GUIDANCE:
BVD Eradication Scheme
Phase 5
December 2019

Protect BVD negative herds at all costs
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WELCOME TO PHASE 5 OF SCOTLAND’S BVD ERADICATION SCHEME

Scotland’s cattle keepers have made tremendous progress since the BVD eradication scheme started as a voluntary programme in 2010. The majority of breeding herds are now BVD Negative. We need to protect the Negative herds by finding every PI (Persistently Infected) animal in Scotland and prevent them from infecting other cattle.

From the 1st December 2019, additional measures apply to BVD Positive herds (those with PIs) and BVD Not Negative breeding herds, in order to protect the BVD Negative herds.

This guide explains:

What you must do to comply with the BVD Legislation BVD Order 2019
The Scottish Government is supporting an ambitious industry-led scheme to eradicate Bovine Viral Diarrhoea (BVD) from Scotland. This has been developed in partnership with representatives from the livestock industry, veterinary profession, science sector and government; more information on the BVD Advisory Group can be found on the BVD pages of the Scottish Government website.

BVD is one of the most important cattle diseases in terms of economic cost, productivity and welfare, and most herds in Scotland are free of it. BVD causes immunosuppression, abortion, infertility, failure to thrive and death, particularly in calves. BVD control is centred on the identification of BVD Persistently Infected (PI) animals and their removal from the herd. PIs shed large amounts of virus throughout their lives and are the main source of infection. Eradicating BVD from those remaining herds would be worth millions of pounds to the Scottish cattle sector.
2. KEY POINTS

**For Breeding herds**
Continue to test your herd *annually* using one of the approved testing methods (see section 4):

**By tissue tagging or blood sample:**
- test all calves born for BVD virus, OR
- test all animals in the herd for BVD virus, OR

**By blood test only:**
- check test – work with your vet to blood sample representative young stock from each separately managed group, to see if the herd has been exposed to BVD (see section 4).

**Beef herds must be check tested once a year, dairy herds twice a year (if they calve all year round).**
BVD virus positive animals can only go directly to slaughter.

Animals in a herd with a BVD Not Negative status must have an individual BVD Negative or Assumed Negative status to leave the herd, unless going direct to slaughter.

Animals considered ‘risky’ must be BVD virus tested within 40 days of joining the herd (these include imported cattle from outwith Scotland, untested animals purchased from non-breeding herds and untested animals from a BVD Not Negative herd)

**NEW** - When tissue tagging under 20 days, an official tag must be used
**NEW** - Herds that have been continuously BVD Not Negative for more than 15 months must complete a Compulsory BVD Investigation
**NEW** - BVD Positive holdings have further movement restrictions
**NEW** - Retesting of PIs must be carried out by a vet
**NEW** - Animals considered “risky” must have a BVD negative status before they move out of a breeding herd.

**For Non-breeding herds**
Calves born into the herd must be tested for BVD virus before 40 days of age and must have an individual status of BVD Negative before leaving the herd.
Phase 5 aims to protect BVD Negative herds by increasing the responsibilities of cattle keepers whose herds are BVD Positive, or who have been BVD Not Negative for more than 15 months.

WHAT’S NEW?

Brief Overview

A. The PI Locator (see section 7 for definition of “PI”)  
This is a list available for all to view on ScotEID.com that displays the CPH of all herds that have had suspect or confirmed BVD PI animals in the herd for more than 40 days.

B. Movement Restrictions  
A herd that is BVD Positive cannot bring any cattle into the herd. This is from the time any animal is identified as a suspected PI. Cattle may move in under licence.

The restriction is lifted when:
- on retest, the animal has NOT been confirmed as a PI, or
- the suspected PI animal is removed to slaughter or killed on farm.

C. The Compulsory BVD Investigation (CBI)  
Herds that have remained BVD Not Negative for more than 15 months must undergo a CBI, which involves getting an individual status for every untested animal in the herd.

D. Animals brought into a breeding herd that are classed as ‘risky’ cannot leave the herd without an individual BVD Negative or Assumed Negative status.

E. The use of an official tag for tissue tagging  
If a calf is tissue tagged under 20 days old, the tag used must be one of the calf’s official tags.

F. Retest of a BVD Positive animal  
A retest sample of a BVD Positive animal must be taken by a vet.

G. Reporting of test results  
Test results must be reported and uploaded to ScotEID within 5 days of laboratory testing.

H. Separate housing for BVD Positive animals  
An additional biosecurity control will be introduced in spring 2020. All BVD Positive animals must be housed separately from other cattle.

Further information can be found on the following page.
A. **PI Locator**
From 1st December 2019, BVD Positive herds are listed by CPH number on the ScotEID website in a **PI locator** list. The CPH appears in the PI Locator List when an animal identified as a PI is still in the herd 40 days after the result was uploaded. The 40-day delay in publishing is to allow time for retesting and/or removal. If the PI is no longer in the herd at 40 days, the CPH of the herd will not be listed.

