



Schmallenberg Disease

Schmallenberg primarily presents itself as malformations in newborn animals, several cases have been reported across the country already this lambing season. The virus is spread by midges and so does not spread directly from ewe to ewe etc. Its spread is closely linked with the number of midges, which typically peak in late summer and drop sharply once frosts begin.

Acute clinical disease in adult cattle presents as fever, reduced milk yield, inappetence and diarrhoea whilst ewes generally don't show any clinical signs. Outbreaks generally last 2-3 weeks, with individual animals affected for only a few days, with spontaneous recovery. The biggest problem linked with the virus is that it crosses the placenta to affect the growing foetus in pregnant animals. The most susceptible stages of pregnancy for foetal deformities are days 62-180 in cattle and 25-50 in sheep. Older foetuses can fight the virus and therefore be born without any abnormalities. The virus attacks the nerve tissue and results in brain and spinal changes, with secondary changes to muscle and bone growth.

Some animals may be born with normal appearance but have nervous signs such as a 'dummy' presentation - blindness, unable to stand and inability to suckle. The deformations vary depending on when the infection occurred during pregnancy. In sheep there may be only one lamb out of a multiple birth affected, with the others normal.

However, it is important to note that not all deformations or neurological signs are linked to schmallenberg and may be as a consequence of the following;

- **Abnormalities in calves**
 - Bovine virus diarrhoea virus (BDVV) - present at birth.
 - Intracranial haemorrhage because of dystocia - present at birth.
 - Hypoxia because of dystocia - present at birth.
 - Bacterial meningitis - appears at 3-7 day-old.
- **Abnormalities in Lambs**
 - Congenital swayback- present at birth.
 - Border disease- present at birth.
 - Toxoplasmosis - present at birth.
 - Intracranial haemorrhage because of dystocia - present at birth.
 - Hypoxia because of dystocia - present at birth.
 - Dandy-Walker syndrome - present at birth.
 - Starvation/exposure/hypothermia - occurs from 6-12 hour-old
 - Septicaemia - appears at 1-3 day old
 - Bacterial meningitis - appears at 3-7 day-old

There is no specific treatment for schmallenberg virus, these malformations may lead to difficult lambings/calvings and it is important to stress that excessive force will risk causing damage to the dam. In some cases, opting for a caesarean might be the best option with lambs or calves delivered alive with severe deformities euthanised for welfare reasons.

If you have any suspected cases, subsidised lab fees for testing through APHA is available, including deformed lamb sample testing, and ewe blood sampling.



Preparing for lambing

As the lambing season approaches, ensuring the health and well-being of ewes becomes paramount, and a key factor in achieving this is proper nutrition. Many diseases encountered during lambing have a nutritional component, making it essential to optimise the flock's diet.

Forage Analysis: Knowing What You Feed

Understanding the nutritional content of the forage being fed to ewes is a fundamental step in formulating a complete and balanced ration. Before lambing begins, we recommend to conduct a forage analysis to assess its quality. Without this knowledge, it becomes challenging to provide ewes with the specific nutrients they need for a successful lambing experience.

Metabolic Profiling: A Window into Ewe Health

Metabolic profiling is an invaluable tool in assessing and managing ewe health. This process involves blood sampling a small number of ewes approximately three weeks prior to lambing. By analysing these samples, we can gain insights into critical indicators such as the ewe's energy requirements, short- and long-term protein status, as well as magnesium and copper levels. Conducting these tests in the weeks leading up to lambing provides a crucial window for making necessary nutritional adjustments based on the results. Taking proactive measures to address any nutritional deficiencies or imbalances revealed by metabolic profiling is essential for ensuring the well-being of ewes during lambing. Planning ahead and allowing sufficient time for adjustments are critical components of this process, as they enable you to fine-tune the ewes' diet to meet their specific needs before

the demanding lambing period begins. Farming connect funding is available for investigations such as metabolic profiling and could potentially cover up to 70% of the cost.

