Researchers have recently validated a new method to effectively assess lameness in tiestalls without having to take a cow out of her stall. They’ve also evaluated lameness on dairy farms across Canada.

Lameness negatively impacts your cows’ productivity and longevity, and reduces dairy production efficiency. It can cost you up to $350 to treat just one lame cow.

The average lameness rate per farm varies between zero and 66 per cent, with an average of 23 per cent for tiestalls and 20 per cent for freestalls. This finding is part of a research project funded by Fonds de recherche Nature et technologies (FQRNT), Novalait, Ministère de l’Agriculture, des Pêcheries et de l’Alimentation du Québec (MAPAQ), Agriculture and Agri-Food Canada (AAFC) and the Dairy Farmers of Canada-AAFC Dairy Cluster involving 240 Quebec, Ontario and Alberta dairy farms (see The Milk Producer, December 2012, pg.30).

The research results show it’s possible for producers to keep their cows’ lameness rates near or below the 10 per cent threshold recommended by the Code of Practice for the Care and Handling of Dairy Cattle.

Research shows it’s possible for dairy producers to keep their cows’ lameness rates near or below the 10 per cent threshold recommended by the Code of Practice for the Care and Handling of Dairy Cattle.

Identifying lame cows on your farm can help you:
1) determine the extent of the problem on your farm;
2) treat your cows and make the required changes;
3) increase your cows’ longevity;
4) improve your farm’s profitability;
5) prepare for the proAction Initiative.

These measures were developed, tested and validated in the research project. You and your advisor can easily use them on the farm. The researchers established standardized
procedures to provide training if you want to learn how to measure lameness on freestall and tiestall farms. You can use these measurements to conduct a self-assessment on your farm. A short summary explaining how to use the training tools is posted on www.dairyresearch.ca/cow-comfort.php.

The researchers tested these standardized procedures on a group of individuals with and without cow experience. After training, all of them were able to identify cows with lameness in the same way, using the procedures. This ensured reliability of the data collected on the farms.

Lameness assessment in herds
Evaluating gait is the best way to detect dairy cow lameness. In tiestall systems where cows get regular exercise, the researchers recommend assessing your cows when they are moving. If it is not practical to observe your cows when walking, you should use the in-

<table>
<thead>
<tr>
<th>Table 1. Description of the presence and absence of three behaviours to record for assessing gait</th>
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<tbody>
<tr>
<td><strong>Behaviour</strong></td>
</tr>
<tr>
<td>Head bob</td>
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<tr>
<td>Asymmetric steps</td>
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<tr>
<td>Limping</td>
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<th>Table 2. Behavioural indicators associated with lameness in tiestalls (A cow showing at least two of the four behaviours is considered lame)</th>
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<tbody>
<tr>
<td><strong>Behaviour indicator</strong></td>
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<tr>
<td>The cow is in a standing position (voluntary movements)</td>
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<tr>
<td>Weight transfer</td>
</tr>
<tr>
<td>Rest</td>
</tr>
<tr>
<td>When moving the cow from one side to the other</td>
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Note: “shift weight” and “rest” refer to voluntary movements; whereas “uneven” occurs when the cow is moved from side to side.
Method for assessing cows’ gait in loose housing when walking

1. Choose a suitable location. The most practical location is the transfer alley when cows are returning from the milking parlour.

2. Assess your cows’ gait. Note the cow’s identification number. Observe at least four strides of each cow and note the presence or absence of behaviours associated with lameness, such as limping, as shown in Table 1.

Assessing cow positions in a tiestall when it is standing

1. Encourage a cow to stand for three minutes before you begin the assessment.

2. Note the cow’s identification number.

3. Examine the front and back legs and note their position (see Table 2).

4. Gently push the cow from side to side. Watch how she shifts her weight from one leg to another. Repeat this process at least two or three times and record her positions, as shown in Table 2.

Tool is well received

If you want to further assess your cows’ comfort, the technology transfer tool used in the Dairy Research Cluster’s project and the FQRNT-Novalait-MAPAQ-AAFC project can help you accomplish this task. Producers tell us they like the tool and the results they received helped them make decisions about cow comfort. About 70 per cent of the producers we called back after our evaluation told the research team they had made changes on their farms to improve their cows’ comfort, extend their cows’ longevity, and better meet the requirements and recommendations in the code of practice.

If you’d like to learn more, visit the Producer Resources section of the dairy research website at www.dairyresearch.ca to download and read the measurement protocols.

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