

# DAIRY PIPELINE

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## The Truth about *Staph. aureus*

*Staphylococcus aureus* is a contagious type of bacteria that can spread from cow to cow at the time of milking. Infected cows will have a chronically high somatic cell count, many of which will be 'millionaires'. To make matters worse, it is very difficult to get rid of these bacteria with antibiotic treatment. We, therefore, have to turn our attention to preventing these infections from occurring.

Some basic principles of milking time hygiene need to be emphasized. It is crucial that gloves be worn, and that means clean ones! *Staph. aureus* can also colonize hands and the use of gloves will help to stop the transmission from humans to cows. If a cow is known to have a *Staph. aureus* infection, change gloves or spray them off with teat disinfectant after prepping her. This will help to prevent the spread from that cow to the next. Another key factor to remember is the importance of single-use towels. If a towel is used on a *Staph. aureus* infected cow and then that same towel is used on the next cow in the parlor, the second cow is exposed to the bacteria that is present on the cloth. After milking, there is a residue of milk left in the unit. The next cow to be milked with that unit may be exposed to bacteria present in the residue. Even so, washing units out after a *Staph. aureus* positive cow is not recommended because it can cause more harm than good. However, the use of an approved post-milking teat dip is suggested to help prevent new infections.

"The milk lost from an increase in somatic cell count due to *Staph. aureus* is tremendous. Therefore, focusing attention on the prevention of these infections is crucial."

Aside from milking time hygiene, calf management must be considered. Some research suggests that baby calves fed milk containing *Staph. aureus* can harbor those bacteria until they calve as 2 year olds, at which point it can show up as mastitis. Therefore, if a *Staph. aureus* infected cow has been identified, it is better to discard her colostrum. This also applies to waste milk. Waste milk can be a great source for all kinds of bacteria and feeding this milk can have the potential of infecting calves with *Staph. aureus*. Heifers are the future, so their health needs to be protected. A variety of *Staph. aureus* vaccines have been tested and some have been marketed over the years. Previously developed vaccines focused on antibody production against *Staph. aureus* with little to no success. Currently, the mastitis lab at Virginia Tech is looking at an alternative approach to vaccination. The strategy is to target the cells, rather than antibodies, of the immune system. Changing the make-up of the somatic cell count during mastitis may allow the cow to clear infections without use of antibiotics. This may be an effective way of reducing the detrimental effects of *Staph. aureus* in the long-run. The milk lost from an increase in somatic cell count due to *Staph. aureus* is tremendous. Therefore, focusing attention on the prevention of these infections is crucial.

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## Spring Cleaning!

With the arrival of spring, most homeowners start thinking about 'spring cleaning'. It's a good idea for farmers, too. Spring in the mind of the dairy farmer means warm temperatures, sun, and fields that need to

be planted. This is the time when all dairy farmers need to have a plan and be mindful of their surroundings. The mad rush to get the tractors started and into high gear can leave even the best farm (Continued...)

## Upcoming Activities

See [VTDairy](#) for details.

**Apr. 4, 2015**

VA Spring Holstein Show

**Apr. 24-25, 2015**

VA Dairy Calf Summit,  
Blacksburg, VA

**Apr. 25-26, 2015**

Atlantic Coast Calf College  
Blacksburg, VA

**May 2, 2015**

Little All-American

**May 18, 2015**

Hokie Cow Classic Golf  
Tournament

If you are a person with a disability and require any auxiliary aids, services or other accommodations for any Extension event, please discuss your accommodation needs with the Extension staff at your local Extension office at least 1 week prior to the event.

“Be a proactive,  
not reactive!  
Help showcase  
what you do and  
educate the  
public.”

*For more information on Dairy Extension or to learn about current programs, visit us at [VTDairy](#)—Home of the Dairy Extension Program at: [www.vtdairy.dasc.vt.edu](http://www.vtdairy.dasc.vt.edu).*



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in a vulnerable position if they are not correctly prepared.

The farm as a whole supports the business and families involved, but individual areas on the farm require their own plans and protocols. Set up plans and protocols to help ensure all aspects on the farm can function properly when the owner or farm manager's time is consumed by preparing fields and cropping. It is also important to remember that while working long hours and having daunting tasks on a long list, we cannot overlook even the simplest things because farms tend to draw unwanted attention.

Think whole farm clean up! During the winter months things tend to get piled up around the farm, old acid wash barrels, tires, plastic, buckets...the list could go on forever. Over time, areas on the farm where you might dispose of trash and junk grow in size. If a large storm comes through with heavy rain and wind, these areas could create even more problems. Trash and debris provide housing for unwanted critters, creating opportunities for disease transmission. Trash that finds its way into areas where cows are housed, give rise to cow health issues like hardware disease. Additionally, trash could become tangled in equipment creating fire hazards. Trash and debris are just a part of the larger picture on the farm that can lead to unwanted attention.

Manure is another area on the farm that tends to be overlooked. How often do you completely clean out your manure pits or tanks? If liquids are pumped out every year without removing the solids, pits and tanks will become less efficient because the holding capacity is lessened.

**The area on the farm requiring the most attention is the health and well-being of your animals.** Animal areas on the farm draw more attention and could result in a visit from regulatory officials or cause your farm to become headline news as a result of mass media exposure. Cows are the paycheck of the farm, treating them with the upmost respect is critical. Plans and protocols on how animals

should be handled and moved, treatment during sickness, freshening, milking, disposal of dead animals, and making sure animals always have fresh feed need to be in place on every farm. It is important to remember calves and heifers are the future of your farm—they are the next milk cow. Treat them like you would treat your own children. If your children get sick you take them to the doctor and get them medicine when needed. Treat the babies on the farm the same way.

Everything you do on the farm is being watched and scrutinized by the public. As a dairy farmer (or a producer of any type of livestock) in this age of constant digital and social media with a never-ending news cycle, you need to protect yourself, family, and business from individuals or groups who know very little about farming practices. They can create a world of bad publicity.

Be a proactive, not reactive! Help showcase what you do and educate the public. Don't let your farm be the next one slammed on the news or YouTube. It only takes one farmer caught in a negative media cycle to make the public think all farmers are bad, so make your business stand out in a positive way. Be proactive. Prevent problems before they happen.

In Franklin County a discussion group was held with members from VCE, VDACS, DEQ, DCR, FSA, NRCS and Blue Ridge Soil and Water to brainstorm ways agencies could come together to better assist farmers *before* problems occur and result in regulatory actions. All members would like to assist farmers in being proactive—working to preventive unwanted attention and problems. A farmer/agency meeting in Franklin County is now in the planning stages to work toward this goal. In the meantime, work with your local extension agent to set up plans, protocols, or farm visits. An extra set of eyes from VCE, can help you avoid future issues. Contact your local extension agent, VDACS, or DEQ field support to work within areas on your farm that you think might pose a problem.

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