

Corynebacterium bovis: A Practical Summary for Controlling Mastitis

Turner Swartz, Ph.D. Student, Dairy Science, Virginia Tech Christina S. Petersson-Wolfe, Dairy Specialist, Virginia Cooperative Extension

Corynebacterium bovis is a contagious, Gram-positive mastitis-causing pathogen. *C. bovis* will typically produce little to no growth on blood agar after 24 hours of culture, but it will show creamy, gray, or white nonhemolytic colonies at 48 hours. *C. bovis* is mildly pathogenic and will usually cause only a mild increase in somatic cell count and a slight reduction in milk production. Information in this publication was summarized from the National Mastitis Council's Laboratory Handbook on Bovine Mastitis (Hogan et al. 1999).

Where are these organisms found?

C. bovis will colonize the teat canal; thus, the teat canal as well as the infected udders will act as reservoirs for infection.

How does *C. bovis* spread to the mammary gland?

This pathogen is contagious and will therefore spread from cow to cow at milking.

How can you prevent and control mastitis caused by *C. bovis*?

Proper milking procedures, including the use of effective post-milking teat disinfectants, will help to reduce the number of new infections. After unit detachment, the application of a proven post-milking teat disinfectant should be applied with coverage over at least two-thirds of the teat barrel. The exception to this are post-dips with the active ingredient linear dodecylbenzene sulfonic acid, which are not effective against *C. bovis*. Dry cow therapy is very effective in eliminating this pathogen.

When are *C. bovis* mastitis infections most likely to occur?

New infections can occur at any time during lactation. Prevalence of *C. bovis* is very low in herds utilizing an efficacious post-dip.

How likely are *C. bovis*-infected quarters to be cured?

Dry cow therapy is very effective in eliminating *C. bovis*. Antibiotic therapy during lactation is not recommended.

Quick Notes

- *C. bovis* is a contagious pathogen that colonizes the teat canal.
- Effective post-milking disinfectants will dramatically reduce the *C. bovis* infection rate.
- Dry cow therapy is very effective in eliminating *C. bovis.*

References

Hogan, J. S., R. N. Gonzalez, R. J. Harmon, S. C.
Nickerson, S. P. Oliver, J. W. Pankey, and K. L.
Smith. (1999). *Laboratory Handbook on Bovine Mastitis*. Madison, WI: National Mastitis Council.

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