

Johne's screening puts producers in a position of power and better productivity

Knowledge breeds control

A positive diagnosis of Johne's disease need not be as disastrous as many would believe, if producers are armed with good test results and a robust management strategy. It is a complex disease but there are simple and effective ways to reduce the impact it has on the herd and to prevent cow to calf transmission.

text **Karen Wright**

It's a hot topic. More producers are waking up to the extent of Johne's throughout UK herds and more than 100,000 cows have been screened for Johne's in the past six months as part of an initiative run through milk buyer, vet and NML workshops.

"This has been a great awareness initiative," says DairyCo vet Karen Lancaster. Many producers have been surprised to find that there are cases in their herds. More than 70% of herds involved in the 30-cow screening tests got results to say that at least one cow in their herd was positive for Johne's."

Ms Lancaster says this is a great starting point but producers must look at a structured screening approach. "Any producer who has had cows come back positive on their 30 cow screen should seriously consider whole herd testing. And I would advise those with a clear initial test to repeat the targeted 30-cow screen six monthly so that they catch any incoming disease early, while also being very aware of the biosecurity of their herd. The cows to target would be those with disappointing yields, over three years old, chronically lame or with high cell counts.

Practical option

"Individual tests on all cows with a milk or blood sample will help to establish the level of disease within the herd. This should be incorporated into a management strategy which involves repeated testing and management changes to begin to control the disease on farm. The ability to carry out Johne's antibody tests on the milk samples taken for milk recording makes quarterly testing a really practical option."

"Antibody responses can be intermittent and some cows that are infected may be missed on a single screen. Repeated testing is important to increase the chances of identifying infected animals and give producers and their vets the confidence that a cow coming back with repeated low results really is low," she says.

Cows that come back with positive results will be classified as 'red cows' and ideally these cows should be culled as soon as possible. However in herds with a high number of positive cows this often isn't practical and precautions must be taken to reduce the risk of spread from these cows.

"High risk cows – 'red' or 'amber' and those that have had at least one positive test – must be separated at calving into a 'leper colony' where they will have no contact with the low risk (green) cows or their calves.

"And their calves should be snatched at birth and fed colostrums taken from low risk cows only," Ms Lancaster says.

"On most farms the number of risk cows will be small and so managing them separately will not be too onerous, particularly in all-year-round calving herds."



Proactive approach: calves from high risk cows are identified at birth and bred to a beef bull

John Allwood has taken the 'bull by the horns' when it comes to Johne's disease control on his 350-cow unit near Chester, Cheshire. John is seeing, first hand, that routine screening of milk samples is the route to take. "This gives knowledge and knowledge leads to control," is his motto.

Cases drop

And by taking this positive and structured approach he hopes that any cases of the disease will be history within the next two or three years.

The Johne's 'story' on his unit started about three years ago. As part of a herd expansion programme John bought in a number of in calf heifers and cows and a few of these have gone down with full blown Johne's. But John also admits that there may have been some lurking cases of Johne's in the herd that he wasn't aware of.

"It's been a steep learning curve for us," he says. "We asked the right questions when we bought the stock but, of course, without routine screening tests for heifers and their mothers you can't be 100% sure the animal is 'clean'."



Karen Lancaster: "Managing high risk cows will not be too onerous"

A few animals looking below par prompted John, with his vet Rob George from Nantwich Vets, to test for Johne's through NML's routine screening programme Herdwise. Every three months a sample of milk – the same one that is used for NMR milk recording – from all milking cows is automatically tested for Johne's antibodies.

"That was the easy bit," admits John. "The results showed we had about eight cows with Johne's antibodies. We followed advice and earmarked these 'red' cows – literally with a red eartag –



John Allwood: "There's no doubt that Johne's disease cases are falling"

and monitored them through further screening tests. These cows had no clinical signs whatsoever."

Remove infection

Although John knows that even screening tests might not be 100% accurate he and his vet are confident that the tests are a great guide, particularly as a picture builds up for each cow. Unless the cow shows clinical signs, she is kept in the herd.

"If she's not in calf we might put her to a beef bull or cull her. And any red cows that calve are isolated and the calf is given a red tag. Her colostrum isn't used and we completely spring clean the calving pen to make sure any possible infection is removed."

A dairy replacement with a red tag is bred to a beef bull – as is any bought-in cow or heifer. "We don't breed any animals to a dairy bull unless we are confident that she is Johne's free. This way we are breeding Johne's out of the herd."

Now two years down the line, and with a good record of test results, John feels that they are making good progress. "Johne's is getting less – there's no doubt about that. We now have very few, if any, new cases. Johne's is a huge underlying problem in our herds and I don't think many producers have really got to grips with it properly. Getting yourself into a position of control isn't difficult – it's easy to arrange routine screening and working with the vet means that you can adapt management to make sure 'red' or 'amber' cows are not a risk to 'clean' animals."

John plans to keep using Herdwise screening for at least another two years. "By then I hope we will be Johne's free, but of course you can never be 100% sure. I should think we will still screen at least a sample of cows perhaps every six months."