As soon as all PIs are removed from the herd, the CPH number will no longer appear on the list and the herd status is set to BVD Not Negative.

This measure alerts neighbours to a BVD risk in their area to promote good biosecurity, protect in-calf cows and reduce the likelihood of purchases from Positive herds. It is illegal to sell PI animals, but other animals from Positive herds may be transiently infected and therefore a disease risk.

B. **Restriction on moves into the herd**
Keepers cannot bring cattle into BVD Positive herds. The only exception to this rule is that APHA can license animals onto the holding under exceptional circumstances, e.g. animals that have left the farm temporarily for veterinary treatment, animals that have strayed, or a movement that is already underway. As soon as the PIs are retested Negative or removed from the herd, the status will return to BVD Not Negative.

C. **The Compulsory BVD Investigation**
**Who is affected?**
Breeding herds that have been BVD Not Negative for more than 15 months.

**Purpose:**
To find out if there are BVD PI animals in the breeding herds whose BVD Herd status has remained BVD Not Negative.

**Impact:**
A breeding herd that undertakes a Compulsory BVD Investigation must obtain an individual BVD Negative status for each animal, usually by testing all animals. You do not need to test animals that already have individual BVD Negative or Assumed Negative status.

**Outcome:**
When all animals are BVD virus tested and only animals with a BVD Negative or Assumed Negative status are in the herd, the vet submits a CBI confirmation certificate to ScotEID declaring the breeding herd BVD Negative. The Compulsory BVD Investigation is then complete.

**When PIs are found:**
If PIs are found during the CBI, the herd status becomes BVD Positive and movement restrictions apply – no cattle can be brought in (except under licence). Should the PIs remain in the herd for more than 40 days, the CPH will be added to the PI Locator list on ScotEID. Removal of the PIs as soon as they are found avoids both the movement restrictions and appearing on the PI locator list.

**After the Compulsory BVD Investigation:**
Breeding herds that have completed the CBI must continue to BVD virus test calves born into the herd for a further 12 months from the date of the vet certificate. The testing can be by tissue tag or blood samples. If using tissue tags on calves under 20 days old, the tag must be one of the official tags.
Timeframe:
12 months is given to complete the CBI. If the breeding herd has been unable to test all animals in the 12 month timeframe allowed, or there are BVD PI animals present, the BVD Policy Team reviews the steps taken during the CBI and considers whether the farmer is in breach of the legislation.

Concerns:
The BVD Helpline on 0300 244 9823 is available Mon-Fri 9am to 5pm, to respond to concerns and answer queries on all aspects of BVD including BVD Phase 5 and the introduction of the CBI.

To see the order of events in a CBI, see table opposite. Remember that any animal can move directly to slaughter at any time without BVD testing.

D. Risky
‘Risky’ animals are cattle without an individual BVD status that either:

• come from BVD Not Negative herds in Scotland,
• were born in Non-breeding herds in Scotland, OR
• were brought in from outside Scotland (Note: if BVD virus tested and this has been completed by a Scottish Government approved laboratory, then it is possible to get these results uploaded to ScotEID).

These animals are given an individual status of BVD Not Negative on arrival into the herd. They must be tested for the BVD virus within 40 days of joining the herd, and before moving out of the herd if this occurs sooner. This process prevents ‘risky’ animals from being moved through BVD Negative herds and potentially being sold under false pretences. If the ‘risky’ animal is moved directly to an abattoir within 40 days of arrival, it does not need a BVD individual status.
<table>
<thead>
<tr>
<th>The Event</th>
<th>The Farmer</th>
<th>Impact</th>
<th>Herd Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>More than 15 months BVD Not Negative</strong></td>
<td>Receives a letter/email from ScotEID explaining a Compulsory BVD Investigation must now be undertaken, including a list of animals in the herd requiring individual BVD status.</td>
<td>BVD Negative or Assumed Negative</td>
<td>No restrictions</td>
</tr>
<tr>
<td><strong>TEST ALL ANIMALS with NO individual BVD status</strong></td>
<td>Arranges to have all animals without a BVD Negative or Assumed Negative status tested for virus/antigen, and animals that have joined the herd since the letter. Assumed Negative status for dams of calves that test Negative</td>
<td>BVD Negative or Assumed Negative</td>
<td>No restrictions</td>
</tr>
<tr>
<td><strong>IF PI found – go to A else go to B</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A – suspected PI found</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check the results <strong>One animal tested BVD Positive</strong></td>
<td>Receives test results from the lab and on ScotEID checks that the results of all animals are present (a misread ID can cause a result to be missing).</td>
<td>BVD Negative or Assumed Negative</td>
<td>No movements except under licence.</td>
</tr>
<tr>
<td><strong>3 weeks after first test of PI</strong></td>
<td>Arranges for the vet to retest the suspected PI.</td>
<td>BVD Negative or Assumed Negative</td>
<td>No movements except under licence.</td>
</tr>
<tr>
<td>Check result</td>
<td>Result of retest is negative – go to B</td>
<td>BVD Negative or Assumed Negative</td>
<td>No movements except under licence.</td>
</tr>
<tr>
<td><strong>Result of retest is positive – PI confirmed – remove PI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Removal of PI</td>
<td>Removes the PI animal – kills on farm or sends direct to slaughter – go to B</td>
<td>BVD Negative or Assumed Negative</td>
<td>No restrictions</td>
</tr>
<tr>
<td><strong>B – All tested &amp; no PI</strong></td>
<td>Contacts Vet and asks for CBI confirmation certificate. Certificate signed.</td>
<td>No restrictions</td>
<td>No restrictions</td>
</tr>
<tr>
<td><strong>Test all calves born in next 12 months for BVD virus</strong></td>
<td>Must continue to test calves for BVD virus for a further 12 months.</td>
<td>No restrictions (unless one or more calves test Positive)</td>
<td>No restrictions (unless one or more Positives)</td>
</tr>
<tr>
<td><strong>12 months completed</strong></td>
<td>Notify laboratory on submission form that it is the end of calving and lab will set Negative herd status. Check on ScotEID that this has been set. Farmer can decide on screening option to continue BVD testing.</td>
<td>No restrictions</td>
<td>No restrictions</td>
</tr>
</tbody>
</table>
E. The use of an official tag for tissue tagging
If a calf is tissue tagged under 20 days old, the tag must be one of the calf’s official tags (primary or secondary), unless:

