

## **3 things you cannot have to achieve a low SCC: Part 2**

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This month continues the discussion on key factors for a low SCC. Last month, we discussed the impact of a high chronic rate and dirty bulk tank cultures. The third factor important in achieving a low SCC is the new infection rate or risk.

Finally, new infection rate or risk also affects SCC. New infection rate is usually calculated as number of cows newly high divided by herd size. New infection risk is usually calculated as number of newly high cows divided by the population of formerly clean cows (from the previous test). Risk is a better monitor for herds with moderate to high level of chronic infections, because the population of clean cows is significantly lower than the herd size. Either one will go up if a significant number of cows are getting infected during each test interval. Every new infection results in one of several outcomes: spontaneous recovery, recovery following treatment, becoming chronic, or culling. No herd will achieve 100 percent recovery for any length of time, so infecting too many cows always results in high SCC unless the herd is culling heavily for high SCC. Excellent herds can achieve new infection risk of 5 percent or less. Very good herds can achieve new infection risk of 7 percent or less. To maintain a downward trend of SCC on most farms, new infection risk must be below 10 percent. Rates approaching 20 percent usually result in difficulty in controlling mastitis and a high SCC on the dairy.

Surprisingly, one thing you can sometimes have with a low SCC is a fairly high rate of clinical mastitis. This is because some herds are extremely good at finding cows with mastitis, and treating or culling them.

Because you cannot usually have a low SCC with a high rate of chronics, dirty bulk tank cultures and high new infection risk, these are great parameters to monitor, at least monthly, as part of a herd's mastitis control program. Tracking this information in a spreadsheet or posting it every month with previous months is an even better idea.