

Feature

ENDEMIC DISEASE

Working together to eradicate BVD in Scotland

A mandatory programme of screening for bovine viral diarrhoea has recently begun in Scotland as part of efforts to eradicate the disease from the national cattle herd. In support of the programme, new guidance and training has been launched for the private veterinary surgeons involved, as Sheila Voas, acting Chief Veterinary Officer in Scotland, explains

FARMERS, vets, scientists and government have been working together on creating a national bovine viral diarrhoea (BVD) eradication plan for Scotland since 2009. The Scottish BVD eradication scheme really is a partnership project and no one organisation or set of interests is in charge. The scheme we have collectively developed is in four stages: a voluntary phase with subsidised screening; mandatory annual screening; control measures; and biosecurity requirements for remaining infected herds. Since December 1, 2011, we have been in the second stage, and by February 1, 2013, every breeding cattle herd in Scotland must have been screened for BVD.

The latest milestone in Scotland's efforts to eradicate BVD came at the end of last month, when we published a guidance booklet for vets, and launched an online training module, both to support mandatory annual screening. We have also published a booklet for farmers, with information appropriate to their needs, which has been sent to over 14,000 cattle keepers in Scotland.

The guidance booklet for vets was developed by Peter Nettleton, a former veterinary virologist at the Moredun Institute who has over 30 years of experience with BVD. I am delighted that the BVA and British Cattle Veterinary Association (BCVA) were both happy to approve the guidance and put their names on the front cover, and I hope that, as a result, vets will feel they can have confidence in the advice inside.

The training takes the form of an online module, which was developed by

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Sheila Voas, acting CVO for Scotland

George Caldwell at the SAC in St Boswells. It is pretty robust and takes around three hours to complete and can count towards a vet's annual CPD requirement. Before anyone can move on from one section to

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the next, they must pass a short, multiple-choice assessment – if they get any answers wrong, they cannot progress to the next section until they have gone back and repeated the question section successfully. The module has been thoroughly tested by a panel of vets in practice in Scotland and it was well received by all.

The training module can be accessed free of charge by vets in practice who have cattle clients who are required to screen for BVD – so that means vets in the north of England with clients in Scotland can get access too. Anyone else wishing to access it should contact George Caldwell directly (telephone 0131 535 3130, e-mail: linsay.eaglesham@sac.ac.uk).

The BVD team in the Scottish Government has tried to make sure that

vets have all the information they need to support the eradication efforts, and we're always available on the end of a 'phone or by e-mail for any vet who has a question. In the past year we've delivered talks to vets from Hexham to Inverurie to Dumfries, and we're also happy to visit practices to explain the scheme to clients, which we've done over 20 times in the past 18 months.

With regard to mandatory annual testing itself, we have made a range of testing methods available. This is for two reasons; first, Scotland's relatively low disease prevalence means that it is important to have cost-effective ways of demonstrating BVD freedom through screening; and secondly, because there are nearly as many different ways of managing a herd as there are herds in Scotland. Blood, milk and ear tissue can all be sampled, and virus and antibody tests are available. Full details are included in the guidance booklets sent to all vets and cattle keepers, and are available online at www.scotland.gov.uk/bvd

Samples must be sent to approved laboratories for testing and, at the time of writing, these were Biobest, AHVLA, SAC, Eclipse and Nationwide. We expect others to be approved soon.

Shared responsibility

Some vets have expressed concern that they may be held liable if a herd they have tested and found to be negative later turns out to have a BVD virus infection. We have taken great care to ensure that, so long as vets are meeting their professional standards and are not acting negligently, there is nothing to worry about. There is a shared responsibility between the keeper, the vet and the laboratory.

For instance, where a vet is doing check testing in a herd, the keeper is required to consult with him or her to identify the

Testing for BVD: Statutory Module for Veterinary Surgeons

Section 3 - Herd dynamics of infection

Impact of BVD

Small to medium herd

- Catastrophic impact on fertility
- High proportion of PI calves born
- Herd level immunity is subsequently high
- Disease re-enters herd as herd immunity falls several years later

Large herd

- Infertility affecting second bred animals
- Relatively low level of infertility due to BVD infection
- Few but regular PI calves born
- Largest impact is on calf health
- Herds remain infected

In the smaller herd catastrophic outbreaks of BVD are more likely with a progression to high herd immunity that falls over several years to leave a susceptible herd ready for another intrusion of BVD. Although it has to be recognised that even in the smaller herd there is the possibility of an adult PI animal remaining in the herd to generate a PI calf leading to calf health problems. But the probability of a PI in the adult herd is simply lower, because there are fewer animals.

