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Under
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Concept

Book of Abstracts

Serological evidence of *Coxiella burnetii* exposure in hunting dogs in Portugal

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Coxiella burnetii is a γ -Proteobacteria that is the etiologic agent of Q fever, a worldwide zoonosis. The role of dogs in the transmission of *C. burnetii* to humans is uncertain, and extensive seroprevalence studies of dogs have previously not been conducted in Portugal. A serologic survey was conducted for antibodies to *C. burnetii* in a sample of 90 hunting dogs from east-central Portugal, namely the municipalities of Proença-a-Nova and Castelo Branco, during the hunting season of 2021. Only adult dogs were sampled. Antibodies specific to *C. burnetii* were detected with a commercial enzyme-linked immunosorbent assay (ELISA; IDVet®, Montpellier, France) according to the manufacturer’s instructions. The seroprevalence of *C. burnetii* infection was 3.33% (n = 3; 95% confidence interval [CI]: 0.69–9.43%). Antibodies against *C. burnetii* were detected in 2/50 of dogs from Proença-a-Nova (4.0%; 95% CI: 0.49–13.71%) and 1/40 of dogs from Castelo Branco (2.5%; 95% CI: 0.6–13.16%). Results of the present study indicate that antibodies against *C. burnetii* were present in dogs in east-central Portugal. These findings will help local health authorities to focus on the problem of *C. burnetii* in carnivores and facilitate the application of a One Health approach to its prevention and control.

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