

9 BAD HABITS IN THE MILK BARN

Hasty udder preparation, poor sanitation and rough treatment can reduce a cow's milk output by Catherine Merlo

Sure, your goal is to maximize your dairy's milk-barn harvest as quickly as you can while minimizing mastitis and other problems, but that's often easier said than done. Take a close look at the protocols in your parlor. Prevent infections and costly problems—and boost milk quality and production—by avoiding these practices.

1. Inconsistent milking routine.

One employee preps and works one way, another follows a different procedure. The morning crew has a different routine from the evening shift. That inconsistency can stress cows and cause poor milk let-down, says Debora Bacon, dairy farm advisor with the University of California-Cooperative Extension.

"Cows are more comfortable when they know what to expect," she says. Train your staff to follow the same milking routine during all shifts.

2. Yelling and prodding. Cows should never be beaten, prodded with a stick or hose, or yelled at, says Ron Medeiros, a Washington-based customer service specialist with Varied Industries Corp (Vi-COR).

That kind of treatment scares cows and makes them reluctant to enter the parlor. Medeiros estimates that 3 lb. to 9 lb. of milk can be lost per milking by rough handling. "You'll get better milk production when you treat cows gently," he says. "Calm cows will produce more oxytocin, which stim-

ulates milk let-down. That's critical."

Teach cows to move into the parlor gate on their own, Medeiros says. That's less time herding the animals, leaving more time for other work.

3. Inadequate equipment cleaning between milkings. Deficient equipment sanitization practices can create a breeding ground for bacteria. Thoroughly clean milking equipment after each use, and sanitize it before the next milking.

4. Insufficient udder cleaning and drying. Always clean and dry teats thoroughly before applying the milking machine. The most dangerous bacteria reside at the teat end, says Pamela Ruegg, Milk Quality Extension Specialist and associate professor in the dairy science department at the University of Wisconsin-Madison, in *The Seven Habits of Highly Successful Milking Routines*.

"It's well established that proper teat-end disinfection can reduce teat surface bacteria by 75%," Ruegg says.

Wet teat skin can boost the chances that these bacteria will enter the mammary glands, Bacon adds. Moreover, wet skin reduces the friction that's needed between the teat and the liner, which means the equipment won't adhere well.



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Without good teat stimulation and the subsequent time lag, a full milk let-down may not take place.

You can reduce the amount of time spent prepping your cows and minimize pathogen growth if your cows come to the parlor from bedding that keeps them clean, dry and comfortable. Tom Lorenzen, a Vi-COR customer support specialist in Wisconsin, also believes that removing udder and tail hair bolsters a cow's cleanliness, which is critical for harvesting high-quality milk.

To check how effective your teat disinfection and drying protocol is,

PARLOR POINTS

→ Employees should always clean and dry teats thoroughly before applying the milking machine units.

→ You can lose 3 lb. to 9 lb. of milk per milking by handling cows roughly.

→ Learn more at http://www.uwex.edu/milkquality/Library_Media/milk_quality_research_reports.htm.



Using the same towels over multiple cows and the same gloves over multiple shifts can spread mastitis, says California's Debora Bacon.

rub a clean swab across the end of the teat before attaching the milking unit. "A swab from a properly prepared team will remain clean," Ruegg says. "A dirty swab indicates that teat preparation methods should be improved."

5. Using the same drying-off towel multiple times. That can spread mastitis-causing organisms and other bacteria. "One towel per cow is a better idea," Bacon says, who favors paper towels over cloth ones.

"When cloth towels are used, they should be disinfected by washing

with bleach or very hot water and drying at a high temperature in an automatic dryer," Ruegg says.

6. Inadequate stimulation. Slow down a little with your milk prep, Medeiros advises. Employees should spend a few seconds on forestripping with both hands. They should get at least three squirts of milk per quarter before moving on.

Waiting as much as 40 seconds after forestripping allows time for a full oxytocin release, which stimulates mammary gland cells to let down

milk. Without good teat stimulation and the subsequent time lag, a full milk let-down may not take place.

It helps if your milkers understand a cow's physiology, Bacon says. They should know that, unless teats are stimulated, the milking machine can fail to remove the full volume of milk that sits in the cow's alveoli. That's where about 70% of the total milk is stored in the cow's mammary gland.

During stimulation, the hormone oxytocin is released into the blood, stimulating the myoepithelial cells surrounding the milk-filled alveoli to contract, Bacon says. The milk is then forced into the duct system and into the gland and teat cisterns.

"When pre-milking stimulation is done incorrectly, an insufficient milk ejection response occurs and milk is incompletely removed from the mammary gland," Bacon says.

Manual forestripping not only encourages milk let-down but also allows employees to detect signs of clinical mastitis or other problems.

7. Not getting full teat coverage when pre- or post-dipping. If your milker only sprays one side of the teat, or doesn't cover the entire area with a solution, it's a wasted application. Make sure your milkers are dispersing spray on the near and far side of each teat.

8. Improperly aligned equipment. If the milking unit is not aligned right, cows may be milked unevenly, leaving milk in the udder and setting them up for infection, Lorenzen says.

9. Wrong person, wrong job. Lorenzen recalls visiting a dairy with a "phenomenal" worker. "She was always on time, worked hard, was efficient and had a great work ethic," he says. But she was too short for the parlor and had a hard time milking.

"You don't want to fire somebody like that," he says. "Find a different position for that person and look for someone else for the milk barn." **DT**