

Setting the gold standard in the milking parlour



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Time and time again the best advice to help milk producers realise the optimum return on milk is to ensure that all hygiene aspects of production are of the highest standards.

By that, we mean ensuring that bacteria counts are low, bulk tank somatic cell counts (BTSCC) run at a low annual average and the clinical incidence of mastitis is low.

In the UK the average clinical rate is 45% (45 cases/100 cows/annum), with the top 10% of producers achieving clinical rates of around 15-18%. The average rolling BTSCC level for 100+ cow size herds is running at the 220,000/ml.

One can only deduce that if these are the averages there must be producers at significantly higher levels who will be constantly failing to realise the full return on their milk.

Price incentive

In support of this comment a recent report from Ireland, where the national average BTSCC level is running >300,000/ml, indicated that supplying milk below 200,000/ml SCC can be worth up to €5,000 for a 100 cow herd per year, depending on who the milk is supplied to!

An added bonus on top of the price incentive is less culling and increased milk yield through removing the restraints of udder infection from the current and maybe even future lactations.

When profitability comes from a 'Lifetime in Milk', cow longevity is vital and improving udder health is a critical part of this process.

The parlour is the obvious place where milk hygiene quality can be affected and management drive and desire are necessary to ensure routines and protocols are observed by all who work there.

Without setting out goals and standards for all to work to, the impact of trying to improve hygiene will be diluted. In simple terms, relief or

occasional milkers must follow the same routine as the primary workers.

Naturally before the parlour there is always the concern for the cows' comfort and cleanliness; dirty cows always result in more infection.

Therefore, a key part of any mastitis consultancy must be to observe cows and give an honest and frank appraisal of cleanliness.

If a veterinarian or mastitis consultant tells you that your cows 'could be cleaner', don't be insulted, accept it, change it and move on.

Once in the parlour, which in itself must be a clean place to work, all your well planned routines and protocols can be brought into play.

So how do we achieve the gold standard in the milking parlour?

Without the acceptance that time must be dedicated to this vital part of the day it will be difficult to really bring into effect any proactive means of reducing infection levels.

Whether the problem is a high Bactoscan or a high mastitis rate, control comes from the desire to improve, put in place and use effective routines and products.

There are numerous injections, intra-mammary tubes etc. that can assist in 'curing' a clinical case but true control comes from reducing the new infection rate at the same time as being effective at 'curing' the clinical case.

Good pre-foaming and wiping techniques is becoming ever so important; as more people strive to add pre-milking preparation to their routine, a poor technique, weak/ limited product and a hurried approach can

undermine the best intentions. Don't rush, prepare well, but what about the extra time involved? Ian Ohnstad of ADAS indicated an increased yield of 5.5% through improved and correct pre milking preparation and a reduced 'unit on time' of around 35 seconds per cow.

It pays to prepare well, but should you pre-foam or pre-dip or pre-spray? Work by J. Cooper at the Institute of Animal Health showed that good pre foaming was 50% more effective at dirt and bacteria removal than mere wet wiping, dipping or spraying alone.

This is a very important aspect of doing the job well. The simple removal of dirt can be achieved by wetting and wiping, BUT what about the bonds that hold bacteria to the skin? Are you cleaning or disinfecting? Can you achieve both? The disinfectant action can vary from product to product depending on the chosen product's biocidal ability in the presence of heavy organic loads and its speed of action.

You should seriously consider not just if the product is capable of achieving a 10 second 'kill' of bacteria but how complete is the 'kill' of bacteria at the 40 second to 60+ second mark, when the product is wiped off the teat?

What about true bacteria removal? It is important to not only be able to loosen dirt but to act to emulsify the bonds which hold bacteria to the skin and embed them in dirt too.

Non-ionic surfactants can break these bonds. These, combined with a foaming action where wet bubbles

explode on the skin, will not only allow dirt removal, but will remove bacteria (both alive and dead) depending on the chosen biocide.

Volac's Pregold, based on acidified sodium chlorite technology has the ability to combine all the above attributes and is consistently proving itself as the premium product in the pre foam market.

Quality scoring

So why achieve all this then rush the wiping of the teat before unit attachment? Care must be taken to wipe around the teat and then importantly across the bottom of the teat to remove all debris pre attachment.

It does not take any longer but always results in significantly cleaner teats. It is possible to score the quality of wiping accuracy by immediately following with a soft piece of cotton wool to see how efficient you have been.

1. No visible dirt or dip residue.
2. Visible dip stain.
3. Small amount of dirt/manure.
4. Excessive dirt/manure.

Aim to achieve >90% of teats scoring two or less.

There are additional considerations to help complete the whole scenario, for example:

- Clean feet – regular foot-bathing will not only reduce lameness, but will lead to less cross infections to teats, particularly when young cows and heifers are laid down.

- Frequent liner changes – when herd numbers are increased, the frequency of parlour maintenance must be increased (twice a year liner changes may need to be made three times per year). Aim for 2000 milkings per liner.

- Regular parlour servicing and dynamic testing all prove vital.

It all comes down to attention to detail and a wise choice of products at the key times of the day when milk value can be optimised. There is money to be made in producing quality milk and keeping cows in the herd longer. A lifetime in milk is achievable, but not without a serious desire to improve pre-milking preparation time in the parlour. ■

Controlling the new infection rate

Pre and post parlour, ensure:

- Clean and comfortable bedded areas.
- Clean and clear walkways at parlour entrance and exits.
- Adequate feeding space.

In the parlour, before unit attachment:

- Stop bacteria from entering teats at the start of milking.
- Good pre-foaming and wiping techniques.
- Stimulate and time manage oxytocin release.

In the parlour, after unit removal:

- Fully immerse all teats with a quality proven and licensed teat-dip.
- Remove and kill contagious pathogens in the milk film on the teat skin.
- Protect the udder from environmental pathogens before next milking.
- Keep teat ends and skin healthy.