GUIDELINE 11

Monitor Bulk Milk Cell Counts

- **Checking trends**
- **Clinical cases**
- **Seeking advice**

The BMCC is an indirect way of estimating the level of subclinical mastitis in the herd. Each 100 000 cells/mL indicates approximately 10% of cows are infected.

A series of BMCCs should be assessed to see both the level and the trend for a herd.

In herds with BMCCs below 200 000, a sudden increase (of 10% or more) may indicate that a clinical case has been missed. Herds with higher BMCCs have much more fluctuation of BMCCs on a day-to-day basis because there are so many infected quarters.

11.1 Check Bulk Milk Cell Counts when they arrive, to see if they have risen.

Ask your factory to send each **Bulk Milk Cell Count** when it is available.

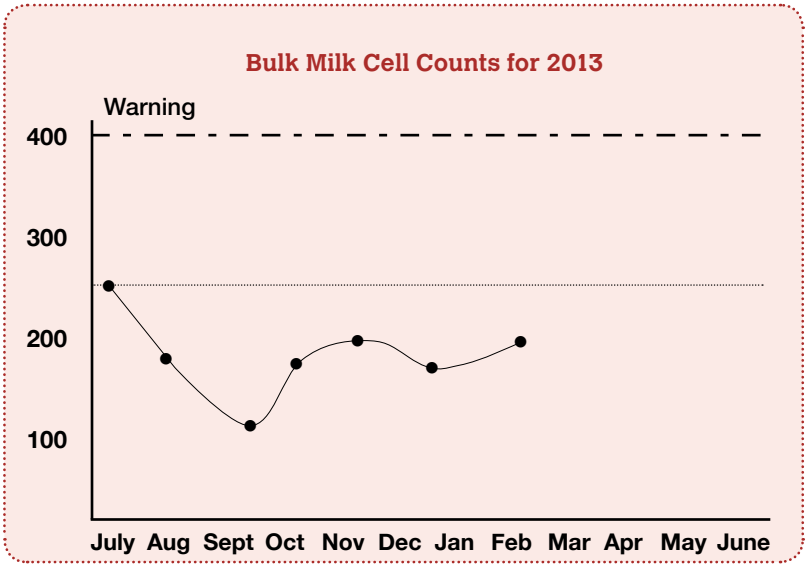
Use a graph to help watch out for rising trend changes.

Bulk Milk Cell Count, refer page 7

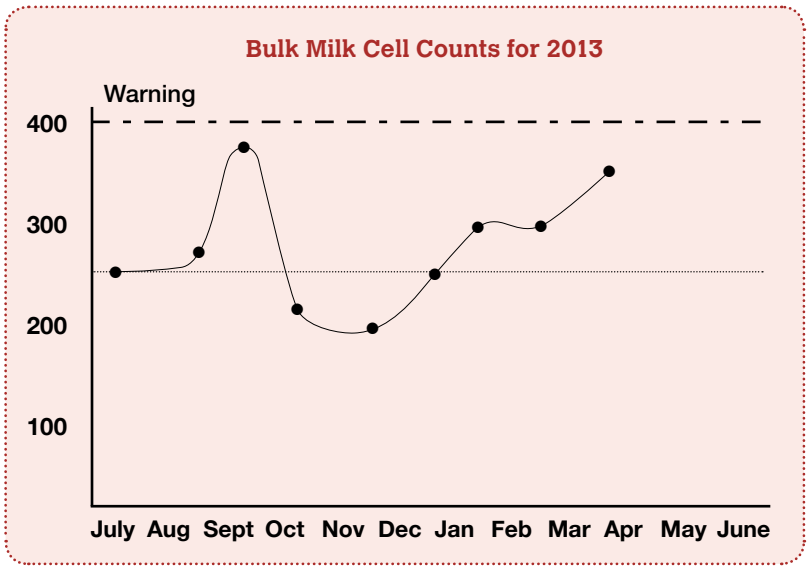
11.2 Consult with your factory field officer or veterinarian if close to, or in receipt of, Bulk Milk Cell Counts which would downgrade milk.

11.3 Check for clinical cases – undetected clinicals can cause Bulk Milk Cell Counts to rise.

If your Bulk Milk Cell Counts are usually less than 200 000/mL, a 10% increase may indicate a missed clinical case.



