

Clear benefits should encourage wider industry engagement in Johne's control

Top gear for Johne's management plan

An industry-led action group launched a draft National Johne's Management Programme at the DairyCo/Dairy UK conference in November, 2014. Subject to approval, it will be launched in April 2015 with the aim of getting 95% of producers on board within two years.

text **Karen Wright**

Healthy food comes from healthy cows – and cows infected with the Johne's causing bacterium MAP (Mycobacterium avium subspecies paratuberculosis to give it its full name) are not healthy.

So says Johne's guru Michael Collins from the University of Wisconsin, who addressed the conference audience.

"MAP is very clever. It lives with a cow for a very long time and it is shed by the

cow, yet she can still look good," he added. "It lives in white blood cells oddly – these are the cells that are normally responsible for killing infection. It grows slowly, typically making it more virulent than fast growing mycobacteria.

"And, although there's no absolute proof, the question still hangs over a link between MAP and Crohn's disease in humans."

Britain behind

When it comes to the management – or control – of Johne's, Britain is a little behind. "In my opinion, producers here don't perceive a problem. My concern is that the UK will end up like the US – as the national herd consolidates so

The 30-Cow Challenge has been running for three months and, so far, fewer than 5% of herds have had low test results for all cows tested



Johne's spreads. Infected cows are sold into expanding herds and spread the disease. It is thought more than 90% US dairy herds are infected with Johne's," explains Mr Collins,

NMR vet and chair of the Johne's Action technical group Karen Bond agrees. "There are still producers out there – and vets – in denial. They think because they haven't seen an affected cow with clinical signs of Johne's that they haven't got a problem."

NML is encouraging all producers to assess the status of their herd through its 30-Cow Challenge – an initiative that has gained the support of the main milk buyers. "In effect, we want them to put their money where their mouth is and take on our 30-Cow Challenge," she says. Regardless of herd size, the Challenge tests milk samples from 30 carefully selected cows using the ELISA test that identifies Johne's antibodies. A cow will have a low, medium or high status indicating the level of antibody found in the sample.

"We stress that it is important to target the 30 cows carefully – cows with higher than average cell counts, more lameness or failing to reach target yields compared with their herd mates, or older cows – these are the ones most likely to be harbouring Johne's.

Using milk records, NMR can select these cows automatically. Otherwise we provide guidelines for vets and producers to put forward the 'best' 30 cows for screening. And we've found that through careful targeting of the 30 cows we can be 95% sure that if a herd has Johne's disease we will find it."

Producers will pay for the 30-cow tests but if all cows are low, the fee is refunded. "This is 'The Challenge'," adds Mrs Bond.

The Challenge has been running for three months and, so far, fewer than 5% of herds have had low test results for all cows tested. Quite a few have had three



Karen Bond: "The Challenge encourages producers to identify Johne's status"

or four positive cows indicating a level of Johne's in the herd and the need to implement a robust management plan.

"There has been a degree of shock and surprise among producers," adds Mrs Bond. "The truth is that Johne's may be at the heart of high cell counts, lower than average production, lameness or mastitis in infected herds. These cows may well be culled from the herd before clinical signs of Johne's are seen – unfortunately these cows have often spread the disease without producers even knowing it's there."

Vet involvement

More than 1,250 producers use NMR's HerdWise service that routinely tests individual milk samples for Johne's. A recent survey of users revealed some good progress; that 41% of HerdWise herds now have fewer than 2% red cows, up from 35% in 2012. Just 3% have more than 10% red cows.

"An increasing number don't have any 'red' cows, but undertake quarterly surveillance to maintain CHcS accreditation for their herds," says Mrs Bond. "They recognise the value of this when they are selling stock. This will become more important.

"But the survey also showed up that 15% of users are not consulting their vet on Johne's management which is a real concern," adds Mrs Bond. "However, a



Michael Collins: "Consolidation of the US dairy herd has led to the spread of Johne's"

pleasing 50% said they consulted their vets every time they received a new set of results."

Most culled 'red' cows immediately or at the end of lactation. "But half were not segregating 'red' cows at calving – a period when spread of MAP between cows and calves is most likely. This should be happening as routine. But the good news is that almost all producers snatched calves from red cows and discarded their colostrum."

Economic benefits

The survey revealed that many producers are not managing amber cows as a risk, but allowing them to calve in the normal maternity area. "These cows pose a threat as they may well be shedding the bacteria," she adds.

"Very encouraging is that 85% of those surveyed have identified economic benefits from managing Johne's in areas, such as reduced cell counts and increased yields. And there are additional benefits through improved calf management too. "The availability of routine testing services like HerdWise and the national management strategies just launched means that producers really have all the tools they need to manage Johne's." |

➔ The draft National Johne's Management Plan can be downloaded from www.actionjohnesuk.org

National Johne's Management Plan

The National Johne's Management Plan sets out to reduce the disease in Britain's dairy cattle and engage producers in credible and robust Johne's management activities.

"There are real and immediate benefits for producers," says chairman of the Action group and south Wales-based producer Lyndon Edwards.

"Some simple and easy steps will help to control the disease and prevent further

spread. It doesn't necessarily mean lots of expense but it does mean long-term commitment."

The Johne's Action Group is advocating six management strategies. "There will be a strategy best suited to each individual farm," adds Mr Edwards. "Producers, in conjunction with their vet, can choose the most appropriate for their situation."

Adding to this, vet and Johne's Group

member Peter Orpin says that it is crucial for British producers to get ahead of the disease and not to make hard work of the disease by waiting for high prevalence in their herds.

"Remember that Johne's erodes farm profits," he says. "Don't test and hope or just test and cull, but put a robust management plan in place. I can't think of a reason why any producer wouldn't test and manage Johne's."