

# FARM ANIMAL NEWSLETTER - MARCH 2017

# SCHMALLENBERG DISEASE UPDATE





We mentioned in the February newsletter that we had seen several lambs with birth defects attributable to Schmallenberg Virus infection. This trend has continued throughout the month with numerous early lambing flocks having experienced foetal abnormalities with Schmallenberg disease being confirmed by isolating the virus from the brains of suspect lambs.

Schmallenberg infection is a relatively new disease in the UK, being first diagnosed in calves and lambs in spring 2012. It is thought only to affect ruminants (cattle, sheep, goats, deer) and there is not thought to be any human health risk from Schmallenberg virus. The disease is thought to be spread by infected midges. The reason why winter 2016-2017 has become the first bad year for the disease since 2012 is likely to be because after 2012 many animals developed a natural immunity to the infection due to infected midge bites and autumn 2016 has been the first year since when a large challenge from infected midges has coincided with a largely susceptible ruminant population.

Beef cows and sheep may initially show very few signs of infection although dairy cows may run a high temperature (104°F), have diarrhoea and milk drop (up to 50% reduction yield) from which they recover over 2-3 weeks. The most serious consequences of the disease appear to be when pregnant ewes are infected between day 28 and 50 of pregnancy when the virus is able to cross into the developing brain of the foetus and cause nerve and muscle development problems. These result in secondary bone problems such as fused limb joints, twisted spines or undershot jaws. Occasionally lambs can be

born with no bone deformities but show nervous symptoms similar to swayback or Border disease.

The local Veterinary Investigation Centre (Penrith) are offering free testing of brain material from suspect lambs for the presence of Schmallenberg disease. We have already had several lambs confirmed as positive Schmallenberg by this method. Because the disease is thought to be spread by infected midges it is likely that early lambing flocks will be more severely affected than later lambing flocks.

Although we have not seen deformed calves attributable to Schmallenberg disease this year (infection of previously unexposed pregnant cows between the 3rd and the 6th month of gestation could lead to foetal abnormalities) we would be interested to hear from anyone experiencing birth abnormalities in calves. It is likely that a vaccine for Schmallenberg disease will be available for this coming year.

If you need more information about the disease please speak to one of the farm animal vets.

#### SHEEP ABORTIONS

Any group of sheep experiencing more than 2% aborting is likely to have an infectious cause of abortion present in the flock. Any aborting ewe, her lambs, afterbirth and subsequent vaginal discharges should be considered contagious to other ewes and humans (especially women of child bearing age) until proven otherwise. It is well worthwhile contacting us to have aborted lambs and afterbirths tested to determine the cause of the problem. Never waste a dead sheep!



#### **Enzootic Abortion Vaccine**

For anyone thinking of vaccinating hoggs against Enzootic Abortion as they return from wintering, we have the option of ordering some short dated Cevac Chlamydophila vaccine (expiry date 27th May 2017) at a reduced price. The vaccine is available in 20 and 50 dose bottles and will result in a significant saving of over longer dated vaccine.

# **REDUCING LAMBING LOSSES IN FIRST DAYS**



#### **Colostrum Quality and Quantity**

The largest factor by far in lamb survival is whether a good immunity to fight infections is achieved. This relies entirely on an adequate amount of good quality colostrum being fed within hours of birth.

Top quality colostrum has high fat and immunoglobulin IgG (antibody) content to supply good energy and immunity levels to the lamb. The body conditional score (BCS), protein and mineral status of the ewe are all critical to producing good quality colostrum. These factors are generally managed by controlling fluke and keeping the ewe in a good BCS and nutritional state from tupping time all the way through pregnancy. Trying to feed thin ewes in late pregnancy to limit weight loss and maximise milk production is expensive and frustratingly ineffective in most cases. A fact that is often overlooked is that a newly lambed ewe has an increased water requirement to enable her to produce milk. A mule ewe with twins or triplets needs up to 10 litres of water a day! This highlights the importance of having enough staff to tend to the lambing pens.

and figures its surprising we don't lose more lambs.

