

What Can You Learn from Kentucky Dairy Producers with Low SCC?

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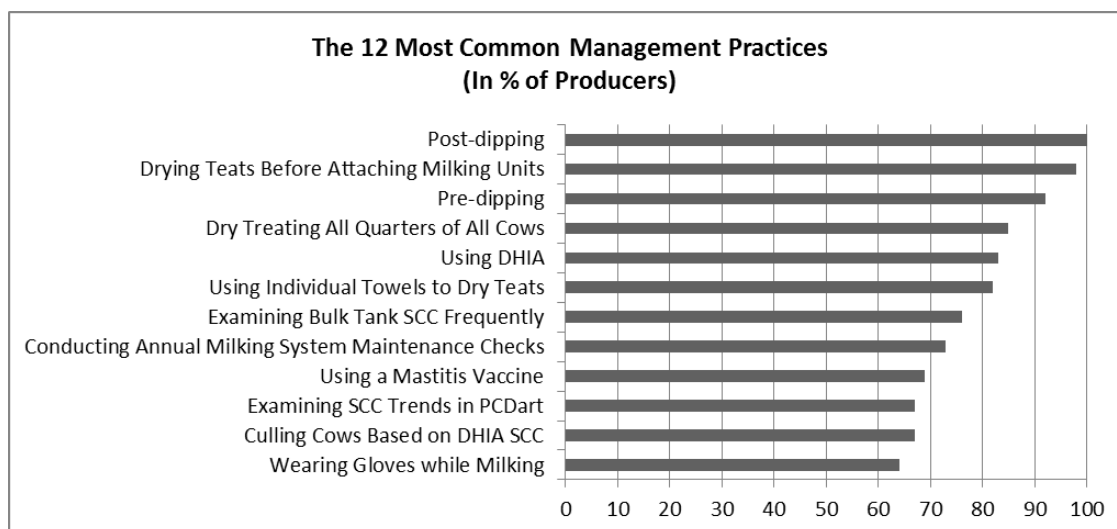


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Dairy producers often make decisions based on what other producers in their area are doing. With this in mind, we set out to learn what Kentucky producers who maintain a low SCC do to achieve this goal. The results of this work are particularly interesting, given recent market trends toward lowering SCC requirements. The goal of our survey was to characterize the management practices employed by Kentucky producers who consistently maintain low SCC so that other producers might learn what makes them successful.

Data provided by DHIA and four participating cooperatives (DFA Mideast, DFA Southeast, Maryland and Virginia Milk Producers Cooperative Association, Inc., and Organic Valley) were utilized to identify Kentucky herds with a yearly average SCC of less than 250,000 cells per milliliter (mL) from November 2009 to November 2010. DFA provided the financial support needed to complete this study. A 54 question survey was mailed to 71 producers who met the SCC requirement in late November, 2010. In total, 48 surveys were returned (68% return rate).

So, what did we learn from these successful producers? Following is a summary of the main ideas expressed by survey respondents:



1. It is possible to attain and maintain a low SCC in any management system.
 - o The majority of the producers managed partial confinement systems, allowing their cows to have four or more hours outside (54%). The remaining farms were total confinement with no pasture access (21%) and exclusively pasture or grazing systems (17%).
 - o Housing systems varied greatly with many different systems represented. The most common housing system was older (10+ years old) freestall barns, but still only 27% of producers used this type. Tie-stall or stanchion barns were used by 19% of producers and new (<10 years old) freestall barns were used by 17% of producers. Other housing systems cited were compost bedded pack (13%), no housing (cows are outside year round; 10%), bedded pack (6%), and winter housing only (4%). Bedding type also varied

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- considerably. Wood shavings or sawdust was the most commonly used bedding at 54%, followed by sand (34%), straw (9%), and lime (3%).
- Seventeen percent of producers described their milking system as a tie-stall barn. The remaining producers (64%) utilized a parlor as their milking system including herringbone (47%), parallel (15%), side opening (11%), parabone (9%), swing (2%), and flat barns (2%).
2. Milking clean, dry teats is crucial.
 - 100% of the surveyed producers post-dipped.
 - 92% pre-dipped.
 - 98% dried teats before attaching the milker.
 - 82% used individual towels to dry teats.
 - 64% wore latex or nitrile gloves while milking.
 3. Record management is useful for monitoring SCC at the individual cow and herd level.
 - 83% utilized DHIA.
 - 67% culled cows based on DHIA data.
 - 67% examined SCC trends in PCDart.
 4. Following are other commonly cited practices:
 - Dry treating all quarters of all cows was a common practice among surveyed producers (85%, n=41).
 - 73% of farms conducted annual system maintenance checks.
 - 67% use a mastitis vaccination program (J-Vac[®], J-5 Bacterin[™], Endovac-Bovi[®], or Lysigin[®]).
 - Supplementing cows with organic selenium (29%) and organic zinc (23%).
 - Using Orbeseal[®] at dry off (44%).
 - Iodine was the most commonly used pre- and post- dip (42% for pre- and 77% for post-). Peroxide (24%) and bleach (16%) were also used as pre-dips. Post-dips included sodium chlorite (10%) and lactic acid (8%).
 - 85% of producers use milk cultures to identify bacteria causing mastitis on their farm.

Many factors contribute to maintaining a low SCC. Perhaps, the most interesting result from this study was that all management systems used by Kentucky producers were represented in this study. This result suggests that low SCC can be attained in any management system as long as it is managed properly.

Producer responses to this survey re-emphasize the importance of milking clean, dry teats. Kentucky producers who maintain low SCC prioritize cow cleanliness before cows ever enter the parlor. In the parlor, the majority of these producers used pre-dipping, post-dipping, and individual towels for drying teats, and milking gloves to minimize the spread of mastitis. Other preventive strategies implemented by many of these producers included dry cow treatment, mastitis vaccines, and regularly scheduled milking system maintenance checks. DHIA, PCDart, and tracking bulk tank SCC proved to be important tools for frequent monitoring of SCC. These results may be utilized by other dairy producers and industry advisors to help dairy producers reduce SCC.

For more detailed information, you may view the full version of the Report to Respondents at <http://www2.ca.uky.edu/afsdairy-files/extension/mastitis/2010SCCSurvey.pdf> or contact Amanda Sterrett (amanda.sterrett@uky.edu or 412-558-2075) or Dr. Jeffrey Bewley (jeffrey.bewley@uky.edu or 859-257-7543).