

Information on the Bovine Viral Diarrhoea (BVD) Eradication Scheme (NI)





Animal Health & Welfare NI

www.animalhealthni.com



Developed and Led by:



Background

Animal Health and Welfare NI (AHWNI) is an initiative by farmers' organisations and the wider cattle industry to promote improved cattle health and welfare within Northern Ireland (NI). Bovine Viral Diarrhoea (BVD) is the first disease to be addressed. Eradication programmes for this disease are already underway in the Republic of Ireland and Scotland. A cross-industry BVD Implementation Group (BVDIG) has been created to develop a Northern Ireland eradication programme. The programme is based on testing ear punch samples collected using tissue sample-enabled official identity tags for BVD virus and is designed to identify calves persistently infected (PI) with BVD virus as soon as possible after birth to enable their rapid culling. Where PI calves are detected in a herd, further testing may be required to identify any other PI cattle that may be present and to prevent spread of infection through trade. This leaflet gives you further information on the disease, on how the programme will work and what you need to do now.

Summary of legislation requirements:

1. **Tag calves born on or after 01/03/16 using an official tissue enabled ID tag from a designated tag supplier.**
(if you do not have an applicator to insert tissue tags order one as part of your tag order)
2. **Submit the tissue tags to a designated lab.**
(results should be received within 7 working days)
3. **Await the results and act on any further instructions you may receive.**
4. **Don't sell any animal born on or after 01/03/16 unless you have a negative BVD test result for it.**

BVD: The Facts

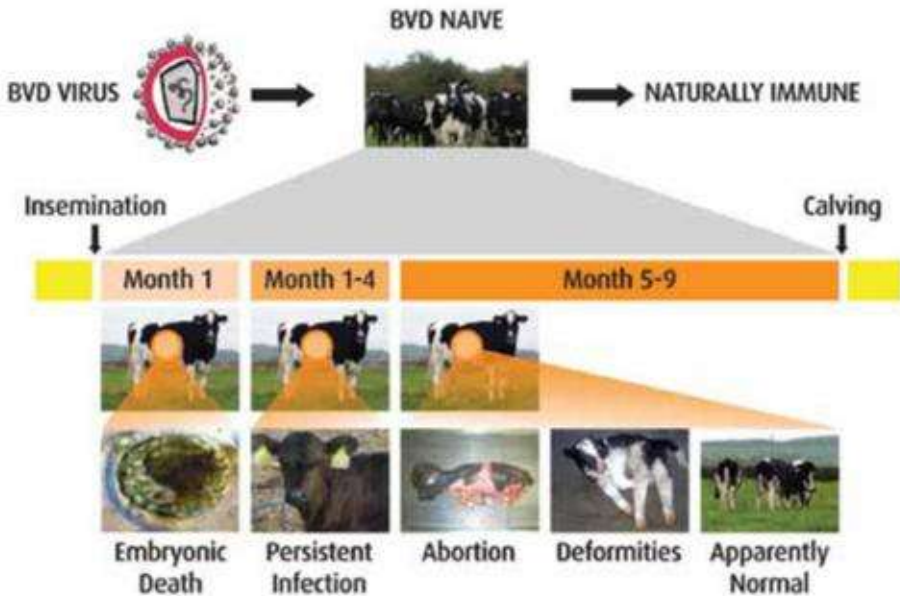
- Bovine viral diarrhoea (BVD) is a highly contagious viral disease of cattle. It can be spread directly by infected animals, or indirectly, for example by contaminated visitors or equipment
- The majority of infections with BVD virus occur after birth. In this case animals become

transiently infected (TI) before recovering and becoming virus-negative, typically within 3 weeks or less. Transient infections may occur without obvious clinical signs but depending on age, sex and immunity they can lead to a range of reproductive problems, including abortion and poor calf health with scours and pneumonias that respond poorly to treatment.

