



# Risks abated

## Maintain optimal reproductive performance by reducing your cows' metritis risk factors

**P**reventing uterine disease by ensuring a smooth, adequate transition period before and after calving will help reduce your herd's metritis risk and maintain reproductive performance.

A well-managed transition period of 60 days before and 60 days after calving can help reduce common risk factors, such as metabolic imbalances, and meet a cow's changing nutritional requirements.

An acute case of metritis can severely impair your cow's fertility, delaying subsequent calving by up to 30 days. Getting your cows back into a regular reproductive pattern, while contending with reduced milk production, can also result in significant financial loss.

University of Guelph researchers found certain factors—such as metabolic imbalances from cows spending more time milking than eating or retained placentas—dramatically increase a cow's risk of developing uterine disease when she calves.

Population medicine doctoral student Jocelyn Dubuc and Ontario Veterinary College professor Steven LeBlanc are studying 2,200 cows from six different herds in Ontario and New York to determine uterine disease causes, impacts and treatments.

The researchers followed the cows' progress from one week before calving, up to 300 days afterward. They found nearly 30 per cent of the cows developed uterine disease, mainly due to long-term metabolic imbalances. They also found nearly 10 per cent of cows with retained placentas were six

times more likely to develop uterine disease.

"We want to convince farmers to look at the broader economic picture of reproductive disease," says Dubuc. "It may not seem like a significant impact initially, but at the herd level, the costs of reproductive disease add up quickly depending on how many cows are affected."

A cow's uterus is exposed to germs and bacteria when she calves. Uterine disease usually occurs during a cow's open period, within the first 50 to 60 days after calving. A cow with the disease experiences increased days open, making her increasingly difficult to breed successfully. It also takes longer for her uterus to return to its normal size.

As well, a cow with long-term metabolic imbalances is 30 per cent more likely to develop metritis, because the imbalance creates an added strain on her immune system and leaves her uterus more susceptible to infection.

"We now understand better what risk factors are linked to metritis, how to better diagnose the disease and prevent it in the long run," says Dubuc.

There isn't one specific method to treat uterine disease, Dubuc adds. However, you should discuss these reproductive

problems with your veterinarian to determine potential treatments, he says. *YH*

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*Joey Sabljic is a student writer with the University of Guelph's office of research. Others involved in this research include professors Todd Duffield and Ken Leslie, department of population medicine, as well as professor John Walton, department of animal and poultry science. This research receives support from Pfizer Animal Health and the University of Guelph-Ontario Ministry of Agriculture, Food and Rural Affairs partnership.*



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