

## Zoonotic Diseases

Zoonoses or zoonotic diseases are those that can potentially affect both people and other animals. The list of zoonotic diseases transmissible from pets to humans is a long one but this article will discuss only a few of the more common ones that we see in canine rescue.

Please keep in mind that this article is not intended to imply that volunteering with rescue is dangerous or unsanitary, but rather to educate and inform. Keeping the rescued dog safe and healthy helps protect you, your dogs and your human family as well.

### Intestinal Parasites

Dogs are born with lots of worms that go dormant in their muscle tissue and emerge throughout the pet's life during periods of stress (especially pregnancy) or sickness. That's why even pets without exposure to other pets can turn up positive for worms after previously being tested as negative on a fecal exam. In addition, they continuously pick up microscopic worm eggs in the environment. The worms go through their life cycle in the dog, causing various degrees of trouble to the pet and end up spreading more worm eggs via the stool around the yard etc.

People can also pick up these worm eggs, remember - they are microscopic, and transmit them accidentally to their mouth. Luckily, most of us have a healthy immune system and the worms in dogs are usually successfully killed soon after entering our bodies...but not always right away. This may be one of the causes of unexplained fevers, aches and pains that people suffer from for a couple of days and we often call "a touch of flu". Sometimes worms can cause much more serious trouble in humans, especially to a developing fetus or children.

A more serious way that people get worm diseases from pets is from eggs in the yard that hatch into larvae that can bore into skin and travel around in your blood, lymph, or neural system causing anything from mild rashes to blindness and other terrible diseases. This is a problem with barefoot children, especially if the ground is damp - which favors larval hatching. This disease is known as larval migrans. This problem is controlled by keeping pet stool picked up and regularly deworming your pets.

The following are the most common intestinal parasites and deworming medicine needed:

Roundworms – Ivermectin

Whipworms – Fenbendazole (Safe Guard or Panacur)

Hookworms – Ivermectin

Tapeworms - Fenbendazole (Safe Guard or Panacur) or Droncit

The important thing to remember is the simple advice to '*wash your hands*'!

### Ringworm

Ringworm is not actually a worm but a type of fungus that causes a skin problem in susceptible humans and dogs. The disease is usually a minor problem and fairly easy to get rid of. The interesting thing is that most of us think we know what ringworm lesions look like...pink, raised, rounded dry little patches that itch. Well, that's often true, but

sometimes there aren't any obvious little lesions, just various forms of dermatitis - general itchiness, excessive shedding, dry skin etc.

It's pretty easy to diagnose this disease in both humans and dogs, and treatment is typically uncomplicated. Any over-the-counter athlete's foot spray that contains Miconazole will usually work.

### **Bacterial**

Bacterial infections such as salmonella and E. coli can be acquired via fecal matter. Use caution when obtaining fecal samples for diagnostic review.

Other bacterial infections that are transmissible between dogs and humans are streptococcus bacteria that causes strep throat, and Leptospirosis, which causes severe liver or kidney disease.

### **Sarcoptic Mange**

Sarcoptic mange is caused by a mite that burrows just beneath the surface of the skin. It may also crawl around on the skin surface. This mite feeds on material in and on the skin. The presence of the sarcoptic mite causes severe itching. The dog will chew and scratch its skin constantly. This leads to the loss of large amounts of hair, especially on the legs and belly. Eventually, the skin will become thickened and will darken due to pigmentation.

Sarcoptic mange is ***highly contagious*** to other dogs and humans (Scabies). The dog's bedding should be washed in hot water with bleach or, preferably, discarded. Although the mites are not able to complete their life cycle on humans, they will cause quite a bit of itching before they finally die.

There are several insecticides that are effective against the Sarcoptic mite. Various dips have been used successfully. Dipping should occur weekly for at least four weeks, at which time your dog should be re-examined to determine if further treatment is needed. An oral product, Ivermectin, is also effective. This drug is approved for use in preventing heartworms, but it is not officially approved for use in treating Sarcoptic mange. However, its ease of administration compared to dipping makes it the drug of choice in certain situations, and it may actually be more effective than dipping in some dogs.

### **Rabies**

Rabies is a very serious infection of the nervous system that is caused by a virus. Rabies is usually transmitted by a bite from an infected animal, and humans who develop a rabies infection often have a history of being bitten by an animal about a month before rabies symptoms began.

Any disease showing progressive neurological symptoms, including weakness, lameness, paralysis, changes in behavior or temperament, seizures, tremors, or inability to swallow, has the potential to be rabies.

Any rescue dog that is showing progressive neurological symptoms is to be taken to a vet immediately, using a minimum number of people to make the transport safely. Do NOT attempt to make a diagnosis yourself! Once the clinical signs have surfaced, the mortality rate is 100%. There is no cure for this disease.

This information has been compiled by the Southeastern Newfoundland Club, as part of their comprehensive rescue program. We are grateful for their generosity in sharing all of their hard work.- NCA 2006