- tissue sampling has already been attempted unsuccessfully with an official tag, OR
- the calf has died before the sample is taken;

in either case, the sample may be taken with a management tag.

F. Retest of a BVD Positive animal
A retest sample of a BVD Positive animal must be taken by a vet.

G. Reporting of test results
Test results must be reported and uploaded to ScotEID within 5 days of laboratory testing.

H. Separate housing for BVD Positive animals
In spring 2020, an additional control will be introduced for BVD Positive animals. They will have to be housed separately from other cattle in order to protect neighbouring herds and reduce spread of BVD within their own herd. BVD Positive animals can be housed together if appropriate. Where there is only one BVD positive animal, it can be housed with one other animal to safeguard its welfare. The companion animal must be selected to have a very low risk of spreading BVD. APHA will do unannounced inspections of BVD Positive animals to ensure that they are housed appropriately. Detailed information will be available early in 2020.
4. BVD MANDATORY SCREENING

Testing options
Permitted screening tests for breeding herds that are BVD Negative or have been BVD Not Negative for less than 15 months:

<table>
<thead>
<tr>
<th>No.</th>
<th>TESTING OPTION</th>
<th>DAIRY/BEEF</th>
<th>TEST FOR ANTIBODY or ANTIGEN/VIRUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Dairy with year-round calving, 10 animals aged between 9-18 months twice a year per separately managed group</td>
<td>Dairy</td>
<td>Antibody</td>
</tr>
<tr>
<td>1a</td>
<td>5 animals aged between 9-18 months per separately managed group</td>
<td>Either</td>
<td>Antibody</td>
</tr>
<tr>
<td>1b</td>
<td>10 animals aged between 6-18 months per separately managed group</td>
<td>Either</td>
<td>Antibody</td>
</tr>
<tr>
<td></td>
<td>Shetland only – test five animals from this age range</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1c</td>
<td>5 animals aged 18m+ on holding since birth per separately managed group</td>
<td>Either</td>
<td>Antibody</td>
</tr>
<tr>
<td>2</td>
<td>Calf screen (all calves born on the holding)</td>
<td>Either</td>
<td>Antigen/Virus</td>
</tr>
<tr>
<td>3</td>
<td>Whole herd screen</td>
<td>Either</td>
<td>Antigen/Virus</td>
</tr>
</tbody>
</table>

**Antibody**: Tests for exposure to the virus.

**Vaccination** can affect the antibody result of a check test as vaccinated animals are likely to give a positive result. This would result in a BVD Not Negative herd status. Discuss BVD vaccination with your vet when deciding which animals to sample for the check test.

**Antigen/Virus**: Tests for the presence of virus.

Cattle keepers are recommended to get veterinary advice on the most appropriate screening test for their herds.

The following should be considered when choosing a screening test:

- size of herd
- calving pattern
- vaccine use
- age of animals
- separate management groups
A “separately managed group” is a group of animals that have been housed or grazed together for at least the past two months. See section 7 for more detail.

**Vet online BVD training is available through SRUC.** This CPD course covers specific vet instructions for BVD testing, including vaccinations, separately managed groups and other helpful information. Vets must complete this to authorise vet declarations. The course is accessed through the Scottish Government website under the Scottish BVD Eradication Scheme [www.gov.scot/publications/bovine-viral-diarrhoea-bvd/pages/scottish-bvd-eradication-scheme/](http://www.gov.scot/publications/bovine-viral-diarrhoea-bvd/pages/scottish-bvd-eradication-scheme/)

Cattle keepers can take **tissue samples** themselves, only vets can take **blood samples**.