- A 4kg lamb needs 20gms IgG for an adequate immunity
- The best colostrum powders have 20gms/ litre IgG

Lamb needs 250mls/ kg colostrum in 24 hours just to keep warm

- Good ewe colostrum has 50 gms/ litre IgG at birth
- A ewe lambed 6 hours has only 30gms/ litre IgG

Supplementing colostrum is a big talking point these days with there being lots of powders on the market of varying costs and quality. More facts include:

- Ewe colostrum is best with 50g IgG and 15% fat.
- Goat colostrum is higher in fat and closer to ewe colostrum. The lower fat content in cow colostrum means a lamb needs 30% for energy levels. Lambs can be allergic to some cow colostrum (it causes anaemia and death). The cows colostrum can be tested for antibodies involved in this allergic reaction.
- Freezing goat or cow colostrum is a good idea. A top tip is to freeze it in a freezer bag laid flat, it will thaw faster than if frozen in a tub. Remember that boiling colostrum or thawing it in the microwave will damage the proteins and the antibodies in the colostrum won't be effective.
- The best powdered colostrums have only half as many antibodies as ewe colostrum, they are therefore better than nothing but not ideal as a replacement for ewe colostrum. Topping up well fed lambs with powdered colostrum probably isn't best practice as you are really just diluting the good stuff.

#### COLOSTRUM SUMMARY

Lambs require 100ml/kg in first 6 hours birth of good quality ewe colostrum 250ml/kg in first 24 hours Lambs need 20g IgG for a good immunity

#### **Minimise The Amount of Pathogens**

There is definite merit in trying to minimise the amount of pathogens in the environment that can infect the lamb. Bacteria and viruses thrive best in damp, dirty, warm places.

Dagging ewes, housing them when they are dry, keeping bedding dry and not overstocking are all achievable management practices to help in this area.

Completely cleaning individual pens out, allowing them to dry and rebedding between each ewe is ideal. This is not always possible at the height of lambing time- scraping a pen back to the wet soggy base and putting straw on top is probably the worst scenario. It is probably best if the pen can't be completely cleaned to just take the worst contamination off the top, leave as much of the dry non contaminated straw and bed on top of this. Lime or antibacterial powders are available to sprinkle in pens to help combat some of the bacteria.



Recent research has shown that 10 uses in one season of an individual pen that has been completely cleaned between ewes is the absolute maximum before the pathogen level build up to totally unacceptable level.

The pathogens that are present in the environment infect the lamb through the mouth or navel in the majority of cases. Clean ewes with clean bags in clean pens are obviously going to minimise the amount of pathogens the lambs take in by mouth. Feeding bottles, teats, colostrum containers, stomach tubes, the shepherds hands and the nozzle of the antibiotic bottle are all places that will get a build up of pathogens. We are using them to prevent disease in vulnerable lambs, they need to be spotless and disinfected before use on each lamb otherwise you have a high risk of spreading disease.

Preventing pathogens gaining entry through the navel is best achieved by applying a drying antibacterial chemical to the navel. Strong Iodine (10% Iodine) is a product that meets the requirements, it is much superior and cheaper than blue sprays. There are also iodine products with additional drying agents being sold now that should be very effective.



lodine is best applied as a dip rather than a spray as you get a much more even coverage of the navel. Remember to clean the dip cup and replenish it regularly (a dirty cup is a bacterial soup that you are putting directly onto the lamb!) It is recommended in sheds that have a build up of disease during lambing that navels are dipped twice; once at birth and once 6 hours later.

In an ideal world our lambing sheds would be clean and dry, every lamb would get lots of good quality colostrum and no lambs would become diseased. In reality there is always a build up of infection during lambing and vulnerable lambs, twins and triplets often don't receive enough colostrum. To control diseases such as watery mouth and joint-ill, antibiotics are essential in the modern lambing shed. Unfortunately in newborn lambs we are seeing a lot of resistance of bacteria to antibiotics. The results of a recent study into how effective certain antibiotics were to E. Coli, the bacteria that causes watery mouth, are shown below. This means that the common drugs we use will not work in up to 50% of our flocks !

	Watery Mouth—E.coli	
Antibiotics		Resistance
Terramycin	Tetracyclines	52.5%
Spectam	Spectinomycin	29.8%
Synulox	Amoxycillin clavulanate	23.7%
Norodine	Trimethoprim sulphonamide	13.9%
Oroject	Neomycin	11.2%

The livestock industry is under a lot of pressure to decrease the amount of antibiotics they use. Doctors believe the rise in superbugs in humans is partially due to overuse of antibiotics in food producing animals. Bearing these factors in mind it is sensible to re-assess how we use antibiotics, both to comply with legislation and to slow down resistance and keep the drugs we have as effective as possible for as long as possible.

Its really important to use the correct antibiotic in the correct way in the appropriate animals.
We recommend that you consider some of the following factors when using antibiotics in disease control in lambs:

- Use drugs that are effective for the disease. This is achieved by sampling untreated diseased lambs to get an accurate diagnosis and to test the pathogen causing the disease for sensitivity to drugs.
- Use the correct dose of drug, inject it as stated by the manufacturer and store it correctly.
- Use preventative antibiotics (such as Spectam, Orojet, Devomycin etc ) only on the vulnerable lambs not likely to have had enough colostrum such as twins triplets
- Consider waiting until late lambing when there is a build up of pathogens before you start using antibiotics at all.