- Infection of the unborn calf between approximately 30 and 120 days of pregnancy will result in it becoming persistently infected (PI) with BVD virus if the calf is not aborted. If a calf is not PI at birth it will never be PI.
- PI animals will shed BVD virus at high levels for life and PI animals are therefore the most significant source of infection. TI animals shed virus at much lower levels and only for a few days.
- TI calves may also test positive for BVD virus. However, due to the immune response in TI calves a repeat test 3-4 weeks later should be negative, whereas a PI will always give a positive result. At the start of the scheme it was expected that around 0.6-0.8% (6-8 calves per 1,000) will test positive for BVD virus.
- PI animals can look entirely normal, particularly at birth, but may become stunted and ill-thriven. PI animals often develop a severe and always fatal wasting condition with diarrhoea and ulceration of the gut and feet, called mucosal disease (MD). This typically occurs between 6 and 18 months of age. The majority of PI animals are dead before reaching breeding age or slaughter weight, either from MD or other infections (particularly scour and pneumonia).
- BVD virus persists in herds by creating further PI calves. Therefore identification and removal of PI cattle is the key to control. Vaccination to maintain immunity in breeding stock can offer further protection where susceptible pregnant cattle are exposed to BVD virus.
- BVD eradication makes financial sense. A recent study estimated that programmes such as this would give a cost benefit of 10:1 over six years of the programme i.e. a return of ten pounds for each one pound spent.

**For more details call 028 7963 9333 visit
www.animalhealthni.com or speak to your local vet.**

The effects of BVDV infection on reproduction



Signs that BVD virus may be present in a herd

- Animals thriving poorly for no apparent reason
- More unexplained abortions than normal
- More calf scours and pneumonias than normal
- Sick calves responding poorly to treatment
- More 'empty' cows than expected
- Birth defects in calves
- Mucosal disease diagnosed

Summary of the Bovine Viral Diarrhoea Eradication Scheme (NI) 2016

You must take a tissue tag sample from all calves born after 1st March 2016 and submit the samples to the designated testing laboratory as soon as possible but not later than 7 days after collection. Note that this requirement also applies to stillborn and aborted calves.

Comment: While calves may be tagged up to 20 days after birth, it is recommended that samples are taken as soon as possible after birth and as soon as the calf is dry. Early sampling of calves reduces the possibility of a non-PI calf being infected with BVD virus after birth and becoming transiently infected (TI; see below), leading to a positive virus result. Avoiding TI animals will remove the cost and inconvenience of re-testing them to distinguish between TI and PI calves. Early tagging also helps ensure that each calf is correctly matched to its dam. This is vitally important to the success of the programme, because the dam of any PI calf should also be tested. On the other hand, because a PI mother will always produce a PI calf, a negative result for a calf also gives an indirect negative result for the mother.

Despite being taken correctly, a small percentage of samples may not contain a tissue sample when received by the testing laboratory. Should this happen, or a sample be found unsuitable for testing for any other reason, you must submit a further sample. This can be a further tissue sample taken with a supplementary tag (see later) or a blood sample taken by your vet.

You have the option to have repeat testing carried out following an initial positive or inconclusive result.

Comment: Blood or tissue samples may be taken from any animal that gives a positive or inconclusive result to confirm that it is PI (as opposed to being transiently infected). This sample should not be taken until at least 3 weeks after the initial sample to allow PI and TI animals to be distinguished. If the re-test is negative, the animal is considered not to be PI. If the animal is not retested, it will be considered PI.

Carry out all necessary follow-up testing following a positive or inconclusive test result.

Comment: You should test additional animals in your herd where they are suspected of being PI. Again, this testing may be carried out using either blood or tissue samples. At minimum this includes testing the dam of animals considered to be PI. If the dam is found positive, the other offspring of the dam are also considered to be PI until such time as they are tested and found negative.

Cattle eligible for test under the programme may only be sold when the owner has received a valid negative test result. Test positive animals are not permitted to move to other farms, markets or Export Assembly Centres and should be culled at the earliest opportunity (an abattoir ban is in place for those born on or after 01/03/2016).

Comment: This requirement applies to both Northern Ireland-born and imported cattle. Because PI animals are the main source of infection for cattle in their own and neighbouring herds it is vital to stop their movement between herds.

Ordering tissue sample tags

The BVD Implementation Group and DAERA have put in place a process to allow tag suppliers to be designated to provide tissue sample-enabled official tags for use in the programme. Management tags (bearing the animal's tag number) will also be available to be used alongside any official tags still in your possession. An up-to-date list is maintained on the AHWNI website (www.animalhealthni.com). Note that the price for each tag includes the cost of the BVD test. You will receive pre-addressed packaging for submitting samples to the testing laboratory with your tag delivery.

Details of your tag order will be transmitted to the AHWNI database that manages the programme. This database will access your relevant herd details on NIFAIS. Once the sample is tested the testing laboratory will transfer the results to the AHWNI database. As part of the tag order process you will also be able to provide your mobile telephone number (for reporting results by text message) and to nominate a veterinary practice to access your results on the database.

