

## Dog's Vaccine for Leptospirosis May Be Optional

**Whether a dog needs a leptospirosis vaccine depends on where he lives.**

*By Jon Geller, DVM*

**Q.** Yesterday my vet checked my 8-week-old, 1.36-pound Chihuahua, Chico, for the first time. In five more weeks they want to give him leptospirosis and combo vaccinations. I have heard so many bad things about this, including a dog I know died after receiving it. Does my dog have to have this or can I tell them no? He lives indoors, and I see no risk for him. I do have another dog who goes out in our yard only, a German Shepherd Dog-Boxer mix. Both are healthy.

**A.** Hopefully I can help you and other dog owners sort out the confusion regarding vaccines.

First of all, serious complications from vaccines are rare, so in most cases the benefits of vaccination far exceed the risks. In some cases, vaccination can trigger a mild allergic reaction, including hives and facial swelling. In rare cases, the reaction is delayed and more severe, including vomiting, collapse and fever.

Some veterinarians speculate that over-vaccination can lead to over-stimulation of the immune system, and the destruction of the dog's own blood cells by the white blood cells, but this has never been scientifically proven.

There is a certain group of vaccines that all dogs should get, regardless of lifestyle or individual differences. These are known as core vaccines, and are combined in one injection known as DA2PPv. The "D" stands for distemper virus, a deadly virus that causes neurological and respiratory problems. Adenovirus 2 is a type of infectious hepatitis (liver disease) that has largely been eradicated in dogs, but is still recommended. Parainfluenza is a mild respiratory virus. "Pv" stands for parvovirus, a highly contagious infection of the intestinal system and white blood cells. Another common combination is DHLPP, with the "H" referring to hepatitis and the "L" referring to leptospirosis.

The rabies vaccine is also considered a core vaccine, as well as a legal requirement in virtually all of the U.S. It is given either every year or every three years, depending on local regulations.

Another group of vaccines constitute the noncore vaccines. These are given individually based on the risk factors for each individual dog. Bordetella, corona virus, Lyme disease and leptospirosis are examples of noncore vaccines. Dog owners should discuss the risk factors for all of these noncore vaccines before agreeing to them.

The vaccine you asked about for leptospirosis protects dogs from an infection they will only get from contact with wildlife. In the past, this was seen mostly in farm dogs who were exposed to infected cattle. Now many urban dogs are exposed to leptospirosis due to contact with raccoons and other critters that have invaded residential areas. The disease is spread primarily through contact with urine.

If you have a one-pound Chihuahua who is going to be staying with you and not running around outside, a leptospirosis vaccination is probably unnecessary. As you pointed out, your Boxer mix hangs out outside in the yard, and could be at risk especially if there is leptospirosis in your region of the country. This is a dog who should be vaccinated.

One interesting note about vaccines is that both a one-pound dog and a hundred-pound dog get the same dose. This is not unlike human vaccination, where an infant and adult are both vaccinated with the same amount of influenza vaccine. The purpose of the vaccine is to stimulate the body's own immune system to respond to the infectious organism, and the risk of side effects appears to be independent of the dose.