

## EXECUTIVE NOTE

### THE BOVINE VIRAL DIARRHOEA (SCOTLAND) ORDER 2012

#### SSI 2012/78

This Order introduces mandatory annual screening for bovine viral diarrhoea (BVD) for breeding cattle herds and single breeding animals, as part of the Scottish BVD eradication scheme. It also requires the keepers of non-breeding herds or animals to test any calves born.

#### **Policy Objectives**

The purpose of this instrument is to require the keepers of all breeding cattle herds and animals to screen their herds and animals for BVD at intervals of up to 13 months between tests. A first screening test is required by 1 February 2013, for herds and animals which are kept in Scotland for a period of 30 days between the coming into force of the Order and 1 January 2013. Herds and animals to which the Order first applies after that date will require a first test within a month of it so applying.

#### **Policy Background**

##### *BVD – The Disease*

BVD is an infectious disease of cattle which is widespread in Scotland – a SAC prevalence study in 2007 showed that around 40% of herds have evidence of exposure. It has been regarded, in terms of economic impact, as the single most important disease of cattle in Europe and North America.

BVD has welfare implications for infected animals, especially as it suppresses the immune systems of infected animals, greatly increasing their risk of developing a wide range of conditions such as scouring, pneumonia and other respiratory diseases. It is a major cause of infertility, abortion, a failure to thrive and is often fatal.

In addition, Scottish Government economists have calculated that eradicating BVD could provide a net benefit to the Scottish economy of £50M to £80M over ten years, and would reduce the intensity of greenhouse gas emissions.

##### *The Scottish BVD eradication scheme*

The Scottish Government is committed to an ambitious industry-led scheme to eradicate BVD, arguably the most important endemic disease of cattle in Scotland.

The scheme has been developed in partnership between industry, the veterinary profession, scientific bodies and the Scottish Government. The scheme that we have collectively developed is in four stages. To understand the scheme, it is first essential to understand something of the nature of the disease, as it is very unusual.

There are two types of BVD infection – transient infection (sometimes called acute infection), and persistent infection. Transient infection is where an animal is infected with BVD virus during its life. The animal will create an antibody, which will fight off the virus in

around three to four weeks. They will have antibodies to BVD in their systems for a long time, often for life, and while they do they will be immune.

The real concern is persistent infection. This only occurs where a foetus is infected in the womb during the first three months of pregnancy, either by their mother becoming transiently infected at that time, or because the mother is itself persistently infected.

Cattle infected in this way are known as Persistently Infected (PI) animals. Their systems never recognise the virus as alien and they do not mount an antibody response. They shed virus in huge quantities and are highly contagious throughout their lives. Around half die in their first year, but around a quarter survive beyond two years and may enter the breeding herd. Most will grow poorly and frequently suffer from ill-health, though some appear entirely normal.

If PI cattle are removed from the national herd, BVD will be eradicated.

The Scottish eradication scheme is designed to reduce the number of PI calves being born by first putting responsibility, and power, in the hands of farmers, and then by making it increasingly difficult to continue to have BVD virus active in the herd. The intention is that this will encourage farmers to eliminate BVD from their own herds, but those who choose not to will have consequences in terms of trading disadvantages, movement restrictions and biosecurity controls.

#### *Stage One: Subsidised Screening*

This stage ran from September 2010 to April 2011. The Scottish Government offered a small subsidy to all breeding herds to support a screening test for BVD through their veterinary practice. £36 was available for an initial test, and if this proved positive, a further £72 was offered for follow-up testing to identify infected animals, or to pay for the vet's time to discuss BVD with discuss the test result and what measures should be taken as a result.

Approximately 4,000 herds took advantage of the subsidy, at a cost to the Scottish Government of £180,000. Of these, we received test results for around 3,500, made up of around 3,000 beef herds and 500 dairy herds. These showed that 23% of beef herds had evidence of exposure to BVD, while the figure for dairy herds was 52%. The percentage of herds with a current infection would be lower than those figures.

This stage delivered multiple benefits – it provided us with meaningful data upon which to base policy decisions; it significantly increased the awareness of the disease among farmers; and it put vets on 4,000 farms to talk about BVD, which increases the understanding of herd health management.

#### *Stage Two: Mandatory Annual Screening*

This is the stage that is to be enabled by the Bovine Viral Diarrhoea (Scotland) Order 2012. The purpose of this stage is to ensure that all breeding herds and breeding animals have a BVD status. This will be a foundation for the next stage of the scheme.

Keepers of breeding cattle herds and animals will be required to screen their herds and animals for BVD at intervals of thirteen months, with a first test by 1 February 2013. It is not

necessary to test all or even most of a herd to find out if it may be infected with BVD virus; by sampling a small number of calves for antibodies, or by looking for antibodies in a bulk milk tank sample, it can quickly and cheaply be discovered if they have ever come into contact with BVD. Most herds will be negative at this stage.

A wide range of testing methods has been offered, appropriate to dairy and beef herds, and to suit all different types of herd in Scotland. We have taken care to make cost-effective options for all, as farmers will pay the cost of testing.

Blood samples may only be taken by a veterinary surgeon. Milk samples can also be taken by veterinary nurses, milk collectors or milk recorders. The only sampling method open to farmers directly is ear tissue tag testing.

