

Protection against worm infection is essential to keeping cats (and dogs) and their families healthy. Deworming is a key part of responsible pet ownership. In some parts of Europe, large roundworms (ascarids) and heartworm have a high prevalence and can cause severe disease in cats. The roundworm *Toxocara cati*, the most common worm in cats, also poses a zoonotic risk.

T. cati is found all over Europe, with significant prevalence.^{1,2} Cats become infected via the ingestion of larvae in their mother's milk, in infected rodents or undercooked meat and/or via the ingestion of infective eggs from the environment.¹ Infection of humans (with *T. canis* or *T. cati*) can occur following ingestion of infective eggs from the environment or eating undercooked meat containing larvae and can have serious consequences for human health not only if the larvae begin to migrate within the body (larva migrans complex)¹ but also because there appears to be a significant association between seropositivity and enhanced allergic manifestations (atopic disease including asthma) in predisposed individuals.³

Heartworm is the adult of the filarial worm *Dirofilaria immitis*, which resides in the heart or adjacent large blood vessels. Heartworm is spread by mosquitoes from infected dogs to other dogs and cats. Heartworm infection is found mainly in southern and southeastern countries in Europe, such as France, Greece, Italy (highest prevalence), Portugal, Romania, Slovenia and Spain.^{1,4} Spread of heartworm disease is occurring due to a number of factors including climate change and pet travel.^{1,4}

Tapeworm infection is far less common in cats, with the flea-transmitted dog tapeworm (*Dipylidium caninum*) being

INDIVIDUALIZED DEWORMING FOR CATS BASED ON AGE, CATLIFESTYLE AND RISK OF INFECTION¹

INDOOR	OUTDOOR
No contact with pets that do not live in same household	Spends time outside, has direct contact with pets from other households and/or uses the same outdoor 'toilet' area
Unlikely to hunt or eat prey Not fed undercooked or raw meat	Hunts and eats prey Fed undercooked or raw meat
Infection pressure LOW	Infection pressure HIGH
Roundworm treatment 1-2x per year ^a	Roundworm treatment at least 4x per year ^a Tapeworm treatment at least 4x per year ^{a,b}

- ^a Fecal examination and treatment based on findings is also appropriate.
- ^b Test cats that that hunt and consume rodents regularly for *Taenia* taeniaformis infection every 2-3 months (eggs may be seen in feces but are not shed consistently). Treat if necessary.

the most common.^{1,2} Cats are infected when they swallow infected fleas. Cats are seldom infected with the fox tapeworm (*E. multilocularis*).¹ This means that cats do not play an epidemiologically significant role in the spread of tapeworms that pose a risk to human health.¹

Where roundworm is the primary concern, the European Scientific Counsel Companion Animal Parasites (ESCCAP) recommends that routine deworming should be administered at least four times a year for adult cats that are housed outside or have access to the outdoors. Kittens should be treated for roundworms every 2 weeks from 3 weeks of age until 2 weeks after weaning and then every 4 weeks until 6 months old. Effective flea control may help to prevent infection with the flea-transmitted tapeworm (*D. caninum*). In areas where *D. immitis* is endemic heartworm prevention should be administered during the season when the mosquito vector is active (e.g. April to October).

ASK US ABOUT THE LATEST INNOVATION IN FELINE PARASITE PROTECTION!

REFERENCES:

1. ESCCAP (www.esccap.org). In, Guideline 01 Worm Control in dogs and cats 6th Edition February 2020 https://www.esccap.org/uploads/docs/2fe4poh6_0778_ESCCAP_Guideline_GL1_v10_1p.pdf. 2. Beugnet F, Bourdeau P, Chalvet-Monfray K, et al. Parasites of domestic owned cats in Europe: Co-infestations and risk factors. *Parasites & Vectors*. 2014;7:291. 3. Pinelli E, Dormans J, van Die I. Toxocara and Asthma. In, Toxocara: the Enigmatic Parasite, Eds CV Holland, HV Smith, CAB International. 2006, pp. 42-57. 4. Morchón R, Carretón E, González-Miguel J, et al. Heartworm Disease (*Dirofilaria immitis*) and Their Vectors in Europe – New Distribution Trends. *Front Physiol*. 2012;3:196.

