

# Mastitis in NZ Dairy Cows

Mastitis is the result of complex interaction between bacteria, the farmer, the milking machine and the cow

## Signs of mastitis

Once bacteria enter the udder, the cow's immune system fights infection by producing white blood cells, measured as somatic cell count (SCC). Depending on the degree of inflammation you may see changes in the milk (clinical mastitis), or no changes in the milk (subclinical mastitis).

### Clinical

Cows show symptoms:

- change in milk e.g. clots, watery, blood
- heat and /or swelling in udder
- reduced milk yield
- cow off-colour

### Acute

infection appears suddenly and usually relatively short-term

### Chronic

long-term infection

### Subclinical

No symptoms in cow, but high somatic cell count (SCC), or reaction to rapid mastitis test (RMT), and often reduced milk yield

## Sources of mastitis

### Environmental bacteria

Mud and muck gets onto teats and causes mastitis, often in Spring. Generally caused by streptococcus bacteria.



### Cow to cow spread

Bacteria in the milk of an infected cow will contaminate the cups for the next 5 cows milked with that cluster. Commonly caused by staphylococcus bacteria.



## Treating mastitis

1. Clean the teat end, before taking a milk sample or treating the cow.
2. Collect initial milk sample, then either submit to lab for culturing bacteria, or freeze for later.
3. Treat with antibiotics as per veterinary authorisation.
4. Anti-inflammatory treatment will provide pain relief, reduce fever and swelling.
5. If the cow is very unwell, seek veterinary advice.

# Managing your herd to minimise mastitis

## Colostrum Herd

Wash teats if they are dirty  
- use low pressure water  
and rub each dirty teat

Teat spray colostrum cows  
before milking to reduce  
spread of bacteria and make  
milking more comfortable

Strip each quarter every  
milking to detect and treat  
mastitis early

Milk each cow

Teat spray again - full  
coverage of all teats

Rapid Mastitis Test (RMT)  
on 8th milking prior to  
joining the milking herd (or  
10th milking for heifers)



## Milking Herd

Wash teats if they are dirty  
- use low pressure water  
and rub each dirty teat

Strip each quarter weekly  
to detect clinical mastitis  
early

Take cups off as soon as  
milk flow reduces to a  
constant dribble in bowl

Bend hose and wait until  
vacuum drops before  
removing cups

Teat spray every surface  
of every teat after every  
milking

Assess the teats of 50  
cows once a month  
(refer scoring chart)



Keep tails trimmed

Take care when hosing down - avoid splashing muck onto teats during milking

Watch short video on Managing mastitis by Dr Steve Cranefield via <http://agrihealth.co.nz/news-research/healthy-udder-video>