

# Serum-Neutralizing Antibody Responses to Canine Distemper Virus Vaccines in Domestic Ferrets (*Mustela putorius furo*)

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One-hundred-fifty pet ferrets, 16 weeks to 8 years of age, were evaluated for the presence of serum-neutralizing (SN) antibody titers against canine distemper virus (CDV) vaccine. All ferrets received an initial vaccine at the source of origin some time before 9 weeks of age, and one or more commercially available CDV vaccines beginning at 14 to 16 weeks of age. SN antibody titers were measured at 1, 2, 3, and > 3 years after each ferret received their last CDV vaccination. Ferrets with titers < 1:50 were revaccinated and antibody titers were measured at > 4 weeks after vaccination to determine seroconversion to  $\geq$  1:50 SN titers. Ninety percent (135/150) of the ferrets had titers in excess of 1:50. Ten percent (15/150) of the ferrets had titers < 1:50, and revaccination of ferrets with < 1:50 SN titers increased anti-CDV SN titers to  $\geq$  1:50 in 40% (6/15) of these ferrets. Age, sex, time since last vaccination, and vaccine brand did not significantly influence the differences in anti-CDV antibody titers. Our results suggest that ferrets maintain SN antibody titers of > 1:50 against CDV for > 3 years after being vaccinated at 14 to 16 weeks of age or older, and there is no significant difference in the ability of 3 brands of CDV vaccine to elicit anti-CDV SN titers.