

Final Business and Regulatory Impact Assessment

Title of Proposal

The Bovine Viral Diarrhoea (Scotland) Order 2019

Purpose and intended effect

- **Background**

Bovine viral diarrhoea (BVD) virus causes a complex of diseases in cattle, the most important of which can interfere with reproduction, affect the unborn calf and ultimately lead to fatal mucosal disease. BVD virus can also cause enteritis during acute or transient infection which is usually mild but occasionally severe enough to cause death, even in adult cattle. Transient BVD virus infection is also associated with significant suppression of disease resistance, leading to outbreaks of other diseases including pneumonia and scours.

BVD is mainly spread by persistently infected (PI) cattle which are born with the disease due to exposure in the womb. These animals will have the disease all their lives and shed the virus extensively, infecting unprotected animals through direct and indirect contact.

The Scottish Government, together with industry, veterinary practitioners and scientific partners, is committed to eradicating BVD from Scotland. We have been working together through the BVD Advisory Group to ensure we achieve the ambition of eradicating BVD in a way that suits the distinctive nature of Scottish farming.

- **Objective**

BVD eradication will make Scotland's cattle businesses more profitable and sustainable. In 2010 Scottish Government economists' analysis showed that, once BVD was eradicated from the herd, the average dairy herd could save £16,000 per year, the average beef herd £5,000¹. BVD eradication also has a role to play in the global effort against antimicrobial resistance: avoiding the need to treat PIs and transiently affected animals will reduce the use of antibiotics, thereby reducing the risk of developing antimicrobial resistance.

To progress the scheme to a satisfactory conclusion, the BVD Advisory Group, a steering group that represents industry and sets the direction of the Scottish BVD eradication scheme, have agreed that there should be further restrictions on "not negative" herds to prevent disease spread in the Scottish herd. These further restrictions will particularly focus on keepers who choose to retain PI animals or do not investigate the cause of their "not negative" status.

- **Rationale for Government intervention**

The aim of eradicating BVD from Scotland fits in with the wealthier, fairer and greener strategic objectives of the National Performance Framework. The eradication of BVD will increase the productivity and profitability of Scottish cattle enterprises by reducing costs associated with the disease such as increased mortality and reduced fertility. This would have positive environmental benefits for Scotland due to reduced greenhouse gas emissions per unit output from cattle, a reduction in the use of antibiotics and improved animal welfare.

¹ <http://www.gov.scot/Resource/Doc/915/0099584.doc>

Consultation

- **Within Government**

The Scottish BVD eradication scheme is an industry-led scheme that is supported by the Scottish Government. The Animal Health Disease Prevention Team has developed these proposals with the agreement of the BVD Advisory Group which includes representatives from local authorities and the Animal and Plant Health Agency.

- **Public Consultation**

The Scottish Government consulted on the content of Phase 5 of Scotland's BVD eradication scheme from 21 August 2017 to 6 November 2017. The consultation sought views on disease control measures that would be effective and proportionate for Scotland's cattle keepers. 70 responses were received, 46 were from organisations and businesses, 24 from individuals. The main industry organisations responded (including National Farmers Union Scotland, Quality Meat Scotland, the Scottish Beef Association, Agriculture and Horticulture Development Board Dairy, Institute of Auctioneers and Appraisers Scotland) together with some local authorities, private veterinary surgeons and cattle keepers. A full list of those who consulted and agreed to the release of this information is attached to the consultation report published on the Scottish Government website at <https://consult.gov.scot/animal-welfare/the-bovine-viral-diarrhoea-scotland-order-2018/>.

- **Business**

We have engaged with 14 beef and dairy farms across Scotland ranging from small to large businesses prior to the publication of the public consultation. Consultation took the form of a face-to-face interview or telephone conversation based on their experience of how the eradication scheme is working and how they would like to see it improved.

Options

Two options were identified:

Option 1 – No change - Remain in Phase 4 of the BVD Eradication

This option would not see further legislation introduced and instead would rely on the current Bovine Viral Diarrhoea (Scotland) Order 2013 (BVD Order) and industry desire to eradicate the disease.

Option 2 – New legislation - Proceed to Phase 5 of the BVD Eradication Scheme

This option would amend the current BVD Order and introduce additional controls that would:

- Increase pressure on “not negative” herds to investigate the cause of BVD exposure in their herd
- Increase pressure on “positive” herds to protect neighbouring holdings/herds
- Prevent delays in testing
- Require tissue sampling to be done via an official cattle identification tag

- Speed-up reporting of lab results to the BVD database
- Improve the effectiveness of the check test
- Prevent dispersal of animals immediately prior to a change of herd status
- Track PIs back to herd of origin

Sectors and groups affected

This will mainly affect cattle businesses as it will require those with breeding herds to continue to test and declare the disease status of their herd. Those breeding herds with a “not negative” herd status will face additional testing requirements to investigate the cause of BVD exposure in their herd. There will also be impacts on testing laboratories and veterinary practices through greater demand for their services, and on tag companies due to a change in the type of tags marketed.

