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Zoonotic Diseases & Kids: 5 Risks Dogs & Cats Pose to Children

Pets bring companionship and joy into our lives. Unfortunately, pets can also bring less pleasant things to us and our family members: zoonotic diseases, which are diseases that can be spread among animals and people and are a potential hazard of pet ownership.

Zoonotic diseases can infect anyone, but they pose a special threat to children <5 years of age.¹ Not only do children have immature immune systems, but they are also more likely to put things in their mouths and not wash their hands properly, which increases risk for disease. Fortunately, with proactive veterinary care, including physical examinations, parasite screenings, deworming, and vaccinations, risks associated with zoonotic disease can be minimized.

Explore 5 of the most common zoonotic diseases dogs and cats can pose to children and how to minimize their risk.

Which Zoonotic Diseases Are Most Common in Pets?

1. Roundworm Infection

A common intestinal parasite of both dogs and cats, roundworms are more common in puppies and kittens than older pets. Young pets are often infected by their mother in the womb; however, older dogs and cats can also become infected through contact with contaminated soil (eg, in yards, at parks). Once a dog or cat is infected, they shed parasite eggs in their feces.² If a child inadvertently ingests these eggs through unintentional contact with feces, they may become infected.²

Roundworm larvae can migrate through the body, with the potential to cause numerous problems, including ocular larval migrans, an eye disease that may cause permanent blindness.² Worms cannot always be seen in a pet's stool without the aid of a microscope, which is why routine fecal testing for all pets is imperative.

2. Hookworm Infection

Hookworms are another common intestinal parasite of dogs and cats that are more common in puppies and kittens than older pets. Unlike roundworms, hookworms do not need to be ingested to cause problems, as hookworm larvae can penetrate the skin.³ People can become infected through skin contact with contaminated soil or direct fecal matter, which can cause

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an itchy skin rash (known as cutaneous larval migrans) or other more serious disease.³ Your veterinarian should screen your pet for intestinal parasites through routine fecal testing and administer routine deworming as part of recommended preventive care.

3. Giardia

In addition to intestinal worms, pets can also harbor microscopic parasites, such as *Giardia*. Some infected pets will show symptoms of the infection (such as diarrhea), whereas other infected pets may never show any symptoms.⁴ Some types of *Giardia* have the potential to be spread to humans through contaminated feces, causing similar symptoms in humans.⁵ Pets with persistent diarrhea should always be evaluated by a veterinarian.

4. Leptospirosis

Leptospirosis is a bacterial infection that can be spread among animals and humans, most commonly through contaminated water or exposure to urine of an infected individual.⁶ More common in dogs than cats, leptospirosis can lead to kidney damage, meningitis, liver failure, and other serious disease.⁶ Treatment can be successful, although this condition can sometimes be fatal. Vaccination for the prevention of leptospirosis should be administered annually for all dogs.⁶

5. Ringworm

A common misnomer, ringworm is not a worm but rather a fungal disease affecting the skin or nails.⁷ Hair loss, scaling, and crusting are the most common skin changes seen in pets.⁷ Ringworm is spread through close contact with an infected animal, with humans often developing a red, ring-shaped rash.⁸ Any pet with new skin abnormalities should be examined by a veterinarian.

Recent technologic advances allow veterinarians to confidently ensure your pet is free from certain parasites by screening for parasite DNA in your pet's stool. However, even with the most advanced testing methods, good hygiene remains essential.

How Can I Reduce the Risk for Disease Transmission?

Simple, proactive measures can significantly reduce the risk for zoonotic infections and help maintain a healthy environment for children and pets alike.

Regular deworming can decrease your pet's risk for several intestinal parasites. However, not all intestinal parasites are killed by routine dewormers, which is why routine fecal screenings are imperative.

Careful hygiene can also help minimize the risk for zoonotic parasite transmission. Pet stool should be immediately picked up from the yard, and, when possible, children should be kept away from a cat's litter box and/or areas where pets eliminate. Pets should also be kept clean and free of stool contamination. Children should be encouraged to wash their hands frequently, especially after playing outdoors or with pets.

Finally, routine veterinary care is critical, and early detection of disease is crucial in reducing the risk for zoonotic disease. Your veterinary team is a key player in helping to minimize the risk for these conditions through measures such as vaccine administration and screening for potential zoonotic disease.

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For more comprehensive education on zoonotic diseases and their risks, please visit [cdc.gov/healthy-pets/index.html](https://www.cdc.gov/healthy-pets/index.html)