**Tissue Tagging**
From 1st December 2019, when the calf is tissue tagged under 20 days old an official tag must be used.

When applying **tissue tags**, make sure you are using the correct tagging pliers and that the pin is straight. Industry figures suggest that about 1 tag in 100 fails. If the laboratory reports that the sample tube was empty or the sample could not be tested, the animal will need to be re-sampled. Re-sampling options are:

<table>
<thead>
<tr>
<th>First sample</th>
<th>Second sample</th>
<th>Further samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official ear tag</td>
<td>Management tag or blood sample</td>
<td>Blood sample</td>
</tr>
<tr>
<td>Management tag</td>
<td>Blood sample</td>
<td>Blood sample</td>
</tr>
<tr>
<td>Blood sample</td>
<td>Management tag or blood sample</td>
<td>Blood sample</td>
</tr>
</tbody>
</table>

The tissue goes into the labelled capsule when the animal is tagged, which is then snapped off and sent to the laboratory. If you want to purchase ear tissue tags, then contact your usual ear tag supplier. If they do not stock them, they will direct you to somewhere that does.

**Indicate when you have tested all calves**
If you choose to get your BVD herd status by testing all calves born on your holding, you must test all calves that are registered with BCMS, even if they die, as BVD could be the cause of death. You must tell the testing laboratory when you reach the end of the calving year. The submission form (sample below) should include a box to indicate that the calving year is now complete. This alerts the lab that it is time to set the annual status for the herd. Herds that calve all year round need to choose an end-of-calving date so that the herd status can be updated annually.

```
2. TEST ALL CALVES including dead calves; using the ear tissue test.
   Does this submission complete the calf screen for this 12 month period?  Yes☐ No ☐
   OR Are you expecting more calves to be born before the end of this 12 month period? Yes☐ No ☐
```

It is also advisable to test any animals that:
- do not produce a live calf, or
- abort a foetus, or
- die before being registered

to ensure these are not persistently infected. The same applies to barren cows.
**Assumed Status** – Testing a dead calf which has been registered will give the dam an assumed status. When testing an unregistered dead calf, the dam’s ear tag number should be included on the submission form, so that she can be allocated an Assumed Negative status if the calf tests BVD negative.

**Submission forms** are available from approved laboratories, tissue tag suppliers and the website [www.gov.scot/bvd](http://www.gov.scot/bvd). Please use an up-to-date form.
5. MANDATORY SCREENING METHODS

For Breeding Herds
If you currently have a BVD Negative herd status or you have been BVD Not Negative for less than 15 months, you can continue to do a check test for antibodies that will indicate if your herd has been exposed to BVD. You must test a minimum of 5 animals annually, larger herds will need to test more than 5. Your vet will advise you on how frequently and what groups of animals you should test. You have 12 months from your test date to test your animals again. Your vet will be able to provide you with further advice about which of the three methods should be used, and whether it is appropriate to test for BVD antibodies or BVD antigen/virus.

0. The dairy check test – for year-round calving dairy herds.
In dairy herds that calve all year round, it can be difficult to ensure that the heifer groups are surveyed properly. To ensure that exposure is detected in these herds, more animals must be sampled more frequently than for the standard check test. If you have a dairy herd that calves all year round, your vet should blood sample no less than ten unvaccinated calves, between the ages of 9-18 months, within each separately managed group. This test must be carried out twice a year six months apart, more than seven months apart will result in an expired herd status. If you have a dairy herd that calves in distinct blocks you can use the standard check test, providing all separately managed groups are tested.

1. Standard check test
The standard check test is appropriate for herds that have distinct calving periods. Whenever possible use option (a) below. Where this is not possible, perhaps as a result of animals leaving the herd before the age of nine months, options (b) and (c) should be followed in order. Before deciding to do a check test, speak to your vet to identify how many groups you have in your herd. Your vet will decide how many animals need to be blood sampled and will also advise on how best to test herds with very low numbers of cattle.

(a) Five calves aged 9-18 months
Take blood samples from no less than five calves in the age range 9-18 months, in each separately managed group (see section 7 for more information). If you have less than five animals in this group, you should discuss with your vet, whether it is appropriate to test under these circumstances. Your vet may check with the lab.

(b) Ten calves aged 6-18 months
If any of your sample of calves are aged 6-9 months, take a sample of blood from not less than ten calves in the age range 6-18 months in each separately managed group. If you have fewer than ten animals in this group, you should discuss with your vet, whether it is appropriate to test under these circumstances. Your vet may check with the lab.

(c) Five homebred animals over 18 months
Only if you have fewer than ten calves aged 6-18 months, and only if your vet advises you, you may choose to use the following method: Take a blood sample from no less than five animals over 18 months that have been on the holding since birth in each separately managed group. If you have less than five animals in this group, you should discuss with your vet whether it is appropriate to test under these circumstances.
**Shetland only:** in recognition of the successful eradication of BVD from Shetland, you may take blood from no less than five animals in the age range 6-18 months. If you have less than five animals in this group, you should discuss with your vet whether it is appropriate to test under these circumstances.

