

**THE MOST COMMON CANINE  
CONTAGIOUS DISEASES  
DOGS ARE VACCINATED FOR OR  
TREATED WITH PREVENTIVE MEDICINE**

Canine diseases are transmitted from animal to animal by three methods.

1. Direct contact with infected animals or with its blood, urine, feces, or saliva.
2. Airborne viruses
3. An intermediate host such as a flea, tick or other insect or parasite.

A contagious disease is an infectious disease that is transmitted from one dog to another.

An Infectious disease is not always contagious.

1. Viral diseases are highly contagious
2. Bacterial diseases have a much smaller chance of being contagious.

Proper immunization can almost prevent most canine viral diseases. Bacterial diseases can be treated but not prevented by immunizations.

**The following Canine diseases are those that can be avoided with vaccinations and preventive medicine.**

### **Canine Distemper**

Canine distemper virus may occur wherever there are dogs. It is the greatest single disease threat to the world's dog population. Younger dogs and puppies are the most susceptible to infection. Among puppies, the death rate from distemper often reaches 80%. The disease also strikes older dogs, although much less frequently. Even if a dog does not die from the disease, its health may be permanently impaired. A bout with canine distemper can leave a dog's nervous system irreparably damaged, along with its sense of smell, hearing or sight. Partial or total paralysis is not uncommon, and other diseases — particularly pneumonia — frequently strike dogs already weakened by a distemper infection.

**Canine distemper is a highly contagious disease caused by a virus.**

Canine distemper virus is most often transmitted through contact with respiratory secretions. Contact with the urine and fecal material of infected dogs can also result in infection. The many signs of distemper are not always typical. For this reason, treatment may be delayed or neglected. The disease frequently brings about something like a severe cold. Most infected dogs have a fever and "stuffed up" head. Exposed animals may develop bronchitis, pneumonia and severe inflammation of the stomach and intestines.

#### **What Are The Signs of Distemper?**

The first signs of distemper an owner might notice are squinting, congestion of the eyes, and a discharge of pus from the eyes. Weight loss, coughing, vomiting, nasal discharge, and diarrhea are common. In later stages the virus frequently attacks the nervous system, bringing about partial or complete paralysis as well as "fits" or twitching. Dogs suffering from the disease are usually listless and have poor appetites. Sometimes the signs may be very mild and perhaps go unrecognized, or the dog may have a slight fever for a couple of weeks. If pneumonia, intestinal inflammation or other problems develop, recovery takes much longer. Nervous problems often last many weeks after the animal has recovered from all other signs of infection. Occasionally the virus causes rapid growth of the tough keratin cells on the footpad, resulting in a hardened pad. Distemper is so prevalent and the signs so varied that any sick young dog should take to a veterinarian for a definite diagnosis.

#### **Prevention and Protection**

Dogs that survive a natural infection usually develop sufficient immunity to protect them from distemper the rest of their lives. Many dogs — particularly pups — do not survive a naturally acquired infection. The safest protection is vaccination. Puppies born to dogs, which are immune to distemper, acquire a degree of

natural immunity from nursing. This immunity is acquired through substances in the colostrums, which is the milk produced by the mother the first few days after giving birth. The degree of protection a pup receives varies in proportion to the amount of antibody its mother has, but the protection diminishes rapidly. There is now a recommended vaccination schedule the disease.

More info:

<http://www.vetinfo.com/dencyclopedia/dedistemper.html>

<http://www.provet.co.uk/Petfacts/healthtips/caninedistemper.htm>

[http://www.marvistavet.com/html/body\\_canine\\_distemper.html](http://www.marvistavet.com/html/body_canine_distemper.html)

## **Heartworm Disease**

The life cycle of the heartworm begins when an infected dog, carrying tiny immature heartworms (microfilariae) circulating in its blood, is bitten by a mosquito. The mosquito takes in microfilariae (larvae) when it feeds. During the next two-three weeks, the larvae develop within the mosquito into the infective stage. When the mosquito feeds again, it can transmit infective larvae to the healthy dog. The larvae penetrate the dog's skin and migrate through the tissues and develop over the next few months, eventually reaching the dog's heart. Once in the dog's heart, the worms can grow to as long as 14 inches and cause significant damage to the heart, lungs and other vital organs. If left untreated, heartworm disease can result in death.

### **Can my dog get heartworm disease?**

**Yes.** Your dog can get heartworm disease, whether he's an "outside" dog or even if he stays inside most of the time. Dogs get heartworm disease from mosquitoes. It is the female mosquito that bites and transmits the infection. Female mosquitoes are very tiny and can easily slip through cracks around windows, doors or screens. Every dog can be at risk, indoors or out. No dog is immune to heartworm disease. The mosquito that bites your dog could be carrying this common and deadly parasite. One bite from an infected mosquito is all it takes for your dog to become infected.

