

Should animals on bite quarantine be vaccinated on intake?

A shelter veterinarian is concerned about the potential for vaccination reactions in animals on bite quarantine, particularly regarding interpretation of possible neurologic signs. Dr. Swailes explains that the benefits of vaccination outweigh the risks for animals on bite quarantine.

Question:

Hi,

I'm a veterinarian at a county shelter caring for cats and dogs. What are your recommendations on vaccinating animals that are placed on a bite quarantine? Intake vaccines are important in a shelter setting, but we also don't want to interfere with the interpretation of rabies signs if those animals were to develop a vaccine reaction.

Thanks!

Answer:

Thank you for reaching out with your question. We recommend vaccinating all animals at intake, as delaying may allow for increased disease exposure prior to vaccination and/or a delay in onset of immunity.

For animals on bite quarantine, we would recommend vaccination on intake as for other animals entering the shelter. In cases where vaccination is not possible due to an animal's fractious or aggressive behavior, the animal would ideally be housed separately from the general shelter population until vaccination can be reattempted.

Vaccine reactions are uncommon, whereas the incidence of infectious disease in unvaccinated animals in shelters can be very high. The benefits of vaccination with a modified live DAPP/FVRCP combination vaccine far outweigh the risks of vaccine reaction. A 2015 study in Canada showed that post-vaccination reactions resulting in neurological signs were highly uncommon. In fact, in dogs they are estimated to occur 0.459 times per 10,000 vaccinations and 0.249 per 10,000 vaccinations in cats (1). Other transient allergic reactions are more frequent but would not be as much of concern while evaluating a bite case. However, differentiating between vaccination reactions and potential rabies manifestation might prove difficult without further testing. Reactions can

cause tremors, encephalitis, polyradiculoneuritis, etc., and can appear within the standard 10-day hold (1,2,3).

On the other hand, canine distemper virus may affect the CNS within 8-9 days post-infection (4), which is within the standard 10-day bite quarantine hold. Clinical signs of distemper can mimic rabies, and by vaccinating these animals on intake, we are greatly reducing the risk of disease.

While it would certainly be unfortunate for an animal on bite quarantine to develop neurologic signs secondary to vaccination, it is our responsibility to protect these animals as well as the rest of the shelter population. The risk of developing potentially fatal illness due to distemper or parvovirus if unvaccinated is much greater and, in most immunocompetent animals, highly preventable with vaccination and appropriate animal handling and sanitation practices. In summary, the rarity of neurologic complications developing post-vaccination should not preclude routine vaccination of animals on bite quarantine.

I hope this information has been helpful to you, and if you have any further questions please do not hesitate to contact us. Please see our information sheet on vaccination in animal shelters for general vaccination recommendations at <http://www.uwsheltermedicine.com/library/resources/vaccination-in-animal-shelters>.

1. Valli LJ. Suspected adverse reactions to vaccination in Canadian dogs and cats, Canadian Veterinary Journal, 2015 Oct; 56(10): 1090–1092
2. Fairley RA, Knesl O, Pesavento PA, Elias BC. Post-vaccinal distemper encephalitis in two Border Collie cross littermates. N Z Vet J. 2015 Mar;63(2):117-20. doi: 10.1080/00480169.2014.955068. Epub 2015 Jan 19.
3. Gehring R, Eggars B. Suspected post-vaccinal acute polyradiculoneuritis in a puppy. J S Afr Vet Assoc. 2001 Jun;72(2):96.
4. Greene CE, Infectious Diseases of the Dog and Cat, Elsevier Saunders, 2009, p. 25-32.

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