

Standard Milking Procedures for stall barns

Background:

Cows need to be calm and clean before milking. The stress hormone "adrenaline" is released prior to milking. Adrenaline will interfere with oxytocin and prohibit normal milk letdown. Cows that are excited or frightened move rapidly, may slip, and often defecate while being moved into the milking facility. Disturbances within 30 minutes of milking can interfere with milk letdown.

Procedure:

- Hand washing is the first step in a high quality milking procedure.
- Wearing nitril or latex gloves will minimize the spread of mastitis-causing organisms between cows during milking. Gloves also protect the workers skin.
- Recommended milking practices include the following steps:

•Forestripping

Effective premilking stimulation consists of 10-20 seconds of teat stimulation. Forestripping is the best method of premilking udder stimulation. It is also the only way to identify cows that have clinical mastitis. The proper method of forestripping is to express 2-3 streams of milk per quarter. In stanchion barns, milk can be forestripped into an adequately sized strip cup. Milk should never be forestripped onto the bedding platform as it can contaminate the bedding with mastitis pathogens.

•Predipping

Premilking sanitation can be achieved by predipping the teats with a sanitizing product such as 0.5% iodine. At least three-fourths of each teat should be covered with the predip solution. Predip must remain in contact with the teat for 30 seconds before drying. In a stanchion barn or walk-through flat parlor, it is difficult to achieve 30 seconds of contact time if the operator is individually prepping and attaching milk units one at a time.

Note: If using saniwipes, this step can be eliminated.

•Drying Teats

Teats only (not the base of the udder) should be dried with a single use cloth or paper towel. The teat should be vigorously dried with special attention paid to the teat end.

•Attaching Milking Unit

The milking unit should be attached within one to two minutes after teat stimulation. This time period is termed "prep-lag time." It is critical in achieving good milk letdown. Oxytocin is the hormone responsible for milk letdown. Blood oxytocin levels peak at about 60 seconds. The objective is to coordinate milk letdown with milk unit attachment. Attachment should be done carefully to minimize the admission of air into the milking system. Good milk letdown has occurred when the milk flows immediately after the milk unit is attached.

•Detaching Milking Unit

It is normal to have about 2-4 cups of milk left in the udder at the completion of milking. Automatic take offs (ATOs) are recommended because they do the most consistent job of removing the milk unit. It is important that cows are not overmilked. ATO settings should be adjusted to current standards.

•Postdipping

The lower one-third of each teat must be dipped with a reputable teat antiseptic product after every milking.

Good Milking Key Points

The following points are crucial in a good milking routine:

- 30 second contact time
- One to two minute prep-lag time
- Good milk letdown

