

BVD Virus

Breeding herds

Affected cattle fail to reach peak performance, have a lower immunity, so suffer more respiratory and infectious disease, and have poorer fertility. With an estimated cost of £50 – £100 per breeding animal, we cannot afford to ignore it.

Have you experienced any of the following symptoms on your farm?

- Reduced fertility and increased abortions
- Subfertility in bulls
- Scour and pneumonia in calves

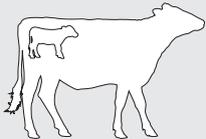
And if not, are you prepared to risk them happening?

BVD suppresses the immune system of infected animals, and as a result a whole host of diseases may be much more prevalent on your farm.

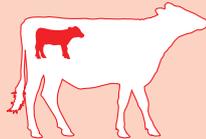


The spread of
BVD dam to calf

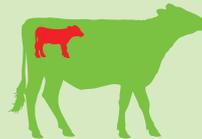
BVD in early pregnancy



Cow and calf infected



Only dam becomes immune



Calf born persistently infected (PI)



Know your status... protect your herd.

For more information, visit www.bvdfree.co.uk or ask your vet

What are the effects?

Adult, non-pregnant cattle

Severe disease is unusual: most infected animals will show no signs of ill health at all. Elevated temperatures, milk drop and reduced feed intake may be apparent, but recovery is usually quick, with these animals then developing a good immunity against the virus.

Breeding cows

The impact that BVD has on fertility is primarily dependent on the cow's pregnancy status at the time of infection. The table below shows the effects of infection with BVD virus (BVDv) on a 'naïve' cow – one which has not previously been exposed to BVDv and is unvaccinated.

Pregnancy status at time of infection	Outcome of infection
Cow infected during the first four months of pregnancy	<p>Depressed fertility – delay to becoming PD positive</p> <ul style="list-style-type: none">• Embryonic death• Early abortion• Cow's immunity develops• 'PI' calves – BVD infection in the early-pregnant cow may result in the birth of a persistently infected (PI) calf. These calves frequently fail to thrive and die young, sometimes of 'mucosal disease'. It may be impossible to identify PIs without laboratory tests. PI calves then continually shed huge amounts of virus. This leads to more disease in their cohort, and keeps infection circulating on farm.• An animal cannot become a PI, it can only be born a PI.• Do not forget that a PI which survives until breeding age, will always give birth to a PI calf.
Cow infected in mid-late pregnancy	<ul style="list-style-type: none">• Late abortion• Weak/deformed calf born• Cow's immunity develops
Cow infected late pregnancy	<ul style="list-style-type: none">• Cow's immunity develops• Normal calf born, immune

Bulls

The bull is often referred to as half the herd – quite rightly, as each year's production hinges on his performance. Therefore the impact of BVD in a bull can be devastating.

An adult bull exposed to BVD virus may develop a high temperature, which can cause 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, even if he is not actually a PI but has just been transiently infected with BVD.

Remember also that a bull will come into contact with the entire breeding herd, so if he is carrying infection or is a PI, the effects can be very widespread. It is vital to discuss BVD risks with your herd vet when purchasing a bull.

Youngstock

BVD doesn't just affect fertility: infection is really bad news for calves. Infection usually enters a group of calves because of the presence of a PI calf in the group.

When a batch of calves is exposed to active BVD infection, the whole group's immune system will suffer. As a result, diseases such as pneumonia or scour may take hold, and will often cause much more severe disease symptoms than usually experienced.

As well as spreading infection to their healthy pen mates and compromising production, any PI animals are likely to die prematurely.

How widespread is the problem, and what is the cost?

It is estimated that 90% of UK herds have been exposed to BVD, with PIs thought to account for 1 – 2% of the cattle population. The costs are hard to quantify, but are undoubtedly massive.

On farms where BVD virus is active there will be a wide range of effects including reduced fertility, abortions and increased susceptibility to all diseases, in particular calf scour and pneumonia.

What can be done?

See our Diagnostics Factsheet.