

## Hookworms

*Ancylostoma caninum*, *Ancylostoma tubaeforme*, *Ancylostoma braziliense*,  
*Uncinaria stenocephala*

### **Affected Animals:**

Hookworms from the *Ancylostoma caninum* species affect dogs, while hookworms from the *Ancylostoma tubaeforme* species affect cats. Parasites from the *Ancylostoma braziliense* species, found in the southern United States, can infect both canines and felines. In Canada, the *Uncinaria stenocephala* affects canines and felines as well. Puppies and kittens are more at risk for serious illness from hookworms. Hookworms tend to do less damage to felines than to canines.

### **Overview:**

A parasite that frequently infects puppies and kittens, hookworms actually have heads that "hook" into the small intestine, where they begin to eat away at the tissue and suck blood. This parasite has been called a "voracious blood sucker" and can pose severe health problems for puppies and kittens that do not have a large blood supply to begin with and can suffer badly from blood loss; anemia, diarrhea, weight loss, weakness, and sometimes death can result. Hookworms are considered a human health hazard since the infective larvae can penetrate the skin and migrate locally, called cutaneous larval migrans.

### **Clinical Signs:**

Clinical signs of hookworm infection can include pale gums due to anemia; diarrhea which can be bloody, dark or tarry looking; weakness; weight loss; and sudden death in severely infected puppies and kittens. Sometimes the hookworm larvae cause itching due to burrowing into the skin of the animal.

### **Symptoms:**

See clinical signs.

### **Description:**

Hookworms live in the small intestines and "graze" on the intestinal walls. These parasites can infect both dogs and cats, but dogs are infected much more commonly. Hookworms actually have mouthpieces that "hook" into the small intestine, where they begin to digest away the tissue and suck blood. In addition, hookworms secrete an anticoagulant that makes the blood lose its ability to clot. Thus, the worm is able to consume as much blood as it can before moving to the

next site, causing severe problems for puppies and kittens since the old sites continue to bleed and young animals often cannot withstand significant blood loss. Puppies and kittens can die from hookworms very quickly.

**Diagnosis:**

Diagnosis involves performing a fecal flotation examination and identifying the hookworm eggs under a microscope. A complete blood count of red blood cells, white blood cells, and platelets will reveal if the animal has anemia, or a low number of red blood cells.

**Prognosis:**

With proper deworming treatment, mature animals that are n

Breeds genetically predisposed to degenerative disk disease include those affected with chondrodystrophy, or abnormal cartilage development. Affected breeds include dachshunds, beagles, cocker spaniels, Pekingese, French bull dogs, basset hounds, Welsh corgis, small poodles and other mixed-chondrodystrophoid breeds.

Large, older dogs without chondrodystrophy may also develop degenerative disk disease.

**Transmission or Cause:**

Transmission to dogs and cats occurs by several methods. The dog or cat can eat the infective hookworm larvae, which is passed and develops within the feces of an infected animal. The worms can also penetrate through the skin, or they can be passed in the mother's milk to the nursing puppies or kittens. In rare cases, the parasites can be transmitted through the placenta before birth. Dogs and cats that eat an animal infected with hookworms -- such as a rodent -- may also become infested with the parasite. Humans can fall victim to the skin penetrating abilities of hookworms and develop irritating skin lesions called cutaneous larval migrans.