

# MASTITIS

## PREVENTION AND CONTROL



**DIVISION OF ANIMAL HEALTH**  
**ICAR Research Complex for NEH Region**  
Umroi Road, Umiam-793103  
Meghalaya, India



## WHAT IS MASTITIS?

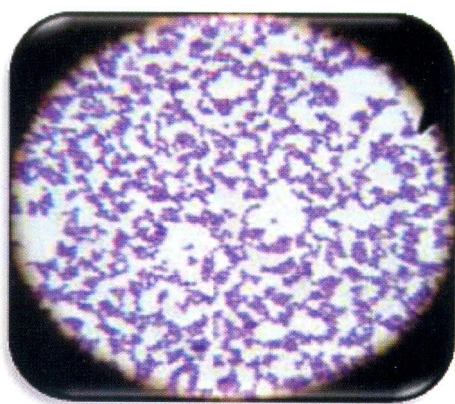
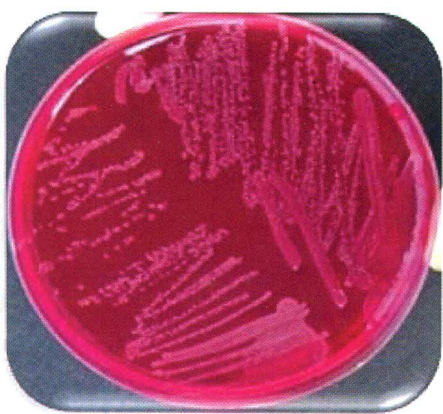
Mastitis is the inflammation of the mammary gland characterized by a range of physical and chemical changes in the udder and milk .



## CAUSE OF MASTITIS

Bovine mastitis is caused by multiple agents as follows :

- i. Physical agents – biting by infants or calves, insects, kicking by other animals
- ii. Chemical agents – acids, alkali, phenol etc.
- iii. Microbial agents: many bacterial agents especially *Staphylococcus*, *Streptococcus*, *Bacillus*, *E. coli* and so on. *M. tuberculosis* is another rare cause of mastitis. *Candida* and *Cryptococcus* have been reported to cause fungal mastitis



## **PRINCIPLES OF PROPER MILKING MANAGEMENT**

- i. Premilking udder hygiene.**
- ii. Stimulation of milk let-down.**
- iii. Efficient removal of milk.**
- iv. Post milking udder hygiene.**

## **PROPHYLACTIC AND CONTROL MEASURES**

- i. First stripping of milk should be discarded and checked carefully for monitoring purpose.**
- ii. Start with full hand, ends with stripping methods of milking.**
- iii. Udder and teat of the cow should be washed with warm water adding a pinch of potassium permanganate or sodium hypochlorite before and after milking.**
- iv. After washing the udder and teat should be dried properly.**





**CLEAN COW SHED**

- v. Teat dips should be applied before and after milking. It should be safe and effective (e.g. iodophores/savalon).
- vi. Ensure complete evacuation of milk and colostrum (either by the calf or manually just after parturition)
- vii. Milking should be done twice or thrice a day, but at regular interval and routine. Abrupt changes in the time of milking affect the total yield.
- viii. Avoid any kind of stress to the animal. Animal should not be excited or beaten up before milking.
- ix. Ensure that animal remains standing at least 10-20min after milking .
- x. Maintenance of strict and proper hygiene of animal, shed, utensils etc. Milking area must be free from flies, rodents, vermin, dust, smoking, all manure dung and dust particles.

- vi. Properly clean and sundry the vessels before and after milking.**
- vii. Personnel hygiene of the milker/ animal handler is also very important in control and prevention of mastitis.**
- viii. Routine examination of cattle is necessary to assure that they are disease free and maintain a healthy herd status.**

**Treatment of mastitis cow is not always a feasible and viable option it may end up with spending of handsome amount of money and labour. So it is always wise, better and economical to prevent by adopting simple and timely animal health care and managerial measures.**



*Compiled by*  
**Dr. Rajkumari Sanjukta**  
**Dr. Z.B.Dubal**  
**Dr. K.Puro**  
**Dr. I. Shakuntala**  
*(Scientist-Animal Health)*  
**ICAR, RC, NEH, Barapani**

**For Further Details Contact:**

**DIVISION OF ANIMAL HEALTH**  
**ICAR Research Complex for NEH Region,**  
**Umroi Road, Umiam, Meghalaya- 793103**  
**Phone: 0364-2 570071/2570257**

**Published by**  
**Director**  
**ICAR Research Complex for NEH Region,**  
**Umiam-793 103,**  
**Meghalaya**

*Designed and printed by :*  
**print21, Ambikagirinagar Path, RG Baruah Road, Guwahati 781024**