

STANDARD TB TESTING AND MONITORING OF CATTLE AND DEER

WHY WE TEST AND MONITOR FOR BOVINE TB

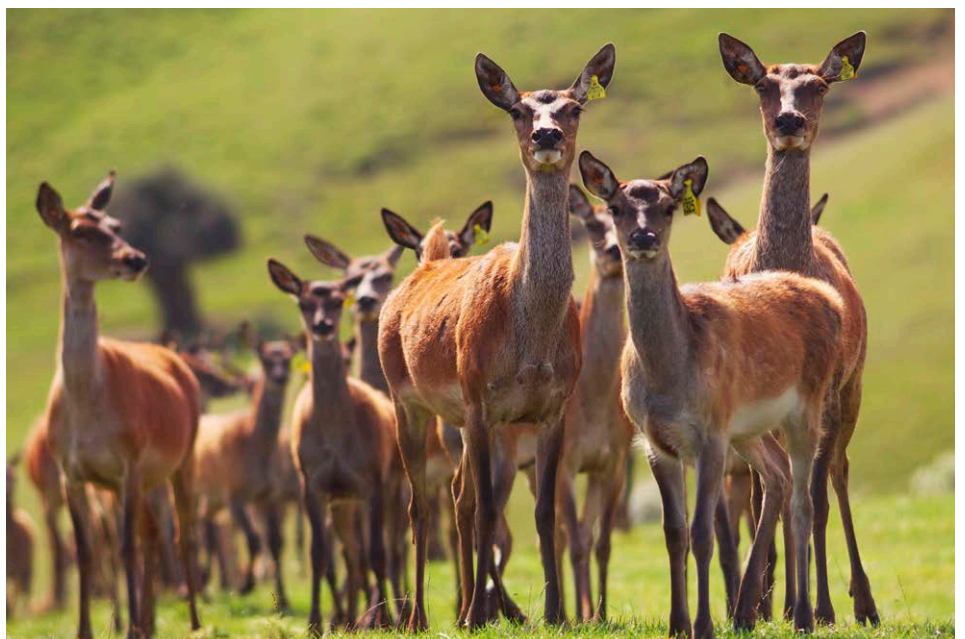
Bovine tuberculosis (TB) is a serious animal health problem. In New Zealand, cattle and deer are tested and monitored for TB. A robust TB management programme includes TB testing, stock movement control, meat processor TB surveillance, livestock traceability and the control of TB infected wildlife. The TB Plan helps maintain the quality of New Zealand's beef, dairy and deer products.

HOW CATTLE AND DEER ARE TESTED AND MONITORED FOR TB

'Clear' or C-status cattle and deer herds are normally tested and monitored through the process illustrated overleaf. OSPRI, the organisation which manages the TBfree programme, advises herd owners via letter or phone call when their TB test is due.

In addition to TB testing, cattle and deer are monitored at slaughter by trained official assessors.

Herds that send stock predominantly to slaughter may have a "Clear Monitored" or "CM" status, which means they are monitored through inspection at a registered meat processor (slaughter surveillance). Farmers with "CM" herds are contacted by OSPRI to assess the number of animals sent to a slaughter



plants over a set period of time, and the status of animals remaining on-farm, to ensure the herd remains eligible to stay on this slaughter surveillance programme.

THE TB SKIN TEST

Tuberculin is a purified protein derivative extracted from TB bacterium. It is not a vaccine. Tuberculin (0.1ml) is injected into the caudal fold (under the tail) of cattle, or into a shaved area of the neck for deer. The site is checked 72 hours later for a reaction - a lump or swelling. Any swelling is an animal's immune response to the tuberculin, and indicates it may have come into contact

