

# Zoonotic Diseases of Companion Animals

## Routes of Transmission

This handout lists potential routes of transmission of select zoonotic diseases between animals and humans.

Additional routes may occur between animals.

## Direct Contact and Fomite

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*These diseases may be spread by bites, scratches, or direct contact with animal tissues or fluids (e.g., urine, feces, saliva). Disease transmission may also occur indirectly through contact with contaminated objects or surfaces (fomites), such as cages, aquaria, bowls, or bedding.*

- Acariasis (mange)
- Brucellosis
- Cat Scratch Disease
- Dermatophytosis
- Glanders
- Influenza
- Leptospirosis
- Lymphocytic Choriomeningitis
- Melioidosis
- Monkeypox
- Mycobacteriosis
- Methicillin-Resistant *Staphylococcus aureus* (MRSA)
- Pasteurellosis
- Plague
- Q Fever
- Rabies
- Rat Bite Fever
- Salmonellosis
- Sporotrichosis
- Tularemia

## Oral

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*These diseases can be transmitted by ingestion of food or water contaminated with a pathogen. This typically occurs from fecal contamination from unwashed hands or soil contact.*

- Baylisascariasis
- Campylobacteriosis
- Cryptosporidiosis
- *Escherichia coli* O157:H7
- Echinococcosis
- Giardiasis
- Hookworm Infection
- Leptospirosis
- Salmonellosis
- Toxocariasis
- Toxoplasmosis
- Trichuriasis
- Tularemia
- Yersiniosis

## Aerosol

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*These diseases can be transmitted through the air by droplet transfer, fluids aerosolized from an animal to a person (e.g., sneezing or cough) or by aerosolized materials which are inhaled.*

- *Bordetella* Infection
- Cryptococcosis
- Hantavirus
- Influenza
- Leptospirosis
- Melioidosis
- Plague
- Psittacosis
- Q Fever
- Tularemia

## Vector-borne

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*These diseases are transmitted by an arthropod vector.*

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|--------------------------|--------------------------------|-------------------|
| FLEAS                    | TICKS                          | TRIATOMINE        |
| • Plague                 | • Ehrlichiosis                 | ("kissing bugs")  |
| MOSQUITOES               | • Lyme Disease                 | • Trypanosomiasis |
| • West Nile Encephalitis | • Rocky Mountain Spotted Fever | (Chagas disease)  |
| SAND FLIES               | • Tularemia                    |                   |
| • Leishmaniasis          |                                |                   |



IOWA STATE UNIVERSITY®

College of Veterinary Medicine  
Iowa State University  
Ames, Iowa 50011  
Phone: (515) 294-7189  
FAX: (515) 294-8259  
E-mail: cfsph@iastate.edu  
Web: www.cfsph.iastate.edu