

Why do the IJCP requirements include the ancillary PCR test?

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The Irish Johne's Control Programme (IJCP) specifies a package of testing that is a combination of the ELISA test on the whole herd (blood or milk), and the ancillary PCR test on a dung sample of most animals that return a positive or inconclusive result to the ELISA test. It is important for herdowners and the programme that the ancillary PCR test, where required by the programme, is not overlooked.

This is fully funded through the programme by DAFM, for those cases specified by the IJCP. This funding includes the costs of collecting the sample and laboratory testing.

Whenever you have an ELISA test result of positive or inconclusive on a blood or milk sample, ask your approved veterinary practitioner (AVP) to advise you whether an animal in your herd requires a funded ancillary PCR test.

The reason for doing the ancillary PCR test is to determine if MAP, the bacterium that causes Johne's disease is present and to ensure that uninfected animals with a positive ELISA test result (expected to be 1-2% of positive ELISA results) are not incorrectly assessed as infected.

The majority of ancillary PCR tests are negative, highlighting the importance of carrying out this testing to clarify a herd's status within the programme.

If an animal with a positive or inconclusive result to an ELISA test does not have a follow-up test, the ELISA test result is assumed to be true and the animal and its herd are considered to be infected. This could have an unintended consequence in the future of preventing you from declaring your herd as low-risk for Johne's disease.

Consequently, it is in the herdowner's best interests, when there is an animal with a positive or inconclusive ELISA result required to have a funded ancillary PCR test, to have that test done rather than dismissing it an optional add-on.

The IJCP recommends that you arrange with your AVP to do the ancillary

Based on the results of the ancillary test, management decisions can then be made, in consultation with your veterinary practitioner or AVP. Options for high-risk cows include breeding to a beef bull, culling, calving in isolation, retaining or culling its calf, and withholding its colostrum and milk from other calves to mitigate further spread and impacts of Johne's disease within your herd.

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PCR test as soon as possible after a positive or inconclusive ELISA test result is reported. This will avoid missing the follow-up test if the animal should die or be culled or sold.

Based on the results of the ancillary test, management decisions can then be made, in consultation with your veterinary practitioner or AVP. Options for high-risk cows include breeding to a beef bull, culling, calving in isolation, retaining or culling its calf, and withholding its colostrum and milk from other calves to mitigate further spread and impacts of Johne's disease within your herd.

There may be some cases, especially in early infection, where an infected animal that is ELISA-positive is not yet shedding MAP in the dung so will be PCR-negative. This is balanced against the consequences of incorrectly calling an animal that is ELISA-positive infected, when it is not.

Most cases where the ancillary PCR test is not required or funded are in herds which have previously had a positive result to a PCR test (or a culture test, which is not routinely used in the IJCP). As these herds are already considered to be infected, animals which have a positive or inconclusive ELISA result are also considered to be infected without the need for PCR testing.

In time, a herd with a positive PCR or culture result may be able to drive down the level of infection to being barely- or un-detectable. At that stage, funding of ancillary PCR testing can be restored. Talk to your AVP about the criteria for restoring eligibility for funded ancillary PCR testing.

There are two other rare scenarios where an animal with a positive or inconclusive ELISA result will not require an ancillary PCR test. These are when the ELISA test samples were collected and submitted to the laboratory within 7 days after calving (for an ELISA test on a milk sample only) or within 90 days after a TB skin test (on blood or milk). In each of those scenarios, the follow-up test should be an ELISA re-test on a blood or milk sample, after the expiry of the 7-day or 90-day period, respectively. In these scenarios, neither the ELISA re-test nor an ancillary PCR test will be funded by the programme. Wherever possible you should therefore schedule ELISA testing to avoid these periods.

The IJCP is now notifying herdowners by SMS whenever Johne's test results are uploaded to ICBF and providing a link to view the results. If there are positive or inconclusive ELISA results, the message will highlight that fact and advise you to 'Contact your vet'.

If your herd currently has any animals which have had a positive or inconclusive ELISA result at any time in the IJCP but have not yet had an ancillary test, contact your AVP to determine your next step.

For further details, [click here](#) to refer to the Johne's Disease Herdowner Flowchart.