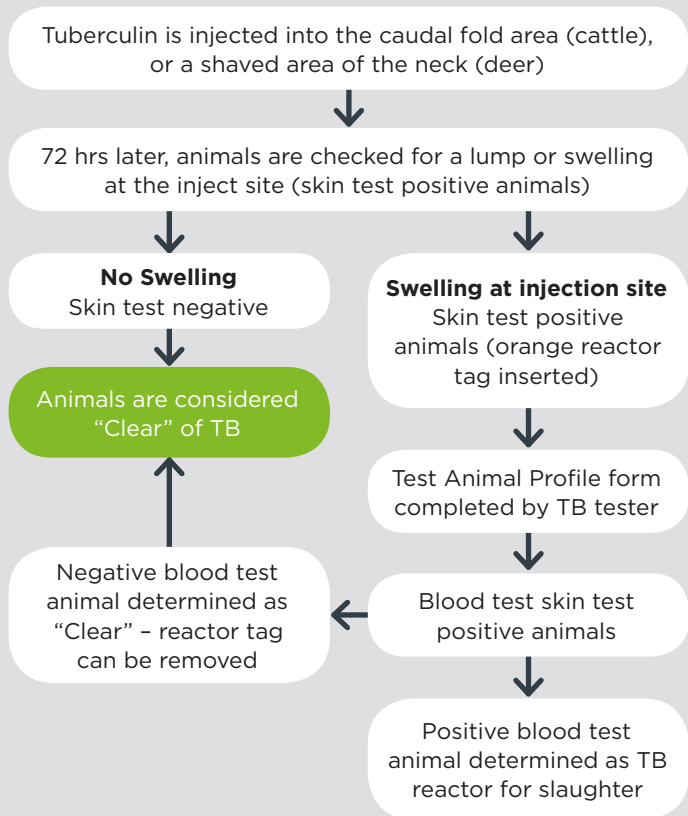
with bovine TB or similar bacteria. If a skin test positive animal is found, an orange reactor tag is inserted into the animal's ear for easy identification when undertaking further blood testing or slaughter inspection.

THE TEST ANIMAL PROFILE FORM

The Test Animal Profile form (TAP) is filled out by a TB tester to gain specific information on a skin test positive animal(s). The information, which includes an animal's testing, grazing and ownership history, enables an OSPRI veterinarian to determine if additional blood testing or slaughter (necropsy) is required.

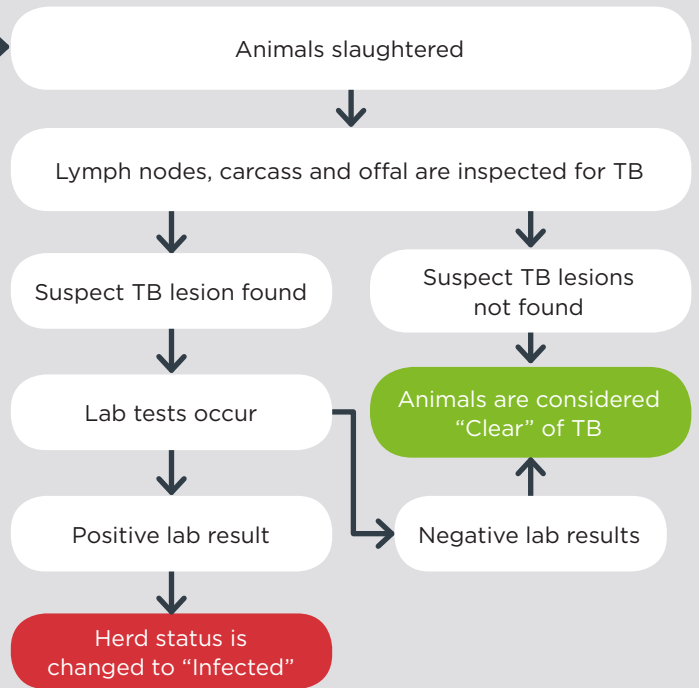
PRIMARY TB TEST

(Skin test)



REACTOR AND ROUTINE SLAUGHTER

(Post-mortem and meat processor)



WHEN ANIMALS GO STRAIGHT TO SLAUGHTER

Skin test positive animals are occasionally sent directly to slaughter when there is a high risk of TB infection from wildlife or a history of TB infection within the herd.

LAB TESTING

If TB lesions are found at slaughter, three types of laboratory tests are available.

- **Histology** - Suspicious tissue is checked microscopically for TB to give an early indication of infection. This generally takes five to seven days once it arrives at the lab.
- **PCR** - Polymerase chain reaction (PCR) technique can amplify small sections of TB DNA and give an early indication of infection. This generally takes three to five days once it arrives at the lab.

- **Culture** - Depending on an animal's circumstances, tissue may be sent for culture. Initial results (liquid media) can take between 20 and 42 days and, if negative, cultures will be continued (solid media) for up to 90 days. Culturing the lesion sample determines the presence of TB bacteria. Following a positive culture result, a herd's TB status will be changed to 'infected' of 'I'.

WHY BLOOD TEST A SKIN TEST POSITIVE ANIMAL?

Blood testing of animals occurs between 10 to 30 days of a positive skin test. Blood testing is a more specific test for bovine TB and avoids the need to slaughter all animals that test positive to the primary skin test. The collected blood sample is sent for laboratory analysis and results are communicated to the person in charge of the animals within a week.



FURTHER INFORMATION

OSPRI is here to provide technical support to everyone - not just the infected herd owners - so if you have questions or need a hand call OSPRI on:

0800 482 463