

Mastitis investigations

Mastitis is a wide-ranging disease that all dairy farmers will experience at some point. Here at the vets, questions around mastitis control and treatment are one of the most commonly asked. The national target level for clinical mastitis is <30 cases per 100 cows per year but levels vary hugely from farm to farm. Some farms are as low as 5-10 cases per 100 cows and some farms have levels exceeding 200 cases per 100 cows! When you consider the average case of mastitis costs between £250 and £300 you can see how getting a handle on mastitis can be the difference between making money and going out of business. The cost to a farm with 250 cows and a mastitis rate of 50 cases per 100 cows per year is estimated to be £31250 a year!

Prevention is better than cure

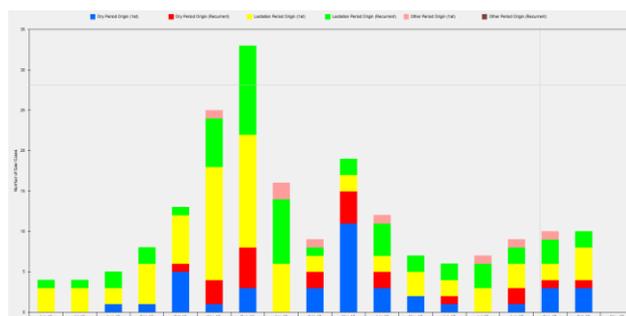
As with any disease we want to try and stop mastitis occurring rather than concentrating solely on treating cases. Although no system is perfect and mastitis cases will still occur and we need to treat these appropriately. If we concentrate on turning the tap off rather than pailing the water out this will be much more effective.

Herd mastitis diagnosis

The key to controlling mastitis at a herd level is to find out where your mastitis is coming from. Every farm will have different pinch points in the system that lead to increases in mastitis and the key is to identify and address these. A farm may be seasonally calving and at peak times of the year the calving yard becomes overstocked. Another farm may have peaks in mastitis associated with milking cows at grass and another farm may have problems with winter housed dry cows. The DairyCo mastitis plan allows you to make a mastitis diagnosis for your herd.

A thorough and full investigation of the farm and mastitis data will “diagnose” your farm mastitis pattern. Which diagnosis you have depends on two factors. Whether mastitis is **contagious** or

environmental. Essentially, this means whether the mastitis spreads from cow to cow in the milking parlour (Staph aureus) or is picked up in the environment from dirty conditions (Strep uberis, E.coli). Then, is the mastitis coming from the **dry period** or the **cows in lactation**.



Although one farm may have problems with more than one area it is key to concentrate on the main issue on farm. Identifying the limiting factor to mastitis control will allow changes to have the biggest effect. A lot of money can be spent ineffectively on mastitis control. A good example of this is auto-cluster disinfection. While these systems are excellent at controlling contagious mastitis, if 90% of the mastitis on farm is caused by environmental pathogens then this will have a negligible effect on mastitis control for a relatively large investment. Another example would be investing in sand cubicles to reduce mastitis rates. Again, sand cubicles can be brilliant for reducing mastitis and cow comfort, but if the mastitis data shows that 90% of the mastitis on farm is coming from the dry period this will have little effect on mastitis rates.

Mastitis investigations

The DairyCo mastitis plan is the gold standard of mastitis investigations. It involves a full review of clinical and cell count data from the farm, a farm visit where all areas of cow management are looked at, discussion of treatment protocols and observation of parlour routine. This will allow a herd mastitis diagnosis and appropriate and effective recommendations to be made. We offer this at the

practice and it has been shown to greatly reduce levels of mastitis amongst our clients and nationwide. Research shows that if a plan's recommendation is followed a 36% reduction in mastitis can be expected. If we look at the farm milking 250 cows and an initial mastitis rate of 50 cases per 100 cows this equates to a saving of £11250!



We also offer more bespoke service for farms that want a particular area of mastitis control looking into. All our vets are competent with mastitis computer software to look at mastitis patterns from clinical and cell count data. We offer parlour visits to assess milking machine function and milking routine. Teats scores can also be performed by our trained scorers to look at teat end damage. Drying off checks can be performed to devise drying off treatment protocols and training in the use of teat sealants such as Orbeseal. We offer in-house milk bacteriology which tells us within 48 hours what bacteria are causing mastitis. This not only allows us to recommend more effective treatments but can also be used as part of herd mastitis diagnosis, so we can see what bacteria are present on farm.



Use of antibiotics

The industry is facing more and more pressure from milk buyers and processors to reduce use of antibiotics. Over and inappropriate use of antibiotics

is not only expensive, it also leads to development of resistant bacteria. In the long term this makes treatments less effective and can even cause infections in humans to become harder to treat.

Mastitis tubes both lactational and dry cow are a major contributor to antibiotic use on farm. Reducing the amount of clinical cases of mastitis on farm is the best way to do this but also making sure we are using the most effective tube is key. We can only find this out by investigating mastitis on farm as described above. Moving to the use of teat sealants and treatment protocols where only high cell count cows receive antibiotics at dry off will reduce overall antibiotic use and save money. The pressure on use of antibiotics is only going to increase so as an industry we need to be seen to be ahead of the game. We are making substantial progress on this; antibiotic use across the dairy sector has reduced over the last year but there is still more to be done.

Mastitis control is unfortunately not as simple as changing to a "stronger tube". The evidence shows that no tube is particularly better than another. What is important is choosing a tube that is effective against the common bacteria on your farm. This can only be established with a full farm approach to mastitis investigation. If you have any questions about mastitis or would like to arrange a visit, please contact the practice.

Potential changes to TB testing

You may have heard that the high-risk area for TB (the southwest) may be moving to 6 monthly testing as standard. Full details have not yet been released but as soon as they are we will let everyone know. In the meantime, if you have any questions please give us a ring at the practice.

Wishing you all a happy and productive 2018.

All the best,

Chris

