

Production of weaners with different levels of zinc oxide – a register based study from Denmark

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Background and objectives

The European Commission has adopted a ban on the medical use of zinc oxide for pigs by 2020. Zinc oxide is widely used in the Danish pig production to prevent diarrhea. Therefore, possible strategies for producing weaners while reducing the use of zinc oxide are highly needed. The objective of this study was to describe the prescription patterns and herd characteristics of Danish weaner herds with use of different levels of zinc oxide. Furthermore, the objective was to determine factors affecting the use of zinc oxide.

Materials and methods

Based on national register data from 2015 and 2016, prescriptions on zinc oxide and the number of animals in each herd, the herd-level use of zinc oxide was determined. The type and amount of antimicrobial products prescribed, as well as information on indication and administration route were used when describing the antimicrobial prescription patterns. Furthermore, herd size, herd type and purchases of vaccines were included in the description. Multivariable linear regression models were performed to determine the variables affecting the use of zinc oxide at herd level.

Results and Conclusions

In total, 415 Danish sow herds with weaners in 2015 and 2016 were included in the study. These herds used different levels of zinc oxide, and had data available on antimicrobial prescriptions and vaccine use. The impact of this study would be to supplement the practical approach of finding possible strategies for reducing the use of zinc oxide in the production of weaners. The results and conclusions of this study will be ready to present at Zero Zinc Summit 2019.