Aseptic Milk Sampling Guide: Taking Clean Samples

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Collection of aseptic milk samples is key to successfully identifying bacteria that cause mastitis infections. These same steps for teat cleaning are also vital for infusing antibiotics or administering an internal teat sealant when cows are dried off. *Note:* Sterile tubes must be used for a clean sample.



- 1. Wear clean gloves during all steps.
- **2.** Remove any loose debris from the teats and udder.



3. Discard three or more streams of milk from the teat to identify signs of infection (flakes, clots, foul smell, watery, yellow, bloody) and remove high bacteria loads and somatic cells.



4. Dip each teat with an effective pre-milking disinfectant and allow 30 seconds contact time before cleaning.



Clean and dry each teat thoroughly with a clean towel. Use a *new*, clean towel for each cow.



6. Beginning with the teats farthest away, scrub each teat end vigorously with a cotton ball or sponge pad that has been soaked in 70% alcohol. Using a new pad each time, scrub until no dirt is visible on the swab or teat end. Cotton balls or sponge pads dripping with alcohol can cause false positives for bacillus. If dripping, squeeze off excess alcohol.





7. Start with the nearest teat and work to the farthest. Remove the cap from the tube but do not lay it down or touch the inside. To keep debris from entering the tube, hold it at a 45-degree angle. Do not let the tip of the tube touch the bottom of the teat end. Collect one to three streams of milk. Immediately replace the cap and secure tightly. Leave roughly one inch of room in the tube for expansion from freezing. Label the tube with the date, cow number, and quarter using the following guide (RF: right front; LF: left front; RR: right rear; LR: left rear). Place samples on ice or refrigerate immediately after collection. Freeze any samples that will be stored for 24 hours or more.



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