

# BVD Virus

## Bulls

A bull is often referred to as half the herd – quite rightly, as each year's production hinges on his performance. Don't leave his ability to do the job to chance. It should be standard practice to 'MOT' your bull(s) before each breeding season, by having his feet checked and trimmed and getting your vet to carry out a breeding soundness examination. In addition, you need to be thinking about BVD.

Despite its name, the main effect of BVD (Bovine Viral Diarrhoea) is to suppress the immune system of affected animals. They are then less able to fight off other infections such as calf scour or pneumonia. As a result, a whole host of diseases may become much more serious on a farm where BVD is active.

**Affected herds are also likely to suffer reduced fertility, increased abortions, and subfertility in bulls.**



**Know your status... protect your herd.**

For more information, visit [www.bvdfree.co.uk](http://www.bvdfree.co.uk) or ask your vet

## Transient BVD infection

A bull which is 'naïve' to BVD – i.e. one which has not previously been exposed to the virus and is unvaccinated – is likely to develop a high temperature when infected.

## Why does this matter so much?

Spermatogenesis (the process of sperm production) takes around 60 days in the bull.

During this time, the bull's testicles will be preparing to produce an average volume of 5 – 6ml of semen per ejaculate, with each ml containing up to three thousand million sperm.

Semen quality depends on good progressive motility, and the proportion of live and dead sperm. In addition, less than 20% of sperm should have abnormal morphology.

**Abnormal sperm arise due to problems during spermatogenesis, for example, as a result of a high temperature following BVD infection.**

Due to the time taken for spermatogenesis, there may be a reduction in semen quality for as long as two months after infection – by which time the breeding period may be over. Bulls can also be an important reservoir of infection as they may go on to shed BVD virus in their semen for a long, and sometimes indefinite, period of time. Bulls should be tested pre-purchase as transiently or 'acutely' infected bulls may still shed BVD virus as above even if showing antibodies present. Veterinary advice is vital in interpreting pre-purchase risks.

## Persistent BVD infection

A bull will come into contact with the entire breeding herd, so if he is carrying infection the effects can be very widespread.

## Before you buy or hire a bull, it is therefore important to check that he is not a 'PI'.

A PI animal is Persistently Infected with BVD and will continually shed huge amounts of virus. If the bull is a PI, this will drastically reduce the herd's fertility, particularly if the herd is 'naïve', i.e. has not previously been exposed to BVDv and is unvaccinated.

A PI bull will adversely affect fertility through early embryonic deaths and abortions, leading to a delay in cows becoming PD positive.

