

NEW INSIGHTS INTO MASTITIS RISKS

FutureDairy research has revealed new insights into risks for clinical mastitis in dairy cows, and particularly those milked in a robotic or automatic milking system (AMS).

The risk of clinical mastitis increases with:

- Extended milking interval: risk increased if more than 15 hours between milkings.
- Milking speed: fast-milking increases risk.
- Low milk yield.
- Blood in the milk or higher milk conductivity.
- High somatic cell count.
- Cows in early lactation (especially 0-29 days after calving).
- Age of cow (number of previous lactations).

The analysis was based on data collected by FutureDairy's AMS and analysed by University of Queensland researchers Jade Hammer and John Morton.

Dr Kendra Kerrisk, FutureDairy AMS research leader said the study used data collected from individual quarters in cows' udders.

On most dairy farms, including research ones, data is collected from the udder of an individual cow. The AMS collects data from each individual quarter, giving researchers access to data not previously available.

"It's enabled us to take a different approach to investigating mastitis, and provided us with new insights," said Dr Kerrisk.

Within the individual cow, the study found there was not a greater risk for front or rear, left or right quarters.

"It was interesting to note the having mastitis previously in a particular quarter posed no greater risk of mastitis in the same quarter again," she said.

While the data was collected from an AMS, the findings could be relevant to all dairy cows, regardless of the type of dairy they are milked in.

"These are interesting insights that could eventually lead to new management systems where cows that are identified at higher risk of clinical mastitis, can be managed differently and possibly monitored more closely. But this is the first time we've taken this approach so there's a lot more work needed before we have a commercial application," she said.

FutureDairy is funded by Dairy Australia, DeLaval and Industry & Investment NSW (formerly DPI NSW) and the University of Sydney. This research is an example of dairy farmers' levy at work.

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FutureDairy's robotic milking system has given new insights into mastitis risks in dairy cows.