

## 1. The Importance of Preventing Enzootic Abortion

- Caused by *Chlamydophila abortus*, enzootic abortion (EAE) is responsible for up to **30%** of lamb losses <sup>[1]</sup>
- Clinical signs include barren ewes, abortion, and mummification or still birth of lambs <sup>[14]</sup>
- Devastating financial impact on the sheep industry costing up to **£20 million a year**<sup>[2]</sup> around **£85** per aborted ewe <sup>[3]</sup>
- Poses a zoonotic risk to those handling an infected flock causing severe disease; with pregnant women the most at risk <sup>[4]</sup>
- Infected ewes shed the organism for up to 3 weeks post abortion, easily infecting the rest of the flock <sup>[1]</sup>

## 5. Why Must the Vet Promote Good Practice?



The uptake of EAE vaccines for sheep in the UK in 2021 was **50%**, showing only an **8%** increase since 2012 <sup>[8]</sup>

Prophylactic use of antibiotics to reduce abortion rates is seen on **10%** of farms <sup>[7]</sup>



RUMA hopes for a **10%** reduction of total antibiotic usage in the national sector and **5%** increase in EAE vaccine sales over a 5-year period, to reduce antibiotic usage 'hotspots' <sup>[7]</sup>

## 6. The Role of the Vet in Flock Health Planning

Farm vets have a unique role with farmers and are very involved with flock health, educating on preventative healthcare. The Flock Health Checklist as seen in figure 1, has been designed by experienced sheep vets in association with MSD Animal Health and can be utilised by vets to ensure decisions made on farm are ethical and in the best interest of the flock <sup>[5]</sup>. The checklist focuses on all areas of the flock identifying strengths and weaknesses which can then be made into an action plan <sup>[5]</sup>. In a role such as this, the vet will utilise the checklist to flag any problems within a farmer's flock; this is of great benefit to the future health and welfare of a flock, including those with EAE, and promotes a positive relationship between the vet and farmer.

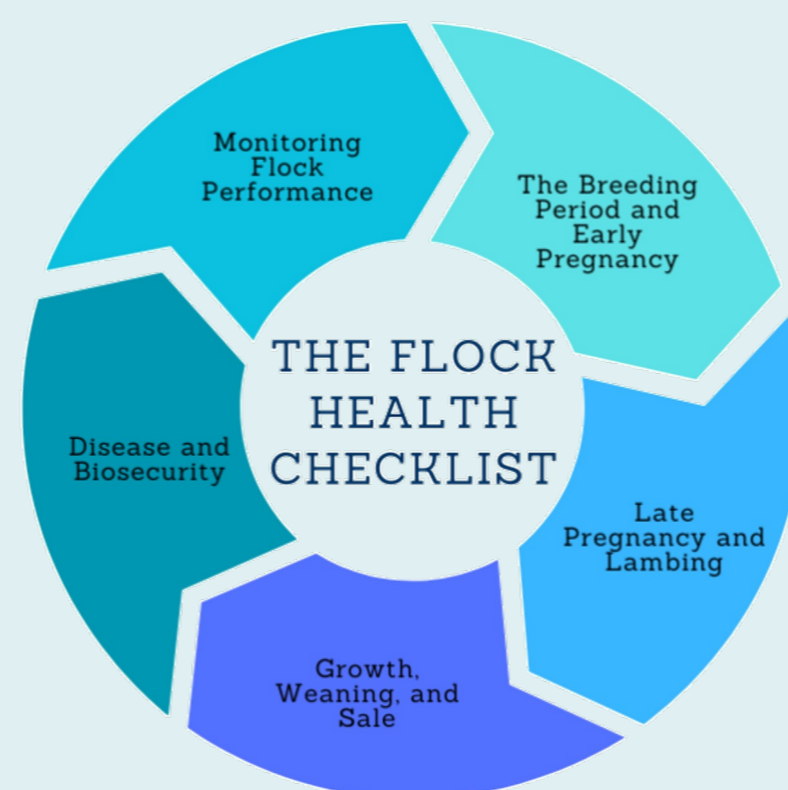


Figure 1 – Adapted from the Flock Health Checklist<sup>[5]</sup>

## 2. A Vets Role in 'One Health' Relating to EAE

The 'One Health' concept was designed to optimize public, animal and environmental health, by preventing health threats such as enzootic abortion; where multiple sectors work together to create long term solutions<sup>[12]</sup>. Multiple roles within the veterinary sector can help achieve this goal.

### Practitioner

First response, infection control, zoonosis prevention, and promoting good practice through responsible antimicrobial usage <sup>[9]</sup>

### Research

Working to advance current practices: advancing diagnostic testing of EAE to detect latent infections <sup>[10]</sup>

### Education

Educating vet students on core competencies, clinical signs, and further education of vets already in the workforce <sup>[11]</sup>

### Government

Focus on disease control and 'safeguarding animal health and welfare' relating to public interest <sup>[13]</sup>

## 3. Enzootic Abortion in Pregnant Ewes <sup>[8]</sup>



At time of conception, the ewe is healthy

*C. abortus* Infection During Gestation Period

0 - 100 days:  
Abortion is seen

> 100 days: lamb is born alive and latent infection in the ewe



Ewe is now infected with *Chlamydophila abortus*

## 4. The Role of the Vet When Treating Enzootic Abortion

Vets commonly get involved once the flock is already infected and they are called out to treat an abortion storm <sup>[6]</sup>. Diagnosis is achieved through laboratory tests of the placenta and aborted foetus to detect the antigen of the causative agent <sup>[14]</sup>. Vets use an inactivated vaccine to reduce spread, or a long-acting tetracycline to reduce severity of infection and losses, improving ewe and lamb welfare; with a follow up dose two weeks later <sup>[9]</sup>.

## 7. The Role of the Vet in Preventing Enzootic Abortion

- Implementing a vaccination programme, and educating on the vaccine benefits <sup>[14]</sup>
- Strict hygiene and biosecurity - disinfecting protocol to prevent spread between farms<sup>[14]</sup>
- Educating farmers on biosecurity <sup>[14]</sup>
  - Disposing of contaminated material
  - Good hygiene when working between ewes
  - Resting land between turnout
- Educating on risk factors <sup>[10]</sup>
  - Wildlife or neighbouring ewes
- Educating on clinical signs <sup>[14]</sup>
- Advising on culling if required <sup>[14]</sup>

