Schmallenberg Virus

The Schmallenberg virus (SBV) is an insect borne viral disease, which is spread by biting midges. It can affect all ruminants (such as sheep, cattle, goats and deer) and camelids (llama and alpaca).

Symptoms in adults include fever, and diarrhoea, and can also be the cause of late abortion or birth defects. It does not affect humans.

The virus often spreads very quickly – disease can last between 2-7 days, after which immunity is formed. There is no vaccine available for SBV and no plans for production of a new vaccine.

Farmers should remain vigilant for signs of disease and <u>report any suspicions to APHA</u> or their private vet.

Spot the signs

As SBV often presents itself in late abortion or birth defects, infection often goes unnoticed until the gestation period has passed.

The acute disease usually lasts between 2-7 days in adult animals, before they begin to develop robust immunity. Symptoms include but are not limited to:

- fever
- diarrhoea

Clinical signs of SPV are often mild or absent.

Fertility signs

Not all birth defects are due to SBV – for example, it does not create extra or missing limbs, or cause gastrointestinal, skin or heart defects.

In female ruminants, SBV can cause deformities as the virus crosses the placenta and replicates in the central nervous system tissue. It also causes the maternal recognition of pregnancy, which results in early pregnancy loss.

Often birthing ruminants infected with SBV require a caesarean or fetotomy to deliver to avoid trauma to the dam.

Disease cycle

SBV circulates in midges, meaning that its circulation is very much weather dependent. Midge populations will increase in warm, wet years, so we tend to see midge numbers peaking in the summer.

Herds that are mating in the summer or early autumn are the worst affected. In the UK, we are on the edge of the SPV endemic zone, where we tend to see explosive outbreaks every couple of years, reflecting a cycle of every 3-5 years when we have naïve animals exposed to circulating virus.