Karen Swindlehurst

### WORMING ADULT EWES AROUND LAMBING TIME

During the summer months worm larvae ingested by sheep off the pasture develop into egg laying adult worms within three weeks. However, the faecal egg output by the ewe is limited by the immunity she has developed to gutworm infections.

In the winter months larvae ingested by the ewe don't complete their development straight away but become inhibited (dormant) L4 larvae in the stomach wall. They lie dormant until activated in the spring to become egg laying adults. This, combined with a lowering of the ewes immunity around lambing time, results in a significant rise in faecal worm egg output from two weeks before until 6 weeks after lambing. This can result in a substantial increase in pasture contamination and increased worm challenge for growing lambs.

The most important time to consider worming adult ewes is around lambing. Whichever wormer is used, it is important that it is effective against the inhabited L4 larvae that the ewes can be carrying at this time of year.

Other considerations to bear in mind are whether to use a wormer with persistent action so the ewes can help clear the pasture of overwintered worm larvae and further reduce the challenge to young lambs (such as Cydectin drench) or whether a combined fluke and worm or worm and scab treatment should be administered.

To discuss which products may be most appropriate for you or to develop a worm and fluke control plan for your flock please contact the surgery on 01729 823538.



## VACCINATION FOR CATTLE PRIOR TO TURNOUT

In the spring, prior to turnout, is when the majority of breeding cattle are vaccinated against BVD and Leptospirosis. In addition to single annual boosters for animals already in a vaccination system, previously unvaccinated animals may require a course of two injections approximately four weeks apart to become fully protected (Bovela BVD vaccine just requires a single injection followed by annual boosters) for both BVD and Leptospirosis.

It is recommended to complete the initial vaccination course prior to service, so consideration needs to be given to which animals are going to be served through the summer. Farms that vaccinate heifer replacements against lungworm will also need to vaccinate calves over two months of age with two doses of Huskvac four weeks apart. The second dose should be given at least two weeks prior to turnout. For further advice on the most appropriate vaccines to use on your farm, which ones can be given at the same time and which worming programmes may be most appropriate after lungworm vaccination, please speak to one of the farm vets on 01729 823538.

## **Bovela BVD Vaccine**

Until recently all BVD vaccines have required an initial course of two injections approximately four weeks apart with either six or 12 monthly boosters. Bovela is a completely new live BVD vaccine which only requires a single intramuscular injection to provide

full immunity. This makes it much more straightforward to correctly vaccinate and fully protect animals. A booster vaccination is recommended after 12 months. The vaccine is ideally suited for vaccinating heifers prior to turnout that are to be served through the summer and bought-in replacements. The vaccine can also be used for whole-herd boosters in herds which have already used another vaccine.



## PRACTICAL LAMBING MEETING

On the 21st February, we held a practical lambing course at Stainforth. Karen discussed a range of topics including ewe management up to lambing, normal and abnormal lambing presentations and how to correct them, as well as lamb and ewe diseases seen around lambing time and how to recognise and treat each one. A Lambing simulator was used to demonstrate lambing techniques while various problems that are regularly encountered were

discussed. Farm Technician Anna helped people give intraperitoneal glucose injections (into the abdomen), stomach tube lambs and advised where best to inject a lamb as well as the correct use of rubber rings. The meeting was informal with lots of discussion amongst the group whilst receiving hands on practical learning. It was an informative evening with lots of positive feedback and following on the success, there will be further meetings covering all aspects of sheep flock health with hands on practical experience as well as discussions and demonstrations.





# EXAM SUCCESS

Congratulations to Anna Ashworth on becoming an R-SQP. Anna, who is a Registered Veterinary Nurse and also our Farm Technician, achieved straight A's in all subjects. She now joins Anne as a Suitably Qualified Person (SQP.) An SQP is an animal medicines advisor, a legal category of professionally qualified persons who are entitled to prescribe and/or supply certain veterinary medicines under the Veterinary Medicines Regulations. We know that this will be of huge benefit to our clients particularly in Anna's role on farm. Well done Anna!

# baby nfws

It was with great pleasure and a little nerves that we welcomed our second son into the world this month. He is a big lad and with his big brother is keeping us both busy with a constant round of feeds nappies and playing trains but I couldn't be happier.

So next time I see you the bags under my eyes won't just be from the lambing room but hopefully the smile will be still there as well. Ian.







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