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TITLE

BIOCHECK.UGENT: A RISK BASED TOOL TO QUANTIFY THE LEVEL OF BIOSECURITY

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CONTENT

Objectives: A positive association between antimicrobial usage (AMU) and selection of antimicrobial resistance (AMR) has been proven in several studies. Antimicrobial stewardship in combination with optimal animal health will be key to slow down the resistance development. A perceived highly effective and feasible alternative to improve overall animal health and reduce the necessity of AMU is the improvement of the level of biosecurity. Biosecurity is as well an important measure to reduce the introduction and spread of epidemic and endemic diseases.

Materials & methods: To quantify the level of biosecurity Ghent University developed the online free available risk based tool Biocheck.UGent. From this system herds receive a score for their internal, external and overall level of biosecurity and areas for improvement are highlighted.

Results: At the moment almost 10000 registrations have been collected and the tool has been used in over 50 countries worldwide. The Biocheck.UGent is currently available for poultry and pig production and is soon for cattle production as well. Large variation between and within herds and countries, as well as room for improvement in the level of biosecurity has been seen in several studies making use of the biosecurity quantification capabilities of Biocheck.UGent. Associations of improved biosecurity levels with reduced AMU and increased production results were published in several publications. Improving the level of biosecurity can be economically beneficial as well, resulting in a net benefit of around 2 euro per finisher per year.

Conclusion: Improvement of the level of biosecurity fits into a holistic approach to tackle the world wide problem of antimicrobial usage and resistance and can help us to reduce the risk of introduction of epidemic diseases.