Controlling mastitis is of vital importance, since milk from cows with clinical mastitis cannot be sold. Sub-clinical cows also produce less milk, therefore decreasing profit for the farm. Steps must be taken to rid the mammary tissue of the infection in order to regain full milk production ability.

Mastitis is an inflammation of the udder caused by an infection in the mammary tissue. The infection can be caused by many different pathogenic organisms—usually bacteria. Clinical signs of mastitis include clumpy looking milk, fever, red or swollen udder, decrease in food intake, dehydration and death. Somatic Cell Counts (SCC), which measure the number of white blood cells in the milk, are used to monitor the presence of infections in dairy herds. A SCC above 200,000 cells/ml is indicative of a mastitis problem in the herd (cows may be sub-clinical with no outward signs.) Often there is a decrease in milk production in a herd with mastitis.

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Steps to control mastitis:

1. Identify the problem organism. Culture Bulk Tank
   Two main categories of organism: Contagious Bacteria – Streptococcus agalactia and Staphylococcus aureus. These types of bacteria infect the udder of the cow and are transmitted from cow to cow usually through milking.
   Environmental bacteria – Coliforms, Streptococcus (non-agalactia), Staphylococcus (non- aureus). These bacteria come from the cow’s environment
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6. Control Contagious Bacteria
   Isolate infected cows It is important to remove them from the milking herd and treat them so that the infection does not spread. They should be milked last or completely separate from the herd, so long as their milk does not enter the bulk tank. Often, newly purchased cows coming into the herd bring mastitis infections with them. Milk infected cows often Bacteria use the milk as a growth medium, so removing their nutrient source often, increases the rate of recovery for a cow being treated for mastitis. Whole teat dipping Instead of spraying, dip whole teat with a teat cup Teat dips should contain an iodine solution. (Ideally, 0.5% for pre-milking and 1% for post-milking) Make sure teats are clean
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13. Antibiotic treatment After milking, treat each infected quarter A withdrawal period occurs after treatment with antibiotics. During this period no milk from the treated cow can be put in the bulk tank. Treatments are typically given as intramammary infusions.

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15. A withdraw period occurs after treatment with antibiotics. During this period no milk from the treated cow can be put in the bulk tank.

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17. Dry-Cow Therapy Measures to control and prevent mastitis infections during a cow’s non-lactating period.

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19. Control Environmental Bacteria Clean and dry teats thoroughly before milking This reduces the likelihood of milk becoming infected during the milking process Pre-dip teats to help sanitize them and prevent spread of infection Many environmental bacteria may be resistant to several germicides, so it is necessary to make sure other control measures are taken as well. Keep milking parlor clean A clean parlor discourages the growth of bacteria. Maintain sanitary housing conditions for cows Manure on bedding, floors, aisles, etc. can breed bacteria and become caked onto cow udders. Identify potential problem spots such as muddy areas, manure pits, stagnant ponds, and soiled bedding. Take steps to eliminate or reduce their potential to breed pathogens.

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Answered by:
Hannah Lysczek; reviewed by Dr. Bhushan Jayarao

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