Samples must be sent to an approved laboratory. To be approved, the Scottish Ministers may require a laboratory to undergo such inspections and quality assurance testing as they consider necessary. The approved laboratories are listed on the Scottish Government website.

After testing the samples, the laboratory will declare a BVD herd finding of either **negative**, or **not-negative**. Ambiguous or inconclusive results will count as not-negative until and unless proven otherwise.

A vet can change the herd finding of a client from not-negative to negative, provided that certain conditions are met. Firstly they must have completed a free online CPD module, which the Scottish Government commissioned SAC to develop. This takes around three hours to complete and is available through the Scottish Government website. This course is open to all vets in practice, but completion is compulsory for those who wish to change the herd status of a client.

The vet must carry-out such follow-up testing as they believe is necessary, in accordance with guidance provided by the Scottish Government. This could range from a simple re-test to virus testing most or all of a herd, depending on the local conditions and the result of the screening test. The vet must declare that he has carried out such follow-up testing, and that either no PI cattle were found, or that PI cattle were found, provide the official identity numbers for them, and state that the keeper has informed him that they have been removed from the herd. The Scottish Government can check this through the Cattle Tracing System.

A small number of calves are born each year to non-breeding herds or animals, such as finishers, typically by them accidentally buying a pregnant cow. In such cases the keeper will be required to test them for virus within 40 days of birth or sooner if they plan to move them before then.

### *Stage Three: Control Measures*

We are in discussions with our partners on this scheme regarding the details of the third stage, and we will publish a consultation paper in spring 2012. NFUS are currently consulting their members, and at the time of laying the Order they had received over 100 responses, with only two negative.

It is intended that the next stage of the scheme is in three parts:

Part One – a ban on knowingly selling PI cattle. There is a general consensus that this should happen.

Part Two – BVD herd status must be declared prior to sale or movement, other than direct to slaughter. A system of presenting cattle for sale through one of three BVD categories has been developed with the particular input of the Institute of Appraisers and Auctioneers Scotland.

Part Three – Herds with a not-negative herd status would only be allowed to move cattle direct to slaughter, unless the individual animals to be moved had been tested for BVD virus. It is much less certain that this will be introduced from 1 December 2012, when the other parts of this stage should be, as it is a considerable burden to place on not-negative herds, which at this time may well still be not-negative through no fault of the keeper. This would be of particular importance in areas where there is higher prevalence of BVD, such as Ayrshire and Dumfriesshire.

#### *Stage Four: Biosecurity Controls*

Once we are in the position that it is extremely unlikely that a PI animal could be bought in, and farmer's have had sufficient time to deal with any BVD problem in their own herd, and prevalence is at a very low level, it will become essential to prevent BVD spreading from those herds who still have BVD to neighbouring farms. From a date not earlier than December 2013 we intend to place biosecurity requirements on such herds that may require them to house cattle, or to create a minimum three metre boundary against neighbouring cattle farms. This will also be consulted upon in due course.

#### **Consultation**

The BVD eradication scheme has been developed in partnership between industry, the veterinary profession, scientific bodies and the Scottish Government, and has twice been consulted upon; in 2010 on the general principles, and in 2011 on mandatory annual screening. The scheme has the full support of all farming industry bodies, notably the National Farmer's Union Scotland, the National Beef Association, the Scottish Beef Cattle Association, the Scottish Dairy Cattle Association and Quality Meat Scotland. Also in favour are the Scottish Society for the Prevention of Cruelty to Animals, the British Veterinary Association, the British Cattle Veterinary Association, the Scottish Agricultural College and the Moredun Research Institute. No industry, veterinary, scientific or welfare bodies have voiced opposition to the scheme.

The Scottish Government published a consultation paper on mandatory annual screening on 17 January 2011, with responses required by 15 April 2011.

A total of 38 responses were received; 35 were in favour of the proposals, and three were opposed.

Of the three responses opposing the proposal, one was public and two anonymous. The public one was from a farmer. All three were from the north-east of Scotland. Their main grounds for opposition were that the government should not compel farmers to control BVD; this should be left to farmers to decide for themselves.

While we accept this as an entirely legitimate position, the Scottish Government has gone to significant efforts to gauge the depth of opinion across the farming industry and crofting sector, and is confident that there is a very substantial majority in favour of a compulsory scheme. Any voluntary scheme, however successful and popular, will never eradicate BVD, and so there will always remain a risk of buying in BVD or contracting it from neighbouring farms. The industry has told us very clearly that they want legislation to ensure that everyone can benefit from Scotland-wide BVD freedom.

The opponents also argued that it would not be possible to eradicate BVD from Scotland unless the rest of the UK were to take part. However, as BVD herd status declarations would apply to cattle coming into Scotland, farmers in Scotland should still be able to source carefully. The scheme puts the responsibility on farmers to achieve a negative BVD status, and then maintain it.

A significant amount of other feedback was received which contributed to refining and improving the details and timing of mandatory annual screening.

### **Financial Effects**

This instrument is accompanied by a Business and Regulatory Impact Assessment (BRIA) and this covers all envisaged financial consequences. It should be noted that the most significant purpose of BVD eradication is to improve the profitability of the cattle sector.

**Agriculture, Food and Rural Communities Directorate  
Animal Health and Welfare Division  
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