2. **Calf Screen – Test all calves**
Individually test all calves born in the herd within the year for virus by blood or tissue sample. You can test the calves as they are born or all at once. Ear tissue tag testing is a useful way to do this, and applying tags early in life helps you to identify and remove PIs promptly.

It is up to the farmer to declare that all calves born within a year have been tested. You must test all calves that are registered as born on your holding. It is also advisable to test any animals that abort a foetus, do not produce a live calf, or die before being registered to ensure these are not persistently infected.

3. **Whole herd screen – Test all animals in the herd**
This way of screening is the most thorough test and should be considered for herds where a test has resulted in a ‘BVD Not Negative’ status. Individually blood or tissue sample all the animals on the holding at the same time. This is a virus test and has the advantage that all the PI animals (see section 7 for more information) in the herd can be identified and removed. The farmer may choose to tissue tag every animal, in which case a vet does not need to be consulted. However, if they choose to take blood samples, a vet must be involved. It will constitute a negative result for that year if all the animals are negative for BVD. To maintain your status for the future, you will only need to test animals not included in the initial screen, such as any animals brought in or born. In future testing, you would test all calves and any animal that doesn’t have a calf (see section 4 for details of Assumed status).

**For Non-Breeding Herds**
If you have a non-breeding herd, you only need to test for BVD whenever a calf is born into the herd. You must test these animals within the first 40 days of life. If you are testing a calf under 20 days old, you should use an official ID tag that takes a tissue sample – these are available from most ear tag suppliers. The sample should be sent to an approved laboratory and tested for virus. You must not move these animals until they have been tested and shown to be BVD Negative.
6. YOUR TEST RESULTS AND BVD STATUS

Test Results
When the laboratory sends your results, they will inform you of your BVD herd status. These results and your BVD Herd Status are uploaded to ScotEID. The BVD Herd Status classifications are BVD Negative, BVD Not Negative or BVD Positive. If you have a PI animal in your herd, you are automatically given a 'BVD Positive' herd status. Your status reverts to BVD Not Negative once the PI is no longer showing as alive on the holding.

Your BVD Herd Screening expires after 13 months. It is advised to complete your BVD testing within 12 months - a further month is allowed for recording the results.

Health Scheme members – CHeCS (Cattle Health Certification Schemes)
Most herds fully participating in the CHeCS BVD programmes meet the testing requirements. If you are testing for BVD as part of your health scheme membership you should not need to do anything extra, but please check with your vet.
7. FURTHER INFORMATION

Terms explained and where to find help and advice

A breeding herd is one in which breeding is expected to take place, or no steps are taken to prevent or minimise the chances of breeding.

A non-breeding herd is one where breeding is not intended.

A PI is an animal that is persistently infected with BVD. These cattle are the main source of BVD infection. In this guidance, we have used PI to refer to any BVD virus positive animal. If an animal has only had one positive virus (antigen) result, there is a small possibility that it was transiently infected at the time of testing and may recover. To be certain it is a PI, arrange for your vet to resample the animal (for BVD antigen) at least three weeks after the first sample was taken. A true PI continues to give positive results throughout its life. A transiently infected animal gives a negative result at the second test and can be returned to the herd.

Trojan cow means a pregnant female with an individual BVD Negative status that is carrying a PI calf. This happens when an unprotected female is infected with BVD in the first 120 days of pregnancy. There is no way to test the unborn calf. The best advice is to individually test the calf for virus (antigen) as soon as possible after birth. Where a pregnant female might have been exposed to infection at the critical time, you should calve her in isolation and BVD test the calf as soon as possible.

Biosecurity

Good biosecurity will help prevent the spread of BVD into your herd. Areas to consider are:

- animals added to your herd, especially pregnant cattle where the BVD status of the unborn calf will be unknown. Make sure you know the herd status of the seller or the individual status of the animal you are bringing in. If in doubt arrange for a virus/antigen test as soon as possible;
- the herd status of the surrounding farms. If in doubt, prevent nose-to-nose contact over boundaries and create a 3 metre double spaced fence to limit exposure to other animals and consider vaccination of the breeding stock;
- the BVD virus can spread through clothing and equipment, maintain good cleaning and disinfection at entry to cattle areas.

Vaccination will not eradicate BVD from your herd but is a useful tool for controlling the disease in different age groups of cattle. Vaccination can protect dams in the early stages of pregnancy, and it is essential that the vaccine is administered at the correct time i.e. before the bull is introduced or before they go to a mart. There are several vaccines available on the market that are very effective, but take care to follow the datasheet instructions precisely. This includes the storage of the vaccine, timing and boosters. You should work with your vet to determine whether vaccinating is a good option for your herd.

