the date and time for testing and confirm the cattle handling facilities on your farm. The surveillance team will manage the blood tests, identification of animals and recording of data.

The time between taking the samples and receiving the results from the tests can vary due to a number of factors. For example tests from farms at higher risk tend to be processed as a priority above lower risk farms. Complications in the laboratory testing process and interpretation of results can also hold things up.

A number of rounds of sampling may be required in order to provide a good picture of the status of a herd. This is dependent on a number of factors – for example, the age of the animals, lactation status and extent of exposure to the organism. Normally, at least three rounds of sampling are done, with at least 21 days between each round. Taking into account the laboratory time, surveillance based on blood sampling of live animals will take a minimum of three months to complete, but is likely to be longer.

If your herd is found to be positive for the disease, you will be assigned your own Case Manager who will be in touch to discuss the next steps.

TESTING OF DEAD ANIMALS

Sampling of dead animals at post mortem is an important aspect of the surveillance programme.

Dead animals are obtained from three sources – animals that have died naturally, animals that have been directed to slaughter by MPI and animals that have been slaughtered as part of a normal culling/slaughter programme.

If any animals die naturally, contact MPI on 0800 80 99 66 as soon as possible and you'll receive advice on what to do, including taking samples if required. In these cases your own veterinarian may be involved.

AsureQuality

Ministry for Primary Industries
Manatū Ahu Matua

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OTHER SURVEILLANCE

Other forms of surveillance testing may also be carried out on your herd. Tests include bulk tank milk sampling, discard milk sampling and testing of herd bulls when these are sent for slaughter. Some of these tests will be part of regional or national surveillance programmes while others may be directly associated with your herd.

THE TESTING PROCESS AND INTERPRETATION OF TEST RESULTS

The testing process is highly technical and interpretation of the test results is done by a team of specialists.

TESTING PROCESS SUMMARY

The testing programme is comprehensive and complex which explains why it takes time. The following outlines the process:

Step 1: Samples are first tested for presence of antibodies against *Mycoplasma bovis* (referred to as the ELISA test). This test is not 100% specific for Mycoplasma bovis. There are other types of Mycoplasma bacteria present in New Zealand and the test can produce what are called "false positives" caused by the discovery of these other Mycoplasmas. This test is a first indication of possible exposure to the disease and the number of positive results is significant.

Step 2: ELISA positive samples are tested for the presence of *Mycoplasma bovis* DNA. This is called the PCR test and is much more specific. A positive result is a strong indication that infection is in the herd.

Step 3: The final test performed on PCR positive samples is DNA sequencing. This test provides absolute certainty on the presence of infection. In some cases the laboratory will attempt to grow the organism in the laboratory. This is a difficult and lengthy process but necessary if a full genetic sequencing is wanted. Full genetic sequencing is used to determine the strain of the *Mycoplasma bovis* and provides information on the possible origin of the bacteria.

HOW PROPERTIES UNDER SURVEILLANCE ARE MANAGED

MPI has overall control of the biosecurity response. However, certain operations are contracted out including the manager of farms under surveillance, scheduling testing (MPI controls the priority setting), carrying out the tests and reporting the results.

In addition, if your farm is found to be infected or at high risk of infection it will be placed under legal restrictions and the managers who look after this are also contractors to MPI.

THE STATUS OF YOUR PROPERTY AND HERD

Based on a range of data obtained, including the test results, properties and the associated animals will be classified as:

- Restricted place (RP). This is the highest level of control and indicates that the disease has been identified as present or is highly likely to be present on the property as a result of cattle movement. Movement of animals and certain materials are controlled both onto and off the property.
- Notice of direction (NOD). Movement of animals off the property is controlled. Properties are placed under a NOD when animals have moved on to the property from a RP.
- Property or animal(s) of interest. Either due to an animal movement or the geographic location of the property and/or other factors means that surveillance testing is deemed necessary.

If you have any further questions after reading this document, call 0800 00 83 33 for help. Or view the information at: **www.mpi.govt.nz**

Receive email updates by emailing: **MBovis2017_Liaison@mpi.govt.nz** and asking to join the database.

MPI and AsureQuality *Mycoplasma bovis* response team.