

## **ROUNDWORMS (LARVA MIGRANS)**

### **What are roundworms?**

Roundworms are intestinal parasites. They are common in a number of different animal species, including dogs and cats. Each animal has a roundworm that is specific to that species. There is a roundworm specific to humans, but this parasite is rarely found in developed countries. Humans can become infected with animal roundworms by accidentally ingesting eggs or larvae. Having direct skin contact with larvae of certain types of roundworms may also cause an infection.

### **How are roundworms maintained in nature?**

Puppies and kittens are often infected with roundworm larvae from their mother. This can happen before birth (puppies) or from the mother's milk (puppies and kittens). The larvae travel into the lungs, are coughed up, and swallowed. Larvae also get into the intestine after hatching out of ingested eggs. Larvae then mature into adult worms and begin to lay eggs, which are excreted in feces. The eggs contaminate the environment. Puppies can be infected with several hundred worms. Because each worm can produce thousands of eggs per day, the environment can be contaminated with millions of eggs over a short period of time. The eggs can survive for months or even years in the environment. Some wild animals are also infected with roundworms that can infect humans. A roundworm of raccoons can cause a very severe disease in humans. Extra care must be taken when pets, raccoons, and other wild animals are in your area.

### **What happens when you become infected with roundworms?**

When humans become infected, usually from accidentally or unknowingly ingesting eggs, the eggs hatch and larval worms usually travel (migrate) within the persons' tissues. This is called larva migrans. The larvae may travel through the liver, lungs, other organs, and tissues, causing damage. Small children are especially at risk because they may put egg-contaminated objects or dirt into their mouths.

### **What are the symptoms of roundworm infection?**

In most cases, signs are mild to non-existent. In children the disease can be more severe, with fever, coughing, nausea, vomiting, and sore muscles. Sometimes infections occur in the eye or brain. Hookworms, a type of roundworm, may cause a severely itchy skin condition.

### **How are roundworm infections treated?**

Anti-parasitic drugs, often in combination with anti-inflammatory medications, are usually successful in treating roundworm infections. Eye and brain infections are more difficult to treat, and treated persons may not fully recover.

**How can I prevent infection with roundworms?**

There are a number of steps that can be taken to prevent infection of you and your children:

- Periodic deworming of dogs and cats. Consult with your veterinarian for a recommended schedule for your area. It is especially important to treat puppies and kittens because they are most susceptible to infection.
- Wash your hands well with soap and water after playing with your pets and after outdoor activities, especially before you eat. Teach children to always wash their hands after playing with dogs and cats and after playing outdoors.
- Do not allow children to play in areas that are soiled with pet or other animal stool.
- Clean your pet's living area at least once a week. Feces should be either buried or bagged and disposed of in the trash.
- Teach children that it is dangerous to eat dirt or soil.
- Take extreme care when disposing of raccoon feces. Wear a mask or respirator with a HEPA filter, dampen the area being cleaned, wear disposable gloves, double bag and dispose of contaminated materials. Contaminated clothes should either be discarded in double bags, or washed in near boiling water with bleach added.

**Where can I find more information about roundworms?**

The Centers for Disease Control and Prevention has information available at their website [http://www.cdc.gov/ncidod/dpd/parasites/toxocara/factsht\\_toxocara.htm](http://www.cdc.gov/ncidod/dpd/parasites/toxocara/factsht_toxocara.htm).