

## News &amp; Comments

## Prevalence and Risk Factors for *Bartonella* spp. and *Haemoplasma* Infections in Cats from Greece

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Vector-borne illnesses with a significant zoonotic influence on the health of domestic cats include *bartonellosis* and *haemoplasmosis*. *B. henselae*, the primary cause of cat-scratch disease in humans, is the most prevalent species that infects cats. Cats are most usually infected via flea bites (*Ctenocephalides felis*) or faeces, with rare instances of hostile cat interactions. With a total of four recorded investigations for both illnesses, there is a dearth of information available on the epidemiology of *Bartonella* spp. and hemoplasma species in cats from Greece. This study's objective was to outline the epidemiological characteristics of distinct cat populations that have been exposed to *Bartonella* spp. or a hemoplasma species.

The Animal Ethics Committee of the Faculty of Veterinary Science, University of Thessaly, examined and approved the study protocol. No matter how healthy they were, cats that met the two requirements were sequentially enrolled for the serological detection of *B. henselae* IgG antibodies. Using a randomization table, cats were chosen at random from the initial enrolment of cats for the molecular identification of *Bartonella* spp. and hemoplasma species. Jugular venipuncture was used to obtain a total of 5 mL of blood from adult cats and 3.5 mL from young kittens. Two EDTA-anticoagulated tubes were successively filled with one millilitre of blood. The ad hoc laboratory investigation of previously published data served as the foundation for the validation of the PCR assays employed in the study.

The prevalence of the hemoplasma species discovered here by PCR is comparable to the findings of a prior prospective study conducted on cats from Greece, where the prevalence was estimated to be 20.6%. A seroprevalence of *B. henselae* was reported to be just 4% in another Greek investigation that examined *Leishmania infantum* infection in 50 clinically healthy cats and 50 sick cats. A seroprevalence of *B. henselae* of 58.8% was found more recently in a study looking into the presence of zoonotic parasites and vector-borne illnesses in stray cats residing parts of Greece. In comparison to cats that had previously received ectoparasiticide treatment, cats who had not been on a preventative ectoparasiticide were more likely to test positive for *haemoplasmas* by PCR.

According to this investigation, hemoplasma species infections and seropositivity for *B. henselae* were both quite prevalent. The findings of this study suggest that cats with flea infestations and cats with partial or exclusive outdoor access are more likely to be seropositive for *B. henselae*. Additionally, cats living in warmer climates like Attica and Crete are more likely to be seropositive for *B. henselae*. A



risk factor for haemoplasma species PCR positivity was determined to be the absence of ectoparasiticide use.

Source: [Veterinary Sciences](#)

**KEYWORDS**

Feline, molecular, prevalence, risk factors, serology, vector-borne

