Mastitis Continues Drain On Farm Cash Flow

GEORGE F.W. HAENLEIN
Extension Dairy Specialist
University Of Delaware

NEWARK, Del. — Subclinical mastitis continues to be the number-one money drain on the dairy farm. This remains stubbornly true despite considerable effort and progress in recent years on the part of dairy farmers, milking-equipment manufacturers, DHIA, pharmaceutical companies and cooperative extension.

Subclinical mastitis is not visible to the person checking forestripping of milk and udder. It is discovered only through a check test like the CMT (California Mastitis Test) in the barn where the dairy cows or goats are milked. Most other tests or devices are not as accurate or practical.

One exception is the DHIA-somatic cell count, which is the superior monitoring routine test of each cow any time. It should be done at least once a month and even of each cow's quarters.

It is not good enough to maintain a low bulk tank somatic cell count. Every cow contributing to that bulk tank requires regular testing; otherwise, subclinical mastitis is invisible and costs money. A 50-cow herd averaging only 200,000 somatic cell counts makes about $500 per month more money than a herd at 500,000 count, and $1,700 more than the nearly 1 million-count herd.

How can you overcome problem cows and problem tank counts? If somatic cell counts increase as cows go through their lactation, it means the milking procedure is the culprit. If somatic cell counts are high in early lactation, look to the environment, dry-cow procedures and heifer raising as possible reasons.

If antibiotic treatments aren't doing much good, sterile milk samples after sensitivity culturing will reveal which antibiotic will be effective. The common "Streptococcus" "agalactiae" is easily controlled with antibiotics. The almost as common "Staphycoccus aureus" or "Escherichia coli" are not. Teat dipping and dry cow treatments can control Strep and Staph but not E. coli. Probably the cleanest environment from a mastitis control standpoint are pastures, where cows can lie on grass, and soil that has been "sterilized" by constant exposure to the sun.

In contrast, cow yards and loose housing systems mean crowded accumulation of cows and manure, the main source of E. coli. A cow lying down on manure and cold concrete floors during the winter season is inviting E. coli to invade the udder.

At the National Conference on Interstate Milk Shipments held recently in Indianapolis, the problem of manure-caused environmental mastitis and milk contamination with high bacteria counts was officially recognized.

The conference voted a change in the U.S. Pasteurized Milk Ordinance to require that udders and teats be clean and dry prior to milking and that only teats be treated with a sanitizing solution and wiped dry before milking occurs.

Every dairy farmer knows that cows resting on pastures come much cleaner for milking than those resting in any other type of housing and system. Recent research confirms that cows milked dry without prior washing but with clean udders and teats had lower bacteria counts.

And lower milk bacteria counts and less subclinical mastitis go hand in hand. Admonitions abound about producing better quality milk, which is of course critical for the consumer, but more immediately, it means less money lost by the farmer for subclinical mastitis.

For a small annual fee, every progressive dairy farmer can and should be a member of the National Mastitis Council, headquartered in Arlington, Va. (703-243-8268). Six times a year an excellent newsletter, "Udder Topics," is sent to members. The latest information on mastitis is printed. Also, members receive fat volumes of proceedings of papers presented at the annual meetings and international symposia on mastitis. The conference in Indianapolis (Sept. 90) has issued the latest volume of 463 pages containing the most up-to-date compilation of information gleaned from 100 contributions and 16 countries.

This conference was sponsored by the American Association of Bovine Practitioners, which underlines the continuing seriousness of the mastitis complex in controlling economic losses on the dairy farm, the stubborn resistance of many cases to treatment and the overwhelming need to stay informed on successful prevention.

Annual losses attributed to mastitis, subclinical and clinical combined, have been estimated at $2 billion, $180 a year on a per-cow basis, 70% of which is due to subclinical reduced milk yield. It is an everyday struggle, but it pays as more and more dairy farmers with less than 400,000 somatic cell-count averages have proven for themselves.

FOCUS
Pennsylvania Dairy Herd Improvement Association
Call 1-800-DHI-TEST for service or information

How Does Your Herd Compare?

STATE COLLEGE (Centre Co.) — This data is pulled from Pennsylvania DHIA's mainframe computer each week. It is a one-week summary representing approximately one-fourth of the herds on test, as they are tested monthly.

These data are valuable from a business management standpoint and can be used for comparing your operations to the averages from almost 1,400 herds across the state.

DHIA Averages for all herds processed between 12/10/90 and 12/17/90	
Number of Herds Processed	1,500
Number of Cows Processed	87,690
Number of Cows Per Herd	58.4
Milk Per Cow (Lbs)	17,134
%-Fat	3.65
Fat Per Cow (Lbs)	626
%-Protein	3.17
Protein Per Cow (Lbs)	544
Average Days in Milk Per Cow	315
*Value for CWT Milk($)	14.69
*Value for CWT Grain($)	8.00
*Value for CWT Hay($)	4.36
*Value for CWT Silage($)	1.52
*Value for Pasture Per Day($)	.31
*Value for Milk Per Cow Per Year($)	2,517
*Feed Consumed Per Cow Per Year(Lbs)	
A: Grain	6,995
B: Hay	2,496
C: Silage	14,793
D: Day Pasture	65
*Feed Cost Per Cow Per Year($)	
A: Grain	560
B: Hay	109
C: Silage	225
D: Pasture	20
*Total Feed Cost Per Cow Per Year($)	915
*Income Over Feed Costs Per Year($)	1,602
*Grain to Milk Ratio	1:2.4
*Feed Cost Per CWT Milk($)	5.34
Avg Level For 1,256 SCC Herds	322,095

*Member generated figures