

BVD must be addressed—no excuses

Milk producers can no longer ignore Bovine Viral Diarrhoea (BVD)—they have to address the problem head on and eradicate the disease from the UK argues vet Neil Howie.

No ifs, no buts. No UK dairy herd should be experiencing the clinical effects of Bovine Virus Diarrhoea (BVD). Nobody should be selling it, nobody should be buying it, and nobody's cattle should be catching it over the fence.

We know enough about the virus, how it spreads and causes disease, how to test for it and control it.

There have been great efforts, supported by central funds and with enthusiastic support from stakeholder groups, to encourage cattle breeders to engage in the four pillars of BVD management: —to make a plan; —to investigate herd status; —to control the infection; —and to monitor progress.

Scottish herds are well into a compulsory eradication scheme.

It seems farmers and vets are fed up with being told BVD is bad, yet there is an appetite for help in formulating plans and responses on individual farms. Guidance is needed about how to progress.

We need to move to the next stage quickly, to capture the benefits of the efforts made so far, and to turn awareness into action. Each and every herd owner, working with their vet, should address the question: 'Is BVD hurting my herd?'

There are only three possible answers:

—Yes: in which case, well done. You can only know that by having made a diagnosis from test results, maybe from a screening investigation, or possibly during a disease investigation. Well done, not because you have BVD, but because you know you have BVD, and from there you can make progress.
—No: in which case, brilliant. Not only do you not have BVD, but you know you do not have BVD. The challenge is to keep that status, and to carry on testing so that you carry on knowing you are free.

—But for most milk producers, the only proper answer is: Not sure. For all that has been written, talks given, access to resources provid-

ed, most herd owners do not know whether their herd is infected with BVD virus. Is that your situation?

Many herds are inoculated with the good vaccines which are available through the vets. But we know, through a number of studies, that many herds which have active infection have been vaccinated for some years.

When asked to assess their herd status, many of these owners will rely on the use of vaccine to believe they have BVD under control. But 'vaccinated' does not indicate a status, which can be either 'negative' or 'not negative', with regard to infection.

So why is there this disconnect between owner perception and reality? In my opinion the vaccines are good, and a good vaccination programme is likely to be advisable for all but a few herds, although there may be some where a combination of isolation and disciplined biosecurity may be deemed sufficient to maintain freedom from infection.

But in my experience, the introduction of virus to such naïve herds can be devastating.

If I buy some posts and wire, I do not have a stockproof fence. I need to plan with skill and effort to put the posts in, fix the wire and make it stock proof. Similarly, buying vaccine, and even emptying the bottles, does not build a BVD protection programme.

It is not the vaccine which is underperforming in infected herds, but the way the infection is being allowed to persist in infected animals. Vaccine will not change that. While it should protect animals which have not met the virus from becoming infected and producing persistently infected (PI) calves, our investigations show that there are flaws in most herds' programmes which mean that investment in vaccine may not be paying back as it should.

If you are spending on vaccine, treat it as an investment. Take advice from your vet as to which

animals should be given what dose, how and where and when.

Experience shows that vaccinating does not mean herds are free from BVD infection. That means questions should be asked about whether vaccine can be used more effectively, and absolutely not that vaccine should be dropped from the protection programme. Most importantly, it means that vaccinated herds should have monitoring programmes to establish whether the protection from vaccine—and other measures—are keeping the herd BVD-free.

What does a monitoring programme look like? What are the tests and how do you use them?

There are many options to test for BVD. Naturally induced antibodies can show an animal has met the infection, and made an immune response to kill the virus. But also they may be there from passage through colostrum from the dam or another colostrum donor.

Antibodies may be there as a result of vaccine stimulation. The tests cannot distinguish between these different origins of antibodies, so skill and judgement has to be exercised in designing and interpreting antibody test programmes. It is generally agreed that a 'Young stock screen', blood samples from representatives of groups of nine to 18 month old stock, taken before they are vaccinated, is a most useful test.

Infected animals carry BVD throughout their body, including skin, which is why tissue samples, taken when applying specially adapted ear tags are useful to detect infected animals from soon after birth to adulthood. Hence,

the 'Tag and Test' systems which have been so well accepted by farmers.

Milk samples can be tested for BVD antibodies and for BVD virus. And bulls can be semen sampled for virus.

The available tests should be used ideally in a multi-layered combination, to create a dynamic, rolling surveillance programme for every breeding herd. The choice may be to go to one of the packaged programmes of testing available through various agencies, or

with your own vet, to design a bespoke programme suitable for the individual herd.

For most, this should show the virus is not hurting your herd, but it is important to know that, and that control programmes are working. Should there be a failure, early warnings of a change to infected status will allow prompt action to reduce the impact as much as possible.

If you are one of the herds which is infected (we think around 20% at any time), creating a monitoring programme should help identify the infected animals, facilitate their removal, and demonstrate that spread is under control.

We need every breeding herd in the UK to monitor for BVD. We can—and will—eradicate this infection, which causes so much harm, loss and cost to the cattle industry. We are getting left behind by many other countries, which have either already eradicated BVD, or are well on the way to doing so.

Every herd owner can help themselves by monitoring and protecting their herd. There is no need to wait for the programmes to be imposed by government.



Vet Neil Howie.

• *Neil Howie is an independent veterinary and livestock production consultant. He has been a member of the Stakeholder Group and the Science and Technical Group of the RDPE supported BVDFree England programme. He has helped National Milk Laboratories develop their CHeCS approved BVDHerdCheck monitoring programmes.*