Schmallenberg virus

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This guidance is for Scotland

Schmallenberg virus (SBV) - named after the German North Rhine town where it was first identified - was first reported in November 2011 and is known to cause congenital malformations in cattle, sheep, goats, and possibly alpacas and deer.

Thought to be transmitted by midges from mainland Europe, this disease was first confirmed as present in the UK in January 2012. Whilst not notifiable, livestock keepers are asked to contact their veterinary surgeon if they encounter cases of newborn cattle or stillborns that show malformations or nervous-disease symptoms.

Schmallenberg virus has been detected in Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Spain, Sweden, Switzerland and the UK.

What is the possible impact of the disease?

In terms of how the virus is transmitted, there is no evidence other than from mother to offspring through the placenta or by vector-borne routes such as that of the biting midge, mosquito or tick. The probability of SBV surviving over the winter and subsequently spreading and manifesting itself in the summer is difficult to assess due to a lack of data on the disease.

Should the virus survive the winter into the summer months, it is suggested that it is most likely to re-emerge between April and May. It is likely to affect previously unaffected regions, assuming the immunity of previously infected animals, although once again the unknowns make this uncertain.
The European Food Safety Authority (EFSA) produced a report - *'Schmallenberg' virus: Analysis of the Epidemiological Data* - which provides an overall assessment of the impact of the infection on animal health, animal production and animal welfare.

As this is still a relatively newly identified virus there are many aspects of the disease that will remain unknown until more research has been done. Typically the impact in most affected herds or flocks has been low, although some livestock keepers have reported more significant losses.

**Clinical signs**

In adult cattle, acute infection has been known to result in diarrhoea, reduced milk yield and/or fever but with a full and rapid recovery over a period of days and full herd recovery within two to three weeks.

No such clinical signs have been reported in adult sheep.

SBV is also associated with abnormalities in neonates and stillborns following infection of the mother. Such malformations are - to date - reported to include bent limbs, fixed joints, twisted neck or spine, a domed appearance to the skull, short lower jaw and brain deformities. The severity of such symptoms is apparently dependent upon when infection occurred during pregnancy. Some may be born with normal outer appearance but have nervous symptoms such as blindness, inability to suckle, recumbency or convulsions.

It is expected that SBV will stimulate a strong immune response, so protecting infected animals from subsequent ill effects and not normally giving birth to further deformed offspring. Being a relatively newly identified virus there is inevitable uncertainty as regards the precise effects.

**What happens when a suspect animal is found?**

Whilst this is not a notifiable disease, you are advised and requested to contact your veterinary surgeon if you encounter cases of cattle newborns or foetuses that are stillborn, malformed or are showing symptoms of nervous disease and you suspect SBV. Veterinary surgeons should then contact the Animal and Plant Health Agency (APHA) if they suspect SBV.

**What happens if the disease is confirmed?**

Details of premises with suspected or confirmed disease are treated as confidential and will not be made public. Since SBV is not a notifiable disease there are no movement restrictions.

For suspected disease in live newborns, dependent upon the severity of the symptoms, your veterinary surgeon is likely to insist on euthanasia to prevent any further suffering.

For acute disease in cattle, again dependent on circumstances, your veterinary surgeon is likely to insist on euthanasia for severely deformed newborns but may monitor symptoms in adult cattle.

It must be remembered that malformations affecting lambs and calves exposed to the virus in pregnancy may lead to birthing difficulties. Excessive force must not be used during the birthing process as this may risk injury to both the mother and offspring. Consequently, livestock keepers should contact their veterinary surgeon in those cases that cannot be delivered naturally.

You should also consider whether any abnormalities would affect the animals’ intended future use and fitness for transport in the long term.
Can people catch the disease?

A Europe-wide assessment has concluded that people are unlikely to catch the disease. However, it is recommended that livestock keepers and others in close contact with livestock follow existing good practice measures when working with livestock and abortion material.

In 2015 Scottish Government guidance advised pregnant women to avoid close contact with animals (including sheep, cows and goats) that are giving birth.

Could it affect the food I eat?

There is currently no evidence that SBV could cause illness in humans. Work is ongoing to identify if it could affect humans in any way. Any new information about SBV outbreaks would appear on the Food Standards Scotland website.

What can be done to reduce the risks?

Vaccination may be possible (your veterinary surgeon will be able to provide more information).

Control of midges is unlikely to be effective given that they are very widespread, and appear to be very effective at spreading SBV.

It is important that strict hygiene measures are carried out during assisted lambings and calvings.

Legislation applicable to SBV

Schmallenberg virus is not a notifiable disease and as such there is no legal obligation for producers to notify anyone of an outbreak. However, livestock keepers are strongly advised to contact their veterinary surgeon if they believe they have cases among their livestock.

The Animal Health and Welfare (Scotland) Act 2006 makes owners and keepers responsible for ensuring that the welfare needs of their animals are met. Amongst other things there is a requirement to protect an animal from pain, injury, suffering or disease. You are strongly advised to consult your veterinary surgeon if you suspect symptoms of SBV so that the appropriate veterinary advice can be given and acted upon.

Penalties

It is an offence to cause an animal to suffer unnecessarily or not provide for its welfare needs. The maximum penalty is a ban on owning animals, a £20,000 fine and 12 months’ imprisonment.

Key legislation

Animal Health and Welfare (Scotland) Act 2006

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