



***Mycoplasma* spp. – A practical summary for controlling mastitis**

**Turner Swartz and Christina S. Petersson-Wolfe
Virginia Tech, Department of Dairy Science**

Mycoplasma spp. are contagious mastitis-causing pathogens that do not grow well on blood agar under aerobic conditions, and therefore must be grown on a selective agar under anaerobic conditions. Infected cows typically have mastitis in multiple quarters and exhibit a dramatic decrease in milk production. A *Mycoplasma* spp. mastitis outbreak can be preceded by a respiratory disease event in bovines of different ages on the farm. Information in this document was summarized from the National Mastitis Council: Laboratory Handbook on Bovine Mastitis (Hogan et al. 1999).

Where are these organisms found?

Reservoirs of *Mycoplasma* spp. include the **respiratory and urogenital tracts**, as well as **infected udders**. These organisms can also be found in contaminated intramammary treatments and treatment devices, contaminated hands, and in airborne emissions in poorly ventilated barns.

How does *Mycoplasma* spp. spread to the mammary gland?

Mycoplasma spp. spreads **easily from cow to cow at milking**, making it extremely important that herds maintain a *Mycoplasma*-free status. This pathogen can also spread from contaminated hands, treatment devices, and from the respiratory and urogenital tracts to the udder as well.

How can you prevent and control mastitis caused by *Mycoplasma* spp.?

Prevention is key when dealing with *Mycoplasma* spp. Maintaining a **closed herd** or only purchasing cattle from reputable *Mycoplasma*-free herds is of the utmost importance. **Culturing all replacements** at calving before commingling them with the rest of the herd will aid in preventing *Mycoplasma* spp. from entering the lactating herd. If *Mycoplasma* spp. are already on farm, extreme hygiene is necessary to prevent the spread of this pathogen. Using an efficacious germicidal pre- and post-milking teat disinfectant will aid in controlling the spread of *Mycoplasma* spp. **Segregating infected cows** to be milked last or using separate milking units is highly recommended. If segregation is not possible, infected cows should be removed from the herd. Lastly, periodic bulk tank cultures should be performed to monitor the presence of *Mycoplasma* spp. in a herd.

When are *Mycoplasma* spp. mastitis infections most likely to occur?

Because *Mycoplasma* spp. are highly contagious, an outbreak can happen whenever there are *Mycoplasma* spp. present in a herd. It can be preceded by a respiratory disease event in bovines of different ages on the farm.

How likely is *Mycoplasma* spp. mastitis to cure?

No treatment is effective against *Mycoplasma* spp. mastitis. Due to its highly contagious behavior, it is highly recommended to either segregate or remove infected cows from the herd.

Quick Notes

- *Mycoplasma* spp. are highly contagious mastitis pathogens that originate from infected udders, and respiratory and urogenital tracts
- Maintaining a closed herd, or only purchasing animals from *Mycoplasma*-free herds is key to controlling this pathogen
- Periodic bulk tank cultures should be performed to determine the presence of *Mycoplasma* spp. on a farm
- No treatment currently exists for *Mycoplasma* spp. mastitis, therefore infected cows should be eliminated from the herd
- Cows infected with *Mycoplasma* spp. mastitis should be segregated and milked last or with a separate milking unit until the cow can be removed from the herd

References

Hogan, J.S., Gonzalez, R.N., Harmon, R.J., Nickerson, S.C., Oliver, S.P., Pankey, J.W., Smith, K.L. **Laboratory Handbook on Bovine Mastitis**. Natl. Mastitis Council, Inc., Madison, WI; 1999.

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