



JULY 2021 DAIRY NEWSLETTER

Mycoplasma Mastitis

Over the past several weeks our clinic has come across an increasing number of mastitis cases caused by Mycoplasma, a species of bacteria that lack a cell wall. The absence of a cell wall allow mycoplasma to be naturally resistant to antibiotics (all intramammary antibiotics other than Pirsue) that stop bacterial growth by inhibiting cell wall synthesis. The northeastern US has been dealing with this mastitis pathogen for quite some time but it has been sporadic here in Southwestern Ontario. Hopefully with some education we can keep it that way.

The following is a synopsis from Cornell University's College of Veterinary Medicine that I have modified to make it more relevant for our situation in Ontario.

Mycoplasmas are commonly found in the nasal cavity and reproductive system of healthy cows but stresses such as severe changes in weather, nutritional distress, and poor ventilation may allow the organisms to grow and enter other organ systems such as the mammary gland resulting in mastitis. It can also be readily transmitted from cow to cow during milking. A typical source of herd infection is purchased animals, especially non-lactating heifers or cows subclinically infected with mycoplasma.

The classic signs of mycoplasma mastitis have been described:

- Sudden swelling of the whole udder or individual quarters
- Cows appear otherwise healthy but have severe mastitis
- Abnormal udder secretions - milk has sandy or flaky sediments in watery or yellowish fluid
- Multiple quarters involved
- Infected quarters that fail to produce milk or substantially decreased milk production
- Prolonged milking times
- No response to treatment

Controlling Mycoplasma mastitis

- Maintain a closed herd
- Fresh cows should not be housed in the same pens or milked with the same equipment as sick cows or cows with mastitis.
- Do not feed unpasteurized waste milk from infected cows to calves. Calves fed infected milk may develop pneumonia, joint infections and head tilts related to ear infections. Pasteurization of waste milk which, if properly done, will eliminate the problem with calves.
- Monitor and eliminate cross-sucking from calf to calf. Calves that have mycoplasma in their nasal and oral cavity can infect their pen mates udders if allowed to cross suck
- Segregate positive cows and milk them separate if immediate culling is not feasible.
- Cull

Mycoplasma testing

- DHI/Lactanet has a Mycoplasma test in its Mastitis 4 test that detects DNA of the bacteria

Culture of Mycoplasma is different than a routine mastitis culture. The culture requires special media and growth conditions. When submitting a milk sample on your own for culture, please tell the clinic that you need a Mycoplasma culture, as it must be selected on the submission form. Also, mycoplasmas may take 3–10 days to produce visible colonies so a result may take longer than you typically expect with a routine culture.