Illinois veterinarians' attitudes, knowledge, and practices toward biosecurity

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Objective
Biosecurity practices are crucial to prevent the spread of infectious diseases among animals and humans. Veterinarians play a vital part in implementing effective biosecurity methods in their practice and sharing biosecurity knowledge with their clients. There is a lack of information on Illinois veterinarians' perception, knowledge, and practices related to biosecurity. This study assessed the biosecurity practices of Illinois veterinarians employed in clinical practice and compared their biosecurity awareness and knowledge to veterinarians working in non-clinical settings.

Methods
All veterinarians registered with the Illinois State Veterinary Medical Association (ISVMA) were surveyed online between October- November 2021 using the Qualtrics[xm] software. Differences in Illinois veterinarians' biosecurity knowledge and practices were assessed using logistic regression models. A significant association was demonstrated using the Wald $\chi 2$ test with a P-value ≤ 0.05.

Results
In total, 104 veterinarians completed the questionnaire of which 88% were veterinarians in clinical practice, and 12% were in other work settings. Among clinical veterinarians, 88% worked with companion animals and 12% with farm animals (bovine and swine). Sixty-five percent of the respondents were females. Seventy percent of the clinical veterinarians had more than 15 years of experience. Among all veterinarians, the odds of having biosecurity training (OR=5.75; 95 % CI = 1.69-19.56) and knowledge of biosecurity guidelines (OR=4.81; 95% CI= 1.37-16.92) were significantly higher in non-clinical veterinarians. Within clinical veterinarians, farm animal veterinarians compared to companion animal veterinarians had significantly higher odds of having biosecurity training (OR=15.31; 95% CI=3.67-63.97) and knowledge of biosecurity guidelines (OR=7.49; 95% CI = 1.82-30.91).

Conclusions
Based on the study results, a gap in biosecurity knowledge was evident among companion animal veterinarians, suggesting a need for biosecurity training and educational program.

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