Assessing biosecurity knowledge and practices among Illinois swine producers

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Objective

There is a growing risk to the health and productivity of the Illinois and US swine population from foreign (e.g., African swine fever) and endemic (e.g., porcine reproductive and respiratory syndrome) infectious diseases. Effective on-farm biosecurity practices play a pivotal role in preventing these high-consequence pathogens from affecting swine farms. However, there is a gap in existing literature on biosecurity knowledge, awareness, and practices of Illinois swine producers. Additional research is warranted to identify these knowledge gaps and to assess Illinois swine producers' preparedness for a potential foreign animal disease outbreak. Focusing on this objective, our study assesses the knowledge and perception of Illinois swine producers related to foreign and endemic diseases and evaluates the biosecurity practices implemented on their hog farms.

Methods

An online questionnaire was designed using Qualtrics^{XM} software and was sent out via email to 406 swine producers that were registered with the Illinois Pork Producers Association.

Results

In total, 17 swine producers opened the questionnaire, out of which 13 producers (3.2 % of total producers) completed the survey and were included in this study. These 13 producers owned a total of 82 swine farms, distributed across Illinois. The preliminary analysis revealed that the most common business arrangement was the independent hog producer (54%) followed by contract hog producer (31%) and contractor/ integrator (15%). More than half of the producers (62%) either had a Secure Pork Supply Plan or have had a biosecurity assessment of their farms. Almost all swine producers (92.3%) reported that prevention of disease is the most cost-effective practice, and 85% of them spent between \$2-15 per hog annually for disease prevention and control methods on their farms.

Conclusions

Despite some biosecurity awareness among responders, the need for a biosecurity-related outreach program was evident from the survey results.

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