



Summer Brings Milk Quality Concerns

Country Roads Veterinary Services Inc.

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Special points of interest:

- Proper Milking Technique is essential for minimizing Mastitis
- Proper Functioning Milking Equipment Decreases Mastitis Risk
- A Milk Culture Centered Mastitis Program Will Increase the Amount of Milk Sold
- A Clean Dry Environment Decreases Mastitis Risk

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Rising SCC with Warmer Wet Conditions

Monitoring and managing milk quality is an ongoing concern for every dairy producer. As summer approaches and brings warmer temperatures combined with the wet spring conditions, somatic cell counts will be on the rise. Many producers are already reporting increases in counts. Environmental mastitis pathogens such as coliforms thrive in warm wet conditions making them a greater concern in spring and summer. Combining this concern with the constant concern of the contagious pathogens like Staph aureus creates a significant threat to milk quality on every dairy. If a producer takes action to monitor and properly manage their milk quality, losses can be minimized. However, if milk quality is neglected SCC can reach high levels in short periods of time creating great losses and can even lead to a violation. What can a producer do to minimize SCC and to maximize milk quality:



1. Keep the milking equipment in excellent operating condition. Just like field equipment needs maintenance to function at its best, so does the milking equipment.
2. Perform proper milking technique.
3. Culture and treat mastitis cases according to culture results
4. Keep living conditions for cows as clean and dry as possible. The best solution to an SCC problem is prevention.



Milking Equipment Evaluation and Upkeep

In order to produce a good, wholesome, healthy product milking equipment needs to be in excellent operating condition. Milking systems lose efficiency over time which creates a mastitis risk to the cows. This could be either an increased teat end vacuum **or** a decreased teat end vacuum. Both damage teat ends increasing the likeli-

hood of mastitis. The milking system should be tested at least once a year according to National Mastitis Council Protocols and standards.

What we will test:

1. System Vacuum
2. Reserve air capacity
3. Regulator efficiency

4. Pulsators
5. Milk let down / proper stimulation (lactocorder machine)
6. Proper milking procedure
7. Pump efficiency
8. Teat end scoring
9. Strip yields (milk left in udder)



A written milking procedure is important to ensure that milking procedure is proper and consistent.

Milking System Continued

10. Proper slope / design

We have never checked a system that passed every test the first time!!

All systems require routine maintenance.

Systems can be tested in two stages. A dry system check and a wet system check. The dry check involves checking system vacuum, reserve air volume, regulator efficiency, and pump efficiency. A system must pass these tests before a wet system check can be performed. The

wet test is done during milking. At this time the pulsators, milking procedure, teat end scores, teat end vacuum, strip yields, proper stimulation and milk flow (lactocorder machine) will be performed.

Often both parts of the system check can be performed at the same time. However the dry system check can be performed after a herd check or at another time separate from milking. This will ensure that the system has adequate vacuum and air flow so the system can

be checked at milking. If you are interested in this let the office know that you would like the initial dry system checked at your herd check so the vet can bring the proper equipment. Then if your system passes the dry test we can schedule a wet test at milking.

Having your veterinarian perform your milking system evaluation not only tests the milking equipment but also evaluates your milking procedure. They are focused on cow health, not equipment sales.

Perform Proper Milking Technique

Performing proper consistent milking procedure is critical for minimizing mastitis risk and for achieving a low somatic cell count.

Proper Milking Procedure:

1. Wear rubber disposable gloves while milking. Human hands are an excellent source of Staph aureus and can spread it easily.
2. Calm handling. Handling cows in a calm manner has been shown to decrease milk out times and increase milk letdown.
3. Wipe dirt from udders with towels. Use individual towels per cow.
4. Pre-dip. All teats should be pre-dipped with an iodine based pre-dip, preferably 1%. Allow a 60 second contact time. Contact time is what is responsible for killing bacteria. Just dipping and immediately wiping it off will kill almost nothing. Pre-dipping is important for preventing environ-

mental mastitis pathogens.

5. Forestrip cows with at least 2 full squirts. This eliminates the milk with the highest likelihood of having bacteria in it. It is also the initial milk let down stimulation. This is also the time you will notice signs of mastitis in a cow.
6. Wipe / dry teats off. Make sure all of predip is removed from teats. Use the twist and flip technique. (ask us and we can show you)
7. Have proper lag time. Lag time is the time from forestrip to attaching the claw. Lag time should be between 90 and 180 seconds. Never less than 90 seconds. This allows proper stimulation time so cows will let their milk out fast minimizing teat end vacuum time and decreasing mastitis risk.
8. Minimize squawks during milking. Many squawks

can indicate improper teat end vacuum and also can allow debris, manure, or bedding into the claw. It can also reverse the flow of milk.

9. Remove claw. Cows should not be over milked. It is appropriate to leave 250-400 cc of milk in the udder. Anything less is over milking and is a mastitis risk. Do **NOT** machine strip, this is a great mastitis risk and damages teat ends.
10. Post dip all teats with an iodine based post-dip. Be sure to cover each entire teat. Sprays usually do not cover teats appropriately. Post dipping is important for preventing contagious mastitis pathogens.

