

# BVD Monitor

A surveillance structure for BVD  
for beef and dairy cattle



The first step in BVD control



## Introduction

BVD is a major cause for economic loss on beef and dairy farms in the UK. It causes fertility problems, mucosal disease, calf death, abortion, appetite loss and diarrhoea. Active infection is transmitted via persistently infected (PI) calves which are unable to produce antibodies to combat the disease. PI calves arise from early infection (<120 days) of in-calf dams.

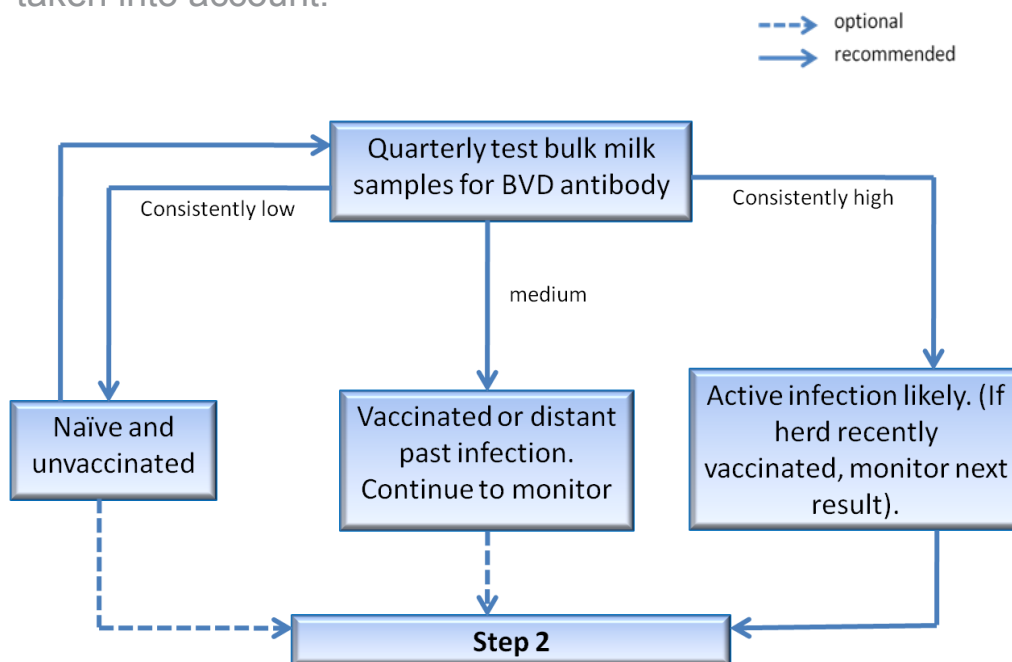
The first step in BVD control is to ascertain if active infection is present, or has recently been present, on the farm.

NML offer a series of simple testing structures for routine BVD surveillance. These give step by step guides for detection of active infection on UK farms. Additional ad hoc testing of bloods or milks or 'tag and test' services are also available to add flexibility to the service.

If active infection is known to be absent, step 1 can be used alone to give an indication of herd BVD status. Whilst vaccination does affect the test result, by testing at multiple time points, it is still possible to monitor if active infection is present. In most other cases, it is recommended that step 1 is used in conjunction with step 2(a) to give an indication as to how recent BVD active infection has been present.

## Step 1 — Quarterly screen of bulk milk samples

This involves monitoring BVD antibody levels within the bulk milk tank over time to ascertain whether the current status is a result of active or past infection within the herd. It can be used as a basic surveillance tool or can be used in conjunction with another step. Vaccination status should be taken into account.

