

ontrolling Johne's disease has been a major Ontario dairy industry focus the last 3 ½ years. More than 150,000 cows have been tested for Johne's disease between January 2010 and May 2013 as part of the Ontario Johne's education and management assistance program.

Veterinarians and producers completed risk assessment and management plans (RAMPs) on tested farms. During that time, farmers received regular news through the program's website at www.johnes. ca, *The Milk Producer* and other publications.

So, what did we learn from all these RAMPs and Johne's tests? Is the RAMP useful? Did we learn more about

the farm practices that affect Johne's disease spread on Ontario dairy farms?

#### What was done in the study

Using the RAMP form, a vet and producer together evaluated the producer's farm biosecurity, calving area and



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calf management, weaned and bred heifer care practices, and cow housing facilities. They assigned a score to each area and gave the farm an overall score.

High RAMP scores indicated they identified increased risks that could

lead to Johne's disease spread on the farm. About 2,100 RAMP scores and their corresponding Johne's herd test results were summarized from the study. Researchers then compared the RAMP scores between positive and negative herds. For this study, a herd was considered positive if one or more cows had a positive test. Large farms often have different practices than small farms, so only farms that were similar in size were compared.

### What did we find?

The lowest or best dairy farm RAMP score was 26 and the highest was 250, with the average at 122. The overall RAMP score was likely to be higher on

a farm with Johne's positive cows than on a farm with mostly negative test results. A similar link was found between high RAMP scores and the herd's test results. In general, farms where more risky practices were identified on the RAMP had a greater

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chance of testing positive.

### **Risk factors linked with Johne's**

Buying cows or bulls from multiple herds was one of the biggest risk factors linked with being a Johne's positive farm. Larger herds were more likely to test positive. Having more than one cow in the calving area at a time also increased the risk of spreading Johne's within the farm. On the other hand, owners who fed artificial colostrum or colostrum from a single test-negative dam usually had fewer test-positive cows.

These results do not mean every large farm, or farms where a large percentage of cows are bought, has Johne's disease. However, such farms have a higher chance of testing positive for the disease.

## How can you reduce your herd's risk?

Study results suggest farmers should try to keep their herds closed to new cattle additions. This reduces the chance of buying an animal already infected with Johne's. Asking about a cow's health status and that of the source herd may also reduce this risk. This helps prevent bringing other diseases, such as bovine viral diarrhea, infectious bovine rhinotracheitis, bovine digital dermatitis, also known as strawberry foot rot, or *Staph. aureus* or *Mycoplasma* mastitis, onto the farm.

Reducing your newborn calves' exposure to an infected cow's manure, colostrum and milk are also good management practices. Having only one cow in the calving pen at a time and feeding low-risk colostrum, or colostrum only from the calf's own mother, will all reduce Johne's spread to calves. An infection can spread more easily when there are more animals in the herd. Therefore, farmers with large farms need to be extra careful with their biosecurity procedures and animal hygiene.

# What about your vet's recommendations?

After completing the RAMP, vets

normally gave one to three recommendations about specific ways to prevent Johne's disease. The vets used the RAMP to identify the best recommendations for Johne's prevention for each farm. The higher the risk score was for a certain question, the more likely it was the vet gave a recommendation on how to improve in that area.

# Is it important which vet does the RAMP?

The study showed some variation among vets in how they scored certain risk areas. This was influenced partly by the RAMP score and the recommendations the vet provided for the farm. This variability is an unintended effect and was not related to gender, years of practice or any other identifiable factor.

However, this variability means you should try to get the same veterinarian to do the RAMP on your farm in successive years. If another veterinarian is assessing the farm, a change in risk score might be due to a change in evaluator and not a true reflection of a change in management or Johne's control.

#### Conclusion

Based on these results, the study shows the RAMP is a valuable tool. It helped producers and vets find high-risk management areas for Johne's disease spread on dairy farms. The RAMP helps vets provide recommendations that fit a farm's unique situation.

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