

Mastitis – A Vet's perspective

With Irish dairy farmers' thoughts turning now to drying off, it is a great time to assess your herd mastitis problem. As well as the multitude of costs associated with clinical mastitis, treating this disease can be hugely time consuming for the farmer. So, what can be done to address the problem?

We spoke to vet Padraig Hyland...

1. Mastitis and High Somatic Cell Counts (SCC) are top of many dairy farmers' problem lists. What do you see as the key issues associated with clinical mastitis?

Mastitis results in massive losses on any farm-when prevalent, it can significantly reduce farm profits. Mastitis reduces milk yield and leads to poor quality milk. Together, these factors erode the milk income received by farmers. In addition, antibiotic therapy used to overcome mastitis adds to dairy farmers' costs and stress. The cost of a severe case can close to €600.

High somatic cell counts (SCC), an indicator of mastitis, have a major impact on the profitability of dairy farmers and dairy processors. Also the cost of high SCCs are immense in terms of reduced milk yields and poor price at the farm gate.

2. What are the causes of clinical mastitis?

The most common cause of clinical mastitis is the environmental bacteria *E. Coli* and *Strep uberis*. *E. coli* is associated with toxic cases of mastitis around calving which requires veterinary attention. *Strep uberis* can cause repeat cases of clinical mastitis where the same quarter keeps getting mastitis throughout lactation.

3. What can farmers do to control mastitis and high cell counts in their herds?

A must for farmers is to have a mastitis control programme where the farmer in association with his vet develops a plan specific to that farmer's situation to reduce the risk of mastitis on his farm and to also address cell count issues. For example to stop the spread of contagious pathogens such as *Staphylococcus aureus* milking routines are critical in association with culling of identified high risk cows. For environmental mastitis keeping udders protected in between milking and in the dry cow period is of critical importance. Regular milk recording is essential and the records available through the ICBF website will assist in an investigation.

The bottom line is that farmers cannot afford to accept high cell counts and high mastitis rates in their herds as they will be penalised by the co-ops and will have a

major impact on profitability. Farmers in difficulty should seek help immediately. The CellCheck guide from Animal Health Ireland is a great resource for all dairy farmers. Farmers should participate in the Arrabawn mastitis control programme which will help you monitor your herd health in relation to mastitis control.

4. How important are dry cow treatments and the dry cow period for controlling mastitis and SCCs in the herd?

Dry Cow treatment is one of the central components of any mastitis control program. The dry cow period is the rest period for the udder when it gets the opportunity to rid itself of existing infections picked up during the lactation through appropriate use of dry cow therapy.

5. So is a carefully selected antibiotic tube the only treatment needed by cows at drying off?

No. Antibiotic dry cow therapy helps to reduce subclinical mastitis at the end of lactation and helps to reduce cell counts. It has little effect on keeping new infections out of the udder. The problem is that bacteria can still enter the udder because not all teats seal during the dry period. UK trial work has shown that over 50% of E Coli mastitis cases in the first 100 days of lactation entered the udder during the dry cow period. Some of these will be the acute cases around calving which can result in death - this is where the benefits of a teat seal such as Boviseal come to the fore. Boviseal forms a seal in the teat canal from drying off until calving. This seal prevents bacteria from entering the udder through the teat orifice and prevents dry cow infections which tend to show clinical signs around calving or in the days and weeks post-calving.

6. Teat sealant has been a key part of Irish dairy farmers' drying off strategy for the past ten years. What can you tell us about the benefits of Boviseal in preventing clinical mastitis?

Teat sealant should be part of every dairy farmer's dry cow strategy. Many farmers see a significant reduction in clinical mastitis once they start using teat sealant in their cows at dry off. What farmers say to me is that they see a reduction or even an elimination in their mastitis cases around calving which leads to reduced workload at a busy time of year. The product makes the dry cow period a lot less stressful from a mastitis control point of view.

7. Can farmers use teat sealant with any dry cow therapy?

Yes. The dry cow tube will be massaged up into the udder. The sealant remains at the base of the teat. Teat sealant can be used with any dry cow tube.

8. There seems to be an increasing trend for using teat sealant on its own. Where do you stand on this?

This is called selective dry cow therapy. If your cow is free from subclinical mastitis and has not had any clinical mastitis in the previous lactation, then you could just use teat sealant. However, this is a decision that you need to take with your vet. You need to be 100% sure that your guidelines and selection criteria are correct.

9. Any other advice on teat sealant use?

Yes follow the manufacturer's instructions for insertion paying particular attention to cleaning the teat end thoroughly and pinching the top of the teat while inserting.

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