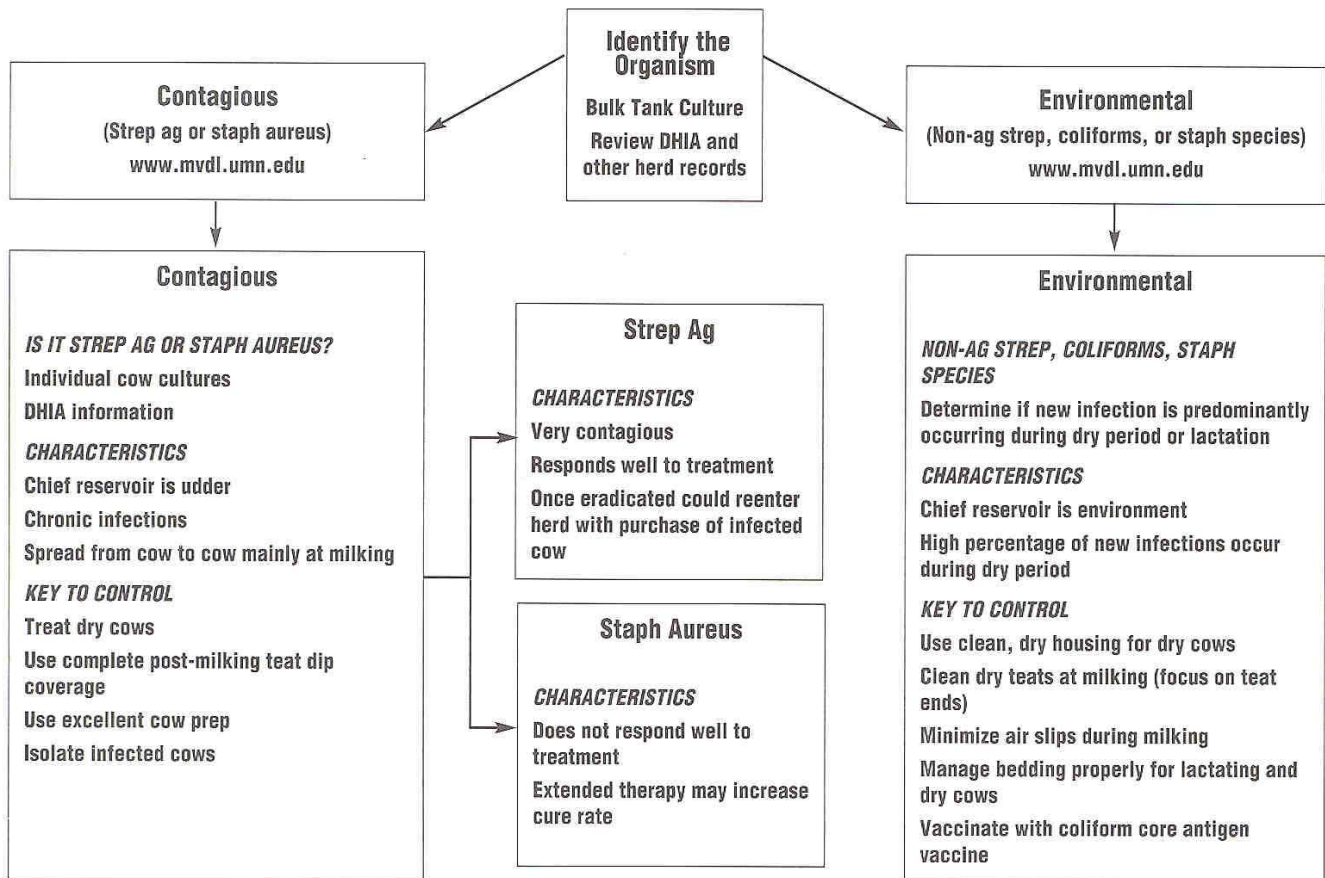




## Seven Steps to Reducing Mastitis and Improving Milk Quality

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Below are the general steps in solving a high SCC problem.

### 1. Define the problem.

Use DHIA and/or on-farm records, bulk tank SCC records, bulk tank cultures, and individual cow cultures to try and understand, which cows are infected and when they are getting infected.

### 2. Identify the troublemakers.

Use bulk tank and individual cow cultures to determine what the main organisms causing elevated SCC or clinical cases. Different organisms will require different solutions (see flow chart above).

### **3. Generate possible causes and solutions.**

Based on the information you gathered in steps 1 and 2; work with your diagnostics team to generate a list of possible causes and consider possible solutions. If there are multiple causes, you will need to use a multiple-pronged approach. The use of a cause and effect diagram may be helpful in this process. (See cause and effect diagramming fact sheet.) Decide on the most likely causes and the best solutions.

### **4. Develop an action plan.**

Work with your team to develop an action plan based on step 3. Determine how the preferred solutions will be implemented, who will be responsible for the implementation, and who will need to be trained.

### **5. Set up plan to monitor progress.**

One of the most important components of any plan is to set up monitors to show whether your plan is working. The use of multiple monitors (e.g., BTSCC and bulk tank culture) is often best since no monitor is perfect. Some possible monitors:

Bulk tank SCC graph for each milk pickup

Monthly bulk tank culture for mastitis pathogens

Individual cow DHI SCC

CMT of all fresh cows (How many cows are calving infected? Which quarters are infected?)

Culture of all fresh cows with high CMTs (What organisms are causing infection?)

Culture of all new clinical cases and new sub-clinical infections (new cows over 200,000 SCC) each month (What organisms are causing infection?)

New infection rate on all cows (goal < 5%)

New infection rate on fresh cows (goal <10%)

Rate of clinical mastitis (goal < 2%/month)

### **6. Carry out the plan.**

Make the changes you and your team decided is appropriate based on facts. Be careful not to tinker with the plan unless there is strong evidence the plan is not working.

### **7. Monitor progress and adjust plan as needed.**

Review the monitors and progress monthly (or more frequently) to determine if the desired progress is being made. If it is, continue on the same course. If not, find out why. Is the problem the plan of action itself or failure to successfully implement the plan? Reevaluate the action plan and/or retrain personnel. Continue to fine-tune your plan until you achieve your SCC goals. Progress can be slow depending on the causes of the high SCC or clinical mastitis problem or the plan being implemented. However, if you use a systematic approach, you will make consistent progress toward your goal. Once reached, a low SCC will reward your farm with increased profitability and personal satisfaction.