

CATTLE NEWS – MAY 2019

This newsletter is the first in a series of newsletters we hope to produce around the topic of mastitis. With selective dry cow therapy now being expected by milk buyers, and vaccinations coming onto the market for some mastitis pathogens our aim is to paint a clearer picture and help you and your herds to be completely and 'udderly' informed when it comes to tackling mastitis on farm!



Following the success and oversubscription for our 'Best Practice Medicines Course' back in February we are looking at running this again in the near future. Please phone the office to register your interest as places will be limited - more details to follow soon!!

MASTITIS

Mastitis is a costly disease of dairy cattle and each year causes huge economic losses to the dairy industry. These losses arise from poorer milk quality leading to the forfeit of bonuses, milk buyer penalties for high cell counts as well as the direct costs associated with the treatment of mastitis cases and discarded milk. AHDB estimate that the cost of treating a single case of mastitis averages £250-£300, ranging from £60 for the treatment of a mild case of mastitis to the loss of a cow in severe cases.

KNOW YOUR BUGS!!

Given the current concerns over appropriate antibiotic use and antimicrobial resistance, sampling affected quarters to correctly identify the bugs responsible allows us to review the treatments given in mastitis cases and therefore select the most appropriate treatment.



Mastitis causing bacteria can be split into 3 groups depending on the type of infection they cause;

	Contagious	Environmental	Mixed
Examples	<i>Staphylococcus aureus</i> , <i>Streptococcus agalactiae</i> and <i>Mycoplasma spp.</i>	<i>Escherichia coli</i> , <i>Streptococcus uberis</i> and other coliforms like <i>Klebsiella spp.</i>	Coagulase Negative <i>Staphylococci</i> (CNS) and <i>Streptococcus dysgalactiae</i> .
Characteristics	Well adapted to survival and growth in the udder. Frequently responsible for chronic infections. Cases increase along with days in milk.	Live in the environment, mainly bedding. Short duration infections with increased cases seen when animals are immunosuppressed (after calving for example).	Mixed characteristics of the previous two.
Transmission & Control	Spread during milking. Biosecurity management helps to avoid the entry of these pathogens.	Spread between milkings. A dry, clean and comfortable environment is important in controlling these pathogens.	Mixed characteristics of the previous two.



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CLINICAL VERSUS SUBCLINICAL MASTITIS

Mastitis is inflammation of the udder usually caused by bacterial infection, which can be defined as either clinical, where there are notable changes in cow health or sub-clinical, where only changes in the milk are observed.

Clinical mastitis can be graded according to severity, with the severity of infection an important factor in guiding treatment.

Mild	Milk secretion altered	GRADE 1
Moderate	Milk secretion and mammary gland altered	GRADE 2
Severe	Secretion, mammary gland and general state of health altered	GRADE 3

Subclinical mastitis is most commonly recognized by detecting the inflammatory process in the udder by testing a sample of milk. This can be done in the following ways;

- California Mastitis Test (CMT) can give results within a few seconds and so is effectively a cow-side test but can give results as negative or +, ++ or +++.



- Somatic Cell Counts (SCC) measure the number of white blood cells (WBCs) in milk. When infection occurs, WBCs arrive at the affected zone in massive numbers and lead to an increase in SCC in milk.

Sampling for bacterial analysis and other laboratory tests are the only truly diagnostic

Contact us on 01297 304007

methods which allow us to identify the pathogen that is causing disease. Other methods such as CMT and bulk or individual SCCs detect the presence of mastitis but do not give a real diagnosis in terms of the pathogen responsible.

MILK SAMPLING PROTOCOL



Hygiene and cleanliness are very important when taking a sterile sample to prevent contamination and determine which bacteria are responsible.

1. Clean gloves should be worn and the teats should be cleaned if obviously dirty.
2. Pre-dip teat, dry wipe and strip fore milk prior to sampling.
3. Using a sterile pot held at a 45° angle, direct 2-3 squirts of milk into the pot. Minimise the time the lid is off the sample pot to reduce the risk of contamination.
4. Record cow ID, quarter and date of sampling. Treatment can be administered after sampling whilst awaiting results in accordance with veterinary advice.



The BVD free campaign is well underway at the practice with all our spaces for the 'Stamp it Out' scheme taken.

Whilst we are unable to offer any more places on the scheme, BVD is an important disease to be aware of so please contact us for more information on controlling this disease in your herd.

Emma