

# Understanding dairy farmers' thinking about antimicrobial use

Study finds most dairy farmers consider themselves below-average users of antimicrobials – perhaps incorrectly

By Caitlin Ford

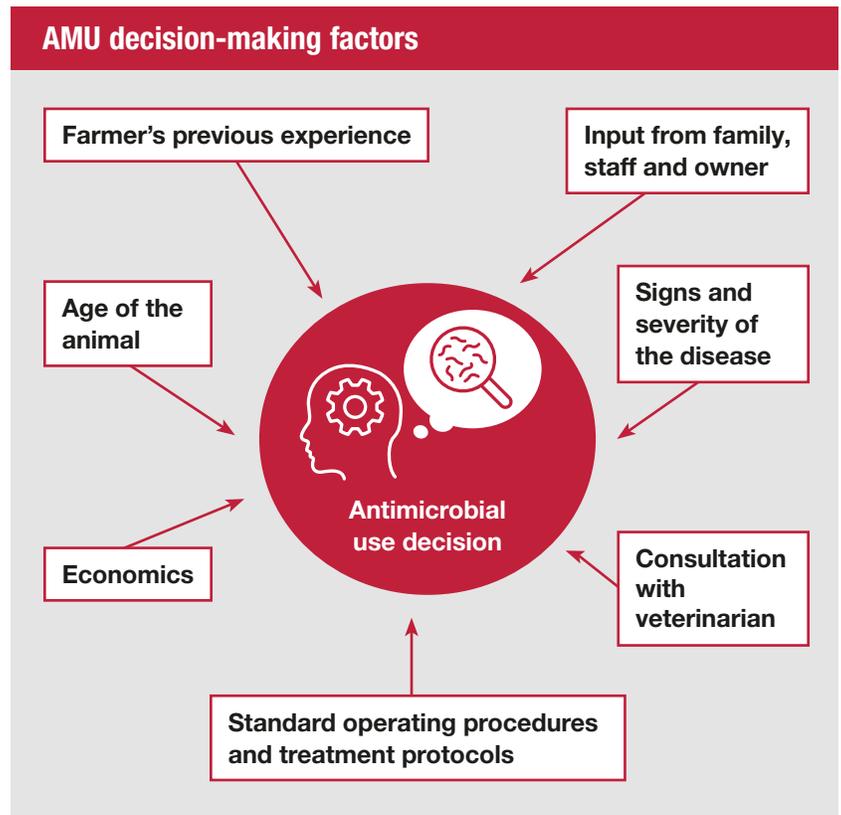
**W**ith growing scrutiny of the use of antimicrobials in food animals, a University of Guelph study provides insights into how dairy farmers make decisions about antimicrobial use (AMU).

The study—led by Dr. Stephen LeBlanc, a professor in the Department of Population Medicine at the Ontario Veterinary College, and post-doctoral researcher Dr. Claudia Cobo-Angel—enrolled 42 dairy farmers from Ontario and New Brunswick in focus groups to discuss their thoughts and practices on AMU.

The farmers discussed factors including the criteria they use to decide whether to treat sick calves or cows with antibiotics, how they select treatments, and how their veterinarian is involved. Many dairy farmers have limited awareness of how their AMU compares to that of other farms.

“We’re trying to better understand how dairy farmers make decisions about treating their cattle with antimicrobials,” said LeBlanc. “We will likely see stricter regulations in the future, so to develop rational programs to support antimicrobial stewardship, it’s important to understand the mindset of farmers. For example, if AMU driven by a sense of duty for animal care, that is different to concern about lost production.”

Many farmers have a small inventory of antimicrobial drugs, prescribed by their veterinarians, that they use to treat infections in their herds. LeBlanc says farmers are the front-line decision makers



for AMU.

“We found that most dairy farmers don’t think AMU is a problem on their farm. Most also consider their use to be below-average compared to other farmers, which isn’t always the case,” said LeBlanc. “Many farmers perceive AMU as a responsibility for the welfare of their animals—when their animals are sick, they treat them.”

Nevertheless, there are opportunities to be more selective with AMU. For example, calves with mild to moderate diarrhea need fluid therapy but usually don’t need antibiotics. Many cases of mild clinical mastitis don’t benefit from antibiotic treatment, especially if it’s a repeat case.

LeBlanc says the risk of antimicrobial resistance in cattle is low; however, overuse still needs to be addressed through farmer education programs and policy.

“Even though we’re not seeing antimicrobial resistance in the cows themselves, this issue is part of a bigger ecological picture,” he said. “Although the dairy industry’s role is relatively small, there is still a social responsibility to help reduce AMU without compromising animal health.”

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Further information on the study can be accessed in the journal **Frontiers in Veterinary Science**. For more information, contact Dr. Stephen LeBlanc, Department of Population Medicine, at [sleblanc@uoguelph.ca](mailto:sleblanc@uoguelph.ca).

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