Separately Managed groups

The correct identification of each separate group is critical to the effectiveness of check testing. A separate group consists of those animals that can freely achieve nose-to-nose contact with all others within the group; for this reason you may have several separate groups within your holding and you may have to sample more than once per year. Your vet should ensure that an appropriate number of animals has been chosen from each separate group on your holding. Housed animals on either side of a central passageway, for example, are separate groups.
PI animals spread the virus efficiently when in nose-to-nose contact with other cattle. Housing with trough feeding will ensure rapid spread, whereas spread will be slower among cattle at grass. BVD spreads so easily it is not necessary to test every animal in every group. Five animals are sufficient providing the following conditions are met:

- All the animals in the group have been together with close contact for at least two months.
- They have had nose-to-nose contact during that period.

You must consult a vet when identifying the separate groups in your herd and before choosing the animals to be tested.

**Imported Animals**

Animals bought in from untested, Non-Breeding, BVD Not Negative or BVD Positive herds must be BVD antigen tested with results uploaded to ScotEID within 40 days. Failure to do so results in your herd status being downgraded to BVD Not Negative until the animal has been tested.

Exceptions to this are:
Accredited English animals – If an animal has been born on an English holding, which has been CHeCS accredited for the full lifetime of the animal and has given the health scheme provider permission to publish their status, it will not require testing.

Northern Irish cattle – All cattle with ear tags starting UK9 and born since the start of the NI BVD eradication scheme (1st March 2016), are deemed as low risk for BVD. This means that young stock brought into Scotland from Northern Ireland will not require BVD testing.

For cattle that have been BVD virus tested outwith Scotland by a Scottish Government approved laboratory, it is possible to get these results uploaded to ScotEID.

**Sources of advice**

The BVD helpline assists with queries about the BVD eradication scheme. The Scottish Government’s BVD policy team deal with questions on the policy. Your own vet or lab may advise on how best to eradicate BVD and protect your herd.

**BVD Helpline – 0300 244 9823**

BVD results and the BVD Herd Status are uploaded to ScotEID by approved laboratories.

**BVD Look up**

The BVD Look Up on ScotEID is available to all cattle keepers.

Public access allows the look up of a CPH to see the BVD Herd Status. Look up of an ID number will show the individual animal’s BVD status.

When logged into ScotEID, a farmer can view all of their own test results, the herd status, individual status and animals that need to be tested for BVD virus.

**ScotEID**

You can access your own BVD records in detail. Contact the ScotEID helpline if you do not already have access: **0300 244 9823**. To ensure that your vet has full access to your BVD testing history, and to help manage your status, make sure your details are correct on all BVD submission forms, including your vet’s postcode.
**Vet online BVD training is available through SRUC.** This CPD course covers specific vet instruction for BVD testing, including vaccination, separately managed groups and other helpful information. Vets must complete the course to sign vet declarations and CBI confirmation certificates. The course is accessed through the Scottish Government website under the Scottish BVD Eradication Scheme [www.gov.scot/publications/bovine-viral-diarrhoea-bvd/pages/scottish-bvd-eradication-scheme/](http://www.gov.scot/publications/bovine-viral-diarrhoea-bvd/pages/scottish-bvd-eradication-scheme/)

**Veterinary declarations**
Approved vets can change the status of a herd to BVD Negative if they have sufficient evidence. Vet declaration forms can be requested from ScotEID. To be approved, a vet must complete the online BVD training through SRUC.

**Compulsory BVD Investigation Confirmation Certificate**
Similar to veterinary declarations but used at the end of the Compulsory BVD Investigation to confirm all animals in the herd are BVD Negative or BVD Assumed Negative. The certificate can only be completed by an approved vet.

**The ScotEID website and BVD lookup**
The ScotEID website at [www.scoteid.com](http://www.scoteid.com) is the central point at which all BVD results, herd status and individual status can be found. All approved laboratories report their results directly to ScotEID.

You can check your herd status at any time by entering your CPH number in the database search box. If you register with ScotEID you will be able to quickly see the BVD results for every test, and the individual status of every animal on your own holding. If you have concerns about your herd status, please contact your vet or laboratory to get this resolved.

The BVD status of any holding or animal can be determined by entering the County Parish Holding (CPH) number or animal ID into the BVD look up page on the ScotEID website. To prevent your herd from becoming infected, the status of every animal should be checked before it is introduced into your herd.

Only animals from a BVD Negative herd, or animals which have an individual Negative or Assumed Negative status, are allowed to move. Do not jeopardise your own status by purchasing animals from a BVD Not Negative herd unless they have been individually tested Negative for BVD virus.
For 'BVD Not Negative' holdings, only those animals which have an individual Negative or Assumed Negative BVD status, may move. For these holdings it is particularly important to check the individual status of each animal. If you notice any discrepancies in the data, please contact the responsible laboratory or the BVD helpline to resolve the issue.

Help on how to use the BVD look up is provided on the website or through the BVD helpline on 0300 244 9823.

