

# Much to be done to bring BVD under control

IT would have been difficult at the 2014 BCVA congress 2014 not to receive information about BVD.

There was the launch of BVDzero.co.uk by Boehringer Ingelheim with a special symposium, plus the involvement of MSD Animal Health and National Milk Laboratories

(NML) with the promotion that this disease is serious and needs to be controlled by veterinary involvement.

On the first day there had been a slight controversy with the experiences of Waitrose suppliers not apparently receiving sufficient veterinary input and this was indicated at another conference. Professor Joe Brownlie spoke at the South West Dairy Conference in the administrative centre of the South West Healthy Livestock Initiative. This initiative includes BVD and he asked the farmers how many of them were involved.

He apparently expected a healthy show of hands but after some prompting managed to encourage one farmer to acknowledge a partial involvement. With a national campaign it appears that there is much work to be done for veterinary knowledge to be converted into on-farm action.

Dr Horst Schirmer of the Friedrich-Loeffler-Institut, Germany, reported the outcome from 16 years of the early detection and elimination of persistently infected (PI) animals. During the past three years there has been a fall in the number of PIs detected and culled. However, a highly virulent BVDV type 2c has emerged which has a 60% mortality, with calves showing negative to ear notch ELISA testing. Some calves did not react to vaccination or field virus although the BVDV genome was detected in all animals.

BVDV type 2c mutation is not considered to be an introduction but a mutation and can blow up again. The speaker warned that an exclusive focus on PI animals might hamper further progress in the advanced stages of BVD eradication.

The DEFRA ambition for the BVD National Control Strategy was explained by Christine Middlemiss. The aim

is to have a single control message. Surveys have shown that farmers have found messages to be confusing and conflicting, with the farmer having difficulty in identifying the impact of the disease on farm.

It is recognised that there are regional issues and bTB in particular limits the ability of farmers to take up other control initiatives. Tenders are due for an integrated disease control

scheme that is industry-led and sustainable. Data on BVD will be collated nationally and there will be

on-farm performance indicators.

Emphasising that BVD has a "lower status for action by Government", veterinary practices were urged to make full use of any funding that becomes available, to engage with the programme, share their information and contribute to national control.

## An important role

Dan Humphries (Lambert, Leonard & May) emphasised that veterinary practices have an important role to play with BVD and that the Check Tag scheme allows closer involvement with herd control.

The tags are ordered by the practice and billed to the farmer; they are sent directly to the farmer who sends the sample to the laboratory (10 calves), with a one-week turnaround for the results which are sent to the practice and the farmer.

On point of sale, the presence of the ear tag advertises the likely disease status and allows potential purchasers to check on the open access web database that the calf has tested negative.

On average, a negative test increases the value of the calf by £20 and demand for tags has increased in the past six months. XL Vet member practices have developed the Check Tag scheme but the tags are available to all practices.

BVD testing at the practice

(IDEXX) allows added value for the farmer with bTB pre-movement testing and the BVD result available on the day of the bTB reading.

NML has a BVD Herdcheck programme which includes routine screening for dairy and beef herds. Karen Bond explained that bulk milk screening is now

extended to herds of 1,000 cows. Quarterly bulk milk BVD antibody testing is being carried out on over 800 herds with 24% being persistently negative.

Vaccination complicates interpretation of positive results and bulk milk qPCR is applied to detect the BVD virus and thereby monitor the herd for active infection. Only cows contributing to the milk tank will be monitored so dry cows and those under treatment would not be included at a single test.

Testing of calves from blood samples, to check for BVDV exposure, before vaccination and after maternal antibodies have waned has been available for many years. The ease of sampling with the ear tag is popular with farmers but to detect PIs as part of herd control all calves, including stillbirths, should be tested. Results to date indicate that 17% of herds have multiple positive animals and 20% only a single positive.

The BVD Herdcheck programme provides effective means of disease surveillance, which are CheCS approved. Biosecurity and purchasing protocols are often not strictly applied by farmers, making early detection of disease essential.

Alistair Smith (Charles Sturt University, Wagga Wagga) compared BVDV control in Australia and the UK and concluded that there is a lack of understanding and poor compliance with BVD control protocols. There are many opportunities for the virus to continue to circulate from cattle to cattle and farm to farm.

Movement of animals between countries without screening means that new genotypes can move into a geographic region adjacent to areas that have eradicated the disease.

There is a need to investigate the ability of the available vaccines to cross protect, with adequate foetoprotection, against current BVDV subgenotypes.

Understanding about the structure, behaviour and clinical manifestations of the BVD virus, the detection and interpretation of test samples and how to apply control and eradication measures need to involve full commitment from veterinary surgeons to advise and support farmers.

## Recycled manure

Martin Green (University of Nottingham) outlined the current situation with the use of recycled manure solids for bedding and related



Alistair Smith.

aspects of management. The use in England and Wales is legal as long as the practice does not present an unacceptable risk to public or animal health.

There are conditions for use that include: raw cattle manure only from the same farm, not composted or digested and from the same epidemiological unit that is not disease restricted; dung from

TB reactors or inconclusives to be excluded; only used for cattle over six months of age in cubicles, not for deep pens or in calving areas; milk must be pasteurised. Additionally, it is advised to actively monitor cow health and have excellent teat preparation.

Within one month of commencement, the Red Tractor Scheme must be informed if manure is being used for bedding. Greater understanding is required to help inform the legal position and a study is in hand to define acceptable and unacceptable risks and to assess the microbiological population over time, the management issues with bedding the material and any effects on milk quality.

Peter Orpin gave a detailed account of the true cost of cull cows and discussed *The Circle of Doom* or "an illustration of the dynamics of culling within a dairy herd based on retention of high-risk cows and exposure to high-risk situations".

Peter and Dick Sibley ran a thought-provoking workshop on the final day attended by some grey hairs, recent graduates and students. Everyone was involved to tease out the low-risk and high-risk areas for cow calamities on the farm and the low-risk and high-risk cows.

Putting yourself into the mindset of a recently calved heifer, introduced to a bullying dominant population, and recognising that her loss would have the greatest economic impact, shows up areas for improvement. Commenting that emergency culling is often unknown to vets visiting the farm, examples of improvement to slopes, corners, walkways and gates yield as much as 1p per litre when accurately costed.

The Red Tractor Scheme offers the opportunity to identify culling losses and it will profit the farmer for vets to recognise the detail and the value of emergency culling reduction.

● Full accounts of over 60 papers and an array of posters are presented in the proceedings.

The 2015 BCVA congress is from 15th to 17th October in Southport.

**RICHARD GARD** concludes his reports from the 2014 congress of the BCVA with details of some of the presentations relating to BVD and its control and the need for greater veterinary involvement



Karen Bond.