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RESOLUTION NUMBER: 22      APPROVED AS AMENDED

SOURCE:                      COMMITTEE ON ONE HEALTH

SUBJECT MATTER:            Canine Brucellosis and Human Health

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BACKGROUND INFORMATION:

Canine brucellosis, caused by *Brucella canis*, is a significant reproductive disease affecting all breeds of dogs. *B. canis* is one of three *Brucella* species with the greatest One Health relevance in the United States (US). The true prevalence of the disease in dogs is not well understood. Knowledge gaps exist regarding the human health impacts of and risk factors for *B. canis* infection, which necessitate further exploration of canine infection prevalence and dynamics. The bulk of the seroprevalence studies attempting to estimate the canine brucellosis seroprevalence in the US were performed in the 1970s and 1980s. Within the past 30 years, few studies have been conducted to evaluate disease occurrence in dogs and distribution in the US. Of the little research that has been performed, seroprevalence data has varied considerably within and between studies. For instance, in a recent study of shelter dogs in Mississippi, test prevalence by shelter ranged from 0-8.6%. A few additional studies have found widely varying seroprevalence among various populations of dogs such as noncommercial dog breeders, commercial dog breeders, free roaming stray dogs, and shelter dogs. Recent evidence indicates an increasing incidence of *B. canis*, at least within the dog breeding industry. This increased incidence adds to the urgency of assessing the current national *B. canis* burden in dogs and its impact on canine and human health. In concert with a comprehensive national strategy to understand canine *B. canis* seroprevalence and distribution, a better characterization of transmission among dogs and from dogs to humans is needed. The literature associated with transmission indicates there are several knowledge gaps and opportunities for further study. For instance, further investigation into the non-reproductive tract routes of transmission, the effect of neutering on infectiousness and susceptibility of dogs, and the role of puppies and asymptomatic dogs in transmitting disease have all been identified as areas that would benefit from more research.

RESOLUTION:

The United States Animal Health Association (USAHA) requests the Centers for Disease Control and Prevention, American Veterinary Medical Association (AVMA), and National Association of State Public Health Veterinarians collaborate on the following:

- 1) research to better understand the relationship between *Brucella canis* (*B. canis*) shedding and antibiotic treatment
- 2) identification of antimicrobial treatment options and associated risk of relapse which can better inform monitoring of cases
- 3) research focused on sero-positive canines and associated risks for zoonotic disease
- 4) the feasibility of a comprehensive national prevalence study and epidemiological assessment of canine brucellosis in the United States

USAHA also requests the AVMA engage Congress and stakeholders on the impacts of *B. canis* on human and animal health.