

Parasite Prevalence in Feline Feces

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In the Literature

Nagamori Y, Payton ME, Looper E, Apple H, Johnson EM. Retrospective survey of parasitism identified in feces of client-owned cats in North America from 2007 through 2018. *Vet Parasitol.* 2020;277:109008.

FROM THE PAGE ...

Feline parasitism not only has the potential to produce disease and unthriftiness in cats but can also cause zoonotic disease in humans (eg, ocular or visceral larval migrans, toxoplasmosis). Therefore, identifying the prevalence and types of parasites seen in cats can be beneficial.

The objective of this retrospective study was to comprehensively evaluate the prevalence and trend of parasitism in client-owned cats over a 12-year period. Results of fecal examinations performed at 2 locations between 2007 and 2018 were evaluated. Results came primarily from the examination of centrifugal flotation with either Sheather's sugar or zinc sulfate solutions but also included saline direct smears, sedimentation, and Baermann tests. Of the 2,586 samples tested, parasites were observed in 24.5% of samples, with multiple parasites identified in 5.7% of samples. Twenty-three different types of parasites were identified, with the most common being *Cystoisospora* spp (9.4%), *Toxocara cati* (7.8%), *Giardia* spp (4%), *Alaria* spp (3.5%), *Ancylostoma* spp (1.2%), taeniid (1.2%), *Dipylidium caninum* (1.1%), and *Eucoleus* (syn *Capillaria*) *aerophilus* (0.7%). A significant difference in prevalence was identified between age categories, with the youngest group (<6 months of age) having the highest infection rate (ie, 41%). Prevalence of parasites decreased in each subsequent older age group. The prevalence of *Cystoisospora* spp and *T cati* increased in summer months through fall; this seasonality is likely due to the litters of kittens born in spring and summer. The prevalence rate of parasitism increased over the 12-year period.

... TO YOUR PATIENTS

Key pearls to put into practice:

- 1** Although fecal flotation is the most common method of parasitism testing, it is not always the best technique for all parasites. Heavy trematode eggs do not reliably float and are better identified through fecal sedimentation. The Baermann technique is the best test for identifying lungworm larvae. Fecal flotation techniques also differ in their ability to reveal various ova and protozoa; the specific gravity of the solution affects the variety of ova and protozoa that float and can also cause distortion, making them harder to detect, and centrifugal flotation is more sensitive than passive flotation.² The type of test should be selected based on the patient's history and expected findings.
- 2** Review of medical records in this study revealed that all cats positive for the rare parasites *Trichuris felis* and *Platynosomum fastosum* had recently moved from the Caribbean. When animals are imported from outside the United States or travel with their owners, they may transport exotic diseases. Therefore, clinicians should be familiar with nonendemic parasites to avoid overlooking or misdiagnosing them.
- 3** This study showed that the prevalence rate of feline parasitism continued to increase over the 12-year study period. Along with owner education and year-round, broad-spectrum parasite control, it is vital that clinicians continue to conduct parasite testing and treatment, especially in kittens and young cats.

References

1. Ballweber LR, Beugnet F, Marchiondo AA, Payne PA. American Association of Veterinary Parasitologists' review of veterinary fecal flotation methods and factors influencing their accuracy and use—is there really one best technique? *Vet Parasitol.* 2014;204(1-2):73-80.
2. Little S, Adolph C, Downie K, Snider T, Reichard M. High prevalence of covert infection with gastrointestinal helminths in cats. *J Am Anim Hosp Assoc.* 2015;51(6):359-364.

Suggested Reading

American Association of Veterinary Parasitologists. *Veterinary Clinical Parasitology*. Zajac A, Conboy GA, eds. 8th ed. Wiley-Blackwell; Chichester, UK; 2012.

Samples OM. Diagnosis of internal parasites. *Today's Veterinary Practice* website. <https://todaysveterinarypractice.com/todays-technician-diagnosis-of-internal-parasites>. Published July/August 2013. Accessed April 15, 2020.

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