



HEALTHIER HERD HEALTHIER PROFITS

An educational initiative brought to you by MSD Animal Health working with the UK's farm vets

Part three:

Vaccinate against BVD to protect yields and fertility

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Taking a step-by-step approach to disease control can help beef producers stamp out BVD on-farm. **Aly Balsom** reports.

BVD eradication is achievable

Modern day testing strategies mean bovine viral diarrhoea (BVD) eradication is an achievable aim on all beef farms with breeding stock looking to reduce economic losses and maximise performance.

BVD represents one of the biggest economic drains to the UK beef industry, with the disease estimated to be present on nearly two-thirds of beef farms.

Obvious clinical signs of infection include mucosal disease, however this is just the tip of the iceberg. The virus is more likely to result in reduced fertility through high levels of abortion and returns. Exposure can also cause immuno-suppression leading to increased levels of pneumonia and depressed growth rates.

Biosecurity

Effective biosecurity is a must as the virus can be spread via nose to nose contact. The fact the disease can move vertically from a dam to her unborn calf also adds complications.

When a naive cow is exposed to the virus during the first trimester of pregnancy, the calf is born carrying and shedding the virus and is termed 'Persistently Infected' or a PI. These PIs are one of the main routes of disease spread.

“One PI in a group of bought-in stores can infect all other animals with BVD”

NEIL ROBERTS

Culling PIs and vaccinating against BVD is widely recognised as an effective way to get on top of the disease. By removing PIs you are reducing risk of disease exposure. Vaccination also protects a cow from the effects of any potential disease exposure and reduces the risk of a PI being produced. Because of this, vaccination is advisable in all breeding herds.

Developments in testing regimes means there are proven strategies available to identify and eliminate BVD, making eradication an achievable target in all breeding herds. The fact the Scottish government has also introduced a BVD eradication scheme demonstrates this and places greater pressure on the rest of the UK to drive BVD control.

Neil Roberts, of Dalehead Veterinary Group, Yorkshire, says the best way to establish if BVD is a problem in breeding herds is to screen youngstock for antibodies.

“Calves are like marker ani-

mals. If there is a PI in calves or cows, calves will test antibody positive (having been exposed to the virus). In a herd with 50 calves, about six to 10 calves over nine months old should be tested for BVD antibodies.”

When bloods test positive, all calves should then be tested for BVD virus until PIs are identified. The dams of any PIs should also be tested and all PIs culled.

Tag and test is also another simple strategy to determine if an animal is a PI. This relatively new test uses specialist tags to take a tissue sample automatically when an animal is tagged. This can then be sent off for analysis.

Infection

Bought-in animals represent one of the biggest routes of infection and as a result, knowing their disease status and quarantining is essential, says vet Paddy Gordon of The Shepton Vet Group.

“There are two main concerns when buying-in cattle – they may be a PI themselves, or if they are in-calf, they may be carrying a PI calf,” he explains.

Ideally bought-in cattle should be tested before they arrive on farm, but if not they can be tagged and tested on arrival during quarantine. If they are a PI they can then be culled. Calves born to bought-in pregnant animals should also be tagged and tested.

Mr Roberts says because BVD control is easier in breeding cattle, there is a need to get on top of the disease in these herds so producers buying fattening cattle will have greater confidence.

“One PI in a group of bought-in stores can infect all other animals with BVD. That PI will probably die but it will lower the other animals' immunity and result in more pneumonia. Ideally, farmers should source stores from farms of known BVD status or tag and test to see if they are a carrier,” says Mr Roberts.



Effective biosecurity is a must as the BVD virus can be spread via nose-to-nose contact.

Case study: H. Curtis and Sons, Brookhams Farm, Bristol

BY choosing to enter a High Health scheme and be accredited free of BVD, Kevin Curtis believes he is not only meeting buyer demand, but also improving the quality and potential of his herd.

Having traditionally vaccinated all stock for BVD and IBR, last year Mr Curtis decided to go one step further and enter his herd of 50 pedigree Limousins cows and eight pedigree Simmentals onto a High Health CHcS accreditation scheme.

Having recognised the benefits in the pedigree animals which are registered under the Brookhams Herd prefix, he is now considering doing the same with his 150-cow commercial suckler herd.



Kevin Curtis

Mr Curtis has also witnessed growing demand for high health status animals when selling bulls from his pedigree herd.

“It is a good selling point. In the future I can see you won't be able to sell pedigree cattle

which are not on a health scheme,” he says.

By working with vet Lottie Maire of Shepton Vet Group, the farm has followed testing and biosecurity protocols so as to be accredited ‘vaccinated monitored free’ for BVD.

Accreditation

As part of accreditation, every year five animals between nine to 18 months old from each management group are tested for BVD antibody and antigen (virus) to allow any PIs to be identified. Two consecutive clear tests a year apart means a herd can be accredited free.

The farm breeds all of their own pedigree replacements, but also buys-in some high genetic, high health French Limousin bulls. All bought-in bulls have to be quarantined for one month and blood tested for BVD after 28 days.

The commercial replacement females and bulls have always been vaccinated with Bovilis BVD as a precaution.

“Vaccination is important on commercial and pedigree herds as you do not want growth checks or negative effects on fertility,” he says.

In the future, Mr Curtis is also strongly considering entering the commercial herd onto a health scheme. This will encourage routine testing and help maintain high fertility.



A freshly-calved heifer with 12-hour-old calf at Brookhams Farm.

BVD explained

- BVD virus is spread via nasal secretions and faeces
- Bought-in animals pose significant risk
- Infection can move vertically from cow to calf during pregnancy. Calves which carry and shed the virus for life are termed

- ‘Persistently Infected’ (PI)
- PIs are the main cause of disease spread
- Infection can cause mucosal disease, reduced fertility, and immuno-suppression
- Good biosecurity and vaccination is crucial

This information was provided by MSD Animal Health, makers of Bovilis® BVD, Bovilis® IBR Marker Live, Bovilis® IBR Marker Inac and Leptivoid™. Always use medicines responsibly.

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