

# Canine Distemper in Ferrets

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Canine distemper is an airborne virus that is extremely contagious. It can be spread through direct or indirect contact, and you can bring it into your home on your shoes and clothing. Ferrets are extremely susceptible to the canine distemper virus, and the fatality rate of ferrets that contract canine distemper is virtually 100%. Because this disease is so fatal for ferrets, it is very important that all ferret owners know the symptoms of canine distemper, as well as how to prevent it.

## SYMPTOMS

You may notice the following symptoms if your ferret has contracted canine distemper:

- Discharge from eyes - generally foul smelling, yellow or green
- Swelling, rashes and thick brown crusts on the chin, lips, and nose
- Severe lethargy
- High fever
- Loss of appetite
- Drooling
- Dehydration
- Coughing
- Hardened, thick paw pads and swollen feet
- Crusting and redness in the abdominal and anal areas
- Muscular tremors
- Seizures
- Vomiting and diarrhea may occur, but are less common than in dogs with distemper
- Coma

You may only notice a few of these symptoms, as they occur at different points during the progression of the disease. For example, thickening of the paw pads tends to happen in the later stages.

The suffering associated with the progression of this disease is excessive, and most ferrets that are diagnosed with distemper are immediately euthanized. From the time your ferret contracts the disease to the time he shows symptoms can be anywhere from 7 to 21 days. Once the symptoms appear, the ferret's organs are already under attack by the virus, and any treatment is only prolonging the ordeal. Canine distemper is 99.99% fatal in ferrets, and those few ferrets that have been reported to survive have done so with severe neurological damage. The most humane thing to do is euthanize. Given the horrible nature of the disease, prevention should be the priority.

## PREVENTION

Canine distemper can easily be avoided by vaccinating your ferret yearly. Many ferret owners believe that since their ferrets do not go outside, they don't need to vaccinate. This is not true! Canine distemper is carried and shed in the urine of infected dogs as well as those dogs who have recovered. Wild animals can also shed it in their urine. Anyone who walks where an affected animal has urinated carries the disease wherever he or she goes. Simply keeping your ferret inside and avoiding contact with animals of unknown vaccination status is not enough to keep your ferret safe.

### Which vaccines to use

The only effective way to be sure that your ferret is protected is to vaccinate him. There is currently only one USDA-approved canine distemper vaccine for ferrets - Purevax-D, manufactured by Merial. Galaxy-D from Schering-Plough is also used to vaccinate ferrets, although it is not currently USDA-approved for this purpose. Vaccines to avoid include:

- Multivalent vaccine (those that contain live viruses other than canine distemper)
- Canine distemper vaccine made with a killed virus
- Feline distemper vaccine
- Canine distemper vaccine cultivated from ferret tissue
- Recombinant canine distemper vaccines for dogs (Purevax is a recombinant canine vaccine for ferrets.)

### When to vaccinate

When a kit (baby ferret) is born, he is protected by his mother's immunity (assuming the mother was vaccinated) for about eight weeks. Kits should receive a series of vaccinations, with the last in the series given at 14 weeks of age. A schedule of vaccinations at 8 weeks, 11 weeks and 14 weeks, and then yearly thereafter is usually recommended. Pet store ferrets should have their first vaccine, but you will need to get the 11 week and 14 week boosters. Ask the pet store for a vaccination record when you purchase the ferret.

Canine distemper vaccines are "live vaccines" (as opposed to a "killed vaccine" where the infectious agent has been inactivated in some way), which means that you should not vaccinate pregnant ferrets, ferrets with infections or ferrets with compromised immune systems. Ferrets with any of these conditions are at increased risk of becoming infected from the vaccine strain of the virus.

If you get a ferret with an unknown vaccination history, a recommended vaccination protocol is:

- **Under 14 weeks:** three boosters given three weeks apart, then an annual vaccination
- **Over 14 weeks:** two boosters given two weeks apart, then an annual vaccination

### Vaccination reactions

Although vaccinating your ferret against canine distemper can save his life, there are risks involved. Ferrets have a high rate of moderate to severe vaccination reactions. The reaction can range from listlessness after the vaccination to full-blown anaphylaxis (life-threatening allergic reaction). Severe reactions usually occur within minutes of the vaccination, but delayed reactions are possible. Symptoms of a severe reaction include:

- Vomiting
- Diarrhea
- Weakness (ferret goes limp)
- Reddening of skin
- Pale or bright pink gums, ears, nose, or feet
- Difficulty breathing
- Seizures or convulsions
- Loss of coordination
- Coma and death if untreated

Because of the possibility of an allergic reaction, always have a veterinarian administer the distemper vaccination regardless of what the law in your state requires. Anaphylaxis requires immediate care that a ferret owner cannot give. Additionally, you should always stay at your veterinarian's office for at least 30 to 60 minutes following the vaccination in case of a delayed reaction. You may also want to ask your veterinarian about pre-treating your ferret with an antihistamine prior to the vaccination.

Since there could be a delayed reaction, monitor your ferret closely for 24 hours after the vaccination. Schedule the vaccination so that you or someone else will be able to monitor your ferret during this time. Be sure veterinary care will be available to you for 24 hours after the vaccination. Know the emergency phone number for your veterinarian and/or emergency clinic in the event your ferret would have a reaction and need immediate attention.

Discuss the options with your veterinarian. If your ferret does have a reaction to a canine distemper vaccine, that doesn't mean your ferret should never be vaccinated again. Your veterinarian may recommend using a different vaccine and/or pre-treating before it is administered. We understand that the possibility of anaphylaxis is a serious concern, but the risk of contracting canine distemper is also very serious. Anaphylaxis can be successfully treated in almost all cases; canine distemper is fatal and incredibly painful.