



DN NEWSLETTER

issue 24

Mastitis is a common disease on dairy farms. From a disease perspective, mastitis is the second largest economic impact on a dairy farm. In 2019, 11.5% of the cows which left the herd, left due to mastitis or high Somatic Cell Count (SCC).

What is Mastitis?

Mastitis is inflammation in the udder and is usually the result of a bacterial infection. Mastitis develops from microorganisms invading the udder through the teat canal. They migrate up the teat canal and colonise the secretory cells. The colonised organisms produce toxic substances harmful to the milk producing cells.

When the cows immune system detects an infection, white blood cells are sent to the infected area, the udder tissue. This is when clots or watery milk may be seen and if tested there will be an increased SCC.

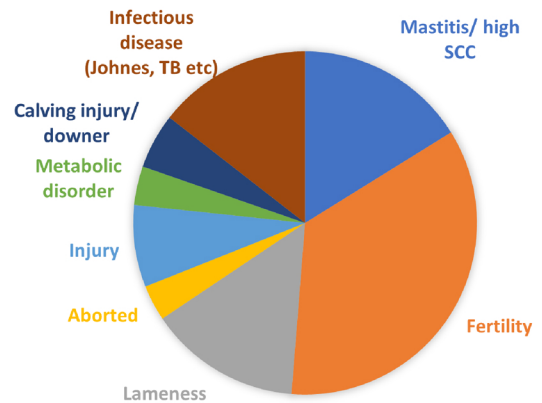
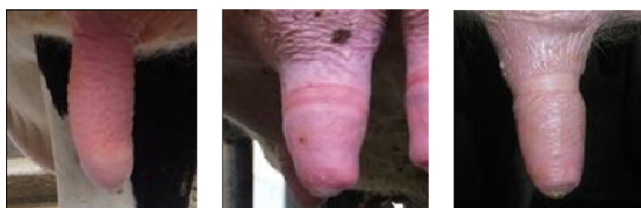
Spread of Mastitis

Historically, the most common way mastitis spread was between cows through the milking process, known as “contagious mastitis”. The most common way to spread it now is the environment from manure and dirt.

Contagious Mastitis

This is the transfer of bacteria from cow to cow. This can be spread a number of ways:

- On the hands of people milking
- Milking cloths or wipes
- Faulty milking machine
- Air admission into the milking unit
- Poor liner fit
- Poor maintenance of the milking machine
- Poor pulsation
- Overmilking or incorrect ACR setting



Signs of Mastitis

- Udder swelling– hardness, thickening
- Warmth in the udder • With or without redness
- Pain • With or without clots in the milk
- Cow may be sick • Can lead to death

Environmental Mastitis

This is the transfer of bacteria from the environment to the cow from

- Splashes of manure
- Dirty legs
- Lying on contaminated beds
- Dirty tails

Importance of Drying Off

Drying off is an opportunity to cure problem cows but to reduce antimicrobial resistance selective dry cow therapy should be a priority.

Hygiene is critical at drying off:

- Wear nitrile gloves
- Completely milk out the quarter
- Disinfect the teats & teat ends
- Start with the teat furthest away
- If needed administer an approved intramammary



Key Points

High SCC and mastitis impact many areas of a dairy farm. Management, control and treatment of mastitis is best done by using a 7 point approach:

1. Milk Clean Teats

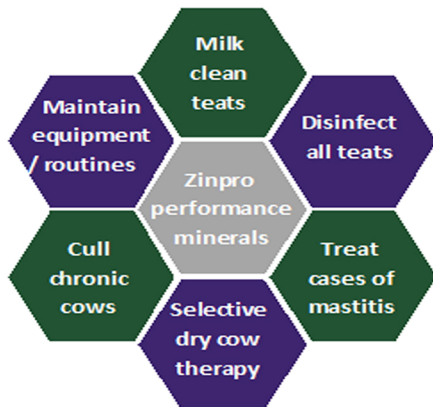
Regularly evaluate udder and teat end cleanliness on farm

2. Disinfect All Teats

Ensure complete coverage of every teat on every cow

3. Treat Cases of Mastitis Quickly and Correctly

Identify pathogens to better understand the cause and determine appropriate treatment options



4. Use Teat Sealants and Selective Dry Cow Therapy

Dry-off and calving are the highest risk periods for mastitis. Make the process clean!

5. Cull Chronic Cows

Use records to determine eligible cull candidates

6. Maintain Equipment and Milking Routines

Faulty equipment and lack of attention to the milking routine can damage teat ends and increase mastitis risk

7. Use Nutritional Technology

Zinpro Performance Minerals have shown to consistently reduce SCC and improve immune response in dairy cattle

6 Reasons to Feed Zinpro Performance Minerals for Udder Health...

1. Zinpro trace minerals increase teat keratin production between milking helping to prevent the entry of pathogenic bacteria

2. Within the udder, Zinpro performance minerals improve the health integrity of secretory tissue

3. Zinpro performance minerals influence the killing capacity of immune cells

4. Cows fed Zinpro performance minerals respond to challenges quicker

5. Healthier udders mean more saleable milk per cow

6. Lower SCC means more cows are eligible for selective dry cow therapy which means less antibiotics are used

