NSA Briefing on Schmallenberg virus

Introduction
As we approach the month of March when the bulk of our flocks lamb, Schmallenberg virus has now been confirmed by Defra AHVLA to have been found on 83 farms in England. The first cases were identified in the counties of East Sussex, Suffolk, and Norfolk but the last week has seen cases emerge in Wiltshire, Cornwall, Hampshire, Surrey, Berkshire, Hertfordshire, Isle of Wight, and Gloucestershire. There are still many unknowns about this new virus and the main things farmers are being asked to do are:

1. Be aware of the symptoms – deformed lambs at birth, twisted spines and locked/stiff joints.
2. Report any suspicious cases to your farm vet who will be able to advise on sending material to veterinary labs for testing.

It is vital to report suspected cases so that a clear picture can be created of the range and spread of infection, and so that proper consideration can be given to vaccine development.

It is most likely that any clinical cases being seen now came from infection that was transmitted by insects during the late summer/autumn of last year and the risk of further infection being transmitted from these farms is considered low. There are currently no implications to trade and no ‘firewall movement barriers’ being put in place in the UK, although Russia has put in place export bans on live ruminants and ruminant products from the Netherlands, Belgium and Germany, where Schmallenberg virus has been present for some time.

There is no evidence of any risk to human health – not from coming into contact with live infected sheep and certainly not from eating sheep meat.

Guidance for sheep producers
Official veterinary advice is two-fold at the moment; Farmers are strongly encouraged to support the gathering of information and report any suspicions of Schmallenberg virus to their veterinary practice (see below for clinical symptoms), and secondly any imports of live animals from EU regions affected by Schmallenberg virus should be undertaken in strict consultation with veterinary advice and guidance.

In newborn animals and foetuses, the disease has been presented as malformations including bent limbs and fixed joints, brain deformities and marked damage to the spinal cord. Some animals are born with a normal appearance but have nervous signs such as a ‘dummy’ presentation or blindness, an inability to suck, and sometimes fits. The foetal deformities vary depending on when infection occurred during pregnancy.
Schmallenberg virus also affects cattle with symptoms in adult cattle including fever, milk yield reduction, and diarrhoea. It remains early in the outbreak to know the extent of the infection and its effects on our herds. Defra AHVLA have indicated that they will cover the costs of testing for Schmallenberg virus although any post mortem costs will be at the farmers cost. There is currently no vaccine available to protect against Schmallenberg virus, vaccine manufacturers and laboratories are currently considering whether it would be possible and effective to develop a vaccine but estimates are that such a vaccine would be at least 2 years away. It is expected that animals that have been infected with Schmallenberg virus will develop immunity and production is likely not to suffer in subsequent years – however if experienced it could affect individual flocks seriously and replacements will need to be vaccinated or exposed whilst not in lamb.

Currently only PCR tests exist for assessing infection in live animals although a serum test is being developed and expected to be available soon.

It is not known to what extent further transmission within the UK could take place. What is known is that the infection period (ie the period when infected sheep are infectious) is around 4 – 5 days, and that at this stage symptoms are very mild in sheep. To affect the unborn lamb infection needs to take place within the first 30 days or so of pregnancy so the critical period is that first month of pregnancy and this is dependent on midge and insect activity and obviously the level of infection insects are carrying. It has been suggested that immunity is gained once infection has taken place so it could be assumed that if ewes are challenged during a period when they are not in the early stages of pregnancy they may well become immune without serious consequences.

Summary
It may seem that there is little that farmers can do to protect their flocks, and in terms of vaccine protection this is true. However there are things that farmers can and should do as part of a longer term biosecurity and health strategy and these include:

- Support the gathering of information and reporting by speaking with your vet regarding any abnormalities in fertility, abortion, or lamb malformations. Veterinary surgeons should then contact their AHVLA/SAC laboratory if they suspect infection with the virus.

- Take veterinary advice before importing purchasing any animals from areas affected by Schmallenberg virus (details can be found on the defra web link below). The NSA would discourage any imports of live animals from these regions.

- Always remove dead lambs and cleansings and keep these secure and away from other stock and wildlife until proper disposal. Leaving dead lambs lying around in the open is an unnecessarily risky process.
· Remember that the virus can be transmitted during periods when insect activity is evident – but that clinical signs may not be seen until later in the season. Consequently always assess the risks of bringing stock onto your farm.

· Always practice the highest possible levels of general biosecurity and quarantine/separation whenever bringing new animals on site.

· Manage your stock to promote general health and vitality. This can be helped by good nutrition including optimum mineral and trace element levels, and through managing internal and external parasites. Given that there is no vaccine available do all you can to increase the ability of your flock to cope with disease challenges.

For more information please follow this link to the defra web site www.defra.gov.uk/animal-diseases/files/poa-schmallenburg-update-120117.pdf (note the alternative spelling – both versions are being used).

The NSA will continue to keep you informed of any developments via our regular e newsletter.

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