

Gastrointestinal parasite infection in dogs from two shelters

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Parasitic diseases have a negative impact on the health of dogs. The infection course is often asymptomatic. Sometimes they also present a danger to humans as a source of zoonoses. The study included two populations of dogs kept in shelters (shelter 1, n=100; shelter 2, n= 87). The animals were kept in pens. Upon arrival to the shelter they were quarantined and dewormed. During the year, the dogs were dewormed twice, with an extra deworming in the case of poor animal condition for unknown reasons. Faeces taken from the dogs were examined using the McMaster method with centrifugation, with glucose and NaCl used as flotation fluid.

In shelter 1, few parasites were found (prevalence of infection was not higher than 4%). Oocysts of coccidia, and eggs of the tapeworms and nematodes *Ancylostoma caninum*, *Trichuris vulpis* and *Toxocara canis* were found.

Dogs from shelter 2 were often infected with parasites. Among the identified parasites, nematodes were commonly reported: *Trichuris vulpis* (43.7%), *Ancylostoma caninum* (35.6%) and *Toxocara canis* (19.5%). Tapeworms occurred in 8% of dogs, protozoa (Coccidia) were found in 10.3%.

Dogs from shelter 1 were held in modern spaces. Pens with a concrete floor were washed daily. Animals had no contact with each other, except for those which lived in the same pen. The location of shelter 2 favored the transmission of parasites. The pens had wooden floors, which makes it difficult to maintain appropriate hygiene and sanitary conditions. The shelter was located in a wetland area near the forest. The dogs could communicate with each other; and had opportunity to go for walks with volunteers.

The level of parasitic infection of dogs in Poland has been declining in recent years as a result of greater knowledge of the parasitic diseases occurring in or transmitted by companion animals.

This research was financed by the Ministry of Science and Higher Education of the Republic of Poland.