When is the best time for Johne's disease herd testing?

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Herd testing is an important component of managing the risks and impacts of Johne's disease. It enables you to assess the likelihood of a herd being infected and to identify animals within a herd that are likely to be infected (test-positive animals, their dams and calves, and possibly their age cohort). Many factors influence the best time of year for herd testing for Johne's disease. It is worth considering this early in the year so that the most opportune time is not missed.

Pilot programmes for the Irish Johne's Control Programme (IJCP) required two rounds of herd testing if using blood samples, but only one round using either blood or milk samples is required now.

For all herds, testing must not be conducted within 6 months (180 days) of the start of testing in the previous year. Testing should not be conducted within 90 days after the first day of the herd's TB test. However, for herds undertaking frequent TB testing, this recommendation may have to be reduced to 60 days after the TB test, but first refer to your veterinary practitioner for advice.

If using milk samples for Johne's herd testing, preferably test at mid-lactation (May to September). For milk samples, avoid the first 7 days after calving, and the last couple of months before drying off, due to increased risk of positive results which may be false. Avoiding the last couple of months is particularly relevant to herds which have a previous positive result to an ancillary faecal PCR or culture test to minimise the risk of un-necessary culling. Plan to do a 'sweeper test' using blood samples of animals that are not in the milking herd (bulls, dry cows, un-calved heifers and culls) within 30 days after the milk-sampling to complete the herd test. If possible, schedule milk testing 1-3 weeks before a TB test, to allow the sweeper test to be done on the first day

of the TB test. Blood samples for Johne's testing can be taken on the first day of TB testing, to reduce veterinary costs and the number of times cows are held back from grazing and ensure all eligible animals are sampled, but it could prolong the day's testing. There is little benefit in waiting until close to drying off to test, to inform culling and breeding decisions. We would not expect the infection state of animals to change significantly over the last few months of lactation, and any small benefit from deferring the testing is negated by the slightly less accurate results at late lactation, delayed opportunity to identify and cull test-positive cows, and increased risk of not completing the herd test before the end of the year.

Ensure that you either remove your cull dairy cows from your farm before starting the year's herd testing, or include them in the herd test.

For herds registered in the IJCP, use your ICBF Johne's screen (at: https://johnes.icbf.com) to list animals to be tested for the whole herd test on the proposed start date of a whole herd test, to list animals that must be tested for a whole herd test that has been started but not yet completed, or to list animals which are required and funded for an ancillary PCR test on dung samples.

The above scheduling considerations do not apply to testing dung samples by PCR. This can be done at any time, and is best done as soon as possible after ELISA results of positive or inconclusive are reported.

Note that herd testing is only one component of managing Johne's disease. There are other essential measures for reducing spread of Johne's disease and which also protect against other calf diseases. These include early removal of high-risk animals, attention to hygiene at calving and in calf pens, early separation of calves after calving, hygienically feeding colostrum and milk from low-risk cows, and protecting replacement calves and heifers in sheds and on pasture from exposure to dung and slurry from adult cattle.

For more information about controlling Johne's disease, speak to your veterinary practitioner or refer to the IJCP webpages **click here**.