Infection Control Methods to Reduce SCC & Mastitis

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Somatic cell count (SCC) levels can be difficult to understand and even more difficult to control. Often a number of small improvements in milking routine can give considerable improvements in SCC level along with increasing control of infected cows milk.

One of the most important controls of infection methods is to wear gloves and disinfect frequently. Gloves are more easily disinfected than hands and they will substantially reduce transfer of bacteria during milking.

Post milking teat dipping or spraying can reduce the level of new cases of mastitis by up to 50%. It is important in the control of both clinical and sub-clinical mastitis in dairy herds. Its benefits increase the longer it is used as the level of bacteria reduces continuously. Where a contagious form of mastitis is present it is a significant factor in control of infection. Often the standard of teat dipping at farm level is poor. Some guidelines are as follows:

- Ensure the entire teat surface that was in contact with the liner is sprayed. A drop of spray visible at the teat end indicates adequate spraying.
- Spray 2 rotations of teat from directly underneath the teats, not from the side, for complete cover.
- 15mls of teat spray per cow should be used; 0.751/50cow herd per milking.
- Use as soon as possible after cluster removal.
- Teat dip should be used at the correct concentration and should be licensed and in date.

Pre-dipping/spraying cleans and disinfects teats prior to attaching the cluster. This practice will reduce the risk of mastitis from environmental bacteria such as e.coli and *Strep Ubereus*. Pre spraying also helps reduce TBCs and is an important control of thermodurics. It is especially important while stock are indoors or during clinical mastitis outbreaks, particularly at the early stages of the calving period. Pre-spray as soon as the cow is in place not as she is walking into parlour. Wipe the teat dry with a paper towel prior to attaching clusters.

Cluster dipping post milking is a very effective form of controlling contagious mastitis and helps minimise the spread of bacteria from cow to cow and prevents chronic cows spreading infection to the rest of the herd. Cross infections and the incidence of clinical mastitis will be greatly reduced by cluster dipping. SCC levels in herds have been reduced by 50,000 even in the absence of culling infected cows. A bucket of solution should be prepared for every 3 units in the pit. Dip the clusters in a peracetic acid based solution before applying to cows. Use licensed in date products as directed on the label.

If you are not milk recording and SCC is steadily rising individual cows should be tested monthly from July to September in the Spring milking herd. Each month's samples should be taken consistently in either morning or evening, don't vary

sampling times from month to month. Late lactation, low yielding, high SCC cows should be dried off. Carry over cows should be closely monitored. Chronic cows should be culled. Milking machine maintenance is a very important control mechanism. Liners should be changed now if not already done in Spring calving herds. Test for and minimise stray voltage, ensure milking machine is tested and faults corrected annually.

Minimising SCC on your farm to a target level of less than 200,000 will ensure a healthy herd of cows are present and normal good milking practices are enough to keep SCC below target level. If an increase in SCC is detected the earlier the above methods are adopted the more quickly controlled the infection level will be.