



MASTITIS: PREVENTION AND TREATMENT

AIM: TO PROVIDE INFORMATION ON PREVENTION AND TREATMENT OF MASTITIS.

NOTE: This fact sheet is one of a series on mastitis and milking practices.

1. What is mastitis?

- Mastitis is an infection of the udder. It is caused by bacteria entering the teat opening.
- The infection can cause visible changes in the udder and the milk (**CLINICAL MASTITIS**) or more subtle changes which you may not be able to see (**SUBCLINICAL MASTITIS**).

2. Why is mastitis important?

- When a cow gets an infection in her udder, cells from the cow's body (somatic cells) are shed into the milk to help fight the infection.
- These cells affect the quality of milk and what can be done with it.
- Milk from cows with mastitis should not be sent to the MCC.

3. Why is clinical mastitis damaging to a cow?

- Clinical mastitis is **painful** and can reduce a cow's appetite.
- It can cause **permanent damage** to the teats and udders which may mean an animal 'loses' a quarter. This can reduce the amount of milk a cow can produce during her lifetime.
- If the bacteria causing the mastitis is infectious, it can be passed to other cows who may also get mastitis.

4. Why is subclinical mastitis dangerous for a cow?

- Subclinical mastitis can turn into clinical mastitis if it is left unmanaged. This is why it is important to regularly carry out a Rapid Mastitis Test (RMT) to detect animals which may have it (*see separate fact sheet*).



Swollen quarter (clinical mastitis)



Clots (Clinical mastitis)



Positive RMT result (subclinical mastitis)



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5. How can you prevent mastitis?

- ✓ Follow good milking practices (*see separate fact sheet*) including:
 - Wash teats with potable water and dry before milking;
 - Strip each teat before milking. Use a strip cup or black surface (but not a gum boot). Look out for signs of clinical mastitis, e.g. clots or other changes to the milk;
 - Discard the first two squirts of milk from each teat at every milking. Then check the next two squirts for clots / changes. If you have concerns carry out an RMT (*see separate fact sheet*);
 - Do not wash teats after milking;
 - Use teat dip after milking. **NOTE:** If you are unable to teat dip, ensure the animal does not sit down for at least 30 minutes after milking. E.g. provide good quality roughage for the animal to eat. This allows the teat opening to close.
 - Clean the milking area and equipment (*see separate fact sheet*);
 - Ensure animals do not lie in dirty areas;
 - Keep good records for your cattle.

REMEMBER bacteria can stay on clothing, e.g. sleeves. Do not use sleeves to wipe teats. **Keep good hygiene and wear clean clothes.**



Clean hands



Clean milking parlour



Clean teats



Teat dip

6. What to do if an animal has clinical mastitis:

At milking:

- ✓ Milk the animal last.
- ✓ Milk the infected quarter last, put the milk separately and discard safely. **DO NOT** send this milk to the MCC. **DO NOT** mix this milk with other milk.
- ✓ Use a separate towel and make sure this is washed immediately after milking.
- ✓ Wash hands immediately after milking.



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Treatment of cows with signs of clinical mastitis:

- ✓ **DO NOT** treat with drugs unless instructed by a vet.
- ✓ When treating with drugs prescribed by your vet, ensure you:
 - Give the **appropriate dose** for the animal's weight (*see separate fact sheet on estimating the weight of a cow*);
 - Give the drugs for the correct **time period** and **frequency**;
 - Give drugs which have not reached their **expiry date** and have been **correctly stored**.

REMEMBER to **withhold milk** for the prescribed withdrawal period.

See separate fact sheet.

- ✓ If more than one person milks the cow, make sure they also know to withhold the milk for the withdrawal period, E.g. mark the cow as 'under treatment' with spray paint, or by tying tape around her tail;
- ✓ Record any treatment given to the cow in your record book.

7. What to do if an animal has subclinical mastitis

- ✓ If you detect subclinical mastitis using the RMT, test the cow again at the next milking. **DO NOT** treat her unless you see signs of clinical mastitis (visible clots in the milk, swollen quarter, etc).
- ✓ Continue to monitor until the milk does not cause a positive reaction using RMT. *See separate fact sheet for further information.*

8. What to do if mastitis is not responding to treatment

- ✓ If a cow is not responding to treatment, contact your local vet.
- ✓ **DO NOT** carry out treatment without the advice of a vet as this may lead to an infection which becomes resistant to antibiotics.
- ✓ Consider culling animals which get repeat mastitis or mastitis which doesn't respond to treatment, after discussing with your vet.

REMEMBER:

- Mastitis can be more common during the wet season when there's lots of mud and dirt;
- Always have **good milking hygiene** and follow **good milking practices**;
- **Prevention** is better and often cheaper than treatment;
- *See fact sheets on milking practices, mastitis overview and testing.*

Contact your local extension or veterinary officer for more information.

ZDTP is focused on supporting dairy farmers to improve their productivity, milk quality and linkages to urban markets. The views expressed in this publication are those of the implementers of the programme and do not necessarily reflect those of the New Zealand Government. For further information, please contact ZDTP on zdtpinfo@primeconsultants.net. Follow us on www.zambiadairy.com, Facebook (facebook.com/zambiadairy/) and Twitter (@DairyZambia).