

National approaches to reduce antimicrobial usage in dairy herds – Lessons learned in five European countries

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Introduction

The current societal focus on antimicrobial stewardship in agriculture has triggered countries worldwide to lower antimicrobial usage (AMU) in dairy herds. Given the difference in context in which dairy industries operate, there is a need for knowledge exchange regarding AMU reduction to further optimize national control programs.

Aim

This project describes the experiences from five European countries regarding national approaches to reduce AMU in dairy herds.

Methods

Representatives from Belgium, Denmark, the Netherlands, Sweden, and the United Kingdom exchanged practical and scientific knowledge regarding AMU reduction in a two-day workshop.

Results

In all five countries, AMU in dairy herds was mainly driven by udder health indications. National efforts to reduce AMU therefore focused on mastitis-related issues. A heterogeneity of national approaches to improve AMU existed because of countries' political, cultural, and organizational contexts. However, selective use of dry cow antimicrobials combined with a central database registering on-farm AMU to enable monitoring and benchmarking were or will be key drivers in all countries to reduce AMU. Some countries had a prolonged low AMU (Sweden), whereas others have improved considerably (the Netherlands) or initiated improvement programs only recently (Belgium/United Kingdom). Across various studies and datasets, deteriorations in animal health have not been observed. Antimicrobial resistance in mastitis-causing pathogens had not altered substantially with decreasing AMU on dairy farms. Reduction in AMU in dairy cows should therefore be initiated or continued from a prudent AMU perspective as well as from antimicrobial resistance and public health perspectives.

Conclusion

Although there are similarities between countries, this initiative identified that national approaches for lowering AMU in dairy herds were country-specific and suited to the context of each country's specific dairy industry. The five countries included in this comparison can serve as an example for other countries considering how to lower AMU in dairy herds.