

Your Herd – BVD Eradication Scheme



Key messages:

Planning	:	Consult your vet on how to control BVD to improve health, welfare and profitability
Investigating	:	Know your BVD status
Controlling	:	Buy only BVD free animals. Cull PI animals: it is key to control BVD If vet advises vaccinate
Monitoring	:	Check your BVD status at least annually

Bovine Viral Diarrhoea (BVD)

What is BVD

BVD as its name implies is a viral disease of cattle which can cause a **variety of symptoms** including diarrhoea. The virus comes from the same viral family as border disease in sheep and classical swine fever. The acute disease is sometimes known as Mucosal disease. It is spread by animal contact and is widespread in the UK and the rest of Europe.

BVD is considered one of the most important diseases economically for cattle today

Infection results in a variety of symptoms depending on the age of the animal. In young animals it can cause pneumonia or mucosal disease (acute diarrhoea, mucosal lesions and death) and will affect the immunity of the calf to other infections. In older animals it can affect fertility for both cows and bulls and again will affect the immunity of the animals. In pregnant animals the symptoms will depend on the stage of lactation but it can cause abortion at any stage, some abortions may be missed and put down to poor fertility, calves can be born with mutations, often affecting the head or eyes. Those cows infected in the first few months of pregnancy may abort or the foetus will be permanently infected as its own immune systems is not fully developed. If the calf is born alive it will what is known as a **Persistently Infected animal (PI)**. These PI animals are the main source of infection to other animals. Some may look normal and others may look poor and never perform well. Generally PI animals die young but some have been known to live a lot longer and even go into the main herd and have calves themselves. Calves born to PI cows will also be a PI animal and the so the chain continues.

Diagnosis

Diagnosis of infection can be done in a variety of ways using blood, milk or tissue (often ear notch tissue). Your vet can help with advising on which samples to take and interpretation of the results. An animal can be tested for evidence of infection using antibodies (Ab) which are produced after the infection. This will give an idea if infection is present on your farm. However, if you are vaccinating it is important to sample at the right age or antibodies from the vaccine can be confused with antibodies to natural infection. Generally to diagnose if BVD infection is active in your herd then a 'youngstock screen' or blood test of animals around 9 months old is carried out. They are tested for antibodies and if they are present then it can indicate infection on your herd. Again this is often best discussed with your vet to make sure the interpretation is correct. If a youngstock screen indicates infection then the next step is to find out if you have any PI animals in your herd. For this either Antigen (Ag) or virus itself is screened for. Usually this is done on blood or tissue samples but in milking cows the milk can be screened.

Vaccination and Treatment

There is no treatment to cure a **Persistently Infected animal** and such animals should be culled as soon as possible as they are big risk to the rest of the herd. There are vaccines which can be used to protect young calves and older animals prior to being served. Vaccination should be discussed with your vet and tailored to your individual situation. An routine booster is required for older animals. Vaccinating a PI animal will not cure it and nor will it prevent that from having another PI calf itself.

BVD disease free

Once the herd has been screened for evidence of no BVD infection and it is has had two clear tests, then a herd can apply for BVD disease free accreditation status. The herd can be either vaccinated against BVD or not vaccinated. Along with the testing of the herd, biosecurity of the farm and management with regards buying in stock, sales and shows needs to be covered. ChECs (Cattle Health Certification Standards) provides the standards for this and again this can be discussed with your vet (www.checs.co.uk). There are a variety of providers for the testing and laboratory work within the ChECs schemes.

Links-Please follow the links below for more information.

1. Scotland BVD Eradication Scheme - <http://www.scotland.gov.uk/bvd>
2. Guidance for Farmers - <http://www.scotland.gov.uk/Resource/0038/00388535.pdf>
3. Guidance for Vets - <http://www.scotland.gov.uk/Resource/0038/00388531.pdf>
4. England - <http://www.dairyco.org.uk/technical-information/animal-health-welfare/biosecurity-and-diseases/diseases/bvd/>
5. Northern Ireland
Voluntary Phase of the Northern Ireland BVD Eradication Programme - <http://www.animalhealthni.com/BVD.aspx>



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