Benefits

Option 1

Option 1 would see cattle farmers comply with the current phase of the BVD Eradication Scheme. It would continue to require all breeding herds in Scotland to have a BVD disease status, and to restrict animals that could spread disease, thus protecting the national herd.

The eradication of BVD supports the reputation of Scottish produce being high quality and having high welfare standards.

This option also has environmental benefits as the increased efficiency of a national herd that was free of BVD would reduce the greenhouse gas emissions per unit of output.

Option 2

Option 2 gives the same benefits as Option 1 but to an increased extent due to certain elements of the eradication scheme being strengthened. Examples are promoting identification and prompt removal of PI animals, reducing risk of disease spread within and between herds, restricting confirmatory sampling to be carried out by a vet and faster reporting of test results.

A new testing requirement that would apply to all “not negative” herds on their second or subsequent annual report of a “not negative” BVD status. The cattle keeper would be required to determine an individual status for each animal in that herd, which would accelerate the detection of PI animals in the national herd.

The proposal to prohibit cattle movements into herds that have a virus positive animal in that herd should reduce the number of on-going and new infections in Scotland.

Limiting tissue tag sampling to the official tag only would ensure calves are BVD tested early in life, thus allowing early identification and removal of PIs. Cattle would also benefit from better welfare due to fewer tags.

Publishing the location details of farms where one or more virus positive animals are retained would increase awareness allowing any neighbouring farms to take appropriate action to reduce the BVD risk to their own herd.

Costs

Option 1

Depending on a herd's BVD status, the type of annual testing selected and herd management decisions, farmers may only need to test a small number of cattle or all calves born into that holding.

Farmers with a "not negative" herd status only have two testing options available to them, either to individually test all animals in their herd or test all calves born. Animals on a "not negative" herd can only move out of that herd if it has been individually tested and found negative for the virus.

Tissue tag testing individual animals costs approximately £3.50 to £5.50 plus the keeper's time to organise and tag animals. Blood testing individual animals costs approximately £4.50 to £7.00 plus vet call out fees. There is a small reduction in cost per head when testing multiple animals.

Option 2

Option 2 would incur the same baseline costs as Option 1. The proposals would also involve some additional costs for the new testing requirement that would apply to all "not negative" herds. On the second or subsequent annual report of a "not negative" BVD status, the cattle keeper would be required to determine an individual animal status for every animal in the herd. For many herds, this Compulsory BVD Investigation would require only partial testing of the herd as some animals will already have an individual status due to previous testing in the herd.

Table 1 provides information from the 27 July 2017 that shows the individual BVD status of animals on "not negative" holdings.

Table 1: BVD statuses of animals on "not negative" holdings as of 27 July 2017

Individual BVD status	Number of animals
BVD Negative	187,908
BVD Assumed Negative	80,202
BVD positive	378
BVD Assumed PI	3
Untested	123,501
Total on "not negative" holdings	391,992

As shown in table 1, on 27 July 2017 approximately two thirds of animals on 1,666 "not negative" herds already had an individual status. There were 123,501 untested animals. It is difficult to provide an individual cost for each "not negative" herd as each herd will vary in size and we would also need to take account of the herd's previous BVD testing history. Using the untested animals from table 1 as an example, the overall cost to industry for BVD testing these animals could range from approximately £400,000 to £850,000. We would expect to see the number of untested animals on "not negative" herds drop over time as cattle keepers anticipate the "sweeper test" coming into force late in 2018 and more breeding females benefit from assumed status.

Scottish Firms Impact Test

The responses to the public consultation were analysed and the report was published on 24 January 2018. The measures that were supported by respondents were put to the BVD Advisory Group who subsequently agreed on the Phase 5 measures on 7 December 2017. The BVD Advisory Group has continued to meet regularly to oversee progress of Phase 5 legislation and to develop communication strategy to introduce Phase 5 to their respective colleagues, clients and members.

Competition Assessment

The current BVD Order places different obligations on all farmers with breeding and non-breeding herds. This inequality is justified as the disease is overwhelmingly spread by animals that are infected in the womb, become Persistently Infected and shed large volumes of virus all their lives. Cutting off the production of these animals is critical to controlling the disease and therefore the heavier burden placed on herds where calves are produced is justified.

“Not negative” herds face higher costs to eradicate the disease from their herd but they are the herds that will benefit the most from eradication. Dairy farms may be impacted disproportionately due to their high replacement rates, but enjoy greater potential benefits through increased fertility, reduced veterinary costs and improved production.

