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Rapidly find, treat and record clinical cases

If clinical cases are missed, they contribute millions of cells into the vat and can significantly increase Bulk Milk Cell Counts (BMCC). Herds that have more than five clinical cases per 100 cows in the first month of lactation or two clinical cases per 100 cows in subsequent months have a significant mastitis problem. 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 alert to clinical cases and situations that increase the risk of mastitis spread.

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.

10.1 Monitor daily Bulk Milk Cell Counts (if available).

Technote 11 describes the monitoring of bulk milk cell counts.

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

Technote 4.1 describes techniques for checking udders.

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 teatcups, or it was drawn in when the teatcups accidentally touched the floor or the cow.

Clots or faecal contamination on the milk sock indicates poor mastitis detection or poor milking routine (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 nor bacteria.

Technote 5.2 describes foremilk stripping.

10.4 If close examination of cows is required, check every quarter of 'suspect cows' for clots before applying the machines.

The Countdown Downunder Farm Guidelines for Mastitis Control include as 'suspect cows' those that:

- have not milked out;
- have recently had had a case of clinical mastitis (e.g. in the past two months);
or
- have had a high individual cow cell count (e.g. above 250,000 cells per mL or another threshold chosen by an adviser to suit the circumstances of the herd).

This list could be expanded to include any cow with known teat damage or severe teat lesions.

10.5 Check every quarter of every cow for abnormal milk before applying machines in the next milking, if the cause of the clots is not found in the suspect cows.

Technote 5.2 describes foremilk stripping.

10.6 Send milk samples for culture to establish the organisms involved in the herd, if concerned by the number of cases.

Technote 4.3 discusses milk samples for culture.

10.7 Treat and record clinical cases as recommended by the Farm Guidelines for Mastitis Control.

Technote 4 discusses mastitis treatments, animal identification, record keeping, withholding periods etc.

10.8 Consider daily foremilk stripping, especially at high-risk times such as during outbreaks of clinical cases.

Technote 5.2 discusses the advantages of foremilk stripping.

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.

