Countryside Veterinary Clinic July 2018 Newsletter



Coliform Mastitis: Cases Increase As Summer Temperatures Climb

As temperatures and humidity rise, it's not uncommon for our practice to observe more cases of coliform mastitis during the summer months. Heat stress does occur in the North Country! E. coli and Klebsiella are gram negative bacteria most likely to be cultured when coliform mastitis is suspected. Coliform bacteria are environmental, opportunistic bacteria found on every farm mainly in fecal contaminated bedding, water troughs and dirty laneways. In many cases, cows can successfully clear coliform infections but when faced with an overwhelming bacterial load or are immune suppressed, clinical infection often occurs. In fact, the most common time frame to observe coliform mastitis is 2 weeks before calving to 2 months after calving precisely when immune suppression is most likely to occur.

Clinical signs of coliform mastitis may include a depressed appetite, depression, diarrhea, depressed milk production and firm hot quarters with watery, yellowish milk. As the cow's immune system fights to destroy the invading bacteria, endotoxin poison may be released from the gram-negative bacteria cell wall. The resulting endotoxic shock may be so severe that death is the end result. Cows that don't die often become downers or at the very least, affected quarters may completely dry up.

Prevention is the key to keep coliform mastitis cases to a minimum. Keeping cows clean, dry and comfortable especially during the periparturient transition period can't be overemphasized enough. In addition, properly balanced dry cow, pre-fresh and fresh cow diets will help to prevent metabolic diseases which can all lead to immune suppression and coliform mastitis. Ketosis, milk fever, retained placentas, metritis and DA's all have a negative effect on the cow's immune system. Properly functioning milking equipment and a good milking routine that results in clean, dry, well stimulated teats will also prevent new coliform infections. Many farms have also found Orbeseal (internal teat sealant) useful to decrease dry and pre-fresh infections that often result in mastitis during the first 2 months of the new lactation.

Along with clean stalls, good nutrition and a well-designed heat abatement system (fans and sprinklers), vaccination with a core antigen vaccine such as J-Vac will also help to prevent or certainly lessen the severity of coliform mastitis. (Anthony Paluck) This is one instance where more is better. Vaccination efficacy actually increases the more often a cow is vaccinated. Two protocols that have been adopted by many of our clients and work equally well are as follows:

Option 1: Popular with large herds - Vaccinate at dry off, 3 weeks before and 3 weeks after calving. A 4th dose can also be given at around 100 days in milk or when the cow is confirmed for pregnancy.

Option 2: Popular with small herds - Vaccinate the entire herd including dry cows and springing heifers every 3 - 4 months.

Depending on the severity of the clinical signs, cows with coliform mastitis may require treatment. A sound protocol will often include IV and oral fluids, flunixin, calcium, intramammary and/or systemic antibiotics. Discuss your treatment options with your herd veterinarian who will be able to assist you in formulating a treatment protocol that makes sense for your farm.

In summary, coliform mastitis can be a devastating disease that can be prevented through proper environmental management (think clean, dry and comfortable), sound nutrition and a solid vaccination program with "J-Vac".



Save the date: Farmer appreciation Picnic: Thursday August 30th Special thanks to **ZOETIS** for helping out!

7:00 p.m. – Lewis County Fairgrounds pavilion. Call to reserve your spot today – 315-376-6563.

We don't want to run out of food so <u>please</u> help us get close to correct number by calling and making reservation (376-6563) with how many adults and how many kids will be attending. **Door prizes will be given out (including 3 - \$100 gift certiciates to Countryside) – BUT you need to be on the reservation list in order to be able to win!**

Farm Bureau Senior Farmer Award to be Presented at picnic.

We have partnered with the Farm Bureau Board of Directors to provide the venue at which the 2018 Senior Farmer Award will be presented during the annual Farmer's Picnic on August 30th. Please join us in celebrating this year's recipient at the award presentation which will take place at 8pm in the Pavilion.



Read our newsletters: Remember that if you spot your name in our newsletter and call us within 5 days of the billing date, we will give you a \$10.00 credit on your bill.