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Early lactation somatic cell count should be low

James R. Dunham
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Abstract
Cows and heifers in milk for fewer than 50 days, as shown on the DHIA Somatic Cell Count report, should have a lower average Somatic Cell Count than cows in milk for more than 300 days, if the dry cow mastitis treatment and management programs are effective. The DHIA Somatic Cell Count (SCC) average for a dairy herd is a good evaluation of a mastitis control program. Since leucocytes migrate to the mammary system during periods of subclinical mastitis, the SCC average indicates the amount of subclinical mastitis in a herd. A realistic goal for a herd average SCC is less than 200,000. In many herds with average SCC over 400,000, the average SCC of early lactation cows is higher than that of late lactation cows. This indicates a problem during the dry period, either dry cows are not being cured of mastitis or they are becoming re-infected with mastitis during the dry period.; Dairy Day, 1987, Kansas State University, Manhattan, KS, 1987;

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Summary

Cows and heifers in milk for fewer than 50 days, as shown on the DHIA Somatic Cell Count report, should have a lower average Somatic Cell Count than cows in milk for more than 300 days, if the dry cow mastitis treatment and management programs are effective.

Introduction

The DHIA Somatic Cell Count (SCC) average for a dairy herd is a good evaluation of a mastitis control program. Since leucocytes migrate to the mammary system during periods of subclinical mastitis, the SCC average indicates the amount of subclinical mastitis in a herd. A realistic goal for a herd average SCC is less than 200,000.

In many herds with average SCC over 400,000, the average SCC of early lactation cows is higher than that of late lactation cows. This indicates a problem during the dry period, either dry cows are not being cured of mastitis or they are becoming re-infected with mastitis during the dry period.

Evaluating the Dry Cow — Mastitis Control Program

The DHIA SCC report summarizes the herd on each test day according to the stage of lactation of each cow. This summary is the Days in Milk SCC Average shown in Table 1.

Table 1. Days in milk and Somatic Cell Count average

<table>
<thead>
<tr>
<th>Days in Milk</th>
<th>Your Herd</th>
<th>Mid-States Top 25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh under 50 days</td>
<td>497,000</td>
<td>178,000</td>
</tr>
<tr>
<td>Fresh 50 to 100 days</td>
<td>390,000</td>
<td>159,000</td>
</tr>
<tr>
<td>Fresh 101 to 200 days</td>
<td>435,000</td>
<td>166,000</td>
</tr>
<tr>
<td>Fresh 201 to 300 days</td>
<td>444,000</td>
<td>183,000</td>
</tr>
<tr>
<td>Fresh over 300 days</td>
<td>466,000</td>
<td>206,000</td>
</tr>
</tbody>
</table>
The effectiveness of a dry cow mastitis control program can be evaluated by comparing the SCC average of cows fresh less than 50 days with that cows fresh over 300 days. If this report shows a consistently higher average SCC for early fresh cows, than an evaluation of the dry cow program should include:

1. **Drying Cows Off.** Cows should be turned dry by discontinuing milking abruptly. Those cows producing more than 40 lb at dry-off should be fed less grain to decrease milk flow.

2. **Dry Cow Treatment.** Every quarter should be treated with a dry cow preparation shown to be effective by sensitivity tests. Sanitary procedures during treatment must be followed. Cows showing high SCC during late lactation should be re-treated 10-14 days following dry-off.

3. **Lots and Housing.** The lots and housing facilities must be clean and as dry as possible for springing heifers and dry cows.

4. **Prepartum Milking.** Springing cows and heifers making up udders that show signs of mastitis should be milked prepartum, and a treatment program should be initiated.