

## **Eradication guidelines and handling guidelines for *Mycoplasma bovis***

**Jorgen Katholm, November 2014**

In many countries, it is recommended to control the bulk tank milk for infection with mycoplasma at least once a year. In bigger farms even every ½ year or every 1-3 month might be a more secure way to survey the infection.

In countries like USA it is recommended to check all new calving cows for infection with *Mycoplasma bovis* or other *Myciolasma* infections. To reduce time in segregation this is done fastest with PCR.

*Mycoplasma* infections can cause severe problems with clinical and not treatable mastitis and also severe outbreaks with arthritis in cows, lung infections and ear infections in calves

If some of these symptoms appear in the herd it is always advised to control a bulk tank milk sample to try to get a diagnosis of the condition. It is also advised to send composite cow samples from cows with symptoms that could be related to *Mycoplasma*.

### **How to handle a test positiv farm.**

Traditionally the advice to handle mycoplasma infections has been to test all cows and cull test positive cows. For many years, this has been practiced by use of culture in bigger farms in Germany and USA.

But resent reports from Denmark, Katholm et al 2012 concluded that infected herds appears to clear infection in BTM in 2-3 months and North America Punyapornwithaya et al 2012 concluded that most herds cleared mycoplasma mastitis within 1 month, 50% of the herds culled diseased cows preferentially, yet culling was not associated with hastened clearance.

So far, the advice from the Danish experience is to

Optimize hygiene on farm.

Optimize hygiene at milking. Milk with gloves and do post milk teat dipping with iodine.

Optimize feeding and all other stress factors on the farm with focus on movements.

Never place sick cows in the fresh cow pen.

Stop feeding fresh cow milk to calves

Only feed calves from dam with colostrum 2-4 days. Pasteurize all other milk from cows to calves or use milk powder

Test cows treated the last 1-2 months for clinical mastitis with composite milk samples for *Mycoplasma bovis* by PCR and segregate positive cows.

Test all new mastitis cases the next 1-2 month for mycoplasma bovis with PCR and segregate positive cows

Stop milking all positive cows with clinical mastitis and positive reaction for Mycoplasma bovis, move these cows to fattening area away from the milking cows or cull

Test bulk tank milk samples every 1-2 week until negative results

Katholm J., K. Krogh and T. W. Bennedsgaard. Surveillance of *Mycoplasma bovis* and *Mycoplasma* spp. by Real Time PCR in bulk tank milk samples from all Danish dairy herds in 2011. XXVII World Buiatrics Congress, Lisbon, Portugal, 3 to 8 June 2012.

Punyapornwithaya V., L. K. Fox, D. D. Hancock, J. M. Gay, J. R. Alldredge. Time to clearance of mycoplasma mastitis: The effect of management factors including milking time hygiene and preferential culling. *Can. Vet. J.*, 2012, 53, p 1119–1122