

ZOONOTIC DISEASES

EXPOSURE TO ZOONOTIC DISEASES

As a veterinary technician we are exposed to a variety of things including zoonotic diseases.

Its important that we take all necessary precautions to protect ourselves from contracting these diseases.

Wearing appropriate PPE and practicing good hygiene is a huge step in preventing zoonotic disease exposure.

WHAT CAN WE BE EXPOSED TO?

Rabies

Ringworm

External and internal parasites

Herpes B virus

Monkey Pox

Tularemia

Salmonella

Psittacosis

RABIES VIRUS



Rabies lyssavirus

Rabies is usually spread through an animal bite. Animals most likely to spread rabies include dogs, bats, coyotes, foxes, skunks, and raccoons.

Symptoms in humans include fever, headache, excess salivation, muscle spasms, paralysis, and mental confusion.

Symptoms in animals include lethargy, fever, vomiting, anorexia, hypersensitivity to light and sound, difficulty swallowing, diarrhea, and enlarged pupils

Seek immediate medical attention after a bite or suspected bite. There is no specific treatment for rabies. Once symptoms appear, it's nearly always fatal. A vaccine can prevent infection.

RINGWORM



The fungi responsible for ringworm infections belong to a specialized group known as dermatophytes, so the medical name for this disease is dermatophytosis.

Ringworm is contagious and transmission occurs by direct contact with the fungus. It may be passed by direct contact with an infected animal or person, or by touching contaminated objects or surfaces. The fungal spores may remain dormant on combs, brushes, food bowls, furniture, bedding, carpet, or other environmental surfaces for up to 18 months. Contact with ringworm fungus does not always result in an infection.

The most accurate method for diagnosing ringworm in dogs is by a culture of the fungus in a laboratory.

The most common way to treat ringworm in dogs is to use a combination of topical therapy (application of creams, ointments, or shampoos) and systemic therapy (administration of anti-fungal drugs by mouth). For treatment to be successful, all environmental contamination must be eliminated.

EXTERNAL AND INTERNAL PARASITES



Examples: Fleas, cheyletiella, sarcoptic mange. Cryptosporidium, toxoplasmosis, Giardiasis and Taeniasis.

For zoonotic diseases that are caused by parasites, the types of symptoms and signs can be different depending on the parasite and the person. Sometimes people with zoonotic infections can be very sick but some people have no symptoms and do not ever get sick. Other people may have symptoms such as diarrhea, muscle aches, and fever.

Wash your hands frequently, especially after touching animals, and avoid contact with animal feces. Follow proper food-handling procedures to reduce the risk of transmission from contaminated food. For people with weakened immune systems, be especially careful of contact with animals that could transmit these infections.

LEPTOSPIROSIS

Caused by a spiral shaped bacteria

Can affect marine mammals, cattle, sheep, goats, pigs, horses, and dogs

Spread though urine and enter through compromised skin and mucous membranes



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HERPES B

□Virus carried by non-human primates (Macaques)

Causes FATAL encephalomyelitis

Direct contact transmission with secretions





TULAREMIA



Rabbit Fever

Caused by the bacteria Francisella tularensis

Carried by rabbits and wild rodents, spread by aerosol, ingestion, ticks and deer flies

Flu-like symptoms with possible swollen lymph nodes that may break open and drain pus.

SALMONELLA



Salmonella is a bacterium that causes salmonellosis in humans. The disease is caused by a group of bacteria called Salmonella, which has many species that can affect humans.

Most people who get ill from Salmonella have diarrhea, fever, and stomach cramps. Symptoms usually begin 6 hours to 6 days after infection and last 4 to 7 days. Most people recover without specific treatment and should not take antibiotics. Antibiotics are typically used only to treat people who have severe illness or who are at risk for it.

■ <u>Wash your hands</u> thoroughly with running water and soap after touching pets and other animals, or their food, water, poop, belongings (such as toys and bowls), or habitats (such as beds, cages, tanks, coops, stalls, and barns).

PSITTACOSIS



Psittacosis is a disease caused by bacteria called Chlamydia psittaci. These bacteria infect birds more often than people.

Signs and symptoms within **5 to 14 days** after exposure to the bacteria.

In general, psittacosis is a mild illness. Symptoms of psittacosis are similar to the symptoms of other respiratory illnesses.

The **most common symptoms** include: dry cough, fever or chills, headache and muscle aches.

People diagnosed with psittacosis usually take antibiotics to treat the infection.

Be safe when handling and cleaning birds and cages to help prevent this disease.

People who have contact with pet birds and poultry are at increased risk.

RESOURCES

<u>https://www.cdc.gov/healthypets/diseases/salmonella.html</u>

https://vcahospitals.com/know-your-pet/ringworm-in-dogs