



# Preventing Zoonotic Diseases

The term “zoonotic” refers to any disease that can be spread from an animal to a human. Certain parasites, fungal infections, bacterial infections, and viruses can be transmitted in this way. Good veterinary care for your pet is essential in preventing the most common zoonotic diseases.

## HOOKWORMS

Hookworm infection occurs through ingestion or skin penetration of hookworm larvae found in the stools or soil contaminated by feces of an infected animal. The larvae then develop and migrate to the intestines where they hook onto the intestinal wall and feast on the host’s blood. The larvae of hookworms can penetrate the skin and infect humans through contact with soil or sand contaminated by feces of host dogs or cats. In a human host, the hookworm larvae do not migrate to the intestines and become blood-sucking adults as they do in pets. Instead, they move around under the skin and eventually die, causing an inflammatory skin reaction known as cutaneous larva migrans, or “creeping eruptions.” It is important to keep your pet free of hookworms with good hygiene, preventive medication and regular veterinary check-ups. Also, keep stray dogs and cats out of sandboxes and gardening areas.

## ROUNDWORMS

Roundworms are parasitic worms that are round in shape, live in the dog’s intestines, and consume partially digested food. Unlike hookworms, they do not attach to the intestinal wall, but literally swim in their food. Adult worms resemble spaghetti and may come out in the feces or vomit of an infected dog. Transmission to dogs is through eggs in feces, eating a prey animal that is a host (usually rodents), mother’s milk, or in utero. In dogs, roundworms cause diarrhea, vomiting and, in extreme cases, pneumonia and intestinal obstruction. In humans, roundworms can cause a serious condition known as visceral larva migrans. Most victims are children who are infected when putting contaminated fingers into their mouths. Once ingested, the roundworm larvae, though not in its usual host, tries to complete its lifecycle. The roundworm gets lost in the



human body, usually in the eye, dies and generates an inflammatory reaction that can cause blindness. Proper hand washing can prevent infection, while pet deworming and preventive medication will reduce environmental contamination.

## RINGWORM

Ringworm is not caused by a worm at all; it is a skin infection caused by a group of fungi. In animals, ringworm appears as a dry, gray, scaly patch on the skin. In humans, ringworm often appears as a round, red, itchy lesion with a ring of scale around the edge. Ringworm is transmitted by contact with an infected animal's skin or fur, either directly or from a contaminated environment. Infected animals continuously drop fungal spores from their skin and fur; these spores, which remain capable of causing infection for many months, are difficult to eradicate from a household. Children are particularly at risk of infection. To reduce environmental contamination, confine infected animals to one room until they are free of infection, then thoroughly clean and disinfect the household.

## BE SAFE, NOT SORRY

Simple precautions, common sense, and good hygiene can keep you and your pet free of zoonotic disease.

- Wash hands after handling pet
- Schedule annual checkups and fecal exams for your pet
- Seek veterinary care for sick pets
- Maintain appropriate flea and tick control
- Maintain appropriate heartworm and parasite prevention
- Avoid letting your pet lick your face, food utensils or plate
- Scoop litter boxes daily
- Wear gloves when cleaning your litter box
- Wear gloves when gardening
- Cover children's sandboxes

Talk to your Veterinarian or Veterinary Technician to learn more about treatment and prevention of these zoonotic diseases.