Managing Mastitis

Unhealthy cows eat less and produce both poorer quality and smaller quantities of milk; maintaining healthy cows is critical.

One illness commonly found in cows is mastitis. Mastitis is an udder infection that can damage a cow’s milk-producing tissue. This damage can result in production losses of 15 percent or more per cow. This loss of milk, paired with the cost of veterinary care, can pose significant economic losses to the farmer.

Mastitis generally results in easily recognizable symptoms; milk has a stringy appearance and shows signs of discoloration and clotting. In some cases, however, there are no visible symptoms. Cows with mastitis should be milked last, and their milk should be discarded.

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Mastitis can be caused by either environmental or contagious bacteria.

Environmental bacteria

This type of bacteria is found in the cow’s surroundings (e.g. bedding, manure and mud), and most infections occur within the first 75 days of lactation. In order to help prevent mastitis, farmers should provide their cows with clean and dry living conditions. Using an iodine-based teat dip also helps, as does a balanced diet that contains vitamins and trace minerals.

Contagious bacteria

The transmission of contagious bacteria occurs from cow-to-cow. The most common means of transmitting bacteria from an infected cow to a healthy cow is via the milker’s hands during the milking process. This type of contagious mastitis is best managed by ensuring that milkers wash their hands thoroughly and that cows with mastitis are milked last. The resulting milk should not be consumed or sold.
The Importance of Milk Quality

Nothing can improve milk quality once it is compromised at the farm level. Therefore, hygienic milk handling and quality control must be observed at all stages of the dairy value chain.

Producing high quality milk begins with the milking area, which must be clean, dry and well ventilated. The cow should be milked on a smooth, non-slippery surface (concrete is preferable). This surface should be slightly sloped to allow for drainage.

Milking Procedures

**Milking Preparation**
- Clean the milking area
- Milker should be healthy and always wash his/her hands prior to milking cows
- Sanitize milking buckets and containers in a solution of 4 ml of bleach in 2 lt of water
- Milk cows at the same time and in the same location each day
- Provide cows with dry hay, which they can eat during milking
- Wash each teat with lukewarm water using an individual, clean cotton cloth or towel
- Use an individual, clean dry cloth or towel to dry the teats
- Lubricate udder with milking gel/salve
- Begin milking cow within two minutes of milk let down

**During Milking**
- Milk the cow in a clean area designated for this purpose
- Use a squeeze method to milk rather than pulling the teat
- Check the first milk from each teat for mastitis
- Milk in a clean metal container; never use plastic containers

**After Milking**
- Use a teat dip of 0.5% available iodine
- Strain the milk with a sieve or a clean muslin cloth
- Measure the volume and record the amount in a milk production record book
- Store milk in stainless steel or aluminum containers
- Transport milk to processors within one hour of milking