



Animal Health & Welfare NI

Sheep Health

January Sheep Health

AHWNl Flock Health Focus: Protect Your Flock- Pre-Lambing Vaccinations

Why Pre-Lambing Vaccination Matters

For flocks lambing in the next 4-6 weeks, now is the time to begin vaccinating in-lamb ewes. For those still a few months off, it's worth deciding which vaccines you'll need so you can order in good time and avoid a last-minute scramble if supplies run short.

Pre-lambing vaccination is essential to protect lambs against clostridial diseases and pasteurellosis. Lambs are born with no natural immunity, so boosting antibody levels in the ewe allows high-quality colostrum to pass on that early protection.

Clostridial diseases and pasteurellosis remain the most common causes of sudden death in sheep, with treatment mainly ineffective. Therefore, vaccinating pre-lambing is the first- and often the only- line of defence.

Clostridial Diseases

Clostridial diseases are caused by toxins produced by bacteria that live in the soil. They cause disease when ingested or entering wounds. These diseases can be caused by a number of different clostridial bacteria species.

Disease	Animals affected	Main cause	Clinical signs	Likely outcome	Prevention
Lamb dysentery	Lambs (mainly aged 12-72 hours)	Inadequate colostrum, stress, sudden dietary changes	Bloody diarrhoea	Sudden death	Vaccination of pregnant ewes
Pulpy kidney	Lambs (4-10 weeks old) Finishing lambs (over 6 months old) Can affect adult sheep and rams	Acute poisoning (by toxins), sudden changes in diet	Neurological signs, bloated belly, arched back, loss of coordination	Sudden death	Vaccination Avoid sudden changes to diet, maintain good hygiene
Braxy	Lambs born in previous spring/shearlings	Eating frosted grass/root crops, damaging the stomach lining	High fever, depression, bloat, breathing difficulties	Sudden death	Vaccination Provide supplementary forage during frost periods
Black disease (liver disease)	Sheep 2-4 years old	Clostridial spores activate in areas of fluke damage in the liver	Rarely observed: dullness, unsteadiness, collapse	Sudden death	Vaccination and liver fluke control
Black leg	Sheep of any age	Clostridial spores activate in muscle tissue after injury/trauma (castration, shearing, cuts etc.)	Dull, fever, severely lame (due to muscle death), swelling	Sudden death	Vaccination Good hygiene
Tetanus	Sheep of any age	Clostridial spores activating in wounds	Hind leg stiffness, seizures, respiratory failure	Death- in early stages antibiotics may treat the disease, but with very slow and expensive recovery	Vaccination Good hygiene Wound care- preventing infection
Malignant oedema (Big head)	Rams	Fighting rams causing head injury to each other	Swelling of head, forcing eyelids closed	In early stages penicillin and anti-inflammatories can be effective Can lead to death	Vaccination Prompt treatment of wounds

Pasteurellosis

This disease is caused by bacteria that are normal residents of tonsils and the upper respiratory tract, however, if an animal is subjected to stress, the immune system can fail to stop these bacteria from multiplying and causing disease. This can occur either as a severe

pneumonia, or as septicaemia (systemic pasteurellosis) due to bacteria passing into the bloodstream.

Vaccination Top Tips

Vaccination for these diseases is absolutely essential due to the lack of treatment options and lack of clinical signs before sudden death. However, the vaccine must be administered correctly in order for it to be effective.

- **Don't vaccinate too early** (antibody levels will have dropped by lambing) or **too late** (antibodies won't have had sufficient time to develop). The standard is 4-6 weeks pre-lambing (check product data sheet).
- **Group ewes by lambing date**- vaccinating later lambers at the same time as early lambers may miss the correct time frame for the late group
- **Allow sufficient time before lambing if boosters are required**- first time lambers that are unvaccinated or have an unknown vaccine status will need two vaccinations 4-6 weeks apart (check product data sheet), and boosters for previously vaccinated ewes should be given pre-lambing, according to the data sheet recommendations of the product being used.
- **Store and handle vaccines properly**- ensure they are kept in the fridge and away from direct sunlight
- **Ensure you are using the correct injection technique**- read the product instructions to ensure the vaccine is being administered by the correct route and site
- **Avoid vaccinating wet sheep**- this increases the chance of contamination of the injection area, causing abscesses
- **Don't vaccinate stressed or sick ewes**- in these cases immune system response is reduced due to stress

Vaccinate Now and Protect Your Flock

Combined clostridial and pasteurella vaccines are widely used in Northern Ireland and provide protection against multiple clostridial diseases, as well as pneumonic and systemic pasteurellosis. Some vaccines offer broader clostridial cover, while others protect against fewer clostridial diseases and may be more appropriate for finishing lambs that are at lower risk of conditions such as lamb dysentery.

The cost of losing animals to clostridial disease is far greater than the cost of vaccinating. Make sure your flock is protected this year.