

Zoonoses and Immunocompromised Persons

What are zoonoses?

Zoonotic diseases or zoonoses (pronounced ZOH-NO-seez) are diseases of animals that can spread to and affect humans. They include some mild diseases such as ringworm; potentially serious diseases such as cat scratch fever, salmonellosis, cryptosporidiosis, or brucellosis; and potentially fatal diseases such as anthrax, plague, and hantavirus.

How common are zoonoses?

Zoonoses vary in occurrence based on the disease pathogen involved. Some diseases can be more common regionally, while others are widespread. In general, the risk of getting a disease from your pet is low and most medical professionals agree that the benefits of animal companionship usually outweigh the potential risks. Most zoonoses can be prevented when simple precautionary actions are taken.

However, contact with young animals, farm animals or wildlife species may pose a greater risk for zoonotic disease. Immature animals, such as puppies, kittens, and calves are more likely to have diarrhea and pose a greater risk of disease spread to humans than adult animals. Young poultry species (chicks and ducklings) can carry *Salmonella*, a bacteria that causes diarrhea in humans. Reptiles (snakes, lizards, and turtles) are also known carriers of *Salmonella*.

Are certain people at greater risk of getting zoonoses?

People with weakened immune systems can be at greater risk of zoonotic infections. Persons in any of the following groups can be at higher risk for zoonotic diseases:

- children under the age of 5
- pregnant women
- the elderly
- people with HIV/AIDS
- organ or bone marrow transplant recipients
- radiation, chemotherapy or chronic corticosteroid therapy
- people with implanted medical devices
- people with diabetes, autoimmune diseases, chronic renal failure, or other chronic diseases
- people with alcoholism or malnutrition

Many different conditions can affect people's immune systems. Your physician can advise whether or not you are at greater risk of getting a zoonotic disease.

Can my veterinarian help?

Veterinarians are experts in animal health and zoonotic diseases. If you are immunocompromised, your veterinarian can help you select an appropriate pet. They can also help you keep your pet healthy through a wellness program.

Should I get rid of my animals if a family member is immunocompromised?

Immunocompromised persons and parents of young children generally do not need to give up common household pets. When precautions are used, the risk of zoonotic disease transmission can be minimized.

However, certain animal species pose too great of a risk for persons with weakened immune systems and should be avoided. These include reptiles (e.g., turtles, snakes, lizards, tortoises), baby chicks and ducklings, wild animals and exotic animals such as monkeys. Also, do not handle or bring stray or wild animals into your home.

How can I avoid or prevent zoonotic diseases?

Personal hygiene is one of the most important things you can do to protect yourself from zoonotic diseases. Washing your hands frequently with soap and running water after handling animals is important, especially before eating or handling food. Avoid contact with your pet's urine and feces as much as possible. Wear gloves when cleaning up feces from pets, cleaning bird cages or fish tanks or emptying litter boxes. Do not let animals lick your face, mouth or wounds. If you are bitten or scratched by your pet, wash the wound immediately with soap and running water and contact your physician.

Continued on next page

When prevention measures are taken, persons with **weakened immune systems** can usually maintain ownership of most pet species.



Photo from Life Extension Foundation www.lef.org

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How can I best care for my animals if I am immunocompromised?

Routine biannual preventative visits to your veterinarian are essential. Keep animals current on their vaccinations and have feces checked periodically for parasites. You should also seek veterinary care early in the course of your pet's illness, especially if they have diarrhea. Keep animal nails trimmed to avoid scratches. Use good flea and tick prevention, if you live in an area where fleas are a problem. Ask your veterinarian's advice about the best flea products to use.

Protect your pet from foodborne illness by feeding high quality commercial food. If you supplement with home cooked food, be sure to cook poultry, meat or eggs thoroughly. Prevent your pets from drinking toilet bowl water and from having access to garbage. Do not let your pet scavenge for food, hunt wild animals, or eat other animals' feces. Do not adopt wild animals as pets or bring them home. Teach children to never handle unfamiliar animals, wild or domestic, even if the animal appears to be friendly.

Should I test my animals to see if they have a zoonotic disease?

Routine screening of healthy animals for zoonoses is not recommended. If your animal looks sick or has diarrhea, see your veterinarian as soon as possible. Your veterinarian will determine what tests might be necessary.

Where can I find more information about zoonoses and immunocompromised persons?

The Center for Food Security and Public Health (CFSPH) has developed short fact sheets about animal and human health issues and prevention measures for a number of zoonotic diseases.

The Centers for Disease Control and Prevention (CDC) also has a website devoted to zoonotic diseases and prevention called 'Healthy Pets, Healthy People'.

The Pets are Wonderful Support (PAWS) organization, in collaboration with the Humane Society of the United States (HSUS) also have a helpful website addressing zoonotic diseases of pets.

Talk with your physician and veterinarian about any questions or concerns you may have about zoonotic diseases.

For More Information

Center for Food Security and Public Health. Zoonotic Fast Facts at www.cfsp.h.iastate.edu/FastFacts

Centers for Disease Control and Prevention. National Center for Infectious Diseases. Healthy Pets Healthy People at www.cdc.gov/healthypets/

Pets are Wonderful Support (PAWS) and the Humane Society of the United States (HSUS). Safe Pet Guidelines at www.pawssf.org/graphics/education/safe_pet_guidelines.pdf

Centers for Disease Control and Prevention. National Center for HIV, STD and TB Prevention. Preventing infections from pets at www.cdc.gov/hiv/pubs/brochure/oi_pets.htm

Centers for Disease Control and Prevention. National Center for Infectious Diseases. For People at Extra Risk at www.cdc.gov/healthypets/extra_risk.htm

Centers for Disease Control and Prevention (CDC). Preventing infections from pets: A guide for people with HIV infection at www.cdc.gov/hiv/pubs/brochure/oi_pets.htm

Centers for Disease Control and Prevention. Pet-Script at www.cdc.gov/healthypets/pdf/petscript_general.pdf