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A simulation model for the spread of LA-MRSA within a pig herd

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Objectives
• Study the mechanisms of MRSA spread and persistence within a pig herd.
• Examine the short and long term consequences and cost-effectiveness of different control strategies.

Materials and methods
• Mechanistic Monte Carlo simulation in R.
• Parameterization by existing data, data harvested in other part of the OHLAM project and expert opinions.

Background
• Livestock-associated methicillin-resistant Staphylococcus aureus (LA-MRSA) is an opportunistic human pathogen.
• LA-MRSA has main reservoir in pigs, but it has also been isolated from other animals and the environment.
• In 2014, LA-MRSA was found in 68% (N=207) and 63% (N=70) of the Danish production and nucleus/multiplier herds.*

*Source: Danish Food and Veterinary Administration.

Possible influence of …

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