

Assess the disease risks and get a comprehensive policy in place

Weighing up the risks

Mention biosecurity and producers imagine double fences and decades of closed herd status. This isn't a reality for most producers – but neither is the option of burying their heads in the sand when it comes to disease control. Producers should assess the risks on their own units and put sound plans in place if they want a healthier herd long term.

text **Karen Wright**

Weigh up the risks – that's Leicestershire-based dairy vet Peter Orpin's advice to producers. And he doesn't just mean the risks of buying in disease but the risks of disease spreading within the herd. "Assessing the risks of buying cattle with disease, or your cows coming into contact with diseased animals, is just one part of the job. It's just as important to assess the risks within the herd – and this is where many producers fall down. They're not managing the disease risk after purchasing animals." In an ideal world any bought-in cattle should come with written disease status

assurances. "But strong demand for cows and heifers and high prices means that this isn't always either possible or enforced by the buyer. This significantly increases the disease risk status, particularly for some diseases. "We can manage the risks presented by IBR, BVD and Leptospirosis through vaccination," adds Mr Orpin. "But the other key diseases like Neospora, Johne's disease and TB are different – they're slow burners. "With Johne's the disease spreads from cow to calf long before it manifests itself. And this time lag is a huge problem."



Peter Orpin: "Assess risk of disease spread within the herd"

This is where an assessment of the risk of disease spread within the herd is equally important. Uninfected animals need protecting, maybe through vaccination or by adapting management protocols. "Producers should assess how good their controls are on farm. And it might not be all doom and gloom. While the risk of say Johne's entering the herd might be high, the risk of spread might be low if control measures are already in place, such as avoiding pooling colostrum and waste milk, testing stock and preventing spread at calving." Along with dairy vet colleague Dick Sibley, Peter Orpin has developed a

Assessing disease beats test and treat

Dorset-based dairy vet Peter Plate from Damory Veterinary Clinic now takes a far more proactive approach to infectious disease control, having observed severe losses due to breakdowns in previously 'clean' herds, with disease such as BVD, or due to a hidden disease, such as Johne's, spreading within a herd. An integral part of his preventative herd health management is a herd risk assessment and he uses Myhealthyherd (MHH) across the majority of dairy herds that he is involved with.

"After years of monitoring and predominantly dealing with the infected herd, the new approach of assessing risk and preventing – or at least minimising – disease is relevant to every farm," he says. "And in many circumstances protecting clean herds from disease breakdowns can be even more cost-



Peter Plate: "Protect clean herds too"

effective than managing infected herds. "Starting off with the MHH risk assessment gives us a comprehensive and practical base. And I think it's particularly important that it's based on well-recognised and published evidence. For example, with regards to BVD, some of our regular bulk milk negative herds

were flagged up through MHH as high risk, perhaps because they have several neighbours with livestock, share farm staff and equipment, or occasionally buying in untested animals." And while some of these producers had been lucky and avoided infections so far, Mr Plate found that others were less fortunate and faced serious economic losses due to disease entering a non-immune population. "In these herds rising bulk milk titres indicate that damage is already done, and any intervention is reactive at this stage." And looking ahead, Mr Plate would like to see all producers contacting their vet before buying in animals from a herd of unknown disease status. "Being aware of the risks and putting more emphasis on biosecurity advice and subsequent measures is money well spent."



Figure 1: Myhealthyherd progress page for Johne's disease, illustrating the key steps required to assess disease risk and biosecurity options

biosecurity risk assessment module for their web-based herd health program Myhealthyherd. Used by producers in conjunction with their vets, this module assesses the risks and gives an assessment of each of six key diseases – IBR, BVD, Leptospirosis, Neospora, Johne's disease and TB – either being brought into the herd or spreading within the herd.

Buying-in procedures

The module is straight forward but comprehensive with 32 questions covering all biosecurity related issues, shown in Figure 1. These include the proximity of other dairy cattle, buying-in procedures and time scales – some of the disease problems in herds originate from cattle bought in five or ten years ago. The scores for each criterion carry a weighting specific to each disease.

Results generated from the assessment provide producers and their vets with a

summary of the risks – red, amber or green – for each of the diseases entering or spreading within the herd, as shown in Figure 2.

Using the assessments, vets and producers can devise bespoke control plans for each of the diseases and use the risk assessment results with routine testing for certain diseases, like Johne's and TB. It provides a blueprint for the herd and it is proving to be a valuable tool for around 50% of UK vet practices.

Data generated from Myhealthyherd shows that the risk of disease entry on many units is high with well above 60% of herds in the 'red' category. "This isn't surprising as there's a lot of herd expansion and restocking going on, but it does mean that it's even more important to make sure that any risks are minimised within the herd," adds Peter. As a practising vet, there's no doubt in

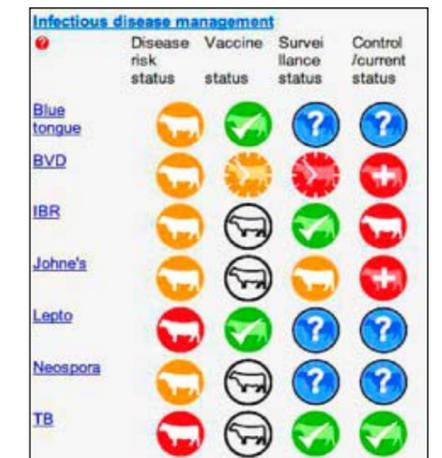


Figure 2: Myhealthyherd infectious disease management module, illustrating the traffic light scoring of risks and status

Peter Orpin's mind, that a policy of protect and prevent is far more successful than treating the disease; a view that DairyCo's R&D manager Elizabeth Berry fully supports.

Improve biosecurity

"Producers could do a lot more to improve biosecurity," she says. When we carried out a recent survey on endoparasites, at least 82% of producers didn't have any related biosecurity measures in place when they were buying in stock.

"And when you see how much liver fluke, for example, has spread then it is fairly obvious that more can be done on our dairy farms. I suspect the situation is similar when it comes to the even more threatening diseases, such as BVD or Johne's", Elizabeth Berry adds. "This whole area of biosecurity is one that is firmly on the agenda with our extension officers and as part of our workshops." |