### **How can I know for sure if my dog already has heartworm?**

The only way to know for sure is to have your family veterinarian examine and test your dog. The procedure is quick and easy. But don't delay in calling your veterinarian to arrange for a heartworm test. If your dog gets heartworm disease, treatment can be dangerous for him and expensive for you.

### **When is the right time to get my dog tested?**

Mosquitoes, the carriers of heartworm disease, can be found at varying times of the year depending on the climate. Ask your veterinarian when the best time is to have your dog tested.

### **Prevention:**

If your veterinarian determines that your dog is free of heartworms, he or she will tell you how easy and convenient prevention can be. It's important to follow your veterinarian's instructions; if you don't, your dog could still be at risk. The once a month pill you give your dog will prevent the disease. They must be given as long as there are mosquitoes alive. Once the fall frost kills them, you can stop giving the medication until next year when you will have to test for heartworm again and start giving the medicine again.

More Info:

<http://www.msu.edu/~silvar/heartworm.htm>

American Heartworm Society at:

<http://www.heartwormsociety.org/heart.htm>

## **Canine Parvovirus**

Since 1978 dogs of all ages and breeds have been victims of a highly contagious viral disease that attacks the intestinal track, white blood cells, and in some cases the heart muscle. This disease, canine parvovirus (CPV) infection, has appeared worldwide. CPV infection is spread by dog-to-dog contact and has been diagnosed wherever dogs congregate, including dog shows, obedience trials, breeding and boarding kennels, pet shops, humane shelters, parks and playgrounds. A dog that is confined to a house or yard and is rarely in contact with other dogs is far less likely to be exposed to the virus. CPV infection can only be transmitted to dogs and other canids, not to other types of animals or people, but animals and people can carry it to your dog. The source of infection is fecal waste from infected dogs. Large amounts of the virus may be present in fecal material of infected dogs. The virus is resistant to extremes in environmental conditions and can survive for long periods. It is readily transmitted from place to place on the hair or feet of infected dogs or by contaminated cages, shoes, or other objects. Definitive information on other means of transmission, if any, is lacking.

### **How Can You Tell If A Dog Has CPV Infection?**

The first signs of CPV infection are depression, loss of appetite, vomiting, and severe diarrhea. Rectal temperatures may be raised. These signs will most often appear 5-7 days after the dog is exposed to the virus. At the onset of illness, the feces will generally be light gray or yellow-gray. Sometimes, the first sign will be fluid feces streaked with blood. Dogs may dehydrate rapidly due to vomiting and diarrhea. Some dogs may vomit repeatedly and have projectile and bloody diarrhea until they die. Others may have loose feces and recover without complications. Most deaths occur within 48-72 hours following the onset of clinical signs. Pups suffer most with shock-like deaths, occurring as early as two days after the onset of illness. In the past, a high percentage of pups less than five months old and 2-3% of older dogs died from this disease. Now, due to widespread vaccination, these percentages have decreased dramatically. Puppies, between weaning and six months of age are at increased risk of acquiring the disease. There appears to be a higher risk of severe disease in certain breeds (e.g. Rottweiler and Doberman Pinscher).

### **How Is CPV Infection Diagnosed and Treated?**

A veterinarian will make the initial diagnosis based on clinical signs but only after considering other causes of vomiting and diarrhea. Evidence of rapid spread in a group of dogs is strongly suggestive of CPV infection and may be confirmed by testing feces for the virus. Some tests may be available in your veterinarian's office. Your veterinarian may choose to send samples to an outside laboratory, however. There are no specific drugs that kill the virus in infected dogs. Treatment of CPV infection, which should be started immediately, consists primarily of efforts to combat dehydration by replacing electrolyte and fluid losses, controlling vomiting and diarrhea, and preventing secondary infections with antibiotics. Sick dogs should be kept warm and be provided good nursing care.

### **Prevention and Protection**

With a few exceptions, dogs of any age should be vaccinated to prevent CPV infection. Unless the actual immune status of a pup or litter is known, it is recommended that a series of vaccinations be given to provide adequate protection. Ask your veterinarian about a recommended vaccination schedule. Proper cleaning and disinfection of kennels and other areas where dogs are housed is essential to control spread of the virus. Remember, the virus is capable of existing in the environment for many months unless the area is thoroughly cleaned. Sodium hypochlorite solution, such as one-quarter cup household bleach in 1 gallon of water, is an effective disinfectant. An owner should not allow a dog to come in contact with fecal waste of other dogs when walking in a park or playground or along city streets. This is especially true until six months of age. Prompt and proper disposal of waste material is always advisable. Check lawns, sidewalks,

and street gutters for fecal waste from neighborhood dogs, and urge friends to do the same. If you are unsure whether this disease is affecting dogs in your community, check with a veterinarian. The risk of exposure can be reduced if you prevent your dog from contacting other dogs in areas where the incidence of CPV infection is alarmingly high.

