

Performance of Johne's programme requirements

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After three full years of Phase 2 of the Irish Johne's Control Programme which commenced in 2019, it is a good time to review when programme on-farm activities are being performed. The patterns of these activities have been quite consistent from year to year.

Using milk samples for herd testing (Figure 4) can obviously occur only during lactation, so there is very little of this testing from December to March. Testing steadily increases from April until around August, then declines until November.

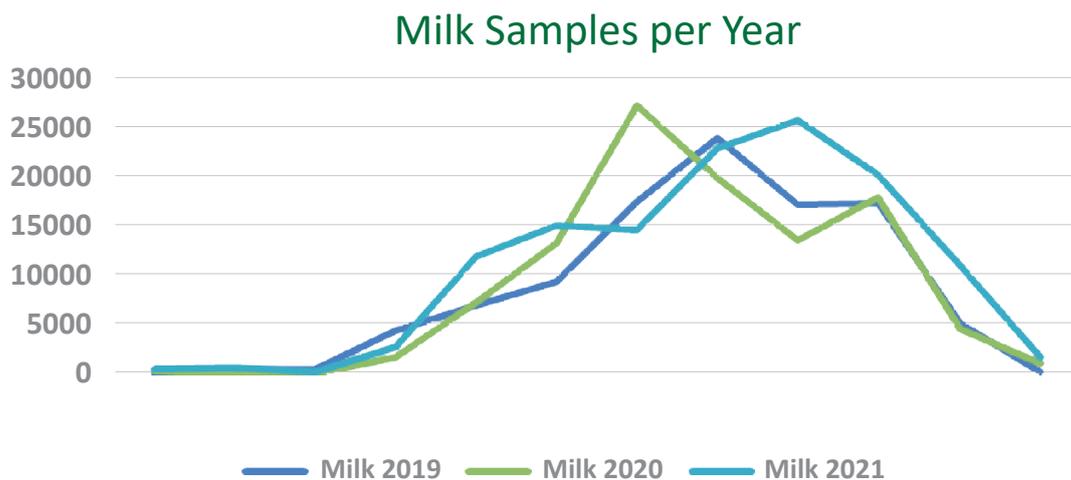


Figure 4. Monthly ELISA testing for Johne's disease of milk samples.

This pattern logically coincides with milk production, however the programme recommends avoiding milk-testing in late lactation (usually October to November) if possible, especially for herds that are known or suspected of being infected. There can be increased numbers of positive and particularly inconclusive results at that time; factors causing this are being researched, but some of these results may not be due to infection.

NOTE: If you are a herdowner who tests for Johne's disease solely by milk samples, book your test in advance with your milk recording organisation, aiming for the summer months.

In contrast, the spread of blood sampling (Figure 5) has a reasonably steady base throughout the year, except during the calving period (February to March), with a steady increase towards the end of the year and into January as the herd is moved indoors. In 2020, there was a relative drop in blood sampling in April to May coinciding with the onset of COVID restrictions.

NOTE: Herdowners who test by blood, either the whole herd or the sweeper test (of residual animals such as bulls, dry cows and un-calved heifers over 2 years old), often find it easier to test on the same day as their TB test. Talk to your vet about taking blood samples at this time.

Blood Samples per Year

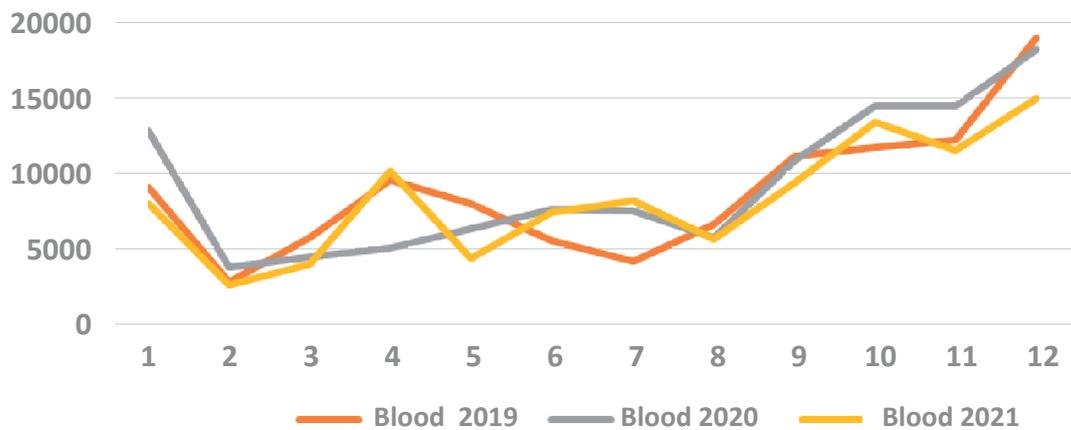


Figure 5. Monthly ELISA testing for Johne's disease of blood samples.

