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Prevalence of *Ehrlichia canis*, *Anaplasma platys*, *Babesia canis vogeli*, *Hepatozoon canis*, *Bartonella vinsonii berkhoffii*, and *Rickettsia* spp. in dogs from Grenada.

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To identify the tick-borne pathogens in dogs from Grenada, we conducted a serologic survey for *Ehrlichia canis* in 2004 (104 dogs) and a comprehensive serologic and molecular survey for a variety of tick-borne pathogens in 2006 (73 dogs). In 2004 and 2006, 44 and 32 dogs (42.3% and 43.8%) were seropositive for *E. canis*, respectively. In 2006, several tick-borne pathogens were identified by serology and PCR. DNA of *E. canis*, *Anaplasma platys*, *Babesia canis vogeli*, *Hepatozoon canis*, and *Bartonella* sp. were identified in 18 (24.7%), 14 (19.2%), 5 (7%), 5 (7%), and 1 (1.4%) dogs, respectively. Six (8.2%) dogs were seropositive for *Bartonella vinsonii* subsp. *berkhoffii*. All dogs were seronegative and PCR-negative for *Rickettsia* spp. Coinfection with two or three pathogens was observed in eight dogs. Partial 16S rRNA *E. canis* and *A. platys* sequences were identical to sequences in GenBank. Partial 18S rRNA gene sequences from the Grenadian *H. canis* were identical to each other and had one possible mismatch (ambiguous base) from *H. canis* detected from Spain and Brazil. Grenadian *B. c. vogeli* sequences were identical to *B. c. vogeli* from Brazil and Japan. All of the detected pathogens are transmitted, or suspected to be transmitted, by *Rhipicephalus sanguineus*. Results of this study indicate that dogs from Grenada are infected with multiple tick-borne pathogens; therefore, tick-borne diseases should be included as differentials for dogs exhibiting thrombocytopenia, leukopenia, fever, or lethargy. One pathogen, *E. canis*, is also of potential public health significance.