

Hookworms

Disease Vectors

Zoonotic hookworms are hookworms that live in animals but can be spread to humans. Dogs and cats can become infected with several hookworm species, including *Ancylostoma braziliense*, *A. caninum*, and *Uncinaria stenocephala*. The eggs of these parasites are shed in the feces (poop) of infected animals and can end up in the environment, contaminating the ground where the animal defecated. People become infected when the hookworm larvae penetrate unprotected skin, especially when walking barefoot or sitting on contaminated soil or sand.

Symptoms, Diagnosis & Treatment

The most significant signs of hookworm in dogs are related to intestinal distress and anemia. The parasites anchor themselves to the intestinal lining so that they can feed on tissue fluids and blood. Pale gums and weakness are common signs of anemia. Some dogs with hookworm infection experience significant weight loss, bloody diarrhea, dull and dry hair coat, or failure to grow properly. Dogs may also exhibit coughing in severe cases. It is not uncommon for young puppies to die from severe hookworm infections. Signs of hookworm infection in cats include anemia, blood in the stool (a black 'tarry' appearance to the stool), a dull and dry coat, and weight loss. For dogs and cats, skin irritation and itching, especially of the paws, can be signs of a heavily infested environment, since the larvae burrow into and along the skin.

Zoonotic hookworm infections in people result in a skin condition called cutaneous larva migrans (CLM). People are infected when animal hookworm larvae penetrate the skin, causing skin inflammation that is red and itchy. Raised, red tracks appear in the skin where the larvae have been and these tracks may move in the skin day to day, following the larvae's movements. The symptoms of itching and pain can last several weeks before the larvae die and the reaction to the larvae resolves. In rare cases, certain types of animal hookworm may infect the intestine and cause abdominal pain, discomfort, and diarrhea.

If you think you have CLM, talk to your health care provider, who will look for the characteristic signs and symptoms and ask about exposure history to zoonotic hookworm. There is no blood test for zoonotic hookworm infection. The animal hookworm larvae that cause CLM usually do not survive more than 5 – 6 weeks in the human host. In most patients with CLM, the signs and symptoms resolve without medical treatment. However, treatment may help control symptoms and help prevent secondary bacterial infections. Antiparasitic treatments may be prescribed by a health care provider.

Prevention

- Have puppies and kittens dewormed by your veterinarian at an early age. Puppies and kittens may need to be dewormed more than once. Follow your veterinarian's advice on how frequently puppies and kittens need to be tested and treated.
- Start or keep your pets on a medication program that prevents, treats, and controls these worms. Your veterinarian can recommend treatments to eliminate and help prevent these worm infections. Since these products are available in many forms, you and the veterinarian can choose which one works best for your dog or cat. Ask for the product that is most effective against the worms that are most common in your area.
- Avoid touching soil, sand, plants, and other objects that might be contaminated by animal feces. Wear shoes and take other protective measures to avoid skin contact with contaminated sand or soil.
- Wash your hands with soap and water after playing with your pets or other animals, after outdoor activities, and before handling food or eating.
- Teach children the importance of washing hands to prevent infection.
- Teach children that it is dangerous to eat dirt or soil.
- Keep play areas, lawns, and gardens around your home free of animal feces. Cover sandboxes and restrict animal access to play areas.

- Do not allow children to play in areas that are soiled with pet or other animal feces.
- Clean your pet's living area at least once a week. Feces should be either buried or bagged and disposed of in the trash. Wash your hands after handling pet waste.

References

<https://www.cdc.gov/parasites/hookworm/>

https://www.cdc.gov/parasites/resources/roundworms_hookworms.html

<https://vcahospitals.com/know-your-pet/hookworm-infection-in-dogs>

<https://vcahospitals.com/know-your-pet/hookworm-infection-in-cats>

Document updated 9.2021