

Contagion

Generalized overview of common transmittable diseases that may be encountered in an animal sheltering environment. Topic discussion will include vaccinations, modes of transmission, treatments, and ways to prevent the spread of these common diseases.

Common Shelter Disease Overview

- **Coccidia:** protozoal intestinal disease that affects immunocompromised individuals (young, old, diseased, pregnant, stressed). Causes diarrhea, lethargy, weight loss, poor appetite, and/or vomiting. Shedding is intermittent so if high risk (<3 months) or high suspicion, treat even if not found on fecal. Treatment includes Albon (RX, on label but static) and Ponazuril (RX, off label but -cidal). Also treat for dehydration (fluids, wet food) and nausea (RX: ondansetron, maropitant) if needed.
- **Ringworm:** zoonotic fungal disease of the skin causing hair loss, crusting, scabbing, redness. More common in immunocompromised. Diagnosis can be by Woods lamp or by DTM culture (2 weeks). Treatment includes oral antifungals and lime dips.
- **FVRC (*feline viral rhinotracheitis and calicivirus*):** aka viral common causes of cat upper respiratory infection (URI) causing watery eyes, sneezing, congestion, nasal discharge, mouth and eye ulcers, and coughing. Diagnosis by PCR test. Treatment includes decreasing stress, supporting the immune system (rx, probiotics), treating secondary infection (rx, doxycycline), and supportive care (watching hydration, helping with congestion, cleaning off discharge, etc).
- **Parvovirus (dog)/panleukopenia (cat):** viral diseases that are highly contagious and cause high levels of disease and death. Affects the intestines and the immune system. Symptoms include diarrhea, lethargy, poor appetite, and vomiting. Diagnosis by IDEXX Snap test, necropsy, or PCR. Treatment includes antibiotics, antinausea, nutritional aids and fluids.
- **CIDRC (*canine infectious respiratory disease complex*):** aka dog upper respiratory infection (URI) can have many causes including bacterial (*Bordetella*, *Mycoplasma*, strep) and viral (adenovirus, parainfluenza, herpesvirus, influenza, respiratory coronavirus). Definitive diagnosis by PCR. Symptoms include sneezing, coughing, nasal and ocular discharge, lethargy, and poor appetite.
- **Canine Distemper:** viral disease that is very contagious and can start like other URI diseases and/or can include fever, vomiting, diarrhea, tremors/seizures or other neurologic issues, death. Most common in immunocompromised/young animals. Diagnosis by PCR. Treatment is supportive and you treat what symptoms they present with as well as maintaining nutrition and hydration.
- **Rabies:** fatal zoonotic viral disease that takes 45-90 days from the time of a bite to become symptomatic. Once having symptoms patients may have a decreased swallowing reflex so may drool and often become neurologic which may make them blind, fearful and aggressive. The virus concentrates in the saliva during this phase. Animals once symptomatic will die within 10 days.

Methods of Transmission

- fomite (most)
- aerosol (sneezing, coughing/pressure washing)
- direct contact touching (hookworm, ringworm, viruses, bacteria)
- oral (most parasites)
- vector (heartworm, tick borne)
- zoonotic (rabies, leptospirosis, ringworm)
- maternal (in utero or by milk).

Prevention

- reduce stress (hiding place, less crowding, keeping species and genders separate, energy outlet, interaction)
- cover kennels
- plan your path
- cleaning
- cognizant of what you are touching
- sanitizing between
- vaccination schedule
- spot cleaning
- smells

Decreasing Fomites

- Disinfection between animals – exam rooms, playrooms, scales, exam tables
- Proper handwashing – wet, lather, scrub 20 seconds (to elbow), rinse, dry, barrier to turn off
- PPE – gloves, but not replacement for hand sanitizing; clothing protection
- Things that sanitizer does/does not kill – debris on hands will harbor germs so must be clean first or won't kill even things susceptible; not ringworm spores or FVRCP/parvo/panleuk
- Laundry – remove debris first, do not overload!, hot water, detergent, bleach, dry completely
- Desiccation (drying) important to sanitizing