Feline diseases commonly seen in shelters

Feline Upper Respiratory Infection

Feline upper respiratory infection (URI) is perhaps the most frustrating illness facing shelter staff.

Transmission: URI is very easily spread by fomites or droplet transmission, and some URI agents are resistant to disinfection. Factors such as overcrowding, poor air quality, poor sanitation, stress, concurrent illness, parasitism, poor nutrition, and other causes of immunosuppression predispose to disease, and many of these factors are difficult or impossible to completely eliminate in a typical shelter, cattery or rescue home.

Signs of URI:

- Clear or colored nasal discharge
- Sneezing
- Red/inflamed conjunctiva
- Ulcers/sores on the nose, lips, tongue or gums
- Fever/lethargy/loss of appetite (these may be signs of many other diseases as well)

Feline Panleukopenia - AKA Feline Distemper.

Panleukopenia virus causes vomiting, diarrhea, and can cause sudden death in cats. The virus is transmitted primarily by the fecal-oral route (including through exposure to objects/clothing/hands contaminated with virus from feces). Panleukopenia is very durable unless inactivated by an effective disinfectant, and can persist in the environment for months or even years. The incubation period is generally less than 14 days, and cats may shed infectious virus for 2 – 3 days *before* signs are observed.

Signs include:

- Vomiting
- Diarrhea
- Dehydration
- Sudden death/found dead in cage

Tapeworms

Tapeworms are an intestinal parasite. As tapeworms take nutrients from the cat, a heavy infestation can cause a cat to become nutritionally deprived and lose weight and the fur to have a rough appearance. Transmitted from the ingestion of fleas.

Photo shows tapeworm segments on cat's rectal area.

Zoonotic Diseases

Roundworms

Worms are present in the GI tract and commonly cause no signs. A heavy infection can cause diarrhea, and adult worms may be seen in feces.

Transmission between animals:
Transplacental infection in utero (dogs only), transmammary transmission in milk from infected female, ingestion of eggs from soil or other matter contaminated by infected feces, ingestion of larvae in tissue of infected paratenic (accidental) hosts such as rodents.

Transmission to humans:
Ingestion of eggs from soil or other matter contaminated by infected animal feces. Puppies and kittens are much more likely to pass eggs in feces than are adult animals. Children are at highest risk of becoming infected.

Toxoplasmosis

Clinical signs in affected animals:
Usually asymptomatic. Recent infection may cause transient fever, diarrhea or respiratory signs. Symptoms more likely in young kittens and cats with concurrent disease. Occasionally causes chronic or more severe disease, including neurological and ocular disease.

Transmission between animals:
Cats are the only domestic species that shed infectious oocysts in feces. Cats may become infected through ingestion of oocysts or ingestion of infected intermediate hosts such as rodents. Transmission to kittens through mother's milk is also possible. Most cats become infected in the first year of life, and oocyst shedding is usually highest at the time of first infection.

Transmission to humans:
The most common mode of human infection is through ingestion of intermediate stages of toxoplasma in undercooked meat. Humans may also become infected by ingestion of oocysts from soil contaminated by cat feces, usually following gardening or ingestion of raw vegetables from such soil. Transmission by the fecal-oral route after exposure to cat feces is also possible, usually when cleaning litter boxes.

Ringworm

Clinical signs in affected animals: Most common: circular area of hair loss and scaling. Most common location is face, ears, feet and tail. Wide range of presentations possible, including hair loss with or without crusting, nail bed infection, infection that mimics "stud tail" and feline acne, and generalized infection.

Transmission between animals:
Direct contact, contaminated environment, or spread by fomites. May be spread to animals from infected humans.

Transmission to humans:
Direct contact, contaminated environment or contact with fomites.
Clinical disease in humans: Ring shaped areas of scaling and hair loss, with or without redness, crusting and itching.

Bartonella (Cat Scratch Fever)

Clinical signs in affected animals:

Almost always asymptomatic. Experimental infection causes transient febrile illness.

Transmission between animals: Transmitted by flea bites. Cat to cat transmission does not occur in the absence of fleas.

Transmission to humans:

Cat scratch or bite, most likely transmitted by contaminated flea dirt inoculated into wound. Other close contact with cats/fleas may transmit disease as well.

Rabies

Most warm blooded animals can be infected. Predominant species infected vary by region; most commonly infected species in the United States are bats, skunks, raccoons, foxes and coyotes. Although vaccination is highly effective, it is not 100% protective; vaccinated dogs and cats have been reported to develop rabies.

Transmission between animals

Bite or ingestion of an infected animal.

Transmission to humans:

Saliva generally needs to enter tissue for infection to occur, so a bite that breaks the skin is by far the most common means of transmission.