

COINFECTION OF *LEPTOSPIRA* SPP AND *TOXOPLASMA GONDII* AMONG STRAY DOGS IN BANGKOK, THAILAND

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Abstract. Leptospirosis and toxoplasmosis are zoonotic diseases with global importance. Asymptomatic animals harboring these pathogens may act as carriers to other animals including humans. The objective of this study was to investigate the seroprevalence of *Leptospira* and *Toxoplasma* infections in stray dogs in Bangkok. A total of 230 stray dogs from monasteries in a Bangkok district were examined for specific antibodies to *T. gondii* and *Leptospira*. The seroprevalence of *T. gondii* was determined by a modified latex agglutination test (cut off 1≥64). A microscopic agglutination test was performed to detect antibodies to *Leptospira* (cut off, 1:100). The seroprevalences of *T. gondii* and *Leptospira* were 10.9% (25/ 230) and 83.5% (192/230), respectively. *Leptospira* serovar *bataviae* was the most predominant (20.3%) serovar. Co-infection with *Leptospira* and *Toxoplasma* was found in 22 dogs (9.6%). The prevalence of *Toxoplasma* in females was significantly higher than in males ($p<0.05$), but no significant differences was observed for *Leptospira*. The high seroprevalence of these two diseases in dogs is of public health concern because close contact between dogs and humans may provide a link between a reservoir in the environment and susceptible humans.

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