

Assessing biosecurity knowledge and practices among Illinois veterinarians

Effective biosecurity practices are important to protect animals and humans against infectious diseases. Veterinarians play an important role in implementing and communicating biosecurity knowledge and practices. No previous study has investigated the biosecurity perception, knowledge, and practices of Illinois veterinarians.

The study objectives are to assess the biosecurity practices of Illinois veterinarians working in clinical practice and compare their biosecurity perception and knowledge to Illinois veterinarians working in non-clinical settings.

An online questionnaire was designed using Qualtricsxm software and sent to all veterinarians registered with Illinois State Veterinary Medical Association. The survey was open for 2 months between October- November 2021. Logistic regression was used to identify the differences in Illinois veterinarians' biosecurity knowledge and practices. A statistically significant association was demonstrated using the Wald χ^2 test with a P-value ≤ 0.05 .

In total, 104 veterinarians completed the questionnaire of which 88% were veterinarians in clinical practice, and 12% were in other work sectors. 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. 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) was significantly higher in non-clinical veterinarians. Within clinical veterinarians, the 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) was significantly higher in farm animal veterinarians compared to companion animal veterinarians.

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.

Keywords: Veterinarian, Biosecurity, Infectious Disease

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