### BVD Herd Status Table

<table>
<thead>
<tr>
<th>Category number/ BVD herd status</th>
<th>Description</th>
<th>Impact on animal movements to other herds or a livestock market</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Non-breeding</td>
<td>Keeper is non-breeding (no calves registered in past 12 month) or has declared that the herd is non-breeding</td>
<td>None</td>
</tr>
<tr>
<td>1 Certified Negative</td>
<td>The herd is CHeCS accredited as BVD Negative.</td>
<td>Can move anywhere. Testing is optional.</td>
</tr>
<tr>
<td>2 Screened Negative</td>
<td>The herd is Screened Negative, either by testing all calves, all animals or by check testing young stock.</td>
<td>Can move anywhere. Testing is optional.</td>
</tr>
<tr>
<td>3 Not Negative</td>
<td>The herd: shows evidence of exposure to BVD: • status has expired; • status was never established; • has been downgraded.</td>
<td>Cattle that don’t have an individual BVD Negative or Assumed Negative status must be tested prior to move.</td>
</tr>
<tr>
<td>4 Positive</td>
<td>Herd includes one or more persistently infected (PI) animals.</td>
<td>Cattle that don’t have an individual BVD Negative or Assumed Negative status must be tested prior to move.</td>
</tr>
</tbody>
</table>

Note: Individual animal status will override herd status and should be referred to wherever possible.
## BVD Individual Status Table

<table>
<thead>
<tr>
<th>Category</th>
<th>BVD status</th>
<th>Movement restrictions</th>
<th>Biosecurity recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Negative</td>
<td>None</td>
<td>Beware Trojan cows (see section 7)</td>
</tr>
<tr>
<td>2</td>
<td>Negative</td>
<td>Test calves born, conceived prior to arrival</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Not Negative (known as ‘risky’)</td>
<td>Must not move to another herd or market if from a Scottish holding. If from a non-Scottish holding it may require BVD testing within 40 days. From Non-Scottish: If an animal has been born on an English holding that has been CHeCS accredited for the full lifetime of the animal, it will not require testing, subject to confirmation by the CHeCS provider. Any animal born in Northern Ireland since 1st March 2016, will not require testing.</td>
<td>Isolate from breeding stock and individually test</td>
</tr>
<tr>
<td>4</td>
<td>BVD Positive</td>
<td>Cannot move to another herd or market. Can only go directly to an abattoir, or under an APHA licence in special circumstances.</td>
<td>Isolate and retest Move directly to slaughter</td>
</tr>
<tr>
<td>0</td>
<td>Untested</td>
<td>None</td>
<td>Individually test</td>
</tr>
</tbody>
</table>

### Samples and laboratories

Samples are taken by the vet or the keeper and sent to a laboratory approved by the Scottish Government, with the following information:

- **BCMS barcode sticker if available**
- **Keeper’s name, address and postcode**
- **Vet practice name and postcode**
- **CPH number the animals are registered to**
- **The CPH number for the holding on which the herd is kept**
- **The date samples were taken**
- **Which testing method was chosen**
- **The full 14 character official ear tag numbers for all the animals which were sampled.**

For calf screens, indicate when you have reached the end of calving year so that the laboratory knows when to set the annual herd status, see section 4.
An example form.

**FARMER’S SUBMISSION FORM – BVD VIRUS SCREENING (using tissue tags)**

PLEASE INSERT BCMS BAR CODE LABEL HERE
(This should contain the following information)

<table>
<thead>
<tr>
<th>Holding Number (CPH):</th>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Postcode:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tel:</th>
</tr>
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<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fax:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Email:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Date samples were taken:    _ _ /   _ _ / _ _ _ _

Are you an accredited health scheme member?                      YES                   NO

Declaration by Keeper
Samples submitted under options 2 and 3 (below) are intended to constitute a mandatory annual screening test for BVD for my herd; samples submitted under option 7 (below) are intended to be additional to screening tests for my herd.

Signature: ___________________________  Date: ___________________________

For a calf screen, all calves born on the farm in a 12 month period must be screened for BVD virus. This includes any calves that are born dead or die before being officially tagged. Your 12 month period will be set by the date you carried out your final test for the year e.g. if your last screen ended 30th April 2015 then the next screen will be all the calves born between 1st May 2015 – 30th April 2016.

(Please copy this form for further calves as necessary or download: www.scotland.gov.uk/bvd)

Please discuss the options on this submission form with the testing laboratory where necessary.

**Which screening method have you selected?** (Please circle option 2 or 3 for herd screening or option 7 for additional testing)

2. TEST ALL CALVES including dead calves; using the ear tissue test.

   Does this submission complete the calf screen for this 12 month period? Yes ☐ No ☐

   OR Are you expecting more calves to be born before the end of this 12 month period? Yes ☐ No ☐

3. TEST ALL ANIMALS IN THE HERD; using the ear tissue test.

   Does this submission complete the herd screen for this year? Yes ☐ No ☐

   OR Are you expecting more calves to be born before the end of this 12 month period? Yes ☐ No ☐

For samples NOT intended to be part of your annual screening, e.g. testing animals prior to purchase, or testing individuals in addition to a check test (blood sampling) done by your vet:

7. OTHER BVD TEST ☐

*Updated 12 August 2016*

If you need more copies of this form, please go to the website at: www.gov.scot/bvd.
You should ensure that the animal ID numbers are correct for the animals you have tested. You can check this on the ScotEID website. Any errors in the animal IDs may prevent you from moving them if the result is not recorded due to an incorrect animal ID.

