

Control plans for this costly disease spread south and gain momentum

BVD control moves on a pace

Industry experts believe that the move in Scotland to eradicate BVD from dairy and beef herds could well spread south of the border. And at very least it is likely to create a barrier to the trade of cattle with the rest of Britain. But aside from legislation, the health, welfare and economic implications of BVD should be enough to make producers want to jump off the fence and eradicate BVD from their herds.

text **Karen Wright**



Gordon Struth and Emma Patterson-Taylor, Animal Health and Welfare Division, Scottish Government

From December 2011 all Scottish cattle herds will be required to have an annual screening test with results from an approved laboratory passed on to the Government. In addition, it is proposed that the sale of all known persistently infected (PI) animals be banned from December 2012. About 40% of Scottish herds are affected by BVD.

Financial incentives offered to Scottish livestock producers resulted in 4,000 herds screened for BVD in the six months from September 2010 with follow up tests for those with positive results. This cost the Scottish Government £180,000.

"This put vets on more than 4,000 farms to talk about BVD and produced excellent data on disease prevalence," said the

Scottish Government's Gordon Struth, speaking at the NML BVD seminar, held at Larkhall in Lanarkshire, earlier this month. "It gave us a sound basis to launch mandatory annual screening."

Work carried out by the Scottish Agricultural College, supported by the Moredun Research Institute, illustrated the viability of an eradication programme.

Moving south

"Industry then came up with a plan that the Scottish Government has taken forward and it has proved popular with a wide range of stakeholders in the industry," added Mr Struth.

In 2006, the Royal Veterinary College

(RVC) began a pilot BVDV eradication programme for farms in south-west England. "We only have preliminary results, but emerging trends indicate that the 59% of study farms that were infected at the start of the project were not performing as well those that were BVD free," said seminar speaker and project co-ordinator Richard Booth, from the RVC.

Herds recruited onto this study, through Synergy Farm Health and Shepton Veterinary Group, underwent screening and control measures and now only 15% of the herds remain infected and should



be free of the disease within a year. "We are particularly interested in the production and health improvements in BVD-free cattle," added Dr Booth. "We are anticipating improvements in calving interval and calf health where herds have moved to BVD-free status."

The south-west project showed that farms removing PI cattle in combination with biosecurity enhancements and vaccination were able to reach BVDV freedom. "It is possible to maintain this status," added Dr Booth.

"Control measures should include routine surveillance on BVD-free farms and PI identification and removal on infected units."

"We are confident that we will have significant data early next year to show the benefits of BVD control, which will be even more convincing when we pool results from similar trials carried out by George Gunn's SAC team in Scotland."

Swiss success

Proof that an eradication programme is successful came from speaker Christoph Goetz, European sales manager for livestock and poultry diagnostics company IDEXX.

"The Swiss BVD eradication programme was launched in February 2008 and in three years the disease is almost eliminated," said Dr Goetz. "They took a straightforward strategy to detect and eliminate PI animals and all dairy cattle – 1.6 million – were tested for the presence of PI animals using mainly ear notch samples. Different PCR tests and an ELISA (IDEXX) test were also approved for use."

In phase two of the Swiss programme,



Jonathan Statham (right): "We give participating producers practical advice to help them make improvements in BVD control"

new-born calves had to be tested within five days of age. Again ear notches were collected and tested. "About 600,000 calves are tested each year and this will continue until the middle of 2012 when phase three will kick in with routine testing to ensure the absence of BVD," he added. Diagnostics for the detection of BVD antibodies in blood and bulk tank milk will be used."

When the Swiss BVD eradication programme started PI prevalence was at 1.5%. By July 2011 this had dropped to 0.07%. BVD has practically disappeared from many Swiss cattle herds.

The Swiss programme is paid for by state funds and producers who pay about one third of the total costs through an additional fee when purchasing ear tags. A £225-per-animal subsidy is paid for eliminating PI animals.

"We now have a programme in Germany to identify and eliminate PI animals. New-born calves and sale animals must be tested using either blood or ear-notch samples but whole herds are not tested for the presence of PI animals, as in Switzerland," said Dr Goetz. "And BVD vaccination is allowed in Germany, unlike Switzerland, and it is used in densely populated cattle areas."

Beef cattle that are not moved from one farm to another and are being shipped directly to abattoirs have not been included into the German programme.

"As PI prevalence is beginning to decrease in many areas, producers in Germany are starting to see positive impacts of the BVD eradication programme and herds are becoming healthier."

Pilot projects

BVD control programmes are being piloted in North Yorkshire and Northumberland. "The restrictions in Scotland may lead to barriers to trade for England's beef and dairy herds if steps



Richard Booth: "BVD-free status can be achieved"

are not taken to manage the problem south of the border," says Ripon-based Bishopston vet Jonathan Statham, who is leading the project.

The projects involve 10 beef and 10 dairy herds in Nidderdale and 18 beef and two dairy herds in the Coquet Valley, Northumberland. They have three phases – disease mapping, measuring BVD impact on herd reproductive and youngstock performance, and developing herd specific BVD control plans.

"Each herd will have its baseline BVD status identified through testing and this information, combined with the farm's management records such as calving intervals, fertility information and calf performance, will be used to prepare a herd health improvement plan," says Mr Statham. "Working with the vet, the producer will be advised of the practical steps that need to be taken to implement improvements and progress will be recorded."

The projects will run for one year and it is hoped that other cattle units in the region and further afield can benefit from the results. |

Booth & Brownlie 'Establishing a Pilot Bovine Viral Diarrhoea Virus Eradication Scheme in Somerset' will appear in Veterinary Record