
BVD VIRUS

Eradication from Rutland
What are you doing about it?





WHAT ARE YOU
DOING ABOUT IT?

BVD:

So what are you doing about BVD on your farm?
How far along the path to improved performance
have you gone? And could you do more?

PATHS TO PERFORMANCE/STEPS TO SUCCESS

The BVD virus is now widely recognised as a significant cause of disease and financial loss on farms throughout the world. So much so, that many countries have set up control and eradication schemes. In the UK, farmers who eradicate or vaccinate their herds against the BVD virus see improvements in herd health and production.

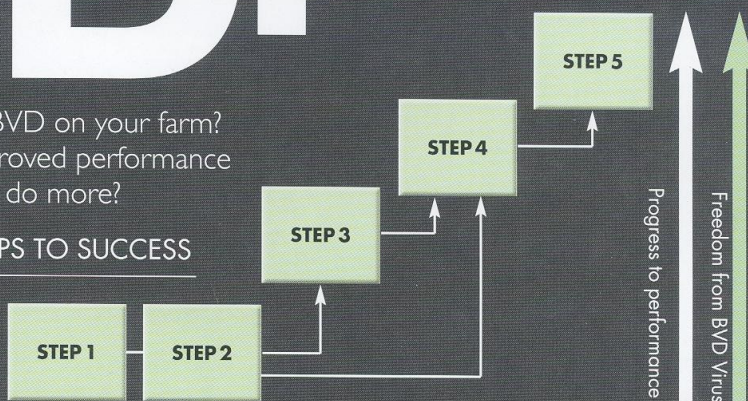
This winter we are launching the BVD Eradication: Rutland scheme. We aim to recruit all farmers from the county of Rutland and initiate customised on farm schemes to eradicate BVD from Rutland farms, and keep it out.

Step 1: Join the BVD Eradication: Rutland Scheme and start to accredit your herd as BVD free

The gold standard for BVD control is to eradicate any BVD virus positive animals from your herd. Eradicating BVD could save you 3-4 calves per 100 cows per year.

There are also proven cost-benefits in vaccinating against BVD – a 200-cow dairy herd could save 2.3p per litre, a suckler herd can save at least £50/cow/year.

Talk to your local vet about joining the BVD Eradication: Rutland scheme, this involves joining an accreditation scheme run by the SAC. Once you have joined the following steps will be followed.



Step 2: Previous herd history of BVD

Depending on the results of previous bulk milk test and/or blood tests, you could already be free from BVD.

Step 3: Improve biosecurity on farm

Eradication of BVD from farm is an achievable goal, however if strict biosecurity protocols are not followed, BVD can easily get back onto the farm. This will waste all the good work, time and money already spent on eradicating BVD from the herd in the first place.

Steps to improve biosecurity should be considered at the same time as blood sampling, your vet can go through this with you at the first visit.

Step 4: Blood sample youngstock

An easy way to determine whether BVD is present on farm is to blood sample 5 animals from each separate group of youngstock (9-18 months of age).

If these animals are positive to BVD antibody then BVD is present on farm and further tests are needed to identify the animal(s) that are spreading the disease, the PI's.

If negative then BVD is unlikely to be present on farm and the next step to accreditation can be made.

Step 5: PI's identified and removed

By going on a PI hunt, and removing these virus-shedding culprits from the herd, you are removing the BVD source. Further improvements in performance may be seen – not just reproduction and fertility, but also animals with stronger immune systems resulting in e.g. fewer respiratory diseases.

Whole herd vaccination is another step in reducing the likelihood of BVD getting back in to the herd. It can also be used while the PI is being looked for to improve herd status more quickly. For best results vaccination should be used as a backup to eradication, not as a replacement, for the following reason.

By vaccinating the whole herd, all animals are protected. However, PI animals may be present in the herd and no amount of vaccine will change their status: they are persistently infected for life. These PIs will shed the virus, and challenge the vaccine's protection to the rest of the herd. And a PI dam will always give birth to a PI calf. So there is still scope to improve herd performance further.

ULTIMATE GOAL: A BVD FREE HERD.

The ultimate goal is a BVD free herd. Protection for the herd can be maintained with vaccination. Once regional or national freedom from disease has been achieved and when appropriate biosecurity is in place, it is realistic to consider ceasing vaccination.

The PI animal

The source of the BVD virus, is what is known as a persistently infected (PI) animal - it will have been infected with the disease via its mother, in early pregnancy. Once born it will shed the virus persistently and expose its fellow herdmates to the disease.

PI bulls are a real threat. Not only do they continually shed the virus, but their semen is also a source of the BVD virus. Always blood test new bulls before they come into the herd.

Persistently INFECTED ANIMALS shed the BVD Virus and cause:

- Abortions
- Infertility
- Mucosal Disease
- Immunosuppression
- Calf pneumonia and scour
- General poor health

Total eradication of BVD

The BVD virus has been totally eradicated from Sweden and Norway. As a consequence, vaccination has been able to cease. Crucial to this BVD-free status are stringent biosecurity measures, ensuring no re-introduction of the virus into the national herds.

BVD has also been totally eradicated from the Shetland Islands. Here again, the geography is a major plus in preventing re-entry of the disease. The Orkney Islands is on track to be BVD-free too. But what about the rest of the UK?

National strategy

Apart from the BVD Eradication: Rutland Scheme, three other BVD control and eradication schemes exist in the UK, operated under the guidance and regulation of the Cattle Health Certification Standards (CHCS). These schemes serve to accredit herds with a BVD status and require adherence of a specific programme of biosecurity and testing to ensure freedom from the virus.

In 2005, the possibilities of a national BVD Control and Eradication Campaign were discussed by a group of industry bodies including DEFRA, the NFU, EBLEX, breed

societies and animal health companies. It was led by Professor Joe Brownlie of the Royal Veterinary College, a UK leading authority on the BVD virus.