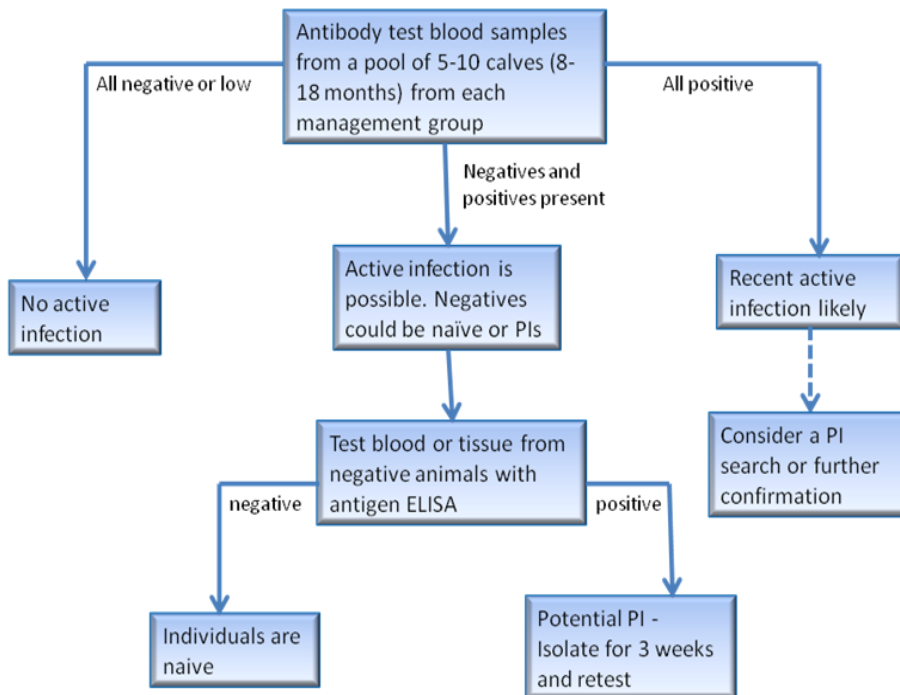


To aid with PI identification, 'Tag and Test' tissue tests are available from Nordic Star.

Call: 0844 7255567

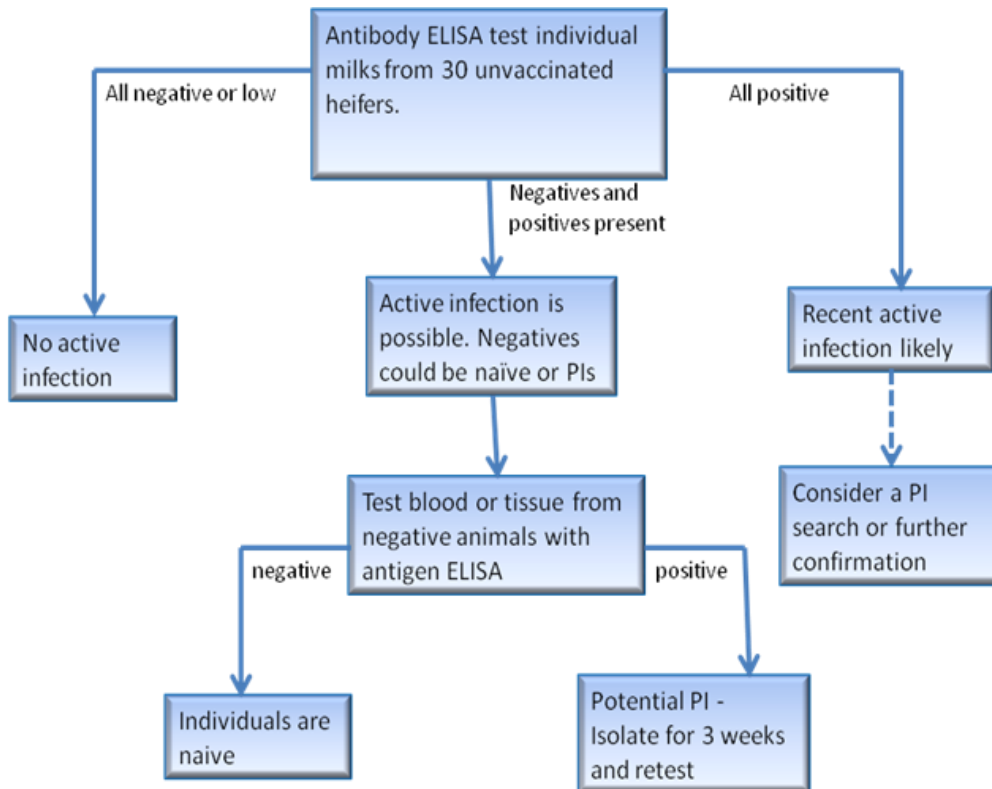
## Step 2(a) - Unvaccinated youngstock screen

This step involves antibody ELISA testing of bloods from a sample cohort of unvaccinated youngstock 8-18 months old. Antibody presence indicates active infection. Where BVD antibody is absent, bloods can be tested for BVD antigen to identify whether the individual is a potential PI or naïve. It is important to only test youngstock that have been on the holding for at least 4 months. It may also prove useful to 'tag and test' all youngstock born in a particular year.



