



The American Ferret Association, Inc.

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AFA Ferret (*M. putorius furo*) Vaccination Policy

The American Ferret Association (AFA) recommends vaccinating ferrets with USDA licensed vaccine products labeled for use in ferrets. Recent changes in the availability of these products have caused shortages of approved vaccines. Use of vaccines that do not include ferrets on the manufacturer's label is an off-label usage; use these products only after consulting with a ferret knowledgeable veterinarian and only in circumstances when the risk of infection warrants the use of the vaccine.

CANINE DISTEMPER VIRUS (CDV):	Ferrets are highly susceptible to CDV. The disease is virtually 100% fatal in ferrets that contract the disease. Proper vaccination provides protection from infection.
USDA LICENSED VACCINE LABELED FOR USE IN FERRETS:	PUREVAX[®] FERRET DISTEMPER (NAC #11110832) Manufactured intermittently by MERIAL, INC. (United States Veterinary License #298), Athens, Georgia 30601, USA. For more information, contact MERIAL, 1-888-MERIAL-1.
RECOMMENDED SCHEDULE (Consult Product Label):	Reconstitute the lyophilized vaccine with liquid diluent and aseptically inject one milliliter subcutaneously in healthy ferrets at 8, 11, and 14 weeks of age, and annually thereafter.
KITS:	For healthy kits less than or equal to 14 weeks of age from mothers whose vaccination history is unknown, incomplete, or outdated; OR for kits that have unknown, incomplete, or no vaccination history: <ul style="list-style-type: none"> ▪ Give a series of three vaccines at three-week intervals, then vaccinate annually on the anniversary of the last booster. ▪ In a 1992 CDV outbreak, some ferrets that had received only two CDV vaccines, the last at less than 14 weeks of age, succumbed to CDV. <p>If exposure to CDV is suspected, kits as young as 6 weeks of age may be vaccinated. In this situation, the second vaccine should be given at 10 weeks of age, followed by the final booster at 14 weeks of age, since passive immunity (maternal antibodies in the kit) may prevent response to the first vaccine in the series.*</p>
ADULT FERRETS:	For healthy ferrets over 14 weeks of age that have unknown, incomplete, outdated, or no vaccination history: <ul style="list-style-type: none"> ▪ Give a series of two vaccines three weeks apart, then vaccinate annually on the anniversary of the last booster. ▪ Do not vaccinate pregnant jills.
KITS AND ADULTS WITH A DOCUMENTED, CURRENT VACCINATION HISTORY:	Complete the series as directed above. Consult the vaccine label.

RABIES VIRUS:	Although it is unlikely that an indoor ferret would contract the Rabies Virus, immunization is required for all ferrets. The Rabies Virus vaccine will protect an immunized ferret in case of exposure and the ferret's current vaccine status will support quarantine in the event that it bites a person.
USDA LICENSED VACCINE LABELED FOR USE IN FERRETS:	IMRAB[®]3 (NAC #11110282) Manufactured by MERIAL, INC. (United States Veterinary License #298), Athens, Georgia 30601, USA. For more information, contact MERIAL, 1-888-MERIAL-1.
RECOMMENDED SCHEDULE (Consult Product Label):	Aseptically inject one milliliter subcutaneously in healthy ferrets at 12 weeks of age, and annually thereafter.

*AFA has included the age of 6 weeks in the case of suspect or confirmed CDV exposure because some of the kits born to jills with unknown, incomplete, outdated, or non-ferret CDV vaccine status died during the 1992 CDV outbreak. Typically, maternal antibodies against CDV should protect kits from properly vaccinated jills. While vaccination at 6 weeks of age should not harm the kit, only a fraction (<30%) will be immunized after the first dose of the vaccine at this young age since there is immunologic interference from antibodies present in the jill's colostrum and milk for up to thirty days.

