ONTARIOSPCA AND HUMANE SOCIETY

Disease Name:	Roundworms, Ascaridiasis
Clinical Signs:	Animals - Most commonly asymptomatic. In puppies and kittens, there may be vomiting, diarrhea, painful potbellies, poor weight gain, poor haircoat and coughing. Death can occur in severe cases (more common in puppies than kittens).
	Humans - Depends on what organs the larvae migrate to. Some worms can penetrate more than one region of the body.
Agent:	Toxacara canis (dogs), Toxacara cati (cats), Toxascaris leonina (dogs and cats). Toxacara spp. are more common than Toxascaris.
Prevalence:	Common and widespread. Infection is most common in puppies and kittens in the first few months of life and in pregnant and nursing females. The vast majority of puppies and kittens are infected, and should be routinely treated, regardless of fecal float results. One study showed that 14.5% of shelter dogs were shedding T. canis eggs. T. cati is the most common worm in cats. Roundworms are more common in adult cats than in adult dogs.
Susceptible domestic species:	Dogs and cats. There are many other species of roundworms that infect other species, but the species listed above are limited to dogs and cats. Baylisascaris is a roundworm of raccoons which occasionally infects dogs, and has serious zoonotic potential.
Zoonotic?:	Yes. Can cause visceral and ocular larval migrans in humans (migration through the internal organs or eyes, which may lead to organ damage and blindness). Baylisascaris can cause visceral, ocular, or fatal neural larval migrans (migration in the brain) in humans.
Diagnostic tests:	Fecal float (identification of eggs).
Test sensitivity (false –ve):	False negatives common, especially in puppies and kittens. Puppies and kittens should be treated routinely, regardless of fecal exam results.
Test specificity (false +ves):	False positives uncommon
Vaccine available?	No
Excreted in:	Feces, milk. Adult dogs are much less likely to shed eggs than puppies. Adult dogs are also less likely than adult cats to shed roundworm eggs.
Mode of transmission:	Fecal-oral, transplacental (from mother during pregnancy) in puppies, transmammary (via nursing) in kittens and puppies, ingestion of animals (e.g. rodents) that have ingested roundworm eggs.
Disinfection	Eggs are extremely resistant to disinfection. They can persist in soil for years. Contamination of the environment can be reduced by prophylactic treatment of susceptible animals and by removing feces immediately (since it takes eggs one week to become infective).
Incubation	Most puppies are infected at birth, kittens become infected within 1-3 weeks of birth.
Prepatent period:	Preparent period (amount of time between infection and shedding of eggs) = three weeks. For some roundworm species, the preparent period is longer (8-10 weeks).
Carrier state?	Yes. Asymptomatic animals can shed eggs for prolonged periods, but this is more common in young cats and dogs, and much less common in adult dogs.



Treatment:	Effective treatments include the following medications. Fenbendazole (Panacur®) contains febantel, which is also an ingredient in Drontal Plus®. Pyrantel pamoate (Strongid®) contains pyrantel, and is also an ingredient in Drontal®, Drontal Plus® and HeartGard Plus®.High-dose ivermectin products include Milbemycin Interceptor®, an ingredient in Sentinel®, Selamectin (Revolution® - in cats only). All puppies and kittens should be treated for roundworms every 2-3 weeks starting at 2-3 weeks of age until they are 12-16 weeks old. Pregnant and nursing mothers should also be treated to minimize
	transmission to their offspring. Prophylactic treatment of all Shelter dogs and cats is suggested.
PPE Req'd	Gloves, gown, impermeable shoe covers