



Infectious Abortion in Sheep

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Abortion in sheep is a major cause of flock losses across the UK, leading to significant financial and welfare challenges. Each lost lamb reduces productivity, increases veterinary costs and adds to the labour demands of lambing season. In severe cases, abortion storms can threaten the long-term viability of a flock.

Infectious causes are particularly concerning due to their potential for rapid spread and long-term consequences. Diseases like enzootic abortion of ewes (EAE), toxoplasmosis, and campylobacteriosis can persist in a flock, causing repeated losses if not managed effectively. On top of this, many of these infections are zoonotic, posing risks to humans - especially pregnant women and immunocompromised individuals.

Early detection and proactive management are key to reducing losses. Keeping accurate lambing records, monitoring abortion rates and promptly investigating any suspected cases can help prevent further spread and protect both flock and human health.

Recognising Infectious Abortion

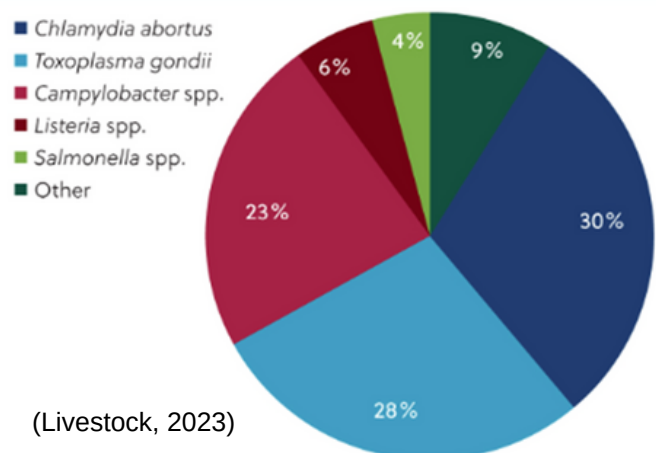
While some abortion in a flock is inevitable, a rate exceeding 2% of lambs lost could suggest an infectious cause and the need for immediate investigation. Keeping accurate, up-to-date records during lambing season is essential for identifying problems early and taking swift action.

Regular flock checks help monitor sheep welfare and detect abortion signs quickly. Be on the lookout for:

- Dead lambs that are not fully formed
- Decomposed or foul-smelling afterbirth
- Ewes with bloody legs or tails

Common Causes of Abortion in the UK

There are several causes of abortion in sheep, but **enzootic abortion of ewes (EAE), toxoplasmosis, and campylobacter** are by far the most common.



Enzootic Abortion of Ewes (EAE)

EAE is the leading cause of abortion in UK sheep, typically occurring in the last three weeks of pregnancy. Infected ewes often give birth to fresh-dead or extremely weak lambs, which usually do not survive. The bacteria spread through aborted material and uterine discharge, so affected ewes and their bedding should be isolated immediately.

Ewes that do not abort in the current season may still carry the infection and abort in the following year.

- **Vaccination:** There are several vaccines that can be administered before mating to prevent infection. One of these vaccines can also be used in the face of an outbreak to help reduce losses.

Toxoplasmosis

Toxoplasma gondii is spread primarily by infected cats. Depending on the timing of infection, symptoms range from barren ewes to stillborn or weak lambs.

- **Prevention:** Store feed in animal-proof containers to prevent contamination from cats and other animals
- **Vaccination:** A preventative vaccine provides at least two seasons of protection

Campylobacter

Campylobacter infection leads to either late-term abortions or weak, sickly lambs. The bacteria can persist in the environment for a very long time as well as being carried by sheep with no clinical signs.

- **Prevention:** Good hygiene and clean bedding are essential, especially in high-traffic areas such as water troughs and feeding spaces
- **Treatment:** There is currently no vaccine available in the UK, although one is available as an import, and treatment is challenging. However, sheep will typically develop immunity after infection

Blue Tongue

Although not a historically a common cause of abortion in the UK, Bluetongue virus poses a significant risk to sheep flocks this spring. Sheep are more susceptible to clinical signs, have a higher mortality rate than cattle (up to 60%) as well as up to 15% abortion rates. Vaccination is the main method of control through significant reduction in clinical signs and therefore mortality and abortion. The vaccine can be used during pregnancy and is a single dose in sheep with immunity is active after 3 weeks. We would recommend vaccinating as soon as possible for ewes to be protected before the high-risk midge season. If you would like to discuss the developing bluetongue situation or vaccination, please don't hesitate to contact the office.

Diagnosis

Any ewe that has aborted should be immediately isolated from the rest of the flock and blood sampled.

The best way to determine the cause of abortion is to submit samples for laboratory testing. Most labs no longer accept a whole foetus for submission, so it is best to contact your vet if you are concerned an ewe has aborted and we will take the appropriate samples for you.

The placenta/cleansing of the aborted ewe is particularly important for diagnosing the cause of abortion so including this with the aborted foetus increases the likelihood of a definitive diagnosis and so allows for more targeted management strategies. Once a diagnosis is made then prompt action is key to minimizing further losses.

Preventing Infectious Abortion

Preventative measures are the most effective way to reduce abortion-related losses. The best approach is to stop disease from entering the flock in the first place. Key steps include:

- **Storing feed in secure, animal-proof containers**
- **Fencing off ponds and other natural water source**
- **Vaccinating all replacements against EAE and toxoplasmosis**
- **Maintain a strict isolation and testing protocol for new stock**
 - **Only purchase from flocks with known disease history**
 - **Blood sample new stock on arrival**
 - **Keeping newly purchased ewes separate from the main flock until after their first lambing**



Jonah Dickie
MRCVS

If you have any concerns or need further advice, please don't hesitate to contact the practice.

Picture Reference:

Jones, C. and Charles, D., 2023. Causes of ovine abortion, vaccination protocols and uptake: an overview. Livestock, 28(4), pp.172-179.