The programme recommends that the sweeper test (typically using blood samples) of bulls, dry cows and un-calved heifers is undertaken as soon as possible and within 30 days after the main herd test; and also recommends that milk-testing be conducted well before drying off; whereas herd owners clearly prefer to blood-test during the housing period.

NOTE: If you test for Johne's disease using milk samples for the milking herd and blood samples for the sweeper test, aim to milk-test in September and blood-test the remaining animals in November, being mindful to blood-test all animals that are to be culled during the intervening period.

Veterinary attendance on farms for PCR (dung) testing (Figure 6) and VRAMPs (Figure 7) follows a similar pattern to blood-ELISA testing: very little activity from the onset of calving until the autumn, although the mid-year activity for blood-ELISA testing is nearly absent for dung testing and VRAMPs.

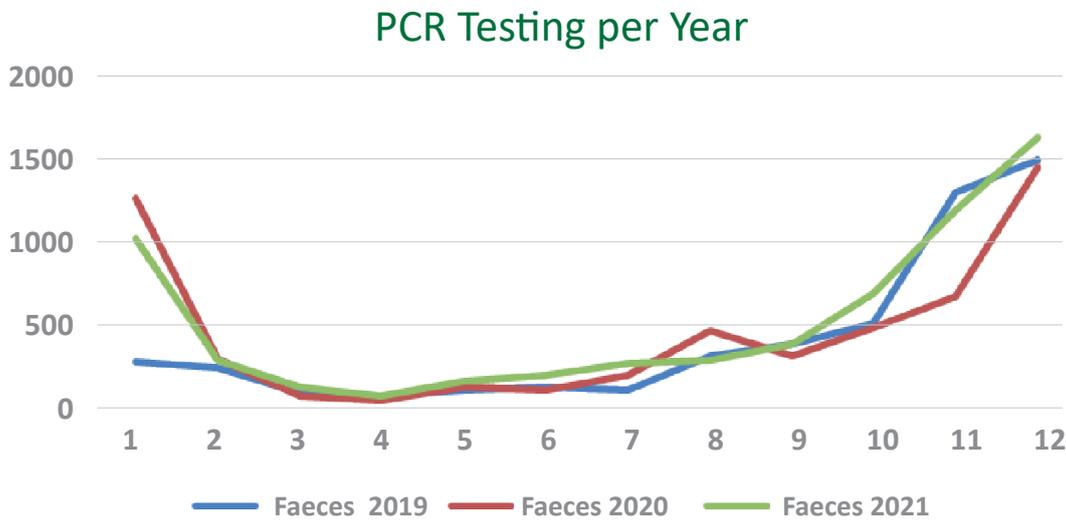


Figure 6. Monthly PCR testing for Johne’s disease of dung samples.

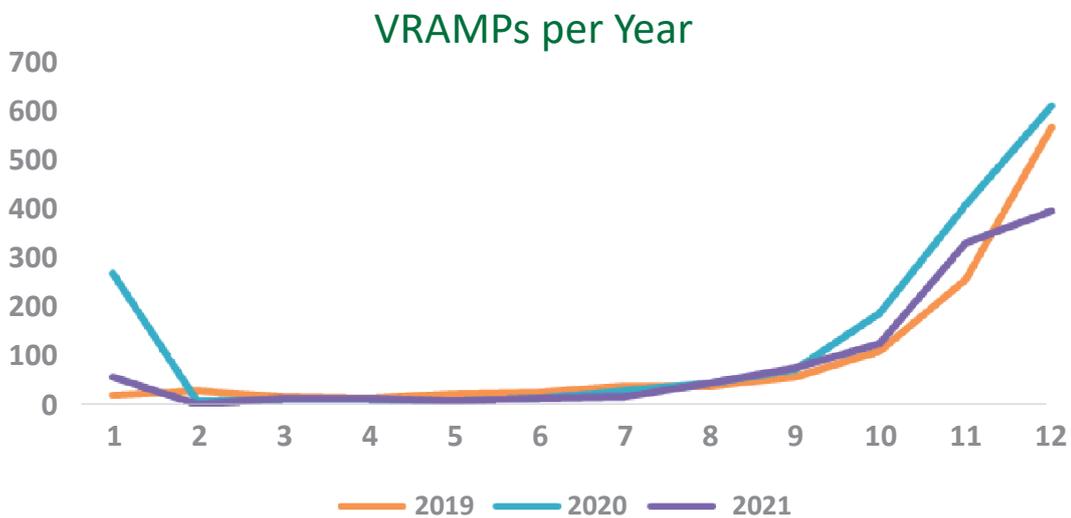


Figure 7. Monthly Johne’s disease VRAMPs.

