



# BVDHerdCheck Dairy User Guide

Manage disease • Protect your future



## BVD HerdCheck Dairy includes

- Quarterly bulk milk PCR (virus)
- Youngstock screen consisting of at least 10 blood samples

**BVD HerdCheck is a CHeCS approved BVD surveillance scheme, which establishes the BVD status of a herd on an ongoing basis. BVD HerdCheck Dairy is suitable for herds that rear their own replacements and may or may not buy in replacements. If you are already using Tag & Test it may be worth considering the Flying Herd or Beef scheme rather than the Dairy scheme.**

## Dairy testing schedule

**BVD HerdCheck bulk milk testing will be scheduled quarterly by NML and the youngstock blood samples may be submitted at any stage during the 12 month period. Some farmers may be already using Tag & Test for their youngstock – if the vials are tested with NML, this testing data will be compiled alongside the bulk milk and blood results on Herd Companion (our online portal to view results).**

A progress status will be shown within Herd Companion offering a simple way of checking which samples are outstanding in order to complete surveillance for that year.

## Part 1: Bulk milk PCR

**Quarterly BVD virus tests will be scheduled on bulk milk samples that are already held within the NML fridge, so there is no need for additional sampling. Where multiple tanks are sampled on one farm, either each sample will be tested and the extra samples charged for, or a composite sample may be provided by the farmer.**

### Why use bulk milk testing?

Surveillance of the bulk tank using PCR, which looks for the RNA of the virus is useful to identify herds with active infection and / or Persistently Infected (PI) animals in the adult milking herd.

PCR works by identifying the presence of virus in the sample. A positive result means that one or more cows that have contributed milk to the sample are infected. Therefore a positive result means that BVD infection was active in the herd on the day of sampling.

Validation of the PCR test shows that it is capable of detecting virus from one PI cow in groups of up to 300 contributing to a bulk tank sample. Further dilution studies conducted by NML show the test is in fact capable of detecting the virus in bulk milk samples up to 1000 cows.

It must be remembered that on any given day, not all cows will be contributing to the bulk tank as some will be dry and some will be withheld due to illness or drug treatments. By repeating this test quarterly, the adult herd can be effectively monitored for PI animals and the chance of any cows being missed from the screening is reduced.

This, together with the repetition of testing gives confidence that BVD HerdCheck Dairy will reliably identify active infection in herds with up to 1000 cows contributing to the bulk tank.

## Part 2: Dairy youngstock screen

**To complete BVD HerdCheck surveillance, a minimum of 10 blood samples are required, from animals between the ages of 9-18 months. These samples must represent the management groups on your farm.**

These samples will be tested for the presence of antibodies (ELISA). Samples can be split into two batches of 5 over the year or all 10 blood samples sent together per year. Your vet may recommend that additional blood samples are required to give a more complete and accurate surveillance of your youngstock, depending on your management system and number of management groups. Additional samples can be submitted to the lab and the results will be reported alongside your other results.

### Why use a youngstock screen?

Animals are tested from the age of 9 months because by this time any maternal BVD antibody from colostrum will have waned. The animals tested must not have been vaccinated against BVD.

By looking for antibodies we are looking for exposure to the virus. If antibody response indicates there is virus amongst the group then a PI hunt can be undertaken.

From 9 months of age any positive antibody results indicate that the animal has been exposed to BVD virus, become infected and then recovered. Testing a subsample of animals within a management group will indicate if the group has been exposed to BVD virus. If the sub sample all test negative for antibodies, the management group has not been exposed to the virus, and is naïve. These animals are at risk of infection.

**IT IS ADVISED THAT YOU CONSULT YOUR VET TO SELECT THE ANIMALS REQUIRED TO PROVIDE AN EFFECTIVE YOUNGSTOCK SCREEN AND TO INTERPRET THE RESULTS.**

### What is a management group?

A management group consists of those animals that can freely achieve nose-to-nose contact. PI animals spread the virus very efficiently when in nose-to-nose contact with other cattle therefore it is not necessary to test every animal in a group.

### Biosecurity tips

- 1 Find out the individual status of any purchased or introduced animals and the status of the herd of origin.
- 2 Cows that have become infected in pregnancy will be antibody positive but could still be carrying a PI calf.
- 3 Bulls can be at risk of infection even if they are antibody positive. Consult your vet when considering buying a bull.
- 4 BVD spreads easily, so protect your cattle from infection at farm boundaries.

### When do I submit my samples?

Blood samples may be submitted at any stage during the 12 month period although it is recommended that blood samples are sent in for testing as soon after the commencement of the scheme to aid early detection of the disease.

To enrol please call 01902 749920