

Producers should 'get off the fence' and tackle Johne's control

Avoid assumptions on Johne's status!

All producers need evidence, in the form of test results, to support the Johne's disease status of their herd. Despite more producers adopting surveillance and control measures in the past few years there are still many who either assume that they are Johne's-free or who are simply carrying on in blissful ignorance and doing nothing. Both are dangerous routes as left undetected and ignored the problem will get worse.

text **Karen Wright**

In 2009 Defra estimated that 34.7% of GB herds were affected with Johne's. Many claimed this was a gross underestimate and since then milk buyers, vets and advisers have worked hard to get an increasing number of producers involved in control schemes.

And there's no excuse for any producer dismissing Johne's. There are schemes like MyHealthyHerd with added biosecurity checks, and milk testing services from NMR – which now offers a comprehensive range of tests from the new advanced 30-cow screening to routine individual quarterly cow milk

tests. These are all tools that are combined in a logical control plan operated by many progressive dairy vets.

Trading advantage

The UK dairy industry is encouraging producers to assess their herd and implement a Johne's control or surveillance plan. One reason is to ensure that the UK is keeping up with other leading dairy countries that have co-ordinated national schemes in place – Holland, Denmark and soon Ireland to name a few neighbours. And some are working on securing a trading advantage based on evidence of their Johne's status.

But a key reason for control is to protect herd health and welfare and, ultimately, profitability. It has been shown that Johne's infected cows are more susceptible to lameness, mastitis, high cell counts and can also have fertility problems.

"There are plenty of herds out there that claim they don't have Johne's, yet haven't even tested for it," says DairyCo vet Karen Bond. "These are mostly farms that have never seen a clinical case and so assume that they don't have Johne's disease.

Yet infected animals may have been removed for other reasons – that may well be Johne's related – before they



Karen Bond: 'Plenty of herds claim they don't have Johne's yet haven't tested'

have a chance to develop clinical signs. Johne's is not the whole answer as there will obviously be other factors that predispose the animals to say lameness or mastitis, but it could certainly be a contributing factor."

And where Johne's is being allowed to 'live' in the herd undetected, it is being given the chance to spread, unless rigorous biocontainment measures are in place. If infected animals are sold, the disease could also spread to other herds. While there is actually no such thing as a Johne's-free herd, they can be accredited tested free. "However, you certainly cannot make this claim without having tested," she adds. "Producers should not assume any herd is Johne's free without evidence."

Pre-purchase checklist

Buying animals with Johne's is always a risk and DairyCo and NMR are encouraging producers to ask the right questions at the point of purchase. DairyCo will have a pre-purchase checklist available on its website as of September. Questions to ask vendors include:

- Does the herd have accredited free status?
- Has the herd ever vaccinated for JD?
- What type of testing does the herd undertake? It's important to know the level of testing, particularly if the seller

Johne's – the real costs

The implications of a range of Johne's control measures are shown in Figures 1 and 2.

Figure 1 shows how Johne's can spread within the herd under a range of management controls. Figure 2 shows the affect on revenue per cow under a range of controls.

One scenario is simply do nothing, which will result in increased prevalence in the herd to the point at which the herd is no longer commercially viable. In short, as Johne's spreads it gets to the point that the impact of the disease on the technical performance of the herd is so marked that the herd has to give up.

The next scenario is test and cull. This is simply tackling the symptom and not tackling the cause. Johne's is still allowed to spread within the herd as other animals will be infected.

The optimum management of all cows works well. This involves maximum control such as separate calving pens for all cows whether they are infected or not. So while spread within the herd is

minimised, control is labour intensive and therefore costly. Managing cows according to their risk level is far more labour and therefore cost efficient. This is risk-based management, where control measures such as separate calving pens for infected cows only are in place, achieves good results.

The effectiveness of each control scenario is reflected in the revenue/cow. In the 'do nothing' scenario the herd doesn't incur

any control costs, so net revenue per cow is higher at the start, but this gain is short-lived as Johne's spreads.

Revenue per cow in the test and immediate cull scenario is constant because the control costs never diminish. The best route again is a risk-based approach and culling 'red'-infectious cows. Over time, as Johne's is brought under control, the revenue per cow will increase.

Figure 1: Within herd spread of MAP

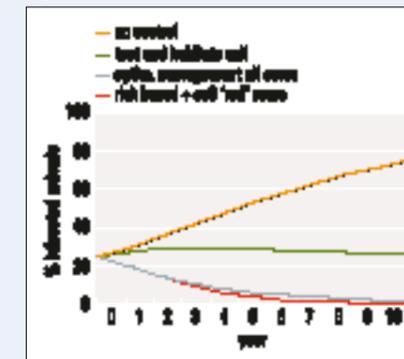
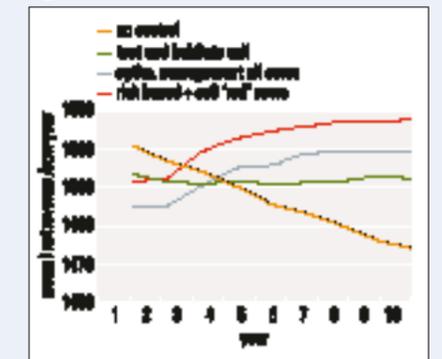


Figure 2: The costs of Johne's



is claiming freedom off the back of a couple of negative bulk milks.

- When did the last test take place?
- What are the results?
- Has there been a diagnosed case in the herd?

"We cannot stress strongly enough the need to ask about herd status rather than that of the individual cows. Testing the individual to be purchased is only useful for older animals and should

always be in conjunction with herd information," adds Mrs Bond. "Of course the vendor is not obliged to share this information. But an answer of 'I don't know' or a refusal to answer is an answer in itself!"

"Those considering themselves 'free' need to undertake routine surveillance and it is equally important that producers don't just screen for Johne's but that they also control the disease – a 30-cow

screen with negative results is not the end of the route.

"An ideal place to start is a herd risk assessment and a 30-cow screen with animals selected either automatically or by the vet. Johne's is an insidious disease and it may not be detected immediately, but we have to keep looking routinely or there is the potential to miss infected animals and allow it to develop and spread." |

Start now!

NMR is offering special deals on its auto 30-cow screening test during the two days of the Livestock Show, on September 4 and 5. If the results from this first test show that there is no sign of Johne's in a herd then NMR will reimburse the cost of the test. This offer only applies to those committing to quarterly 30-cow tests, not those opting for an ad-hoc 30-cow test.

If the test shows a presence of Johne's, NMR will recommend further tests in consultation with the herd's vet.

Industry takes on Johne's-control role

Taking an active role in Johne's control, Dairy UK established the Johne's Action Group to raise awareness of the disease among producers, purchasers, milk testing laboratories and vets and to encourage the sharing of good practices. The group is not necessarily seeking to promote a single veterinary approach, though Dairy UK's Ed Komorowski admits that such an approach would help producers and reduce confusion.

"But as a group we are seeking to promote veterinary approaches which take into account the characteristics of the disease, use appropriate testing methods, and allow producers and vets to manage their own situation in an

economic fashion," he says. Looking ahead, he can see that producers with accredited tested free herds could provide low risk replacement animals. "But this requires producers to become aware of their Johne's status, and to work with their vets in managing their herds accordingly," says Mr Komorowski.

Dairy UK and DairyCo are hosting a conference 'Johne's – Moving the agenda forward' on Wednesday October 10 at Sixways Stadium in Worcester. It is aimed at a wide audience including producers, advisers, vets and the animal health industry.

More information is available from Ian Wakeling at iwakeling@dairyuk.org

