

## Seroprevalence of *Neospora caninum* in dogs from Khorramabad and Kermanshah, west of Iran

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### Abstract

Neosporosis has a global distribution and a great impact on the dairy cow industry. This study was aimed to determine seroprevalence and risk factors of *Neospora caninum* infection in owned and homeless dogs from Khorramabad and Kermanshah areas, west of Iran. A total number of 120 dogs (60 from Khorramabad and 60 from Kermanshah) were randomly selected. Blood samples were taken from cephalic vein and sera were analyzed for detection of anti-*N. caninum* antibodies using *Neospora* modified agglutination test (N-MAT). Of all, 18 (15%) of the examined dogs were infected with *N. caninum*. The seroprevalence of infection was higher in Kermanshah (16.66%) than in Khorramabad (13.33%). There was no significant difference in the seroprevalence among household dogs (27.27%), farm dogs (16.66%), and homeless dogs (12.65%). It is critical in these areas to implement the necessary measures to control the parasite and manage the population of dogs with *N. caninum* infection.

**Key words:** *Neospora caninum*, Seroprevalence, Dog

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