

Corynebacterium bovis – A practical summary for controlling mastitis

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Corynebacterium bovis is a contagious, Gram positive mastitis-causing pathogen. *C. bovis* typically will produce little to no growth on blood agar after 24 hours of culture, but will show creamy, grey or white non-hemolytic colonies at 48 hours. *C. bovis* is mildly pathogenic, and will usually cause only a mild increase in SCC and a slight reduction in milk production. 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?

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

How does C. bovis spread to the mammary gland?

This pathogen is contagious and therefore will 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 **efficacious 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 dodecyl-benzene sulfonic acid, which are not effective against *C. bovis*. Furthermore, **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 cure?

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
- Efficacious 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., 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 Counc., Inc., Madison, WI; 1999.

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