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Supplementary (button) tags

This is the name given to tissue sample tags other than official approved identification tags. However, in common with the official tags they must bear the full identification number of the animal on which they are used. This is to ensure sample traceability. Supplementary tags may be used for additional sampling in your herd as an alternative to blood sampling. They may also be used to match any existing pairs of approved identity tags already in your possession.

Storage and submission of samples

If not being sent immediately, store samples in a cool dark place (ideally in a non-domestic fridge) FOR A MAXIMUM OF 7 DAYS. For shipment, place the tissue tag samples inside a plastic bag and seal it. Place this bag in turn inside the outer packaging provided by the tag supplier (which must be labelled with the words "BVD TAG TEST-EXEMPT ANIMAL SPECIMEN" and your herd number). A large letter stamp must be used for up to 10 samples. If unsure about postage please bring the package to your local post office to ensure correct postage is paid and avoid delay in results or samples being lost in the postal system.

Notification of results

Laboratories will report results electronically to the AHWNI database (95% within seven working days, median <2 days) which will in turn notify you within 24 hours each time new results are received. All animals must be registered with NIFAIS in order to avoid delays in receiving results.

Notification is most efficient by SMS (text) message. Wherever possible, herd-owners should provide a mobile number for reporting results. You can update this directly on the AHWNI database or alternatively you can contact AHWNI directly on 028 7963 9333. Note that calves must be registered before a result will be issued. If you have not provided a number, a letter will be issued describing your test results.

The majority of tests will be negative for BVD virus. The remainder may be POSITIVE, INCONCLUSIVE or

EMPTY (no tissue present in the punch submitted). In each of these three cases AHWNI will issue a letter confirming the result and advising you of the next steps to take, including advice on re-sampling of these and other animals in the herd. These letters will also contain a submission form for any re-tests or additional testing that is required as a result of the reported results. You must give this form to your veterinary practitioner if these samples are collected.

Can I re-test an animal with a positive or inconclusive result?

Yes. This must be done using a blood sample collected by your vet. Re-tests should be carried out 3-4 weeks after the initial test was performed to allow transiently infected animals to become virus-negative.

What should I do with a persistently infected animal (PI)?

For the purposes of the programme, an animal is considered to be PI if the initial test result is positive or inconclusive, or if the result of a retest gives a further positive or inconclusive result. It is illegal to sell a PI animal. PI cattle are the main source of infection for other cattle in your and neighbouring herds and contact with susceptible pregnant cattle is likely to lead to the birth of further PI calves. PI calves are also likely to die before reaching slaughter weight or breeding age. It is recommended that PI animals are culled as soon as possible, and strictly isolated until this is done.

Should other animals be tested following an initial positive or inconclusive result?

The mothers of positive or inconclusive calves are also under suspicion of being PI and again may be tested using a blood sample collected by your vet. While you may choose to wait until a re-test of the calf confirms it to be PI before sampling the dam, it is quicker and more cost effective to sample both calf and mother at the same time. If the mother tests positive, all of her descendants are likely to

be PI, and these offspring should be treated as PI or tested. Details of the animals involved will be included in the letters issued by the database.

Can I see my herd's results on the AHWNI database?

Yes, herd-owners can access results for their own herd via the AHWNI website (www.animalhealthni.com) using their Government Gateway username and password. This allows access to all test results and details held for your herd. All letters and reports issued for your herd will also be stored here. You can also use the database to provide or update your mobile phone number or to grant your veterinary practitioner access to your results.

How can I demonstrate the BVD-free status of tested animals for sale?

You can generate a declaration of negative results for animals in your herd from the AHWNI database.

What steps should I take to prevent accidental introduction of infection to my herd?

The single biggest risk is through purchased animals, which should ideally be tested negative for BVD virus beforehand. Note that even non-PI cattle may be transiently infected if recently exposed to BVD virus (and therefore still pose a risk for a short

period of time). Where the possibility exists that bought cattle may have been recently exposed to BVD virus, it is advised that they are isolated from other (especially pregnant) stock for at least 4 weeks after purchase.

Where pre-purchase testing is not possible, cattle should be isolated post-purchase until tested negative. Note that pregnant non-PI cattle may carry a PI calf if they were exposed to BVD virus during early pregnancy. It is best practice to isolate any purchased in-calf heifers or cows until they have calved and the calf has tested negative for BVD virus.

Where can I find further information?

Further details of the programme are available from www.animalhealthni.com or from, AHWNI, Unit 49, Dungannon Enterprise Centre, 2 Coalisland Road, Dungannon, Co. Tyrone, BT71 6JT
Tel: 028 7963 9333
Email-
info@animalhealthni.com
Twitter-@animalhealthni



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