

Managing *Staph. aureus* on the Organic Dairy

Staph. aureus (SA) mastitis is highly contagious and can spread by contact with milking units and milkers' hands. Our organic dairy farm, Reed Farm, in Windsor, Maine received a Northeast SARE grant to develop management options for *Staph. aureus* on organic dairies. The following protocols helped us reduce our SCC from over 200K-300K+ during our SA outbreak back down to routinely under 100K without culling all infected cattle.

Staph. aureus is detected in the bulk tank culture. Find the SA positive individuals in the herd by culturing individual cows and quarters, and milk test monthly to monitor for suspect cattle. If immediate culling of all the SA positive cows is not a viable option for a small dairy, some of the protocols from our study may allow you to manage the challenge, maximize milk quality, and cull over time.



Daily Milking Routine for Our Study to Manage *Staph. aureus* positive (SA+) Cattle

- Milk wearing nitrile work gloves.
- Pre-dip using IBA Bac Stop* iodine teat dip.
- Wipe teats with single service paper towels.
- Post dip using IBA Genesis Barrier* (iodine) teat dip.
- Sort cattle into two groups either in space or time:
 - Milk *Staph. aureus* negative cattle first and SA+ cattle last to reduce the chances of exposing healthy udders to the pathogen, or
 - Mark milking units using orange flagging tape after milking *Staph. aureus* positive cows, so that units that have contacted SA+ cows never contact SA negative cows. This became our preference in the tie-stall environment.
- Sanitize milking clusters by dipping first in a bucket of warm water, then a bucket of IBA FS-100* sanitizer at 100 ppm (1/6 oz. per gallon of water) for 10 seconds after milking SA+ cows or suspect cows.
- Ensure cows dry off and calve in a clean environment.

Dry Off Protocol

- We had greatest success switching to once-a-day milking for 3-4 weeks prior to dry off.
- At dry off time, cows were confined for up to 7 days and provided with lesser quality feed to discourage milk production.
- We did not post-dip daily for 7 days following dry off because we observed that cows associated the dipping with the normal milking routine and this encouraged milk let down and continued lactation.

Manuka Honey Dry Cow Treatment

Just after the last milking for SA+ cows being dried off:

- Warm 5ml of UMF 10+ medical grade Manuka honey in a small jar placed in a bowl of hot water.
- Dose intermammary into the SA+ infected quarter using a single use sterile syringe with a cannula tip.
- Massage in thoroughly.

Note: Protocols and routines should be discussed with a veterinarian through a veterinarian-client relationship.

**These are the products we used; no endorsement or discrimination is intended for similar products.*



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