<table>
<thead>
<tr>
<th>Official ID (include all 12 digits per animal)</th>
<th>Tissue Tag Number (if different)</th>
<th>Lab Reference</th>
<th>Virus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dead calves**

<table>
<thead>
<tr>
<th>Dam’s official ID</th>
<th>Tissue tag number</th>
<th>Lab reference</th>
<th>Virus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

Please tick this box if you **do not** give permission for samples and information you submit to be shared with Scottish Government appointed research providers to support BVD eradication.

**FOR LABORATORY USE:**

<table>
<thead>
<tr>
<th>Lab Ref No:</th>
<th>Date of receipt:</th>
<th>No of Samples</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Initials:</th>
<th>Checked:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Reported</th>
<th>Invoiced</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Vet</th>
<th>Databased</th>
</tr>
</thead>
</table>

*Updated 12 August 2016*
Laboratories
There are a range of approved laboratories, the details of which can be found at www.gov.scot/bvd. The laboratory to which you submit your samples will inform you and your vet of your results and pass on your herd status to the Scottish Government. In addition, they will report individual results for every animal tested for virus. We will presume all cattle that test positive for antigen (virus) are PI animals, until proven otherwise by a future test. Your tag supplier will state which lab to send your samples to.

Frequently Asked Questions

1. Got BVD? Don’t worry, you can just vaccinate.
FALSE – Vaccination does not deal with PI animals. They are too highly infectious and will still be able to spread infection potentially creating yet more PIs.

2. You should keep a PI animal on the farm so that your animals are not naive i.e. the idea of PI parties, ‘natural vaccination’.
FALSE – PI animals are highly infectious and should be culled as soon as they are identified. BVD causes significant losses on herds that have it, through transient as well as persistent infection. An animal that is transiently infected will suffer lower immunity and increased susceptibility to other diseases as a result and can reduce fertility.

3. The government is making vaccination compulsory/the government is banning vaccination.
FALSE – Vaccination will continue to be available and is a decision to be taken between keepers and vets.

4. You can’t get rid of BVD, because of transient infection.
FALSE – The evidence is overwhelming that removing the persistently infected animals will stop the disease from circulating. Transient infection will fizzle out on its own.

5. There’s no point in getting rid of BVD, because my herd will be re-infected by sheep/deer.
FALSE – Sheep can carry BVD and can re-infect your herd, but only if they have been in contact with cattle with BVD in the first place. Removing the source of infection – the PI cattle – will reduce BVD among sheep. Also, transmission from sheep to cattle is very weak, so only a small number will be unlucky enough to get re-infected this way. To be sure though, you should keep breeding cattle away from sheep. Deer can carry BVD, but we have no evidence to suggest this is a serious problem, and again, removing PIs will remove a major source of infection for deer.

6. It’s impossible to eradicate BVD from my herd – I’ve been trying for years.
FALSE – The vast majority who have followed a CHeCS scheme have got rid of BVD in under two years. If you test to find your PIs, slaughter them, buy in only BVD-free cattle or isolate and test them, test your calves for two years, and exercise good biosecurity, you should get rid of a BVD infection in under 24 months. All the studies show that the benefit to your profits will far outweigh the cost of getting rid of BVD.
7. I’ve got a PI animal, but it looks alright, so I don’t need to slaughter it, I’ll just finish it.

FALSE - Very few PI animals ever reach a good slaughter weight. You will only waste money trying to feed it. While it’s on your farm it is a significant disease risk to the rest of your herd. It’s always better to send it for slaughter immediately.

Where can I get more information?
The best source of advice and information is your vet.

If you are in a health scheme you will be able to access specialist advice through them. For more information on the Scottish BVD eradication scheme, screening requirements and information about ScotEID please go to www.scoteid.com or call the BVD helpline on 0300 244 9823.

If you have any questions specifically relating to BVD policy development, please call the policy team on 0300 244 9877 or email bvd@scotland.gsi.gov.uk.

For more information on BVD in general, visit the Scottish Government’s website at www.gov.scot/bvd which explains more about the disease.

Further copies of this guidance are available from:

BVD Policy Team
Scottish Government
Animal Health and Welfare Division
Saughton House
Broomhouse Drive
Edinburgh
EH11 3XD
Tel: 0300 244 9877 Fax: 0300 244 9797
Email: bvd@scotland.gsi.gov.uk WEBSITE: www.gov.scot/bvd
BVD Look up: www.scoteid.com The BVD helpline: Tel: 0300 244 9823