



Overview

A zoonotic disease (zoonosis) is any disease or infection that can be naturally transmitted between vertebrate animals and humans. Zoonoses can be bacterial, viral, parasitic, or fungal, and transmission can occur through direct contact, bites, scratches, contaminated food or water, airborne particles, or vector insects. They are not rare edge cases — they are some of the most common diseases in the world.

■ ■ **By the numbers:** Over 200 known zoonotic diseases exist. They cause approximately 1 billion cases of illness and millions of deaths annually worldwide. In the U.S., CDC tracks dozens of priority zoonoses including rabies, Lyme disease, salmonellosis, toxoplasmosis, and influenza variants.

Major Zoonotic Diseases at a Glance

Major Zoonotic Diseases at a Glance

Disease	Agent	Transmission	Animal Reservoir	Key Notes
Rabies	Virus (Rhabdovirus)	Bites/scratches from infected mammals	Dogs, bats, raccoons, foxes	Universally fatal once symptomatic; preventable by vaccine
Lyme Disease	Bacteria (Borrelia)	Deer tick bite	Dogs, deer, mice	Arthritis, cardiac, neurological; tick prevention is key
Leptospirosis	Bacteria (Leptospira)	Infected urine in soil/water	Rats, dogs, wildlife	Kidney/liver failure; NYC waterways are high-risk
Toxoplasmosis	Parasite (Toxoplasma)	Cat feces, undercooked meat	Cats (definitive host)	Danger in pregnancy; litter hygiene prevents transmission
Salmonellosis	Bacteria (Salmonella)	Fecal-oral; raw food, reptiles	Reptiles, poultry, dogs/cats	GI illness; handwashing critical after reptile handling
Ringworm	Fungus (Dermatophyte)	Direct contact	Cats, dogs, guinea pigs	Skin lesions; contagious; treatable with antifungals
Cat Scratch Disease	Bacteria (Bartonella)	Cat scratch/bite, flea feces	Cats (often subclinical)	Fever, swollen lymph nodes; serious in immunocompromised
MRSA / Staph	Bacteria (S. aureus)	Contact with infected wounds	Dogs, cats, humans (bidirectional)	Drug-resistant; household transmission documented
Avian Influenza	Virus (Influenza A)	Respiratory/fecal contact with birds	Poultry, wild birds, cats	H5N1 detected in cats; monitor public health advisories
Campylobacteriosis	Bacteria (Campylobacter)	Fecal-oral; contaminated food	Dogs, cats, poultry	GI illness; common in puppies and kittens



■ ■ Prevention Principles for Pet Owners

- **Handwashing** after handling pets, cleaning litter boxes, or touching animal waste is the single most effective prevention tool
- **Keep vaccines current** — rabies vaccination protects both your pet and your family
- **Parasite prevention year-round** reduces tick, flea, and mosquito-borne zoonoses
- **Avoid raw meat diets** — raw pet food is a documented source of Salmonella, Campylobacter, and Listeria in households
- **Pregnant individuals should not clean litter boxes** — toxoplasmosis risk is real
- **Reptile owners** must wash hands thoroughly — Salmonella is endemic in reptile GI tracts
- **Immunocompromised individuals** (HIV, chemotherapy, transplant recipients) should consult both their physician and vet for additional precautions

■ **One Health Reminder:** Zoonotic disease prevention is shared responsibility. Your vet keeps your animal healthy. Your physician keeps you healthy. Public health agencies monitor the ecosystem. Each layer depends on the others. XVCare is here to be your partner in the animal health piece of that puzzle.

■ **Talk to your vet about your household's specific zoonotic risk.** Factors like young children, pregnancy, immunosuppression, reptile ownership, or exposure to wildlife all change the risk profile. We're happy to walk through it with you.

■ Final Summary

Zoonotic diseases are not rare — they are part of the everyday reality of sharing our lives with animals. Simple prevention habits and current vaccines dramatically reduce risk for your family and your pets.

■ Related XVC Guides:

- [Rabies: A One Health Disease](#) · [Avian Influenza & H5N1](#)
- [Leptospirosis One Health](#) · [Flea & Tick Prevention](#) · [What Is One Health?](#)



This resource may be shared for personal, educational, or non-commercial use provided it remains unmodified and Xavier's Veterinary Care is credited as the original source. Commercial reproduction or resale without written permission is prohibited. For diagnosis & prescriptions, consult a licensed veterinarian.
© 2026 Xavier's Veterinary Care.