As you receive Bulk Milk Cell Counts from your factory, plot them on a graph like this one.



This graph shows a ‘spike’ in September and a worrying trend of increasing BMCCs from December. If your graph shows this type of trend, consult with your factory field officer or veterinarian.

GUIDELINE 12

Use Individual Cow Cell Counts for management decisions

- **Chronically infected cows**
- **Infection spread**
- **Seeking advice**
- **Monitoring heifers**

Regular ICCCs enable you to monitor udder health over each lactation. They also give you an option for **Selective Dry Cow Treatment**, and allow you to assess the contribution of individual cows to **Bulk Milk Cell Count** problems if they arise and create a preferential culling list

Recent Australian evidence shows that it is usually not economic to treat high cell count cows with antibiotics during lactation, unless these cows have **Strep agalactiae** infections.

Selective Dry Cow Treatment, refer page 8

Bulk Milk Cell Count, refer page 7

Strep agalactiae, refer page 3

12.1 Consult your veterinarian or factory field officer for advice on management of cows contributing high numbers of cells to the vat. Take action if Bulk Milk Cell Count premiums are being lost or you are approaching penalty levels.

Management options may include:

- Finding and excluding undetected clinical cases.
- Excluding high ICCC cows from supply – this is a short term solution only.
- Drying-off individual quarters of specific cows and making her a '3-teater'.
- Drying-off individual cows early.
- Culling high ICCC cows.
- Treatment if *Strep agalactiae* is identified as a problem in the herd.

12.2 Consider milking chronically infected cows last to avoid contaminating other cows.

In some herds it is often feasible to manage the high ICCC cows in a separate herd and milk them last.

Some electronic identification and drafting systems may allow high ICCC cows to be drafted out before milking, and milked last

12.3 Watch for evidence of spread of infection in the herd by checking the percentage of cows and heifers with increased cell counts each month.

Heifers are likely to be clean of contagious mastitis bacteria at calving, and so can be an 'indicator group' for spread of infection.

Cell counts are a guide to infection status of individual animals, and will only give a guide to infection spread. Where contagious mastitis bacteria are concerned (especially **Staph aureus**) fluctuations in cell count occur in infected animals, and a peak cell count over the season should be used. A reduction in cell count in tests later in lactation does not necessarily mean that the infection has cleared up.

In herds with satisfactory mastitis control, no more than 1% additional heifers should have a peak ICCC of greater than 250 000 cells/mL each month.

For example, if 10% of heifers have a peak cell count of greater than 250 000 cells/mL in November, no more than 11% should have a peak cell count of 250 000 cells/mL by December.

12.4 Check the new infection rate on your Mastitis Focus report.

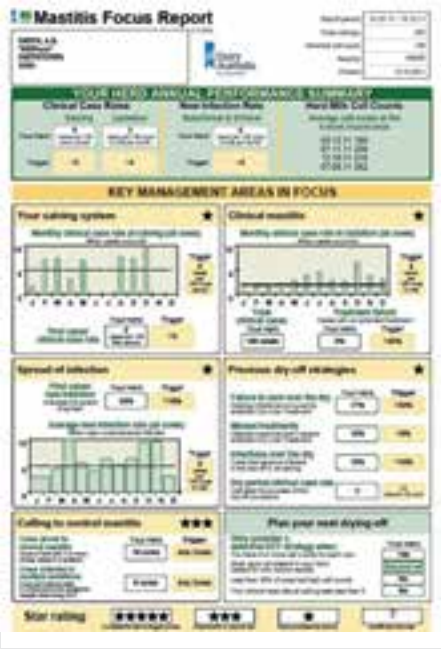
The spread of infection graph indicates how quickly infection is spreading to clean cows. This is usually not obvious as most mastitis infections are subclinical.

The new infection rate can only be measured in herds that participate in herd testing. Accuracy is further increased if clinical mastitis and Dry Cow Treatment records are uploaded to your herd test provider database.

✓ **Enrol for a minimum of bi-monthly herd testing, which generally equates to four herd tests per lactation.**

Staph aureus, refer page 3

✗ **A single ICCC (eg from a spot test) needs to be interpreted with caution. An ICCC pattern over time more accurately assesses the status of an individual cow.**



Refer to:
www.mastitisfocus.com.au