

Disease Name:	Hookworm
Agent:	<i>Ancylostoma caninum</i> , <i>A. braziliense</i> , <i>A. tubaeforme</i> , <i>Uncinaria stenocephala</i> <i>A. caninum</i> (dogs), <i>A. braziliense</i> (dogs & cats), <i>A. tubaeforme</i> (cats), <i>Uncinaria stenocephala</i> (dogs and cats). <i>Ancylostoma caninum</i> is the most likely to cause disease.
Clinical Signs:	Animals - Can cause black, tarry diarrhea and severe blood loss (anemia) which can be fatal in puppies. Adult dogs that are sickly and malnourished are also commonly affected, but infections in adults are typically asymptomatic. Can also occasionally cause footpad dermatitis in adult dogs from very contaminated environments. Humans – Depends on what organs the larvae migrate to. Some worms can penetrate more than one region of the body.
Susceptible domestic species	Dogs and (less commonly) cats.
Prevalence:	Very common and widespread in dogs. One study showed that 20% of shelter dogs were shedding hookworm eggs. Infection is most common in puppies during the first few weeks of life, but infection is also common in adults. <i>A. caninum</i> is the most common.
Zoonotic?	Yes. Can cause cutaneous larval migrans (migration through the skin, also called “creeping eruption”) in humans.
Diagnostic tests:	Fecal float
Test sensitivity (false negatives)	Moderate. False negatives are not uncommon. Heavily-infected animals may show clinical signs before eggs are shed in the feces. In low-level infections, eggs may be shed intermittently.
Test specificity (false positive)	False positives uncommon
Vaccine available?	No
Excreted in :	Feces, milk (dogs)
Mode of transmission:	Fecal-oral, transmammary (during nursing – dogs only), percutaneous (skin penetration by larvae), ingestion of animals (insects, rodents) that have ingested hookworm eggs.
Disinfection	Eggs are less resistant than those of roundworms. Most hookworm eggs are destroyed by freezing, drying, and temperatures over 38°C. Bleach (three cups per gallon of water) will kill hookworm larvae on cement. Contamination of the environment can be reduced by prophylactic treatment of susceptible animals and by removing feces daily (since eggs can become infective in just two days).
Incubation	10-14 days, but can vary with age, stress, malnutrition, and other disease. Puppies frequently become ill at 1-3 weeks of age.
Post-recovery shedding	Yes. Most animals that are shedding are asymptomatic.
Carrier state?	Yes, asymptomatic animals may shed hookworm eggs for prolonged periods.
Prepatent	Time between infection and shedding of eggs = 2-4 weeks (shorter if eggs are ingested, longer if

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period:	infection acquired via larval penetration of skin). Eggs become infective 2-8 days after they are shed.
Treatment:	All puppies should be treated for hookworms every two weeks starting at 1-2 weeks of age until they are 12 weeks old. Pregnant and nursing bitches should also be treated to minimize transmission to their offspring. Prophylactic treatment of all shelter dogs and cats is suggested. Severely malnourished animals may require re-treatment. Effective treatments include the following drugs: Pyrantel pamoate (Strongid®), pyrantel is also an ingredient in the following products: Drontal®, Drontal Plus®, HeartGard Plus®), Fenbendazole (Panacur®), Febantel (Milbemycin, Interceptor®, an ingredient in Sentinel®).
PPE Required	Gloves, gown, impermeable shoe covers