Have your vet help you develop a written procedure.



Developing a Mastitis Treatment Program for Your Dairy

Having an organized written mastitis program will take the guess work out of treating cows and has a large impact on the success of mastitis treatment. Culture based treatment also minimizes dumped milk by limiting antibiotic use., which results in a dairy selling more milk.

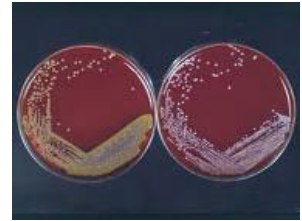
Treating every case of mastitis is a waste of mastitis tubes and increases the amount of milk dumped. Never quarter milk a treated cow. This will result in an antibiotic residue. Treated

cows must have all milk dumped for the appropriate withholding times.

Not treating any mastitis cases will result in an elevated SCC from common infections that become chronic and become difficult to treat. This will also increase the number of cows that are clinically sick, and will likely result in the spread of contagious mastitis pathogens like Staph aureus.

Culture based treatment results in treating infected cows with appropriate tube treat-

ments while allowing no growth cultures (bacteria free, but have abnormal looking milk from damage cause from earlier infection) to be stripped out and quarter milked. This minimizes dumped milk as well as decreases antibiotic use. Producers sell more milk and spend less on tube treatments.



See the attached culture and treatment protocols as well as a treatment log at the back of this newsletter.

Keeping Conditions Clean and Dry

Working to prevent mastitis starts with the environment. Keeping living conditions as clean and dry as possible helps minimize the risk of mastitis. Bacteria grow well in damp conditions. Keeping adequate bedding as well as promptly removing manure from the stalls helps decrease the risk of mastitis.

Having adequate ventilation and proper cow cooling can also help decrease the risk of masti-

tis.

Combining a clean dry environment with pre and post dipping teats greatly reduces the mastitis risk on a dairy as well as helps minimize somatic cell counts.

What else minimizes mastitis risk?

1. Vaccinating for coliforms with J5 or Endovac.
2. Providing excellent nutrition to your cows.

3. Dry treating all cows and using Orbeseal internal teat sealant.
4. Having your dairy on monthly test to evaluate individual cell counts. This can help recognize trends and often detect a problem early.

Other Items Of Interest

Fred Gingrich has a nice...but used....Stanley Furniture baby crib with matching dresser and changing table. Does not have a mattress. It is FREE and he will deliver if anybody can have a use for it. The first person that calls can have it!

ODPA.....it is not too late to consider joining the Ohio Dairy Producers Association. Several farmers in our area have joined. All producers who join receive a \$25 coupon from our office if you let us know you have joined....one per farm account. Ask us for more information.

June is National Dairy Month! We would like to extend our thanks and appreciation for all of the hard work our dairy farmers do every day to provide us with nutritious and delicious dairy products.
THANK YOU!

TOSHIBA

Primary Business Address
Your Address Line 2
Your Address Line 3
Your Address Line 4

Phone: 555-555-5555
Fax: 555-555-5555

E-mail: someone@example.com

We're on the Web!
example.com


Organization

Your business tag line here.

This would be a good place to insert a short paragraph about your organization. It might include the purpose of the organization, its mission, founding date, and a brief history. You could also include a brief list of the types of products, services, or programs your organization offers, the geographic area covered (for example, western U.S. or European markets), and a profile of the types of customers or members served. It would also be useful to include a contact name for readers who want more information about the organization.

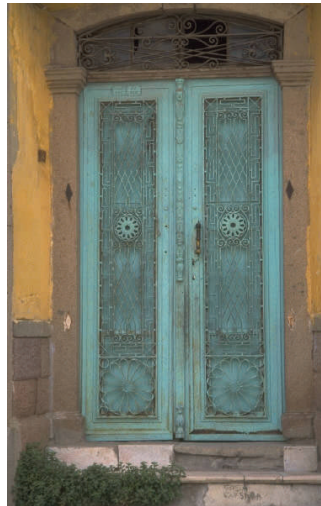
Back Page Story Headline

This story can fit 175-225 words.

If your newsletter is folded and mailed, this story will appear on the back. So, it's a good idea to make it easy to read at a glance.

A question and answer session is a good way to quickly capture the attention of readers. You can either compile questions that you've received since the last edition or you can summarize some generic questions that are frequently asked about your organization.

A listing of names and titles of managers in your organization is a good way to give your newsletter a personal touch. If your organization is small, you may want to list the names of all employees.



Caption describing picture or graphic.

here. You may want to refer your readers to any other forms of communication that you've created for your organization.

You can also use this space to remind readers to mark their calendars for a regular event, such as a breakfast meeting for vendors every third Tuesday of the month, or a biannual charity auction.

If space is available, this is a good place to insert a clip art image or some other graphic.

If you have any prices of standard products or services, you can include a listing of those