

It's a simple, cost-effective and reliable service – and these are key reasons why NML's new Johne's disease screening test on individual cow milk samples appeals to vets and producers.

It marks a big step forward in Johne's control in UK herds.



'Ease' appeals to Cheshire producers

The simplicity of carrying out a test for Johne's on milk samples already collected through milk testing, and the confidence in NML's disease testing services is appealing to dairy clients with Cheshire-based vets Wright and Morten, members of the XL Vet group. And this is ideal – just the encouragement that vet Tom Beech welcomes as he builds the new milk screening test into his Johne's Control programme – a service that will be available to all the practice's dairy clients.

"There's no denying that the disease is quite widespread among UK herds – producers and vets just haven't looked for it," he says. "It's a costly disease and it can spread rapidly between and within herds if control measures are not in place."

The NML HerdWise test is an important part of Mr Beech's programme. He will use the results as an integral part of evaluating the prevalence of the disease within the herd and in implementing control measures. "I will then have the tangible evidence to take on farm and advise on the management of the cows and on biosecurity measures.

"Producers don't have any extra sampling or recording to do and this is key. Many of my clients are already using NML's Healthcheck for ad-hoc disease testing and working their way through the list of BVD, IBR and Lepto. They are keen to improve the health status. Johne's test through HerdWise is an obvious next step and takes them forward in their herd health programme.

"Quarterly results for Johne's is a real plus along with reports that are carefully



Tom Beech: Tangible results turn hidden costs into reality

able to categorise cows into groups depending on their risk status.

"And a service that reports consecutive results is far more accurate. "We talk about the hidden losses with subclinical diseases like Johne's but when you have data on individual herds to discuss with producers it's easy to turn the hidden losses into reality."

Handy test steps up Johne's control

A first – NML launches Johne's screening test using milk samples

National Milk Laboratories (NML) launched the UK's first Johne's disease screening programme on milk samples this autumn. It is available to dairy producers through their vets who can use the screening as part of a wider Johne's management programme. The NML Johne's test is one of its HerdWise screening programmes. Testing is carried out on a quarterly basis using a milk antibody ELISA test for

Johne's – a wasting disease

Johne's disease is a chronic wasting disease caused by MAP infecting the gut.

Reduced milk yield is one of the earliest signs of the disease. This, and other associated signs such as a higher risk of displaced abomasums, downer cows and high cell count cows through reduced immunity, make for an expensive disease.

the presence of antibodies against the Johne's-causing bacteria *Mycobacterium avium* subspecies *paratuberculosis*, commonly known as MAP.

NML has modelled its screening test on a similar programme used in Denmark that, since its introduction in 2006, is now used in 27% of their dairy herds.

"The real value of the test is its simplicity for vets and producers," says NML's business development manager Hannah Pearse. "We use milk samples already collected through our NMR milk recording service. Once producers are enrolled onto the service by their vets the samples are automatically directed for Johne's testing on a quarterly basis and results are available to the vet via the NMR web-based service Herd Companion PRO."

Greater accuracy

The Herd Companion system holds a log of previous Johne's tests for the individual cow along with other health and fertility data. Consecutive test results are used to



Hannah Pearse: "Simplicity of screening test is what really appeals"

determine the disease status of each cow.

"The HerdWise screening test advocates quarterly testing rather than once a year, which would be more typical where blood tests are used," adds Ms Pearse. "This increased frequency of testing increases the sensitivity of the test allowing more accurate interpretation of the disease status of the cow.

"Within the report we also include milk

yield, potential milk yield drop, parity and days in milk – all factors that influence the management control programme."

Using the results – that are made available to the vet – cows are grouped according to their risk level. These groups follow a traffic light system with cows in the red group, having repeated positive Johne's tests and potentially showing a drop in milk, classed as high risk. Colostrum or milk from this group of cows should not be fed to calves.

Similarly, cows in the yellow group, which may have had a positive result, should be treated as high risk and their colostrum or milk should not be used. Colostrum and milk from cows with negative results, which are considered low risk, can potentially be used for calves.

NML's HerdWise Johne's screening programme is available to vets for £5 to £10 per cow per year plus a one-off annual administration fee per herd. Fees depend



Typical example of a cow with Johne's disease

on herd size and are adjusted monthly depending on cows in milk. Many vets will use the screening programme as part of their own Johne's control programmes that can include a detailed risk assessment and control measures specific to the farm.

NML's Johne's screening programme has gained CHECS (Cattle Health Certification Standards) accreditation.

Karen Wright