Comments and Further Recommendations

- As in all animal species, ferrets may experience adverse reactions to vaccine products following immunization. Ferrets may suffer from a blushing of the ears, restlessness, respiratory distress, vomiting (sometimes with blood), diarrhea (often with mucus or with blood), collapse, seizures, coma, and rarely, death. Therefore, do not vaccinate any animal unless appropriate emergency measures are available to manage such potential occurrences. Following immunization, closely observe the ferret for no less than twenty minutes, and preferably for one hour, for signs of immediate hypersensitivity. AFA strongly encourages that all ferrets be observed at a veterinary hospital directly post vaccination so a veterinarian may provide immediate care if needed. Owners should report any changes in behavior or suspicious clinical signs seen in the ferret within three days following vaccination to the ferret's veterinarian.
- Although there is no documented evidence that the administration of more than one vaccine product at the same time to a ferret is associated with a higher incidence of adverse events, AFA recommends that ferrets receive each vaccine product individually, preferably separated by a two week interval. In the event of a reaction, the veterinarian can evaluate the contributory role of the vaccine product with greater ease.
- Animals with an infective process should not receive any vaccine. In addition, animals who have hematologic malignancies, or that are undergoing immunosuppressive treatments, may:
 - Produce a poor immune response which may not be protective, or
 - Experience adverse effects, including contracting the disease itself, especially if vaccinated with a live-attenuated viral vaccine product.
- AFA discourages the immunization of pregnant jills. Breeders should update the vaccination status of male and female ferrets at least one month prior to anticipated breeding if the animals are near their annual booster date. This will prevent the transmission of the vaccinated disease during the breeding interaction, and it may confer some immunity to the kits from the jill through passive transfer of antibodies in her colostrum and milk.

- Report any vaccine-associated adverse events to the:
 - United States Department of Agriculture Center for Veterinary Biologics at:
 - 1-800-752-6255, or
 - www.aphis.usda.gov/vs/cvb/html/adverseeventreport.html
 - FDA Center for Veterinary Medicine at:
 - 1-888-FDA-VETS, or
 - www.fda.gov/cvm/
 - Vaccine manufacturer; by law, the manufacturer must forward these reports to the appropriate government agency.

- AFA strongly recommends that ferrets receive only monovalent, or single agent, vaccines. Manufacturers have designed most currently available CDV vaccines for use in dogs; these products are multivalent, or combination, vaccines.

- Whenever available, the American Ferret Association recommends the use of a licensed vaccine against canine distemper in ferrets (currently only Merial's Purevax Distemper). When such a vaccine is unavailable due to shortages or other problems, the AFA recommends considering the use of a limited antigen vaccine that has a track record of safe and efficacious use in protecting ferrets. At this time, that is limited to Nobivac DPv, also known as The Puppy Shot, which has been used extensively in Europe and contains the vaccine strain formerly available as GalaxyD. Although it does also vaccinate against canine parvovirus, which ferrets do not get, it is still the most proven vaccine available at times when the licensed product is not. As always, the AFA recommends discussion of any vaccination protocol with the ferret's treating veterinarian, and use of such tools as antibody titers and risk assessment to determine the ultimate protocol used for each individual animal.

- For more information, please review the two articles reference below:
 - "Incidence of and Risk Factors for Adverse Events Associated with Distemper and Rabies Vaccine Administration in Ferrets," *JAVMA*, Volume 226, Number 6, March 15, 2005, pages 909-912. Summary: The adverse event incidence rate for Rabies alone, Canine Distemper alone, and the combination was 0.51%, 1.00%, and 0.85%, respectively, which were not significantly different. This study was based on 3,587 ferrets. The risk of an adverse event was primarily associated with an increase in the number of Canine Distemper vaccinations.
 - "Serologic Evaluation, Efficacy, and Safety of a Commercial Modified-live Canine Distemper Vaccine in Domestic Ferrets," *AJVR*, Volume 62, Number 5, May 2001, pages 736-740. Summary: Based upon eight vaccinated ferrets, researchers found Galaxy[®] D to be safe and effective against challenge with virulent CDV. Since researchers challenged the ferrets only three weeks after the second vaccine, duration of immunity was NOT determined. All eight control (unvaccinated) ferrets died of the disease when challenged with virulent CDV. Colorado State did the serum virus neutralization titers.

- Disclaimer: AFA encourages each individual who is considering using Nobivac DPv in ferrets to review the available information and make his/her own judgment and decision on the matter. AFA assumes no responsibility and is not liable in any way for any problems, complications, or similar associated with the use of Nobivac DPv in ferrets.