



## VETERINARY PUBLIC HEALTH

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### **SWEDISH PIG FARMERS' OPINIONS OF ON-FARM MEASURES TO IMPROVE PIG HEALTH AND REDUCE ANTIMICROBIAL USAGE**

A. Backhans<sup>1</sup>, M. Sjölund<sup>2</sup>, U. Emanuelson<sup>1</sup>, A. Lindberg<sup>2</sup>, V. Visschers<sup>3</sup>.

<sup>1</sup> Swedish University of Agricultural Sciences, Uppsala, Sweden; <sup>2</sup> National Veterinary Institute, Uppsala, Sweden; <sup>3</sup> University of Applied Sciences and Arts Northwestern Switzerland, Olten, Switzerland.

#### **Introduction**

In this survey, conducted within the MINAPIG project, we investigated how Swedish pig farmers would use antimicrobials in three different hypothetical scenarios, and explored their opinions on different preventive measures.

#### **Materials and Methods**

In a paper-and-pencil questionnaire, farmers were presented with three scenarios in which 10% of pigs showed symptoms of 1) neonatal diarrhoea, 2) diarrhoea in weaning pigs or 3) respiratory disease in fattening pigs (assessed on Likert scales). They were asked how, when and what animals they would treat. Additionally, they evaluated four preventive measures: vaccination, optimal stable climate, reduced stocking density and cleaning and disinfection on their current implementation or intention to do so, their perceived effectiveness for disease prevention, and their perceived costs (financially and labour). They were furthermore asked to estimate how much they could reduce their AM usage within the next five years.

#### **Results**

In all, 390 farmers (45%) completed the survey. For the proposed scenarios, 32% of the participants would always initiate AM treatments immediately to piglets and weaners and 15% to fatteners, whereas about 10% would always wait before initiating treatment. Approximately sixty-seven percent answered that they always treated only sick piglets, weaners and fatteners. An optimal stable climate was considered the most effective preventive measure followed by cleaning and disinfection, vaccination and reduced stocking density. Cleaning and disinfection was the most commonly used measure (87%) and optimal stable climate the most likely to be implemented (19%). The mean estimated possible reduction in AM usage the next 5 years was 18%.

#### **Discussion and conclusion**

The majority of farmers applied AM only to diseased pigs, which probably contributes to the overall low AM sales in Sweden. Farmers' positive attitude towards optimization of stable climate indicates this could be a feasible measure to improve health, and potentially reduce AM usage even further.