

Infections that Pests Carry

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Caring for animals and pets offers a tremendous learning experience For children - it can teach them responsibility, gentleness, and respect for nature and other living beings. Like adults, children can benefit from the companionship, affection, and relationships they share with their pets. But it's not uncommon for animals and pets to transmit infections to humans, especially children. Before you give in to your child's pleas at the pet store, keep reading for more information about how to protect your child from infections carried by pets and animals.

How Do Pets Spread Infections? Zoonotic infections, also called zoonoses, are infections transmitted through or from animals to humans. Like people, all animals carry germs. Some illnesses that are common among house pets - such as distemper, canine parvovirus, and heartworms - can't be transmitted to humans. But pets also carry certain bacteria, viruses, parasites, and fungi that can cause illness if they are transmitted to humans. Humans get these animal-borne diseases when they are bitten or scratched or have contact with an animal's waste, saliva, or dander. Pets are also more likely to carry ticks and fleas in their fur, and these organisms can also carry disease.

"The most severe infections can be fatal, such as rabies; most infections won't kill you, but the severity can range depending on your age and overall health," says Grant Morrison, MD, a family practitioner. For example, Dr. Grant says that exposure to Salmonella from handling turtles or iguanas may cause a healthy adult to get severe but temporary diarrhea, but in infants or people with chronic illness, exposure to Salmonella could be life threatening. That's because zoonotic infections are particularly dangerous to infants and children, pregnant women, elderly people, and people whose immune systems have been compromised by illness or disease (such as cancer or AIDS (news – web sites)).

Common Infections That Pets Carry: Dogs and cats are popular pets among children with families, but they may carry infections listed below.

Campylobacter infection: Household pets and animals can transmit *Campylobacter jejuni*, bacteria that cause diarrhea, abdominal pain, and fever in people. The campylobacter bacteria may exist in the intestinal tract of an infected household or wild animal, and a person can become infected through contact with contaminated water, feces, or unpasteurized milk. More than 2 million cases of campylobacter infection occur each year in the United States and *C. jejuni* is now the leading cause of bacterial gastroenteritis. Campylobacter infections are contagious, especially among members of the same family and children in day care or preschools. Children with campylobacter infection are generally treated with antibiotics.

Cat scratch disease: A person who is bitten or scratched from a feline with *Bartonella henselae* bacteria may develop swollen and tender lymph nodes, fever, headaches, and fatigue, a condition known as cat scratch disease. The symptoms of cat scratch disease usually resolve without treatment; however, a doctor may prescribe antibiotics if the infection is severe. Cat scratch disease rarely causes any long-term complications.

Rabies: Rabies is a serious illness caused by a virus that enters a person's body through a bite or wound contaminated by the saliva from an infected animal. Animals that may carry the rabies virus include dogs, cats, raccoons, bats, skunks and foxes. Widespread immunization of dogs and cats has decreased

the transmission of rabies in these animals and in people. Human rabies is rare in the United States: only five cases of rabies were reported in 2000. An effective vaccine is available for treatment following a bite with a potentially rabid animal.

Rocky Mountain spotted fever: Rocky Mountain spotted fever (RMSF) is carried by ticks that attach themselves to animal skin, particularly dogs. The ticks that cause Rocky Mountain spotted fever are infected by the Rickettsia bacteria, which can cause high fever, chills, muscle aches, and headaches, as well as a rash that may spread across the wrists, ankles, palms, soles, and trunk of the body. Rocky Mountain spotted fever is not contagious and can be treated with antibiotics.

Lyme disease: Like RMSF, Lyme disease is transmitted through the bite of an infected tick that may have hitchhiked into your home on your pet. Symptoms include a bull's-eye rash where the tick attached, followed by headache, fever, and joint or muscle pain. If treated with antibiotics during the rash stage, later complications can be prevented.

Dog tapeworm: *Dipylidium caninum* is the most common tapeworm of dogs and cats in the United States. Most cases of dog tapeworm infection in humans occur in children; they become infected when they swallow an infected flea. Symptoms of tapeworm infestation include itching around the anus, vague abdominal pain, and diarrhea. Tapeworms may be seen stuck to the skin around the anal area or in the feces. Children infected with *Dipylidium caninum* are treated with oral medication to kill the tapeworm.

Ringworm: Ringworm, also called tinea, is a skin infection caused by several types of fungi found in the soil and on the skin of humans and pets. Children can get ringworm from touching infected animals such as dogs and cats. Ringworm of the skin, or tinea corporis, usually is dry, scaly round area with a raised red bumpy border and a clear center. When the scalp is affected, the area may be flaky, red, or swollen. Often there are bald patches. Ringworm is treated with antifungal medications including shampoo, cream, or oral medicine.