

TABLE 1.1
Emerging Parasites of Greatest Concern

Parasite name	Type of parasite	Primary hosts	Distribution in North America ^a	Transmission route	Site of infection	Zoonotic
<i>Ancylostoma caninum</i> [multiple anthelmintic drug resistance (MADR)] ^a	Nematode	Canids	Scattered across the United States and Canada	Transmammary; ingestion or transdermal penetration of infectious larvae	Intestinal tract	Yes—cutaneous larva migrans Reportable or notifiable^b: No
	Treatment recommendation: Triple combination deworming with benzimidazole, ML, and pyrantel					
<i>Baylisascaris procyonis</i> ^b	Nematode	Raccoons, occasionally dogs	Widespread across the United States and Canada	Ingestion of larvated eggs or tissues of paratenic hosts (rabbits, rodents, and birds) containing larvae	Small intestine and occasional systemic infections in dogs	Yes—ocular, visceral, and neural larva migrans Reportable or notifiable^b: No
	Treatment recommendation: Dogs: Fenbendazole, milbemycin oxime, moxidectin, and pyrantel pamoate					
<i>Cercopithifilaria bairae</i> ^c	Nematode	Dogs and various wildlife	Scattered throughout the United States	<i>Rhipicephalus sanguineus</i> (brown dog tick)	Superficial dermal tissues and subcutaneous tissues	No Reportable or notifiable^b: No
	Treatment recommendation: ML (topical moxidectin)					
<i>Cochliomyia hominivorax</i> ^{d,e,f}	Fly larvae	Any	Reemergence in 2026 in the United States and imported dogs anywhere in the United States and Canada	Adult female flies lay eggs in open wounds	Any open wound	Yes Reportable or notifiable^b: Yes
	Treatment recommendation: Remove larvae from wound(s); administer ML, nitenpyram, or an isoxazoline (all extralabel drug use)					
<i>Dipylidium caninum</i> (praziquantel resistant) ^g	Cestode (tapeworm)	Dogs and cats	Occasionally diagnosed across the United States	Ingestion of infected arthropod intermediate host (fleas most common)	Intestinal tract	Yes Reportable or notifiable^b: No
	Treatment recommendation: Pyrantel/praziquantel/oxantel, or nitroscanate (when available)					
<i>Dirofilaria immitis</i> (ML LOE populations) ^{h,i}	Nematode	Dogs, some wild canids, cats, wild felids, and ferrets	Distributed throughout North America with focal “hotspots” (e.g., southeastern United States, particularly the Lower Mississippi River Valley)	Mosquito vector and intermediate host	Pulmonary arteries and heart	Yes—rarely Reportable or notifiable^b: No
	Treatment recommendation: Dogs: Melarsomine (AHS protocol)* Cats: No adulticide treatment; manage symptoms and prescribe ML					

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TABLE 1.1, CONTINUED
Emerging Parasites of Greatest Concern

Parasite name	Type of parasite	Primary hosts	Distribution in North America ^a	Transmission route	Site of infection	Zoonotic
<i>Echinococcus</i> spp. ^{i,k} <i>E. granulosus</i> (EG) <i>E. canadensis</i> (EC) <i>E. multilocularis</i> (EM)	Cestode (tapeworm)	Wild and domesticated dogs (EG, EC, EM), and cats (EM)	Alaska, Canada, northern and upper Midwest United States	Dog as DH: Ingestion of infected intermediate host (sheep, goats, pigs, camels, cervids [EG and EC]; voles, lemmings, rodents [EM])	Dog as DH: Small intestine	Yes—cystic echinococcosis (EG, EC) and alveolar echinococcosis (EM) Reportable or notifiable^l: May be required in some regions
				Dog as IH (EM): Ingestion of fresh eggs	Dog as IH (EM): liver or other viscera	
Treatment recommendation: Praziquantel for intestinal adult stage; albendazole +/- surgical resection for larval stage (alveolar echinococcosis)						
<i>Haemaphysalis longicornis</i> ^l	Tick	Various wild and domestic animals, and humans	Eastern half of the United States, but spreading westward rapidly	Direct transmission following interaction with infested environments	Skin	Yes Reportable or notifiable^l: No, but USDA should be alerted
						Treatment recommendation: Approved dog or cat isoxazoline or pyrethroid-containing product
<i>Heterobilharzia americana</i> ^m	Trematode (flake)	Raccoons, occasionally dogs	Primarily southern United States, but cases are increasing across the United States	Penetration of dog’s skin by cercariae during contact with freshwater sources where intermediate hosts (freshwater snails) are present	Mesenteric vasculature	Yes—localized dermatitis, “swimmer’s itch” Reportable or notifiable^l: May be reportable locally
						Treatment recommendation: Combination of praziquantel and fenbendazole at higher dose and frequency than for other indications
<i>Trypanosoma cruzi</i> ⁿ	Protozoa	Dogs, cats, humans, horses, and other domestic and wild mammals	Primarily southern United States, but spread of vector (<i>Triatoma</i> spp.) suggests potential expansion	Introduction of infected kissing bug (<i>Triatoma</i> spp.) feces into a bite site or mucous membrane; ingestion of infected bugs; vertical transmission; contaminated blood transfusion	Myocardium	Yes Reportable or notifiable^l: May be reportable locally
						Treatment recommendation: Benznidazole or a combination of amiodarone and itraconazole

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TABLE 1.1, CONTINUED
Emerging Parasites of Greatest Concern

*Disclaimer for Geographic Distribution: Information on geographic distribution may continue to change. Please refer to external resources such as CAPC, AHS, USDA, and CDC for United States updates, and CAPC and CPEP for Canada.

†Even if a disease is not reportable, individuals identifying these organisms are encouraged to promptly communicate findings to local animal and (as applicable) human health entities to enhance surveillance and control activities. Reporting requirements may change over time; consult local, state, and federal public health resources.

AHS, American Heartworm Society; CAPC, Companion Animal Parasite Council; CDC, Centers for Disease Control; CPEP, Canadian Expert Parasitology Panel; DH, definitive host; EG, *Echinococcus granulosus*; EC, *Echinococcus canadensis*; EM, *Echinococcus multilocularis*; IH, intermediate host; LOE, lack of efficacy; MADR, multiple anthelmintic drug resistance; ML, macrocyclic lactone; USDA, US Department of Agriculture.

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2026 AAHA One Health Guidelines: Emerging Concerns in Canine and Feline Parasitology are available at aaha.org/one-health-parasitology

These guidelines were prepared by a Task Force of experts convened by the American Animal Hospital Association (AAHA) and were subjected to a formal peer-review process. This document is intended as a guideline only, not an AAHA standard of care. These guidelines and recommendations should not be construed as dictating an exclusive protocol, course of treatment, or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to each individual practice setting. ©2026 AAHA.