## Step 2(b) - 1st lactation unvaccinated heifer screen

This step involves antibody ELISA-testing individual milk samples from thirty heifers. If there are less than thirty first lactation heifers, the whole age cohort should be screened. The result gives an indication of whether active infection is present currently or recently.



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WV6 8TQ

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[www.nationalmilklabs.co.uk](http://www.nationalmilklabs.co.uk)



## Result reporting

Results are sent in a PDF report to the farmer and the vet (suitable permissions must be granted. Data permission forms available from [www.nmr.co.uk/images/pdf/third\\_party\\_authorisation\\_form.pdf](http://www.nmr.co.uk/images/pdf/third_party_authorisation_form.pdf) ).

Results are also displayed on Herd Companion ([www.nmr.co.uk/herd-companion/](http://www.nmr.co.uk/herd-companion/)). Login details are available from customer services.

## Result interpretation

It is important that interpretation is carried out by the farm vet and that cattle movements, vaccination status and the presence of clinical symptoms are taken into account when considering the next course of action. NML is unable to make interpretation on behalf of the vet but is happy to provide guidance on test protocol and quality control data.

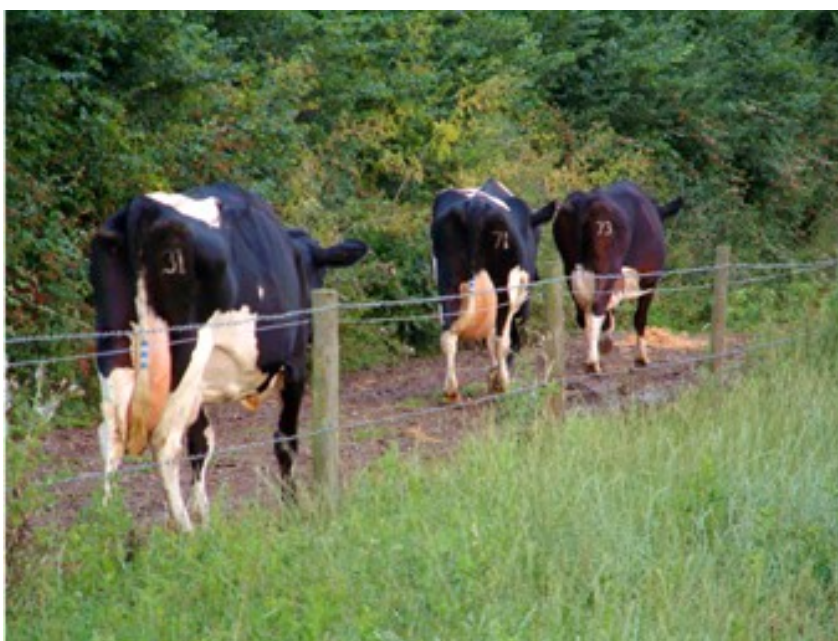


## How to order

All of the tests are currently available through NML and kits can be ordered by calling **0844 7255567**. This document illustrates a recommended structured approach to ascertain if active infection is currently or has recently been circulating on the holding. Vaccination status must accompany all submissions.

Bulk milk samples (already held at NML) can be used for bulk screening. Furthermore, NMR milk recording samples can be used for the 30-heifer screen (where individual cow IDs are specified).

Tag and test tags can be ordered from Nordic Star via NML.



## BVD pricelist

	Farm
• Bulk Milk ab* ELISA	£6.00
• as above—quarterly (NML samples can be used)	£20.00
• Individual blood ag* ELISA	£4.50
• Individual blood ab* ELISA	-
• Tag and test (button tag)	£4.50
• Tag and test (statutory tag)	£5.50
• 30-heifer screen	£100.00

(kits available via customer services or NMR samples can be used)

\*ab – antibody, ag – antigen

**For more information on how to order**

**Call: 0844 7255567**

***[www.nationalmilklaboratories.co.uk](http://www.nationalmilklaboratories.co.uk)***

**[www.nmr.co.uk](http://www.nmr.co.uk)**

