

GUIDELINE 10

Rapidly find, record and treat clinical cases

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Clinical cases of mastitis are costly and significantly disrupt the milking routine. Clinical cases that are missed can dramatically increase the bulk milk SCC because they produce very high numbers of somatic cells.

Rapid detection and treatment of cases means fewer chronic infections develop, and less chance of infection being passed to other cows. Use records of clinical cases and treatments to monitor herd level of mastitis and identify individual cows for culling.

Milk cultures are recommended to identify which bacteria are involved if a herd problem emerges. A sterile sample must be taken before treatment is started for each case.



Benefits of improving udder health

The benefits of improving udder health and milk quality can be calculated for your herd using the [SmartSamm Gap Calculator](#).



Good Read

[Technote 10 - Rapidly find, record and treat clinical cases](#)

10.1 Monitor bulk milk SCC.

Check the tanker docket after every collection for milk quality results including the bulk milk SCC. A sudden increase of 50,000 cells/mL or more over 1 to 2 pickups may indicate one or more missed clinical cases.

The effect that a single clinical case has on the bulk milk will be more apparent in small herds or when the volume of milk in the vat is low, such as at the start and end of the season.



See [Guideline 11.1](#) for tips on interpreting your bulk milk SCC.

10.2 Check for swollen quarters and quarters that don't milk out.

Look for swollen quarters at every milking, at both cups-on and cups-off.

When removing cups, there may be 'strings' of mastitis hanging from teat ends indicating the cow has mastitis.



See [Healthy Udder - Find 1](#) for tips on finding clinical mastitis.

10.3 Watch for clots on the milk filter.

Check the filter after every milking, before washing the plant.

If there is a separate mastitis/high SCC herd, check the filter before these cows are milked.

Learning to assess the nature of the material on the milk filter (reading the filter) is very useful. Know how to recognise the difference between mastitis clots and clumps of internal teat sealant. Clumps of teat sealant will smear or spread out when rubbed.

If there are any clots on the filter, examine (strip check) suspect cows at the next milking.

Check the filter again at the next milking. If clots are still present, strip more cows at the next milking until the culprit cows are found and removed from supply.

10.4 Strip check every quarter of the herd for clots before applying the machine.

Strip all cows before milking when clots are found on the milk filter sock and/or there is a sharp rise in the bulk milk SCC.

- Identify 'suspect cows' for priority stripping. These could include:
- Recently calved cows
- Cows which have had clinical mastitis recently (check clinical records for last month)
- Cows known to have a high individual SCC (check last herd test)
- Cows that don't milk out properly
- Cows with teat damage or sores.

Strip foremilk onto a dark surface. Look for clots, watery or discoloured milk that persist for more than three squirts. For some clinical cases, discoloured milk may be the only visible sign. These may cause the bulk milk SCC to rise sharply but show no clots on the filter.

Gloves should always be worn. Good milkers learn to strip without getting milk on their gloves.

Quarters with a few small flecks only in the first three squirts may be left untreated and checked again next milking. If these flecks continue every milking, consider taking a milk sample for culture and check the individual cow SCC history.

Only treat cows with clinical signs of mastitis unless otherwise advised by your vet.



Spread stripping over a few milkings

Spread the task over two or more milkings, if the task is too much for one milking. For example, check one side (eg left front and back quarters of every cow) at one milking, and the other side (right front and back quarters of every cow) at the next.



Clinical case for treatment

A case of clinical mastitis which requires treatment occurs when there is heat, swelling or pain in the udder, or there are changes in the milk (wateriness, clots, discolouration) that persist for more than three squirts of milk.



See [Healthy Udder - Find 1](#) for pictures of signs of clinical mastitis.

See [Guideline 5.2](#) for ways to strip the whole herd at high risk times, such as during a clinical outbreak or the first 6 to 8 weeks of the season.

10.5 Decide when to collect milk samples for culture.

Samples for bacterial culture must be taken before treatments starts.

Samples can be frozen and stored, so taking samples from all cases and freezing them allows you to send them for laboratory examination later, if necessary. Samples can be stored for up to 4 months without any negative effect on most mastitis-causing bacteria.

Consider taking a milk sample for bacterial culture if:

- You had more than 1 case per 100 cows per month
- You had more than 8 cases per 100 cows in the calving periods
- You had more than 16 cases per 100 heifers calved in the calving period
- You are concerned about the type of clinical cases occurring, or
- Cows are not responding as expected to antibiotic treatment



Mastitis Focus

Check your [Mastitis Focus report](#) to see if the level of mastitis in your herd is of concern.



Collecting good samples requires training

Your vet can train your milking team to use the correct technique to collect milk samples for culture, as described in [Healthy Udder - Find 3](#)

10.6 Record and treat clinical cases as recommended by MRS T.



See Healthy [Udder - Treat 1](#) for tips on MRS T (marking, recording and separating, before treating cows with antibiotics).

See [Guideline 4](#) for more information on finding, recording and treating clinical cases