It was agreed that a national strategy was ultimately the way forward, but that it needed the involvement of both vets and their clients. Also, that eradication should focus on getting a specific area of the country clear - reducing the risk of the disease re-entering.

Eradicating BVD in East Anglia

Stemming from the meetings on national strategy - a new BVD eradication scheme has now been launched by the regional Holstein Clubs in Norfolk and Suffolk, headed up by Professor Brownlie. The aim is to eradicate BVD from participating herds and also prevent them from re-infection.

Already 71 farms have signed up for the scheme and two thirds of them have been tested.

Professor Brownlie and his RVC team will be collecting data throughout the trial to assess the cost-benefit to participating herds, and identify and quantify the secondary benefits of being a BVD-free herd.



Eradication plans in Somerset

The relatively low and dispersed cattle population of East Anglia, means that biosecurity is easier to manage than in the more densely stocked areas of the south west.

XLVet Geoff Singleton of the Kingfisher Vet Practice in Crewkerne says: 'In cattle dense areas, it can be hard to achieve total biosecurity, as it's not just a case of quarantining and testing new arrivals of cattle. The BVD virus can be spread by infected cows having nose to nose contact over the fence with neighbouring herds, and by people visiting from farm to farm. Sheep and deer can spread it too'.

So maintaining whole herd vaccination in conjunction with eradication should be the way forward. XLVet Paddy Gordon of Shepton Veterinary Group in Shepton Mallet has just

started working with the Royal Veterinary College on a three year research programme which aims to eradicate the PI animals from herds. In collaboration with the RVC, it will also assess a whole range of health and disease levels on 30 of the practice's farms, including fertility problems and abortions.

'Immunosuppression is another one of the effects of the BVD virus,' explains Paddy. 'This means cattle can have a lowered immune system and therefore be more prone to, for example, pneumonia, or TB. So the programme also includes measurements of mastitis levels, calf diseases, mucosal disease and respiratory disease'. 'Most of our dairy farming clients are already vaccinating against BVD. They are seeing fewer PI calves, mucosal disease and poor doers than ten years ago, before BVD vaccines became available. Also very apparent is the reduction in abortions and

infertile cows. One farmer used to have one or two abortions per month - that's all now stopped thanks to vaccination'.

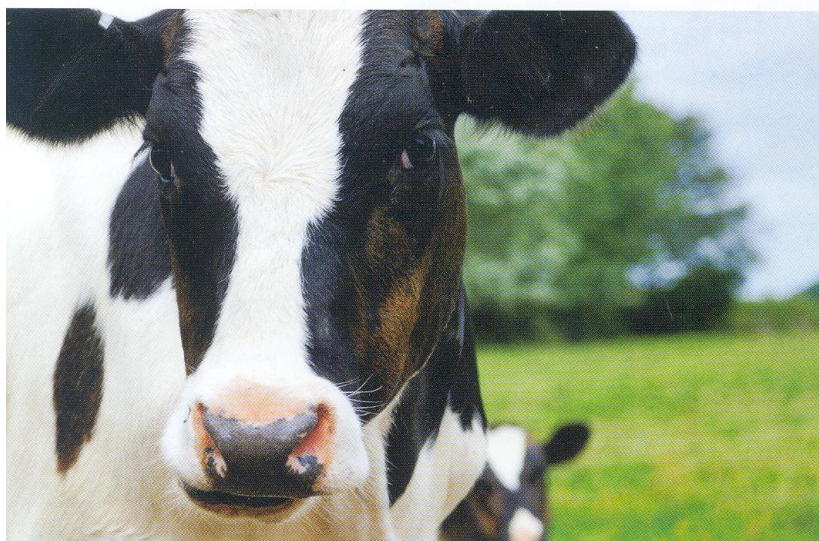
'Clearly vaccination has already proved effective on these farms. However, we are now looking to see whether we can improve things further, by identifying and removing any PI animals'.

'On one farm we blood tested all 300 youngstock, and found 2PIs amongst them. These have now been removed. If left in the herd, they would have continued to shed the virus and increased the disease challenge levels that their fellow herdmates were being exposed to'.

'In this high density cattle area, eradicating PIs needs to go hand in hand with vigilant biosecurity.'

“ Total eradication of BVD in Rutland can really be achieved. If we all work together, we can make this happen. ”

Luke Knowles MRCVS - Farm Veterinary Solutions, Uppingham, Rutland



TAKE ACTION!

Eradicate BVD from Rutland - talk to your local Rutland vet.

1. Join the BVD eradication from Rutland scheme.
2. Find out what levels of BVD infection and/or exposure your herd has now. This involves bulk milk sampling and blood sampling as advised by your vet.
3. Depending on your individual herd situation - make plans to eradicate the persistently infected animals.
4. Devise biosecurity measures which protect your herd from the virus coming in.
5. Regularly review your situation with bulk milk and/or blood sampling.
6. Maintain immunity in your animals with BVD vaccination.

PI hunting

Hunting down a PI requires a methodical step-by-step approach to home in on the guilty animals. An initial bulk milk test will give an indication of whether there may be PI cows in the milking herd. Blood testing will be needed for youngstock and bulls and beef herds.

But biosecurity will be essential to keep out any new PIs. For example, don't bring in any new stock without first blood testing them!

Make BVD vaccination easier

- ✓ Talk to your vet and work out how much vaccine you need and which animals to target.
- ✓ Arrange BVD vaccinations to coincide with leptospirosis vaccinations and save time.
- ✓ Use an automated syringe gun which reloads vaccine and makes the job quicker.



For more information about the BVD Eradication: Rutland Scheme please talk to your vet.