

Preventing Prototheca Mastitis

Producers who receive a diagnosis of Prototheca mastitis should review the result with their herd veterinarian.

The diagnosis of Prototheca mastitis has ramification for the overall herd mastitis prevention approach as well as the individual cow.

The general approach to control Prototheca mastitis is broad based and involves:

- improving the mastitis treatment protocols,
- improving the cow environment, milking and teat end hygiene, and
- testing of the herd and removing infected cows in a suitable and timely manner

Reduce the risk of Prototheca mastitis by:

1. Using improved intramammary treatment techniques:

- Clean your hands before treating a cow for mastitis.
- Clean and disinfect the teat end to be treated, as is done prior to milking, before infusing lactating or dry cow intramammary treatment tubes.
- Use the alcohol swab provided to disinfect the teat ends prior to infusing with IMM tubes.
- Never warm intramammary treatment tubes (antibiotics or teat sealant) by submersion in a bucket of warm water.
- Never reuse treatment syringes.
- Don't treat cows for the same mastitis case with a second antibiotic without consulting your veterinarian.
- Don't treat cows that have already had one case of mastitis in the current lactation without consulting your veterinarian.
- Review and revise your mastitis treatment Standard Operating Procedure to improve IMM treatment hygiene with your veterinarian.
- Write down your treatment decision processes for mastitis cases (ie who to treat, what products to use, how long to treat, withdrawal times, what to do if the case does not improve and when NOT to treat) with your veterinarian.

2. Improving the cow environment

- Scrape yards, alley ways, cross-overs and holding areas to keep them clean
- Scrape more often to prevent a large volume of wet manure being collected by the scrapers
- Fix floors and alleyways to prevent "ponding" of manure and water which can lead to splashing of cow's legs and teats.
- Fence cows out of wet and dirty areas of the pasture or yard

- Improve ventilation to improve drying of cow contact areas (beds, alleys)
- Improve ventilation and drying of the environment in high risk mastitis areas such as maternity pens and close-up cow housing
- Remove old feed from the mangers frequently and
- Use more clean, dry bedding for the dry cows, calving cows, lactating cows and heifers

3. *Cleaning the teat ends twice or three times daily:*

- Thoroughly clean and dry teats before each milking. Use cloth towels, one per cow, to ensure good cleaning and drying.
- Prior to milking make extra effort to clean and dry the teat ends and around teat orifices, wiping across teat ends in multiple directions.
- Use a licensed post-milking teat-dip according to label instructions on all teats immediately after removing the milking unit. Some evidence suggests 1% iodine post dip is preferred for herds with *Prototheca* mastitis.

4. *Dealing with infected cows:*

It is strongly recommended that positive *Prototheca* results be discussed with your herd veterinarian before taking any action.

- Mark infected cows with a leg band so everyone on the farm can easily identify the infected cow
- Milk *Prototheca* infected cows last:
 - In tie stall barns, infected cows should have their own stalls and stay in them.
 - In parlours, infected cows should be milked last or with a “mastitis unit” as they come through the parlour.
 - In free stall barns *Prototheca* cows should be in a mastitis group and not housed with first lactation, fresh cow groups, or in the calving pen.
- Do not attempt treatment of *Prototheca*-infected quarters. Treating or “killing” a quarter can make *Prototheca* mastitis worse. Antibiotics do not work on algal infections.
- Stop treatment of quarters known to be infected with *Prototheca*.
- Cull *Prototheca* infected cows as soon as it is reasonable to remove them.

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