

## BVD

BVD is one of the most important diseases of cattle in terms of economic cost and welfare, causing abortion, infertility, wasting and death.



Abortion due to BVD

Cattle exposed to BVD virus rarely show obvious clinical signs. In some situations, BVD virus infection may temporarily lower immunity increasing the

risks of other infectious diseases like scours and pneumonia, this happens particularly in young calves.

The real problems start when the animals that are infected are breeding animals as BVD can cause reduced conception, abortion, the birth of weak calves or calves born with 'persistent infection' (PI).

### Incidence and costs

It is estimated that more than 90% of UK herds have had exposure to BVD. The cost of BVD to the UK cattle industry has been estimated to be around £60 million per year. In beef suckler herds this translates to £37/cow/year.

## Disease mechanism

When non-pregnant animals get infected they will build up immunity and shed the disease. When infection occurs during pregnancy the effects can vary from abortion to deformed calves. If infection occurs within the first 3 months of pregnancy then the foetus can be infected before the immune system has fully developed.



PI (left) with an animal of the same age

This results in a persistently infected (PI) calf that never eliminates the virus. It is suggested that these PI's account for 1-3% of cattle in the UK. A PI often appears stunted but can appear totally normal. PI's are likely to die within 6-12 months but a significant amount can reach production age. PI animals will infect breeding cows and the cycle of infection continues with the creation of new PIs. This is the reason that BVD affected farms have a continuous circulation of the virus on the farm, causing more abortions in breeding stock and potential immune suppression in younger animals.

## Treatment

Vaccinating against BVD is a good way to reduce the spread and symptoms of the disease on your farm. However this does not guarantee that you will eradicate the virus and the development of PI's could still take place. A better way to eradicate BVD from your farm is to sample all the animals to find, and cull, the PIs. A combination of these two will give the best results.

## Prevention

Biosecurity is very important to prevent BVD from entering your herd. Even more so than other diseases, your herd should be 100% closed if you choose this option. If your animals have no immune protection at all and BVD is introduced the results can be potentially devastating. Therefore in most circumstances a combination of biosecurity and preventative vaccination is preferable. When you are a flying herd vaccination is highly recommended. To monitor BVD levels on your farm the FarmVets SouthWest infectious disease monitor is a very valuable tool.