

Farm News February 2023

Reducing antibiotic use in farm livestock

While farmers and vets have taken a leading role in the responsible use of antibiotics, there is still room for improvement, especially with the ongoing threat of antimicrobial resistance. We can help you to identify areas where the use of antibiotics can be reduced.



Red Tractor and supermarkets have introduced stricter rules regarding antibiotic use and have been backed by processors and retailers who want assurances regarding the further reduction of antibiotics on farm.

The UK Government unveiled a target for antibiotic reduction in food-producing animals of 25% between 2016 and 2020. New objectives are due to be set for 2025. The dairy industry has effectively demonstrated that a significant reduction in the use of dry cow antibiotics can be achieved by monitoring cell counts prior to drying off. Ensuring that only susceptible or infected cows udders are treated.

Furthermore, there is increasing evidence that cows not harbouring an udder infection are adversely affected by the use of antibiotics, due to damage to the protective microbiome within the udder.

Similar positive changes have been seen in sheep welfare in the move towards EAE vaccination, as well as the use of Footvax, instead of an over reliance on antibiotic therapy.

The basic steps required for reducing antibiotic use on livestock farms rely on establishing a reduced level of disease within the herd or flock. This reduction in disease levels requires involvement from the vet to agree a structured plan that will identify the areas where your farm is vulnerable to disease and create an action plan to address the issues. The following should be considered:

- An audit of antibiotic usage on farm and a breakdown of the main diseases and age groups of animals treated
- Stopping the use of antibiotics as a preventative measure in anticipation of a disease problem eg antibiotic dry cow therapy when there is no active infection in the udder
- Accurate diagnosis of the causes of disease eg pneumonia, mastitis, by taking samples for laboratory analysis
- Understanding the role of management in the prevention of specific diseases
- What is the role of other factors such as housing environment, nutrition and genetics in the disease process?
- Are there any underlying factors or diseases which might make the herd more susceptible to disease eg Johne's disease or Bovine Viral Diarrhoea virus (BVD)? If this has not been established, then a herd screen should be arranged for these debilitating background infections and work with your vet on an action plan to reduce their impact
- Assessing whether additional precautions such as vaccination could help prevent disease. This requires an accurate diagnosis of the bacteria or viruses which are the cause

Unless these question and factors are addressed, any reduction of antibiotic use may be ineffective and possibly have unwanted consequences to the health and welfare of the animals.



Watery Mouth

Watery mouth is an infectious disease of the small intestine of new born lambs caused by *E. coli*. Lambs aged 6 – 48 hours old are at the highest risk of contracting this disease.

E. coli lives in the environment and once the lamb picks it up, it multiplies rapidly, commonly killing affected lambs within hours. The costs of treating watery mouth are high, not including the time involved in treatment. There is still an estimated 83% mortality rate within affected lambs so prevention is always better than cure.

Historically, Spectam has been used as a preventative measure for watery mouth in lambs. However, this is no longer an option. There are a number of controls that you can put in place to prevent infection of lambs with *E. coli* including:

Colostrum – the 5 Q's

- **Quantity** 50ml/kg in the first 2 hours - 200ml/kg in the first 24 hours
- **Quality** Ensure ewes have adequate nutrition for their needs before lambing (consider blood sampling in late pregnancy to monitor this). Clostridial vaccination of ewes 2 – 4 weeks prior to lambing
- **Quickly** Lambs' ability to absorb the antibodies in colostrum reduces within the first few hours, so making sure lambs have fed as soon as possible is vital
- **sQueaky Clean** Make sure udders are clean, and any equipment used is thoroughly cleaned. Refrigerate fresh colostrum if stored.
- **Quantify** Colostrum quality and effectiveness of colostrum transfer can be tested – ask our vets for more info.



Give more attention to your high – risk lambs

These are low BCS ewes, multiples and lambs from difficult lambings

Clean environment and equipment

- Shear/dag ewes before winter housing
- Clean and disinfect pens between uses and use clean dry straw
- Use a separate stomach tube for administering colostrum to newborn lambs, not the same one used for treating sick lambs

Reduce further stress to the lambs

- Don't castrate or tail dock within the first 24 – 48 hours (risk period)
- Dip the navels with strong iodine, more than once if necessary

Symptoms

Prompt treatment is necessary to prevent fatalities. Therefore, recognising the symptoms is key:

- Lethargy
- Bloating
- Failure to suckle
- Retained meconium/constipation
- Drooling
- High Temperature

Treatment

Before reaching for antibiotics to treat these cases there are other options to try first as antimicrobial usage could make some cases worse due to a wave of toxin release following the bacterial death. Contacting your vet is beneficial as it allows the best possible management methods for individual cases. Treatment options include:

- Stomach tube glucose/electrolytes (50ml/kg 4 times daily)
- Milk should not be fed until recovered
- Put 20ml soapy water into the rectum - this helps to stimulate gut movement
- Slowly warm hypothermic lambs
- Injectable antibiotics – speak to your vet



Are you prepared?

There is a reduced availability/high cost of strong iodine for navel dressing this spring due to production ceasing at a plant in Chile. Navel dipping is important, however it must be remembered that most cases of joint ill and other bacteraemic conditions follow invasion of bacteria via the tonsils or intestinal tract from a heavily contaminated environment.



- The most important things stock keepers can do to avoid these conditions is ensure an adequate supply of quality colostrum through management of the body condition and nutrition of pregnant animals (which may involve forage analysis and metabolic profiling in later pregnancy), good colostrum intake and the provision of a clean and dry lambing/calving environment. We advise the use of gloves when lambing/calving, as bacteria living on our hands can inoculate the tonsils of newborns during assistance.
- **It is not appropriate to use tetracycline antibiotic sprays for treating the navels of neonatal animals** – they do not dry them very effectively and it is an unnecessary use of antibiotics.

There are alternative products available, however, there is little or no data available on their use in lambs, and very limited data available on their use in calves. It is important to scrutinise the safety datasheet for whatever product is used, including the requirements for disposal.

Contact the Farm Office on 01889 567200 or speak to one of our vets for further information.

Lambing essentials

Lambing season is fast approaching and some of you may already be in full swing. For those of you who haven't started just yet we have got it covered with a bucket containing the **Lambing Season Essentials Kit** with all of the essential items you will need for £58 ex VAT.



Huskvac

Lungworm can have a devastating impact on a herd's productivity and can affect animals of any age. Vaccinate prior to turnout to help ensure your herd is protected from lungworm

- Lungworm is a UK-wide problem impacting cattle of any age which is mainly diagnosed in late summer/autumn.
- Lungworm impacts productivity of both beef and dairy systems with outbreaks being unpredictable.
- Definitive diagnosis and herd level infection status can be challenging to establish.
- Vaccination is a predictable method of protecting a herd against lungworm and should be combined with controlled, effective anthelmintic use and grazing management as advised by your vet.

Contact the Farm Office to place your Huskvac orders or request more information

Forthcoming Events

Developments and Updates on TB and TBAS

presented by Sarah Tomlinson, Technical Director for the TB Advisory Service (TBAS)
Monday 27th February at 7.30pm

Doveridge Village Club, 1 Alms Road, Doveridge, DE6 5JZ

