Holistic approach is key to improving and maintaining cow health How 'safe' is your herd?

The importance of protecting dairy herds against multiple infectious disease challenges has been brought into sharp focus with the publication of the latest data from one leading animal health company's monitoring scheme. So what can producers do to help to safeguard cow health?

text Matt Mellor

The results of tests on milk samples, collected from nonvaccinating British herds by their vets from January 2014 to October 2015, make interesting – and shocking – reading. The data, gathered by MSD Animal Health's EXPERTIS DairyCheck diagnostic scheme, show that 64% of dairy herds were antibody positive for Bovine Viral Diarrhoea (BVD), which means they have been exposed to the disease. And more than 60% of these BVD positive herds were also antibody positive for Infectious Bovine Rhinotracheitis (IBR) or bovine leptospirosis, and almost half were antibody positive for both these diseases, meaning they had been exposed to BVD, IBR and leptospirosis (see Table 1).

BVD, IBR and leptospirosis can all cause serious issues and economic losses. Depending on the disease, this may include reduced milk yield, infertility, abortion, respiratory disease and an increase in other conditions, such as calf pneumonia and scours. Employees are also at risk of contracting leptospirosis from infected cattle, which causes flulike symptoms, but may also result in organ failure.

Planned approach

According to MSD Animal Health's John Atkinson, the results send a clear message about the importance of working with your vet and

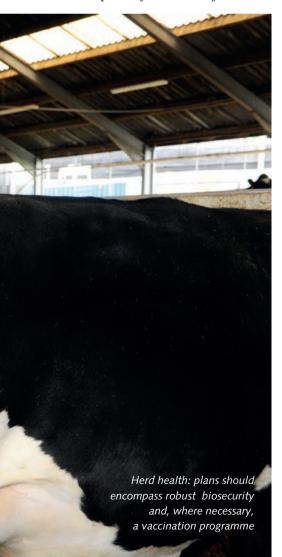


	mber of positive	percentage of herds positive
BVD and IBR	482	65
BVD and leptospirosis	468	63
BVD, IBR and leptospirosis	361	49

Table 1: Incidence of other diseases in 741 non-vaccinated BVD infected herds (source: MSD Animal Health DairyCheck data)

taking a planned approach to disease management. "It is significant to see that so many dairy herds have been exposed to these three important diseases in the UK, with many likely to be suffering the consequences of infection," he says. "But the fact that we are seeing multiple challenges is logical given that there are common risk factors for these different diseases. And one of the effects of BVD is to suppress the immune response, making cattle more susceptible to other disease challenges, such as IBR," he says.

"The good news is that a properly planned and co-ordinated approach will impact the herd positively by reducing the risk posed by all these major threats.



This reduces the need to deal with each one in isolation. "Time taken with their vet to plan a disease prevention and control strategy really will be well spent on many dairy farms. This planning should include: a review of biosecurity, to reduce the risk of disease entering the farm; the implementation of appropriate disease monitoring, to quickly detect any disease entering the herd; and the improvement of herd immunity through vaccination, where required, to help prevent certain diseases damaging health and productivity."

Poor biosecurity

One of the most common risk factors implicated in the spread of infectious diseases is a lack of effective biosecurity. This is an area for improvement on many British dairy farms, according to Mr Atkinson, and therefore represents an opportunity to eliminate risks and reduce disease incidence.

"Biosecurity is your first line of defence against infectious disease," he says. "The biggest risk to your cattle is often other cattle. So think about the risks of buying in cattle of unknown health status, as well as the potential for contact with neighbouring cattle over fences. Both BVD and IBR can be spread simply through nose-to-nose contact, so doublefencing may be a recommendation.

"Then there is the risk of disease being spread in water courses, in the case of leptospirosis, and some diseases can also be transmitted through bull semen. Every farm is different so make sure you review your own circumstances with your vet to ensure you are aware of all potential risks."

A closed herd is a good way to avoid bringing in disease, but may be unrealistic in many situations. So where buying in stock is unavoidable, his advice is to minimise risk in the first instance by only buying from known sources.

"It is always a good idea to enforce a period of quarantine," Mr Atkinson adds. "This enables you to get animals tested, and administer any vaccines or other treatments."

On most dairy units, vaccination will play an important role in disease prevention and control. And vaccination often fulfils two important roles. "Effective vaccination helps protect the individual vaccinated animal from the damage caused by a specific disease, but can also reduce the spread of disease within the herd," he says.



John Atkinson: "Vaccination should be considered as a preventative measure"

Information from testing to determine the disease status of the herd, together with the assessment of risks posed by various diseases, will help determine which vaccines are most appropriate for each herd.

Vaccination benefits

"If your herd is positive for a particular disease, then vaccination can help protect uninfected animals and reduce disease spread. If your herd is negative, then steps should be taken to protect its status, including a review of herd biosecurity.

"Where biosecurity is sub-optimal and there is a risk of disease entering your farm, then vaccination should be considered as an important preventative measure."

In many cases, as highlighted by the recent DairyCheck data, there may be a need to vaccinate against more than one disease, and in these cases it is important to understand how vaccines can be administered.

"It can sometimes be difficult to administer several vaccines when they all have to be given at separate times," explains Mr Atkinson. "Fortunately, some of the vaccines that help protect against the key infectious disease have been licensed to be given to the same animal at the same time."

For example, the market-leading vaccines Bovilis BVD and Bovilis IBR Marker Live can be mixed together for booster doses, meaning that only one syringe and injection is needed. And the UK's leading leptospirosis vaccine, Leptavoid-H, is licensed to be given at the same time, but at separate sites, as Bovilis BVD. "These license claims give producers the peace of mind that the combinations have been proven in terms of efficacy and safety, as well as helping improve on-farm efficiency, by saving labour time and reducing stress." |