Scottish cattle farmers have higher production costs which may place them at a disadvantage to farmers not covered by the legislation such as cattle keepers in England and Wales. However, in the long term eradicating BVD will cut costs, making the industry more efficient and competitive. There is likely to be a competitive advantage in selling cattle with a BVD free status, such as increased market prices as seen with TB free cattle.

Test run of business forms

No changes are proposed to the current requirement for businesses to report the following to the Scottish Government (reports are held on ScotEID).

- The county parish holding number (CPH);
- The date when the samples were taken;
- The date of the test;
- The testing laboratory;
- The method of screening used; and,
- The overall result for the herd.

Legal Aid Impact Test

The proposal is unlikely to have an impact on the legal aid fund.

Enforcement, sanctions and monitoring

Local authorities are responsible for enforcing the BVD Order with co-ordination from the Animal and Plant Health Agency (APHA) who are responsible for issuing any breach letters.

Criminal offences are being created, although these are largely in line with the current BVD Order, which is made under the Animal Health Act 1981. The maximum penalty is a fine and two years' imprisonment.

A database operated by ScotEID lists the BVD status of all Scottish breeding herds and any individual animals that have been tested by an approved BVD testing laboratory, allowing the disease exposure, incidence and location to be monitored.

Implementation and delivery plan

Phase 1 farmers volunteered to test the BVD status of their animals and report the results to the Scottish Government from 1 September 2011.

Phase 2 required cattle breeding herds to be screened for BVD by 1 February 2013 and annually thereafter.

Phase 3 brought in control measures that placed restrictions on movement and sale of BVD positive animals, restrictions on untested herds/animals and required a herd's status to be declared before sale from 1 January 2014.

Phase 4 brought in further control measures on "not negative" herds, reduced testing options, a requirement to test replacement animals from untested herds and created an assumed negative status for dams of calves that have tested negative. Phase 4 was implemented on 1 June 2015.

Phase 5, the proposals we are consulting on, will increase further pressure on "not negative" herds, especially those that do not remove PI animals from their herd. This phase will also introduce a number of procedures that aim to streamline and improve the eradication scheme. We expect this to come into force in the Autumn of 2018.

- **Post-implementation review**

A database operated by ScotEID contains the disease status of all the herds in Scotland. This is updated continually with the results of BVD tests. The data held on ScotEID allows BVD exposure and incidents to be monitored and therefore provides the necessary tools to determine whether the policy is having the desired effect.

Summary and recommendation

Which option is being recommended and why? Refer to analysis of the costs and benefits in reaching the decision. Summarise, using the table below, the information gathered for each option.

Option 2 is the preferred option. The proposals should progress the scheme to a satisfactory conclusion. Without adding new restrictions and controls it is likely that the disease will continue to prevail at a low level, which carries the significant risk of disease increase over the next few years due to loss of confidence in the scheme by those cattle keepers who are currently engaged with the scheme.

- **Summary costs and benefits table**

Option	Total benefit per annum:	Total cost per annum:
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	- economic, environmental, social	- economic, environmental, social - policy and administrative
1	<p>Eradication of BVD would enhance Scotland's reputation for good animal welfare and high quality products.</p> <p>Increased efficiency of disease free herds will reduce the intensity of greenhouse gas emissions generated by beef and milk production.</p> <p>All breeding herds have a known disease status, updated annually: beneficial to potential buyers.</p>	<p>Eradication of BVD is estimated to benefit farms by around £37/cow/year. After BVD eradication, average dairy and beef herds could benefit by £15,800 and £4, 800 per year respectively.</p> <p>Cattle keepers face an annual testing cost, which can be as low as £3.50 per head.</p>
2	<p>Eradication of BVD would enhance Scotland's reputation for good animal welfare and high quality products.</p> <p>Increased efficiency of disease free herds should reduce the intensity of greenhouse gas emissions generated by beef and milk production.</p> <p>All breeding herds have a known disease status, updated annually: beneficial to potential buyers.</p> <p>Breeding herds that have been “not negative” for two or more years would need to investigate the cause of their “not negative” status, forcing the identification of PIs.</p>	<p>Eradication of BVD is estimated to benefit farms by around £37/cow/year. After BVD eradication, average dairy and beef herds could benefit by £15,800 and £4,800 per year respectively.</p> <p>Cattle keepers face an annual testing cost, which can be as low as £3.50 per head.</p> <p>Potential for approximately £400,000 to £850,000 cost to industry to BVD test untested animals on “not negative” holdings.</p>

Declaration and publication

- **Sign-off for Final BRIAs:**

I have read the Business and Regulatory Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs. I am satisfied that business impact has been assessed with the support of businesses in Scotland.

Signed: Mairi Gougeon

Date: 2nd October 2019

Minister's name: Mairi Gougeon

Minister's title: Minister for Rural Affairs and the Natural Environment

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