

Many UK units fail to spot insidious disease that silently saps dairy productivity – and profits

# Could your herd have IBR?

Is IBR preventing your herd from reaching its milk production and fertility potential? Here a leading cattle vet shares how identifying and tackling the virus on one of KW's Compass Programme farms has seen herd health and profitability reach heights that the producer never thought possible.

text Rachael Porter

The figures are shocking and enough to make most producers reach for a bulk test sample kit for IBR. For a start there's the £4 per day in lost fertility. For every cow that returns to service due to IBR infection, that's three weeks added to the calving interval – at a cost of around £84. "Lost time is lost money in this instance," says vet Jonathan Statham from the North Yorkshire-based Bishopston Vet Group. "With acute IBR outbreaks you may be looking at a milk yield drop of between four and five litres/cow/day and that could last for a couple of weeks. Some cows just never get back to their milking potential."

Some cows, with high temperatures, will even suffer abortion too, which sends the cost of the disease spiralling even higher.

"So, as you can see from these figures alone, it's not a disease to ignore or to treat lightly. It has to be dealt with quickly and systematically."

## Milk drop

Producers John and Mark Smith, who run their 350-cow herd at Crosby Grange, at Thornton-Le-Moor in North Yorkshire, didn't ignore the disease. To be fair, they didn't know it was such a problem in their herd until they signed up to become a KW Compass Farm back in July 2008.

## Crosby Grange improvements

- Daily milk yield up by six litres/cow
- Herd calving interval cut from 454 to 418 days
- Average SCCs cut from 300,000 cells/ml to less than 150,000 cells/ml
- Clinical mastitis cases cut by 50%

Although things were improving by July 2009, it wasn't by as much as KW or the Smiths would have hoped," says Jonathan.

On-going problems with SCCs and mastitis, coupled with milk drop, and poor general cow health and fertility, prompted further investigation by Jonathan following routine screening for infectious disease.

"The herd tested positive for IBR – it hadn't been picked up before – and this helped to explain some of the costly and frustrating 'symptoms' that the Smiths' herd had been experiencing."

## Easily spread

IBR (Infectious Bovine Rhinotracheitis) is a herpes virus (BHV-1) and flares up in animals when they are stressed. "It's latent in infected animals and is 'reactivated' during times of stress or change – such as calving, housing and social group changes," explains Jonathan. "A range of stressors may trigger it – even at grazing. And it's easily spread in confined spaces, such as across a busy and hot collecting yard."

It may be difficult for herds to be 'biosecure' against IBR since it's an airborne disease and can be spread from farm to farm in high density cattle areas. But care should still be taken to screen purchased cattle before introducing them to the rest of the herd.

In its acute form, cows and heifers show severe respiratory infection, including nasal discharge, conjunctivitis and tracheitis. But in its sub-clinical form, poor performance – in terms of both milk production and fertility – may be the only outward signs of the disease.

"So it's best to screen for it. A bulk milk test will flag up if antibodies are present, but it won't tell you if the disease is 'currently active' with virus shedding from carrier cows," says Jonathan.

Blood testing a group of youngstock at between nine and 14 months old may be helpful in revealing if IBR is currently actively challenging the herd.

"If it is, then vaccination is key to control and that's what we did at Crosby Grange – it now forms part of the bi-annual vaccination programme for all cows and heifers at the unit."

The good thing about vaccination is that it can also be carried out, intranasally, in the face of an outbreak. Vaccination can be given by injection, but it needs to be ahead of a disease challenge. "So if the disease is already 'circulating' and cattle are relapsing, then vaccinate intranasally. This will stimulate the cow's immune system and boost her ability to fight off the disease. So it's like a treatment," says Jonathan.

That's what the Smiths did, going into the autumn in 2009 when they started seeing signs of milk



## KW Compass Programme

The KW Compass Programme has been designed to champion best practice and is taking a handful of commercial milk production and beef units on a journey of improvement – highlighting the farm strategies that really do make a difference to the bottom line.

drop at housing. Young stock – pregnant heifers in particular – is also routinely vaccinated. "This is one of the ways to make some headway in controlling the disease in the longer term. It protects the animals from the disease before they enter the milking herd and over time will reduce the proportion of the herd that are infected with IBR," he explains.

Vaccination gives protection for a maximum of six months, so herds have to be vaccinated twice a year. Costing around £5/cow/year – that's two doses at around £2.50 each – vaccination is money well spent, according to both Jonathan and producer John Smith.

## Vaccination programme

Crosby Grange's August 2010 monthly management report showed a rolling average milk yield that was 2,024 litres higher than August 2009, with 9,324 litres of milk sold, despite the fact that more than 50% of the herd comprises heifers in their first lactation.

And in just 27 months, the Smiths have also been able to slash a month off the herd's calving interval, as well as halving somatic cell count levels and clinical mastitis rates.

"This has to be, in part, down to tackling IBR," says John. "We have also improved mastitis control protocols and robust IBR and BVD control vaccination programmes have complemented lungworm controls," adds Jonathan.

He says that IBR is typically a greater problem in herds that also have BVD. "BVD damages the cow's immune system, which allows IBR to 'reactivate' again and again. We're seeing this problem across many UK herds."

John and Mark Smith are certainly delighted with the results and their herd's progress so far and believe that in 2011 – with IBR under control and when the high percentage of heifers in the herd move into their second lactation – that a daily average yield of 33 litres per cow is now a realistic target. |