

INFECTIOUS DISEASES IN DOGS RESCUED DURING DOG FIGHTING INVESTIGATIONS

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Fighting dogs often receive minimal preventative health care and the potential for spread of infectious diseases is high. The purpose of this study was to describe the prevalence of infectious diseases in dogs rescued from fighting operations in order to guide medical protocols for short-term and long-term care.

A total of 269 dogs were seized by investigators and transported to a temporary animal shelter. Blood and fecal samples were obtained at the time of shelter intake. Testing performed included hematocrit, fecal flotation, *Giardia* antigen screening, *Babesia* PCR, and serology for heartworm antigen and antibodies against *Borrelia burgdorferi*, *Anaplasma*, and *Ehrlichia*.

32% of dogs were positive for *Babesia gibsoni*. Fleas were present on most dogs, but few ticks were identified. 29% of dogs carried one or more intestinal parasites. 38% of dogs were anemic (hematocrit < 35). There was no significant difference in the prevalence of anemia in *Babesia*-positive dogs (40%) compared to *Babesia*-negative dogs (37%) (P=0.6). 9% of dogs tested positive for heartworm antigen.

Dogs seized in a multi-state dog fighting investigation were infected with a variety of pathogens. Anemia was a common finding, likely due to both parasitism and *B. gibsoni* infections. Empirical treatments for all dogs should include broad-spectrum internal and external parasiticides along with monitoring for development of anemia. Case responders should be prepared for mass screening and treatment of *B. gibsoni* and heartworm infections and should implement protocols to prevent transmission of infectious and zoonotic diseases in the shelter and following adoption.