

Jørgen Katholm

DVM, Dip ECBHM, Certified in Cattle Herd Health

Market Development Manager

Mobile +45 4041 7396

E-mail: jk@dna-diagnostic.com

Web: www.dna-diagnostic.com

Use of PCR test in bulk tank and individual cows for surveillance of milk quality.

It is my opinion, that in all farms but especially in the bigger dairy farms, it is essential to follow the development in mastitis bacteria on the farm.

This is essential to be able to react fast, if the development in milk quality Bulk tank SCC or TBC is not as expected.

An increase in bulk tank SCC will only appear if there is an increase in selected mastitis bacteria. For Bulk tank TBC also increase in new infections with *Strep. agalactiae* or *Strep. uberis* can highly influence bulk tank TBC.

Actions to be taken:

Staphylococcus aureus – as we know better milking procedure and segregation of infected cows.

Strep. agalactiae - as for *Staphylococcus aureus*.

Strep. dysgalactiae - special emphasize on teat skin quality use of teat dip with proper disinfection and conditioner.

Strep. uberis - clean cows.

E-coli, *Klebsiella* – clean cows better feeding with focus on negative energy balance (ex. heat stress) and focus on daily change of bedding.

Mycoplasma bovis – Segregation and slaughter of clinical cases.

These advises is fast to communicate to people in charge, with monthly surveillance of bulk tank samples with mastit 4 PCR test.

With to high reaction for one of the bacteria, action must be taken towards correct prevention.

I see that milk equipment installations or milkers often meet the demand - our bulk tank SCC is higher than expected (promised) before installation so the present situation is all a question of installation and milking not working correct.

But if the detection in the Bulk tank is *Strep. uberis*, *Klebsiella* or *Mycoplasma bovis* it is not a milking installation problem and thereby other actions must be taken.

If you find an increase in *Staph. aureus* or *Strep. agalactiae*, a fast action towards new infections has to be put in place with control of the hole milking process.

If the bulk tank is positive in a certain direction single cow investigations of ex. 20 -30 high cell count cows but also 10 – 20 cows with acute symptoms, can confirm the diagnosis and stress the prevention actions even better.