NOTE: Some herdowners prefer to complete their VRAMP before the calving period to refresh best practice during calving. But once those practices are well established, consider switching the VRAMP to the end of calving, to take pressure off completing at the end of the year and also to review practices immediately after calving and to allow time to make changes to facilities before the next calving.

When this information about timing of activities for 2021 is collated (Figure 8), it is apparent that the number of herds completing their WHT (yellow line) increased steadily from May until October, increased more rapidly during November and December and then continued to increase but at a slower rate during the January extension period. However, meeting the requirements for payment of herd testing assistance by completing both the WHT and VRAMP (green line) was held up by the typically delayed completions of the VRAMP until November to December and into the following January (Figure 7 and orange line in Figure 8).

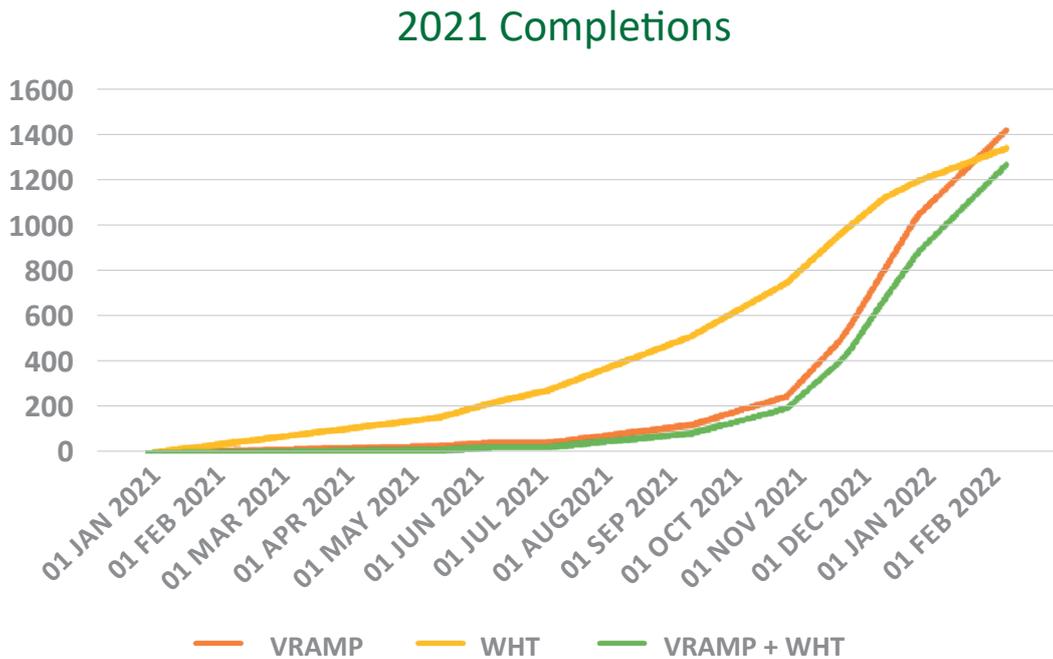


Figure 8. Cumulative completions of WHTs and VRAMPs for 2021 programme year.

AHI is researching the reasons for these patterns by interviewing dairy farmers and veterinary practitioners engaged in the programme. There is no single factor that determines when testing and VRAMPs will be performed (busy schedules are certainly a challenge), but the programme has extended the deadline for completion of annual requirements to accommodate the preference for completions during the housing period.

In fact, for the 2021 programme year (from the 1st January 2021 until the 31st January 2022), 426 herds (23% of dairy herds registered in the IJCP), completed the VRAMP and WHT requirements during the January extension, showing how important that extension is to match the programme timetable to the calendar of on-farm priorities. Similarly, for the 2019 programme year, more than one third of herds required the January 2020 extension to complete the VRAMP and WHT requirements, although at that time participants were still learning how to embed the requirements into their farm routines.

The programme will continue to encourage participating herds to complete the yearly testing and VRAMP in good time, rather than the pressure of leaving these requirements to the end of the year. However, the programme also wishes to make completion of the requirements as easy as possible for participating farms. It recognises the need to embed the practices within the farm's seasonal demands as seamlessly as possible, so that they become part of the yearly routine.