

DN NEWSLETTER

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The difference between profit and loss in our sheep flocks can often come down to losses. Knowing our losses and understanding the causes, especially when it comes to abortion, can be the key to reducing problems in future years.

Sheep Abortion and Lambing Records

As lambing gets underway it is important to record any issues, ideally direct on the ewe, or in a recording system.

Highlighting issues early can prevent big problems occurring and knowing later in the season which ewes had issues can allow selection for culling, reducing prospective future challenges.

Abortion

Infectious causes of abortion mainly occur after day 100 of pregnancy. Over 80% of abortion outbreaks in the UK are caused by Enzootic abortion, *Toxoplasma gondii* or *Campylobacter*.

Diagnosis of abortion is vital for control. Minimum requirement for laboratory diagnosis is the foetus, or foetal stomach contents, a piece of placenta and a blood sample from the dam. The first abortion should be sampled but it is worthwhile testing more cases if they occur to get a full picture.

Chlamydial abortion, Enzootic abortion of ewes (EAE)

This is also a risk to pregnant women, i.e., it is a zoonotic disease. Even with the availability of a vaccine this is still the main cause of abortion in sheep in the UK. Disease occurs from exposure of susceptible sheep to infected uterine discharges and aborted material.

Abortion will occur if the ewe is more than 6 weeks from her due lambing date. If closer to lambing the infection will remain latent in the ewe and will cause abortion in the following pregnancy. The ewe is unlikely to be sick.

In an emergency injecting the whole flock with 20mg/kg long acting Oxytetracycline can reduce the number of abortions, but the placental damage is not reversed resulting in weak lambs with high mortality.



There are accreditation schemes which offer breeding female replacements from flocks monitored free of infection. Vaccination is an excellent method of control for replacements and in flocks with an endemic problem. Vaccination will not prevent all abortions but can reduce the incidence.

Toxoplasmosis

This can also be a problem in people with immunosuppressive illness. If susceptible women are infected during pregnancy their foetus can suffer serious eye and brain damage.

It results from infection of susceptible sheep with the protozoan parasite *Toxoplasma gondii*. Part of the life cycle takes place in cats.

Infection in early pregnancy can be seen as embryo loss with an increased number of returns to service after an irregular extended period or increased barren rate >8-10%.



Often the highest number of barren sheep is in the youngest age group. If infection occurs in mid pregnancy, abortion or weakly live lambs with a small, leathery mummified foetus can be seen.

All sheep feed should be stored in vermin-proof facilities to prevent contamination. Vaccination provides excellent control as long as given 3 weeks before the breeding season.



Campylobacteriosis

Caused by *Campylobacter fetus* subspecies *fetus* and *Campylobacter jejuni*. Usually seen in intensively managed flocks where there is heavy contamination and unhygienic environments during late gestation.

Purchased sheep are the main source of infection. Usually seen as abortion in late gestation with sometimes weak lambs being born and dying after birth.

Sheep should be managed hygienically in clean environments. Special attention given to feeding areas/troughs. Purchased sheep should be kept separately until after lambing.

Salmonella

Caused by *Salmonella* Montevideo, *Salmonella* Dublin or *Salmonella* Typhimurium. See abortion or dead ewes with rotten lambs inside. Sources include contaminated feedstuffs, water sources, effluent overflow, carrier cattle and carrion. Has the risk to be zoonotic so people need to ensure strict personal hygiene.

Store all feed in vermin-proof bins. Turn feed troughs over and move immediately after feeding. Use a clean area of a field to feed every day if using a snacker. Ensure water is from a mains supply if possible, with ponds and surface water fenced off. In an emergency and under veterinary guidance long acting oxytetracycline (20mg/kg) can reduce the number of abortions in an outbreak.

Biosecurity and Biocontainment

Reduce / prevent the introduction of diseases entering the farm from outside sources. Freedom from most infectious causes of abortion is best achieved by maintaining a closed clean flock.

Reduce / prevent the movement of infectious diseases on your farm. Any aborted ewes must be isolated and aborted material and infected bedding removed and destroyed. Ewes giving birth to dead/weak lambs should also be isolated. Lambs fostered onto aborted ewes should not be retained for future breeding.

Lamb Losses

TARGETS:

Aim for less than 15% lamb losses:

- <5% scanning to lambing
- <5% lambing and week one
- <2% week one to weaning
- <2% weaning to sale/retention

Ask your vet for advice if:

- Ewe losses are > 3%
- Lamb losses are > 15%
- >2% ewes are barren at scanning

Remember if you don't measure and monitor you can't find out where issues are occurring, and you can't improve next year. Ask for help and support analysing your figures and look for ways to prevent losses next time.

