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

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

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.

- Baylisascaris
- Campylobacteriosis
- Cryptosporidiosis
- Escherichia coli O157:H7
- Echinococcosis
- Giardiasis
- Hookworm Infection
- Leptospirosis
- Salmonellosis
- Toxocarasis
- Toxoplasmosis
- Trichuriasis
- Tularemia
- Yersinia

Aerosol

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

These diseases are transmitted by an arthropod vector.

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