

Dog Tips

Cat Tips

Here's Proof Your Pet Probably Doesn't Need This Vaccine

The law demands it. But is this law based on actual science or some kind of arbitrary black-and-white policy made by legislators in fancy chairs in state capitals? If you have any doubt, you'll be stunned by this study showing that this test group didn't need it.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Thankfully, the veterinary community has issued new guidelines for the handling of pets overdue for a rabies booster who are exposed to the virus
- The revised guidelines recommend that cats and dogs exposed to rabies who are overdue for a vaccine be given a booster shot followed by an observation period
- Currently, the law in many states requires rabies-exposed pets to be quarantined for several months at great financial expense to the owner, or euthanized
- The new guidelines will hopefully be adopted by states and counties across the U.S., and sooner rather than later

Editor's Note: This article is a reprint. It was originally published April 06, 2016.

I have some encouraging news! On March 1, 2016, the Compendium of Animal Rabies Prevention and Control Committee, under the auspices of the National Association of State Public Health Veterinarians, published revised recommendations for the handling of pets overdue for a rabies re-vaccination in the event they're exposed to the virus.

The new guidelines, published in the Journal of the American Veterinary Medical Association, recommend that cats and dogs exposed to rabies who are overdue for a vaccine be given a booster shot (re-vaccination) followed by an observation period rather than be quarantined or euthanized.¹

Currently, if a pet with a lapsed rabies vaccination is exposed to a rabid animal, the law in many states requires the pet to be quarantined for several months at the owner's expense, or euthanized.

The revised guidelines also recommend reducing the quarantine period from 6 months to 4 months for unvaccinated cats and dogs exposed to rabies.

New Guidelines Follow 4-Year Study

The new guidelines follow the results of a study conducted at the Kansas State Veterinary Diagnostic Laboratory (KSVDL) by veterinary researchers led by Dr. Michael C. Moore.²

Dr. Moore and his team set out to evaluate whether dogs and cats overdue (by law) for a rabies vaccine respond satisfactorily to a booster (re-vaccination).

For 4 years, between 2010 and 2014, the researchers collected blood samples from 74 dogs and 33 cats that had 1) been exposed to rabies and brought to a veterinarian, or 2) were brought to a veterinarian for a rabies booster.

The KSVDL researchers gave a rabies booster to each dog and cat to evaluate their anamnestic antibody responses.

They discovered that after 5 to 15 days, all the animals - both those with current vaccinations and those overdue for a vaccination - had rabies neutralizing antibody titers of \geq 0.5 IU/mL, indicating immunity to the virus.

Study Proves Rabies Protection Doesn't Suddenly Disappear

The study results demonstrate that when an animal with an out-of-date rabies vaccination receives the booster, the antibodies in his or her blood rise, protecting against exposure to the virus. The study authors concluded:

"Findings supported immediate booster vaccination followed by observation for 45 days of dogs and cats with an out-of-date vaccination status that are exposed to rabies, as is the current practice for dogs and cats with current vaccination status."³

Moore said, "When it comes to vaccinating either people or animals, they don't just all of a sudden on a predetermined date have zero protection or loss of priming."

The team at the Rabies Laboratory at the Kansas State Veterinary Diagnostic Laboratory gets several calls each month about cats and dogs that have been exposed to rabies and are overdue for a vaccine. Traditionally, the only options available have been a very costly 6-month quarantine or euthanasia.

"We are very excited that people might have an additional option if their cat or dog is out-of-date and exposed to rabies," said Moore.

Most Pets Overdue for a Rabies Booster Were Still Immunized

More interesting than the rabies booster findings for those of us fighting against over-vaccination of pets is what the researchers discovered about the dogs and cats in the study before they were given rabies re-vaccinations.

Based on blood samples drawn on day 0 of the study, several of the animals whose rabies vaccinations were out-of-date had acceptable and even high rabies antibody titers pre-booster. Examples:

- A dog that was 3 months overdue for a 3-year vaccination had a pre-booster titer of 9.7 IU/mL
- A dog 5.5 months overdue for a 3-year vaccination had a pre-booster titer of 12 IU/mL
- A dog 2 years overdue for a 1-year vaccination had a pre-booster titer of 0.6 IU/mL, as did a dog 3.5 months
 overdue for a 1-year vaccination
- A dog 1.5 years overdue for a 1-year vaccination had a pre-booster titer of 1.8 IU/mL
- A cat 9 months overdue for a 3-year vaccination had a pre-booster titer of 12 IU/mL

For the entire group of 74 dogs, those with current vaccinations (55) had a median pre-booster titer of 2.6 IU/mL. The remaining 19 dogs with out-of-date vaccinations had a median pre-booster titer of 2.0 IU/mL –well over the \geq 0.5 IU/mL that indicates protection against the virus.

Of the 33 kitties, 7 had a current rabies vaccination and the remaining 26 were overdue. The cats with a current vaccine had a median pre-booster titer of 2.4 IU/mL, and interestingly, the kitties whose vaccinations were out-of-date had a median pre-booster titer of 6.3 IU/mL – again, well over the \geq 0.5 IU/mL target.

This means the vast majority of pets in the study, whether they had a current rabies vaccination or were overdue for a 1- or 3-year vaccine, had adequate rabies neutralizing antibody titers and were protected in the event of exposure to the virus prior to receiving a rabies booster.

Will the New Guidelines Change State Rabies Vaccination Laws?

Unfortunately, the veterinary community can only provide recommendations with regard to the management of pets exposed to rabies. According to Dr. Richard Ford, an emeritus professor at North Carolina State University College of Veterinary Medicine:

"The application, interpretation and enforcement of rabies vaccination laws can vary significantly from state to state, and even county to county. Complex and sometimes conflicting rabies laws can lead to considerable confusion, misinterpretation of state and local statutes and inappropriate actions on the part of individual practitioners."

As Dr. Jean Dodds, veterinary vaccine authority and chairperson of the American Holistic Veterinary Medical Association (AHVMA) Communications Committee, points out in a press release titled "Changes Sought to Rabies Vaccination Laws Based on Scientific Research":

"Until legal changes occur, animal guardians and veterinarians must comply with existing legal statutes. Rabies serum antibody titering can be performed for information, documentation, and to satisfy export and import requirements, but this does not replace the legal requirement for rabies booster vaccinations."

Hopefully, I'll have more good news to report in the near future about states adopting the new recommendations in the Compendium of Animal Rabies Prevention and Control, 2016.

In the meantime, you can bookmark **RabiesAware.org**, a new site (sponsored by the veterinary drug company Merial) that "provides rapid access to current, validated state-level laws and regulations on rabies vaccination." The information is a resource for veterinarians, but pet guardians will also find it useful. The site is still being populated as of this writing, so not every state has information available yet.

Sources and References

AVMA March 1, 2016

¹ Journal of the American Veterinary Medical Association, March 1, 2016, Vol. 248, No. 5, Pages 505-517

² Journal of the American Veterinary Medical Association, January 15, 2015, Vol. 246, No. 2, Pages 205-211

³ JAVMA News, March 1, 2016

⁴ <u>Dr. Jean Dodds' Pet Health Resource Blog</u>