Space Matters: Feeding and Lying Space Requirements

Providing adequate space for feeding is another crucial aspect of managing ewe nutrition. A large ewe, for instance, requires 50cm of trough space for concentrate feeding, 25cm for restricted forage feeding, or 15cm for ad-lib forage feeding. Ensuring that each ewe has sufficient space to access and consume its ration without competition is essential for optimizing nutrient intake. Considering the lying space is equally important. Each ewe should have approximately 1.2m² of lying space in a straw pen. This not only contributes to their comfort but also plays a role in minimizing stress and promoting overall health during the lambing process.

Access to Fresh Water: A Fundamental Requirement

While focusing on the solid components of the diet, it's crucial not to overlook the importance of providing ewes with continuous access to fresh water. Adequate hydration is essential for proper digestion, nutrient absorption, and overall metabolic functions. Ensuring that water sources are clean and easily accessible contributes to the well-being of ewes and, consequently, the success of the lambing season.

Timing and Considerations for Vaccination

Timing is critical when it comes to pre-lambing clostridial vaccination. Administering the vaccine approximately four to six weeks before the expected lambing date ensures that the ewes develop a robust immune response and transfer sufficient antibodies to their offspring through colostrum.

While pre-lambing clostridial vaccination is a cornerstone of disease prevention, a comprehensive approach is advisable. This includes maintaining a clean lambing environment, providing proper nutrition, and implementing good management practices. Adequate colostrum management, sanitation, and prompt attention to sick animals also contribute to an effective disease prevention strategy.





New TB regulations

From February there will be new regulations introduced in the Low and Intermediate regions of Wales.

- Pre-movement testing will be reintroduced into the Low TB Area of Wales (LTBA)
- Cattle moving into the Intermediate TB Area from the High TB area of Wales, the High Risk Area of England and from Northern Ireland will need a post-movement test 60-120d after arrival on farm.
- In TB breakdown herds, whole milk fed to calves must be pasteurised

To discuss these changes further, please speak to one of our Vets.



Leptospirosis

Leptospirosis is a common infection in dairy and beef herds, causing infertility, abortion and poor milk yield. But it can also affect humans, leading to flu-like symptoms with severe headaches. Dairy farmers are particularly at risk of infection, from urine splashing onto the face whilst milking. Pasteurisation destroys all leptospire organisms excreted in milk.

As previously mentioned the main source of the bacteria is through infected urine, but it can be found in the products of abortion too. Disease is spread most often during the spring and summer, when cows are out at pasture and will have an increase contact with contaminated urine whilst grazing. The *Leptospira Hardjo* bacteria is not carried by vermin or wildlife but can be carried and excreted by sheep, making mixed grazing is a risk factor.

So what would a leptospirosis infection look like on my farm? A sudden milk yield drop occurs two to seven days after infection of susceptible cows. The udder becomes soft and flabby with colostrum-like secretions or blood tinged milk in all quarters. Signs can be mild and go undetected but some cows become lethargic and stiff with a fever and reduced appetite. Abortion may occur three to twelve weeks post infection with most abortions occurring during the last three months of pregnancy – this can also present itself as weak or pre-mature calves. Infertility can be another clinical sign, caused by embryonic death.

Individual diagnosis can be reached through looking at antibody levels in blood or milk samples and comparing these with a second sample taken a month later. Submitting aborted foetus samples is another form of diagnosis, however, delays in sample submission lead to rapid sample autolysis resulting in a reduced chance of achieving a diagnosis.

Herd screening is an efficient and cost affective way of analysing your herds status. A bulk milk test can be used as part of a surveillance programme in a naive herd to monitor any changes.

The control of leptospirosis in cattle herds relies upon a combination of management decisions to reduce infection. Vaccination will help reduce urine shedding following exposure, and will protect against milk drop and abortions.

For more information on Leptospirosis, please contact us on 01978 311444 to speak to one of the team.

