

# TECHNOTE

10

## *Rapidly find, record and treat clinical cases*

If clinical cases are missed, they contribute millions of cells into the vat and can significantly increase Bulk Milk Somatic Cell Counts (BMSCC). Herds that have more than 8 clinical cases per 100 cows in the calving period, 16 clinical cases per 100 heifers calved in the calving period or 1 clinical cases per 100 cows in subsequent months, have a significant mastitis problem and help should be sought.

Rapid detection and treatment of cases means fewer chronic infections develop, and there is less chance of infection being passed to other cows. This requires milking staff to be aware of signs that indicate clinical cases and situations that increase the risk of mastitis spread.

### 10.1

#### *Monitor bulk milk SCC.*

Sharp rises or spikes in the BMSCC may indicate the presence of a new clinical case of mastitis in the herd.

### 10.2

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

### 10.3

#### *Watch for clots on the milk filter.*

Milk filters (or 'socks') are located between the milk pump and the bulk milk tank and are designed to remove extraneous matter such as hair, dirt, and dung from milk (Akam and Spencer 1992). This type of material is present because it was not removed prior to application of the teat cups, or it was drawn in when the teat cups accidentally touched the floor or the cow.

Cows with heat, swelling or pain in the udder, or changes in their milk (wateriness or clots) that persist for more than three squirts, have clinical mastitis and require treatment.

SmartSamm Mastitis Focus report can help to monitor the incidence of clinical mastitis in the herd

Technote 11 describes the monitoring of bulk milk SCC.

Technote 4.1 describes techniques for checking udders.

Technote 4.2 and 5.2 describe techniques and routines for foremilk stripping.

Clots on the milk sock indicate poor mastitis detection (Blowey and Edmondson 1995). The filter should be examined after every milking before the plant is washed and if clots are found on the filter, suspect cows should be examined at the next milking. The filters do not remove dirt particles less than about 70 micrometres in diameter, somatic cells or bacteria.

Note that some clinical mastitis may not present as clots on the filter sock e.g. discoloured milk. The presence of these infections may be indicated by a sharp rise in the BMSCC.

## 10.4

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

The *SmartSAMM Guidelines* recommend that all cows are foremilk stripped for clots when clots are found on the filter and/or sharp rises in the BMSCC are observed.

'Suspect' cows could be marked for future reference. When clots appear on the filter sock, these cows are candidates for priority stripping. These include cows that:

- have recently calved;
- have recently had a case of clinical mastitis (e.g. in the past two months);
- have had a high individual cow cell count (e.g. above 500,000 cells per mL or another threshold chosen by an adviser to suit the circumstances of the herd);
- have not milked out properly;
- any cow with known teat damage or severe teat lesions.

Daily foremilk stripping of the herd is warranted during high-risk times, such as during outbreaks of clinical mastitis or during the first 6-8 weeks of lactation.

Technote 5.2 discusses the advantages of regular foremilk stripping.

## 10.5

### ***Decide when to collect milk samples for culture.***

Technote 4.3 discusses collection, storage and analysis of milk samples for culture.

## 10.6

### ***Record and treat clinical cases as recommended by MRS T.***

Technote 4 discusses mastitis treatments, animal identification, record keeping, withholding periods and MRS T (Mark, Record, Separate and Treat).

## **Acknowledgements**

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## **Key papers**

Akam DN, Spencer SB. Design and operation of milking machine components. In: Bramley AJ, Dodd FH, Mein GA, Bramley JA editors. *Machine milking and lactation*, Chapter 5, Insight Books, Vermont, United States; 1992:190-192.

Blowey R, Edmondson P. The milking routine and its effect on mastitis. In: *Mastitis control in dairy herds*, Chapter 6, Farming Press Books, Ipswich, United Kingdom; 1995:83-86.