

# Pet Safety: Zoonotic Disease

## What is a zoonotic disease?

According to Webster's College Dictionary, it is any disease of animals communicable to humans. Scientists at the Centers for Disease Control (CDC) estimate that 75 percent of all emerging diseases in the world today are zoonotic. That includes mad cow disease, bird flu, West Nile virus, monkey pox, SARS and more. Unfortunately, the bio-terrorism threat of anthrax is also a zoonotic disease. The risk of pet sitters contracting illnesses from their companion animals is low.

To minimize the risk of contracting an illness, the Food and Drug Administration (FDA) advises pet owners to, "Practice good personal hygiene, keep pet areas clean, control disease carrying insects and get regular vaccinations and veterinary care for their pets."

According to the American Veterinary Medical Association (AVMA) the most common zoonotic diseases you are likely to encounter are:

### Salmonella

Salmonellosis is the disease caused by the Salmonella bacteria and is transmitted primarily by reptiles and the feces of baby chicks

and ducklings. The CDC reports that 70,000 Americans contact salmonellosis each year from reptiles. Dr. Scott Stahl, a veterinary reptile practitioner and past president of the Association of Reptilian and Amphibian Veterinarians advises people not to eat, drink or smoke around reptiles. Reptiles should also be restricted from areas where food is being prepared or eaten.

"Reptiles tend to intermittently shed the organism," said Stahl, "so a fecal culture may return a false negative. Once the bacteria are shed in droppings, Salmonella may be found on the reptile's skin, its cage, the floor and any other surface the animal touches."

The U.S. Food and Drug Administration warns that elderly people, children less than 5 years old, people undergoing treatment for cancer, people who have received organ transplants and people with suppressed immune systems are at a higher risk for all zoonotic diseases, especially bacteria-borne illnesses.

### Ringworm

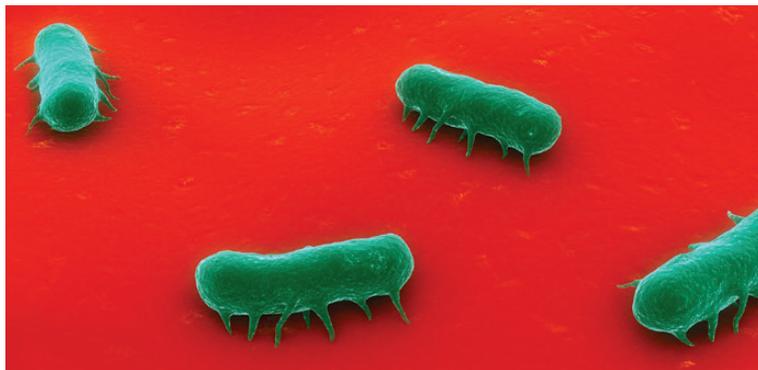
Ringworm is a fungal infection that affects the skin and can be easily

spread from companion animals to humans. In pets, ringworm appears as a dry, scaly, itchy patch in the skin. In humans, it often appears as a round lesion with a scaly ring around the edge, accompanied by redness and itching. The Cornell University College of Veterinary Medicine has reported that infected pets often come from households that have a large number of animals. This may also be true of pets that routinely come in contact with a variety of many different pets, such as those at dogs parks or in dog play groups.

The Cornell Feline Health Center advises, "Infected pets continuously drop fungus spores from their skin and fur. These spores, which remain capable of causing infection for many months, are difficult to eradicate from a household. To reduce environmental infection, confine infected pets to one room until they are free of infection, then thoroughly clean and disinfect the entire household."

### Roundworms and hookworms

Roundworm larvae can migrate through the body, damaging organs and tissue. They are known to damage the retina of the eye and cause blindness. Hookworm larvae migrate



just under the skin and can cause inflammation and pain. And they can also eventually reach the small intestines, where they attach themselves to the intestinal wall and live off of blood from their human host.

Both roundworms and hookworms are common in companion animals and can be passed along to humans through fecal contamination. It is imperative to have yearly fecal exams for your pets and keep parasites under control. Timely removal of fecal material in litter boxes, houses and yards is just as important to your own health as it is to your pet.

Dr. Jim Humphries, president and news director for the Veterinary News Network states, "The most wide-spread zoonoses are diseases caused by parasites, such as common roundworms found in puppies and kittens. The CDC estimates that more than 10,000 people in the United States annually test positive for roundworms and more than 750 will partially lose their vision. Worse yet, the raccoon roundworm is becoming more common. As humans move into formerly wooded areas and raccoons adapt to tolerate an urban lifestyle, infection with this parasite may become more likely. Unlike the more ordinary canine roundworms, raccoon roundworms have been known to cause death in humans."

Lower your risk You can lower your risk for contracting diseases with a single practice. Dr. Humphries advises, "The simplest action is to simply follow a rule common to restaurants, schools - and your mother - ALWAYS WASH YOUR HANDS!

Routine and thorough hand-washing has been shown to reduce the incidence of many bacterial diseases. In a similar fashion, hand washing after playing with pets or roaming the backyard will greatly diminish the possibility of picking up a nasty parasite, like roundworms."

### Cat Scratch Disease and Rabies

Even combined, the numbers of people in North America who are affected by zoonotic diseases is just a fraction of the number of people who are injured by their companion animals. Dog bites and cat-related injuries are far more common. The CDC reports that more than 4 million people are bitten by dogs annually and tens of thousands of people seek medical attention each year because of injuries associated with cat scratches and bites.

Cat Scratch Fever is a flea-borne infection that is transmitted to humans through a scratch or bite. It causes infection at the site of the injury and can result in swollen lymph nodes, fever and lethargy. Any cat scratch or bite should be treated seriously by thorough cleansing and disinfecting. If problems arise, consult a doctor for follow-up treatment and antibiotics.

### Rabies

Rabies is a viral disease that is almost always fatal to humans and can affect any warm-blooded animal. It is usually transmitted via saliva through the bite of an infected animal, but can also pass from host to human via infected saliva or blood coming in contact with an open wound or mucous membranes. Due to strictly enforced government vaccination requirements, the incidence of rabies in

domestic animals had been partially controlled.

The FDA reports that today, domestic animals account for fewer than 10 percent of the reported animal rabies cases - and very few of these are companion animals. However, rabies in dogs, cats, horses and cattle has risen in some parts of the U.S. in recent years, most notably in the eastern and south central parts of the country. It is important to make sure that your pets are up-to-date on their rabies vaccinations. While post-bite treatments are effective and readily available, the best course of action is prevention - and that means vaccination.

Other zoonotic diseases? Believe it or not, we have just dipped a toe in the disease-infested waters of zoonosis. There are also insect-borne diseases such as Rocky Mountain spotted fever and ehrlichiosis. Other parasitic diseases include giardia, leptospirosis or mange. And there's always bird flu, monkey pox and the plague! But the chances of companion animals passing these diseases on to their own owners is slight. Vaccine protocols have greatly decreased many zoonotic diseases and similar strategic deworming plans may help to stop zoonotic parasites as well.

If you have any questions, please consult your veterinarian. Dr. Humphries concludes, "Educate yourself about zoonotic diseases. Don't allow unfounded fears to dictate your happiness with your four-legged friends."

