

# **ZOONOTIC DISEASES**

When you share your home with animals, you get a lifetime of happiness and unconditional love. In general, people with pets are healthier and happier. It is uncommon for you to get sick from your pet or vice versa. However, there are risks that you have to understand and ways to keep you both safe from disease. Zoonotic diseases are diseases that are spread from animals to humans and are capable of affecting both species.

### **Rabies**

The deadliest - and most commonly known - zoonotic disease is rabies. Hong Kong is considered rabies free. However, there is a risk of reintroduction of rabies from infected imported animals. Pets usually contract rabies from infected wildlife, and humans usually contract it from those infected pets. Rabies can affect almost any warm-blooded animal, including bats, squirrels, horses, cows, dogs, and cats. Rabies is most commonly spread via bites from infected animals. Other ways of transmission are possible (such as through scratches or the air (aerosolized) from bat guano (poop), but are unlikely. It is quickly fatal, and there is no established treatment that always works (there are cases of patients recovering from rabies, but these are extremely rare). Signs of rabies include aggressiveness, altered behavior, nervousness, anorexia (not eating), ataxia (wobbly walking), hyperesthesia (increased sensitivity to touch), photophobia (fear of light), disorientation, change in vocalization, inability to swallow, excessive salivation, mandibular paralysis (unable to open the jaw), paralysis, seizures, coma, and death. Death occurs from respiratory paralysis or prolonged seizure activity. If you are bitten by an unknown dog or cat in an area where rabies can occur, it is very important to go to the doctor as soon as possible for a post-exposure rabies vaccine (if needed). In many areas, these dogs or cats will be placed in quarantine for at least 10 days to monitor them for symptoms of rabies. It is better to be safe than sorry – if you are bitten, it is best to get it checked out by a doctor if the skin is broken. While there is no great treatment for this disease, keeping your pets up to date on their rabies vaccine is very effective in preventing this deadly disease.

## Leptospirosis

A common disease that we see in warm, humid climates — especially after heavy rains — is leptospirosis. Leptospirosis (lepto for short) is caused by spirochete bacteria. This bacteria is spread through the urine of infected wildlife (any warm-blooded animal). Dogs pick up the bacteria when they drink from infected water sources. This is more common in rural areas, but we also see a lot of it in urban environments from rats. It can happen in cats as well, but it is much less common. Leptospirosis can cause liver and kidney failure. It is treatable with antibiotics, but not every dog survives — some dogs may require dialysis, and that is not always successful.



Lepto can spread to humans through the urine of infected dogs. If you are taking care of a dog who is suspected of having lepto, make sure to wash your hands frequently after petting them (as urine can get on their coat) and use gloves when cleaning up their waste. If your dog has lepto and you start to feel sick with flu like symptoms), it is important to go to your doctor and make sure that they know that you may have been exposed to lepto.

For more information on Leptospirosis click here: What is Leptospirosis and is it rare? — Dr. Lawren Durocher Babek (drlawrenvet.com)

#### Salmonella

Another bacterium that can make the rounds from animals to humans is salmonella. Salmonella is a bacterium that is associated with food-borne illnesses (uncooked chicken and raw eggs being the most common culprits). In general, dogs and cats are fairly immune to salmonella, other than those who are fed with raw meat. Salmonella has been found in some commercial foods, but those foods are tested fairly regularly so we know when an outbreak occurs. However, raw meat is not tested. While Salmonella is not common in dogs and cats, it can happen. Humans can get salmonella from the poop of infected dogs and cats. Exotic pets, like turtles, reptiles, iguanas, etc., carry salmonella more commonly. You can get salmonella even by petting them, so make sure to wash your hands! Salmonella will cause stomach upset in people (vomiting and diarrhea). It is treatable with antibiotics. Washing your hands after feeding your pet is a good idea. If you feed your pet raw meat, it is important to keep their dishes separate from those for the rest of the family and follow food safety guidelines closely.

#### **Parasites**

Dogs and cats can carry fleas and ticks that carry some diseases that can infect humans, such as Lyme Disease, Tick Fever, Ehrlichia, and Bartonella (cat scratch disease). In this case, these diseases are not spread from pets to humans directly, but rather through bites from fleas and ticks. The best thing you can do is to maintain a good flea and tick preventative strategy as recommended by your local veterinarian. Parasites such as hookworms and roundworms can be spread to humans via exposure to infected poop from your dog or cat. The poop from infected dogs or cats carries eggs that hatch and then infect the soil; people can then contract the parasites orally through open wounds in the skin (such as the bottom of the feet) or orally if not using good hygiene. Toxoplasmosis can also spread from infected cats to humans — this is much more common in immune suppressed people, such as those infected with AIDS or patients undergoing chemotherapy. Toxoplasmosis can also be passed to a woman's fetus, so it is important to avoid having pregnant women or immunocompromised people change the litter box.



For a quick reference on Tick Fever click here: <u>Tick Fever: A Quick Guide — Dr. Lawren Durocher</u> Babek (drlawrenvet.com)

#### **Skin Diseases**

Some skin diseases can spread from dogs and cats to humans, but it's not as common as you may think. Ringworm is the most likely zoonotic rash. Cats tend to be infected more commonly than dogs. People can contract ringworm by petting infected cats. In people, it causes a characteristic circular shaped rash and can be spread from one person to another through infected towels, bedding, or clothing. Scabies can also be spread from infected dogs and cats to humans and causes intense itching in both pets and people. If your pet develops a rash, it is important to let the vet know if you are experiencing symptoms as well.

In general, the key points to remember are that good hygiene and keeping up your pet's preventative health care will help save them and you from disease.