

David Kent: "BVD crept up on us a second time – now it's belt and braces"

The BVD experience

Life is full of surprises – a statement that one Shropshire producer doesn't under-estimate when it comes to BVD risks. Despite precautions, as good as the majority of producers, the disease 'crept' into his herd. And that's something that could happen to many other herds unless a far more robust control programme is adopted.

text Karen Wright

Managing a traditional dairy unit to the south of Shrewsbury, David Kent has built up his Holstein herd from 50 cows to 300 during the past three decades. The 111-hectare farm, with a heifer rearing unit two miles away, lends itself to traditional dairying with cows grazing in the summer and housed and fed a partial TMR during the winter. The system, which David manages with the help from his wife Helen, supports an average yield of 7,800kg at 3.9% butterfat and 3.2% protein. Milk is sold on a Wiseman Tesco contract. "We are not purely yield driven," says David. "It's just one part of the jigsaw. We want fit and healthy cows with staying power," he adds, jokingly stating that his target is a herd of cows that produce 10,000 litres a lactation for 10 years and at the end sell for good barren prices. "But what is true is that the best cows are those that we don't notice and so often the records show this to be true."

BVD 'surprises'

So for these reasons disease control, with a focus on prevention rather than cure, is high on the agenda at Welbatch Farm. "But unfortunately BVD has given us some problems – and surprises," adds David. David's first experience of BVD was 20 years ago when he bought in some cows from a local pedigree sale. "Within a couple of months one aborted and produced a mummified calf. Then every six or eight weeks another cow would do the same. Clearly we'd bought in BVD." Once the BVD vaccine was available David was one of the first to vaccinate

his whole herd starting with heifers at bulling. "So when we had calf problems two years ago, with scouring in young calves and outbreaks of pneumonia in older calves, BVD wasn't the first thing that sprung to mind. It was cold and the milk replacer feeder had been freezing up – so we questioned availability and quality of feed."

Working with his vet, Geoff Lloyd from Camlas Vets, some calves were screened for the pneumonia viruses, and all the sampled animals came back with very high levels of antibody to the BVD virus, indicating that they had all been exposed to the virus since birth.

"We normally only see this situation in groups where there is a BVD carrier – a persistently infected or PI animal," says Mr Lloyd. "But this herd was fully vaccinated and had had a recent 'negative' bulk milk test for the BVD virus indicating that there wasn't a PI in the milking herd. It transpired that the affected cow had been dry at the time."

Mystery disease

"The situation in this herd was a mystery," adds Mr Lloyd. "So we tested all the young calves, up to six months old, for the presence of BVD virus to see if there was a PI and sure enough we found a two-month old calf positive for the BVD virus and so a likely PI."

This immediately put the focus on the calf's mother, who had been born on the farm and vaccinated as a heifer in 2009 and again in 2010. She and her mother, who was also still present on the farm but had been bought in as a pregnant



David and Helen Kent: "We now have a far more aggressive BVD control programme"

heifer back in 2008, were blood tested to show that the calf's mother was also a PI, but the grandmother was not. PI animals are born carrying the virus, carry it for life, and act as a source of infection for other animals – even if they are vaccinated. They can only be born to a susceptible dam that comes into contact with the virus when she is up to 120 days into pregnancy, or to a dam that is already a PI.

"All calves born to a PI cow will be PIs," adds Mr Lloyd. "In this case it is most likely that the grandmother had been exposed to BVD at the critical early stages of pregnancy and so was already carrying a PI calf when she arrived on the farm." And what surprised David Kent the most was how well these PI animals were. "The calf was the best we've had and her mother was fit and healthy. Both were culled, of course, but it was such a steep learning curve. We'd lost 44 calves in four months."

At this point Mr Lloyd advocated a far more aggressive control programme. "What many producers don't realise – and neither did David at the time – is that a PI animal will remain 'PI' regardless of any vaccinations and any

Tag and Test

Tag and Test, blood and milk screening for BVD, are offered through the NMR Group. All are simple and easy services to use. NMR's Nordic Star supplies the eartags and testing is conducted by NML. In the case of the bulk milk antibody test, a spare traceability sample, held by NML, is used so there's no extra sampling on farm. NML will shortly be offering PCR testing of bulk milk samples to screen for BVD virus.



calves born to a PI will themselves be PI calves," he says. "BVD is not controlled by vaccination alone."

Following Mr Lloyd's advice, any bought-in animals are now isolated and screened for BVD using either a milk or blood test for BVD virus. "I also recommended screening the milking herd using a PCR bulk milk test every quarter for the presence of BVD carriers. The cost of doing so is cheap compared with the potential losses. A one-off bulk milk test only screens the animals included in the bulk tank that day. Quarterly testing

ensures that all cows and heifers entering the milking herd are tested."

BVD tested at birth

All calves are tested for BVD at birth using Tag and Test – this has replaced blood testing at Welbatch Farm. "It's easier, quicker and cheaper," adds David. The piece of tissue punched out of the ear at tagging can be sent to the NML lab and results are back within five days. The tissue samples from beef calves are refrigerated and used for testing if results are required. Ongoing monitoring

through quarterly PCR is still taking place to make sure any other emerging threats are picked up that could jeopardise the BVD status of the herd. Now confident that BVD is, and should remain, under control in his herd David is still shocked at the naivety among some producers. "I see producers with larger prestigious herds full of expensive cows buying heifers and not taking any precautions. I thought I knew about the disease and I've been caught out. I'd like to see similar moves in England to those happening in Scotland to eradicate BVD." I

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