More Info:

[http://www.marvistavet.com/html/body\\_canine\\_parvovirus.html](http://www.marvistavet.com/html/body_canine_parvovirus.html)

[http://en.wikipedia.org/wiki/Canine\\_parvovirus](http://en.wikipedia.org/wiki/Canine_parvovirus)

<http://www.cpvh.com/Articles/39.html>

## **Canine Bordetellosis (Kennel Cough)**

Bordetellosis is caused by bacterium *Bordetella bronchiseptica* that is present in the respiratory tracts of many animals. It is a primary cause of tracheobronchitis (kennel cough), which results in a severe chronic cough. In addition to the cough, some dogs develop a nasal discharge. Transmission most frequently occurs by contact with the nasal secretions of infected dogs. Vaccination is usually accomplished by the use of a nasal spray. There are several effective schedules and methods for administering the vaccine. Your veterinarian will establish a schedule that is best for your dog.

### **Prevention:**

Dogs who travel, board dog shows; hunt come into contact with other dogs should be vaccinated each year to prevent this disease.

More Info:

[http://www.ivis.org/advances/infect\\_dis\\_carmichael/keil/ivis.pdf](http://www.ivis.org/advances/infect_dis_carmichael/keil/ivis.pdf)

<http://www.wendyleesshihtzu.com/Bordetella.htm>

## **Canine Parainfluenza**

Parainfluenza is caused by a virus, which produces a mild respiratory tract infection. It is often associated with other respiratory tract viruses. In combination these viruses are usually transmitted by contact with the nasal secretions of infected dogs. **The vaccine to protect against this disease may be combined with other vaccines to offer broader protection.**

More Info:

<http://www.provet.co.uk/infectiousdiseases/5a6bac3.htm>

## **Canine Leptospirosis**

*Leptospira* bacteria cause leptospirosis and that impairs renal (kidney) function and may result in kidney failure. Clinical signs include vomiting, impaired vision, and convulsions. The disease is transmitted by contact with the urine of infected animals or by contact with objects that have been contaminated with the urine of infected animals. This bacterium is harbored by cattle, pigs, sheep, rats as well as dogs.

### **What are the Clinical signs?**

Fever, depression, lack of appetite, jaundice, vomiting and muscle pain. This disease can be fatal

Treatment consists of specific antibiotics and streptomycins.

### **What can I do to prevent the disease?**

Use of a bacterin, a bacterial vaccine is of help. Veterinarians may or may not include leptospirosis in their canine immunization programs, depending on the geographic area, and incidence of the disease and owner's wish.

More Info:

<http://www.labbies.com/lepto.htm>

<http://www.cpvh.com/Articles/88.html>

## **Rabies**

Rabies is a preventable viral disease of mammals most often transmitted through the bite of a rabid animal. The vast majority of rabies cases reported to the Centers for Disease Control and Prevention (CDC) each year occur in wild animals like raccoons, skunks, bats, and foxes. Domestic animals account for less than 10% of the reported rabies cases, with cats, cattle, and dogs most often reported rabid. Rabies virus infects the central nervous system, causing encephalopathy and ultimately death. Early symptoms of rabies in humans are nonspecific, consisting of fever, headache, and general malaise. As the disease progresses, neurological symptoms appear and may include insomnia, anxiety, confusion, slight or partial paralysis, excitation, hallucinations, agitation, hypersalivation, difficulty swallowing, and hydrophobia (fear of water). Death usually occurs within days of the onset of symptoms.

### **Prevention:**

Limit contact with wild animals. Vaccination is essential for all dogs.

More Info:

<http://www.cdc.gov/ncidod/dvrd/kidsrabies/>

[http://www.cdc.gov/ncidod/dvrd/rabies/the\\_virus/virus.htm](http://www.cdc.gov/ncidod/dvrd/rabies/the_virus/virus.htm)

<http://www.canismajor.com/dog/rabies.html>

## **BASIC VACCINATION SCHEDULE FOR DOGS**

**Bordetella** - a bacterial infection (kennel cough)

**(DHLPP)**

**Distemper** - an airborne viral disease of the lungs, intestines and brain

**Hepatitis** - a viral disease of the liver.

**Leptospirosis** - a bacterial disease of the urinary system.

**Parainfluenza** – a viral infectious bronchitis.

**Parvovirus** - a viral disease of the intestines

**Rabies** - a viral disease fatal to humans and other animals.

Puppies - 6 weeks to 1 year

6 to 8 weeks - First puppy shot (DHLPP) + Corona

11 to 12 weeks - Second puppy shot (DHLPP) + Corona

15 to 16 weeks - Third puppy shot (DHLPP) + Corona

Over 4 months - Rabies (repeat 1 year later)

7 to 9 months - First heartworm test

Adult Dogs - After 1 year

- DHLPP - Yearly
  - Heartworm test - Yearly
  - Rabies - Every 3 years (after second Rabies shot)
  - Bordetella – Yearly
- 
- Each state has their own laws and regulations regarding the frequency & requirement of certain vaccinations.
  - There are ever changing ideas on how much vaccination should be done.
  - When in doubt, always discuss it with your veterinarian.