In contrast the large herd may have little in the way of infertility attributable to BVD infection outwith the animals being bred for the second time, an age where there is a high level of wastage in the dairy herd and where most infertility is seen in the large beef cow herd. The largest impact is likely to be on calf health due to the presence of single PI animals on a regular basis. The herd remains infected and the majority of animals are immune, but sufficient naive animals remain.

Assessment ? Slide 5 of 9

The Scottish Government
Riaghladh na h-Alba

VET'S GUIDE TO:
Mandatory BVD
Screening 2012

Supported by the BVA and the BCVA

The online training module (above) is available free of charge to all vets who have clients in Scotland who must test their herds for BVD. (left) A booklet for vets gives guidance on Scotland's mandatory BVD screening programme

by mandating ear tissue tag testing as the only testing method permitted, but in Scotland we have taken a deliberate decision to include vets as much as possible, and we always advise farmers to consult their vet before making any decisions.

Government support

Some have questioned why the Scottish Government is legislating to compel farmers to test their herds for BVD. There are many good reasons. Scottish Government economists estimate that BVD eradication could be worth £50 to £80 million over 10 years to our livestock industry: that's a very conservative figure as it does not consider all the consequential losses of BVD, such as increased pneumonia and scour. There are obvious welfare benefits, and anything that significantly reduces the number of empty cows and lost calves is going to improve the environmental efficiency of each kilo of beef and litre of milk we produce. Also, Scotland's place in the market is at the quality end, and reputation is critical. With the Nordic countries virtually clear of BVD, Switzerland in the third year of an eradication scheme, Germany in the second year and Ireland in the voluntary year, if Scotland wants to stay at the top table, we must act now.

In the end though, the answer as to why the Scottish Government supports the scheme is a simple one – even in the best voluntary scheme, there will always be a small minority of farmers who prevent the majority from enjoying the full benefits of BVD freedom. As long as there is a serious risk of getting BVD back over the fence or through buying in cattle, BVD will continue to circulate and the costs in terms of biosecurity and breakdowns will continue to fall on those who have done their best.

That's the lesson from Orkney, where an excellent local voluntary scheme in one of Europe's most densely stocked cattle regions fell just short of complete eradication. The industry tells us that a compulsory national scheme is the only way to ensure that everyone can fully benefit, and we are happy to provide our support.

Next steps

This spring, we will consult on the next stage of the Scottish BVD eradication scheme. There are three main proposals to consider:

- A ban on knowingly selling persistently infected cattle;
- Requiring herd or animal status declarations before sale or movement; and,
- Movement limitations on 'not negative' herds – this could be regionalised and phased.

We'll be working closely with the BVA and BCVA in developing the details of this next phase, but we learn a great deal from vets in practice feeding back to us their views and experiences, so we would appreciate responses from as many vets as can find the time to do so. I will write to all livestock practices in Scotland when the consultation paper is published, and we will make an online response form available to make it as easy as possible to reply. Even if someone has no specific points to make, it is always important to us to know whether people actually support the eradication effort.

We've come a long way to get to the point where we have legislation before the Scottish Parliament, guidance for all vets and farmers, and training materials online. From now on the success of the scheme will depend entirely on the extent to which vets and their clients work together to remove BVD from each herd. The philosophy behind the strategy is that it allows farmers and vets to take BVD eradication into their own hands, rather than the heavy hand of bureaucracy going round the countryside testing everything in sight. Regardless of national schemes and legislation, farmers will improve profitability and herd welfare by getting rid of BVD. Working together with their vet, it's something they can all achieve.

- More information on Scotland's BVD eradication scheme and access to the CPD module and guidance booklet is available at www.scotland.gov.uk/bvd. The BVD team can be contacted by e-mail: bvd@scotland.gsi.gov.uk, or by telephone on 0300 244 9823.

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separately managed groups. If a vet arrives to find all the cattle have obviously just been turned out of pens and barns and are standing together, it is legitimate for him or her to tell the keeper to put the animals back and wait another two months, or to use a different testing method. The legislation gives the vet the final say.

The principle behind the shared responsibility is that the farmer must cooperate with the vet to ensure that the appropriate testing is carried out. Then, on the basis of the samples submitted, the laboratory gives a herd status of 'negative' or 'not negative'. The vet's responsibility is to test adequately and appropriately, based on information provided by the farmer, which is why we're providing guidance and training to help.

We trust our vets and know that we can depend on their professionalism – in fact, we believe they are pivotal to the success of our scheme in Scotland. There is no group more eager to get rid of BVD than our vets, and many vets have played a big role in developing this scheme. Some other countries removed vets from the process