# **BVD** testing



# Calf screening (<35 days old)

BVD testing doesn't have to be complicated. We have recently simplified our BVD testing options and updated the tests for various age groups ensuring all details are up to date with the latest guidelines.

Calf screening in dairy herds aims to identify and remove persistently infected (PI) animals before they can infect any pregnant cows. An ideal time to sample is during tagging or disbudding. Up until recently, using antigen ELISA testing in animals less than 35 days-old was not recommended due to interference from maternal antibodies and the potential for false negative results. Recent work carried out in New Zealand now indicates that antigen ELISA is a suitable test to use on ear notch samples for animals in this age group. PCR is a suitable test for serum or ear notch regardless of age.

## PCR vs antigen ELISA – which to choose?

#### Tissue samples

Tissue samples are tested in a pool by PCR, then all samples in a positive pool are individually tested by antigen ELISA. Recent work has shown that antigen ELISA testing on tissue/ear notch samples can be performed on animals of any age.



#### Serum samples

Serum antigen ELISA is still NOT a suitable test for animals less than 35 days old due to the potential for false negative results. When serum samples are tested using PCR, the sera are pooled for PCR testing and then all samples in a positive pool are individually tested using PCR.



## **Benefits of PCR testing:**

PCR testing is highly sensitive and will detect transiently infected animals (TI) as well as PI animals. For young calves, we recommend testing tissue samples by PCR. Gribbles Veterinary uses a combination of PCR (pooled samples) then antigen ELISA (on individuals in positive pools), which allows for differentiation of TI and PI animals in most cases.

Note: As there are no clear cut-off value between TI and PI animals, Gribbles Veterinary always recommends retesting positive animals 4 weeks later to minimise the chances of culling a TI animal, regardless of whether the positive test is completed by PCR or antigen ELISA.

#### **Summary of testing options:**

Animal age	PCR	Antigen ELISA	Result type
<35 days	Serum or ear notch	Ear notch only	Individual
>35 days	Serum or ear notch	Serum or ear notch	Individual

Please refer to our current price book for sample types, test turn-around times and pricing. If you have any questions or would like any further information, please contact your local Gribbles Veterinary laboratory or Territory Manager.