

### Distemper Virus



### Viruses in General

Viruses are tiny infective agents that live inside the cells of other animals. They can infect a wide variety of organisms, including people, animals, and even bacteria. Viruses consist of mostly genetic material, and their primary goal is to “trick” the host’s body into reproducing this genetic material. When enough viral particles are reproduced, the host cell dies. This is what

causes symptoms of viral infection. Viruses are particularly difficult to treat because they live inside the cells of another organism and are therefore “protected” from the normal treatments, such as antibiotics, that cannot directly kill viruses.

### About Distemper

Distemper is a virus that can affect both dogs and cats, but cannot be transmitted across species and does not cause illness in people. It initially targets the respiratory system, but can also move on to the digestive system and the nerves and brain. It is primarily spread through respiration (coughing and breathing), but can also be spread through urine.

### Symptoms

In a dog, the initial symptoms are similar to that of a cold: sneezing, coughing, and eye and nose discharge. In later stages, it can also cause vomiting, diarrhea, hardening of the foot pads, neurological twitching and eventually seizures. In a cat, the symptoms include vomiting, diarrhea, and fatigue.

### Making a Diagnosis

Distemper is a clinical diagnosis. This means that rather than confirming infection with a simple test that is negative or positive, the veterinarian must look at the whole picture and take into account many factors including symptoms, history, and blood tests. In the local market, there are many test kits in circulation that may promise a quick confirmation for canine Distemper. However, no single test can provide a definitive diagnosis of Distemper. Any test results must be evaluated together with all of the animal's other symptoms and its medical history. The key is that if the veterinarian believes the dog may have Distemper, it should be treated accordingly against its clinical symptoms and provided with supportive care. The patient must be monitored daily and quarantined away from all other animals.

### Treatment

Because Distemper is a virus, there is no cure. The key to treatment is supportive care to boost the patient's immune system to fight the virus on its own. If the patient has pneumonia, antibiotics may be used to treat secondary bacterial infections. Airway dilators are used if needed. If the patient has diarrhea, intravenous fluids may be administered to prevent dehydration. Again, there is no direct cure for the virus. It is all about providing support for the body to boost the immune system while also fighting secondary bacterial infections.

### Prognosis

It is imperative that you bring your pet to seek veterinary attention immediately, adhere to strict isolation protocols to keep your pet away from other animals, and allow for supportive medical treatment. Distemper is a very serious infectious disease with a high prevalence here in Beijing. Rates of fatality may be as high as 70% among puppies and dogs with weak immune systems or poor history of vaccinations. With Distemper, prognosis is always guarded, but many dogs have also survived with early medical diagnosis and treatment with appropriate supportive care.

### Prevention

Distemper can be *prevented* with the proper care and vaccinations. For puppies, avoid taking them outside until they are fully vaccinated and keep them isolated from all other dogs. This will keep your puppy from being exposed and potentially infected. Puppies may receive their first vaccination for Distemper at 6-8 weeks, followed by 2 more vaccinations on a schedule recommended by your ICVS veterinarian. Revaccinating each year can prevent adult dogs from contracting Distemper. Vaccinations for Distemper are very effective, and if given as instructed by your veterinarian, can be an essential factor in keeping your pet healthy and safe.

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