



## WHY PUPPIES NEED VACCINES

An article by dvm360 in association with Kathryn Primm, DVM, and modified for Evergreen Veterinary Hospital

### ***What is a vaccine?***

The history starts with an epidemic of smallpox, which killed millions of people. In 1796, a physician named Edward Jenner noticed that the milk maids, who were routinely exposed to cowpox, did not get sick with smallpox. He wondered whether their exposure to cowpox protected them, and the idea of vaccination was born.

A vaccine exposes the immune system to inactive or incomplete disease-causing agents to train the immune system to quickly and effectively respond when exposed to the real thing.

### ***Why do we vaccinate puppies?***

Since we know that vaccines train the immune system to react quickly to certain diseases, we want to protect puppies from diseases for which we have vaccines. If we expose our pups to vaccines, when their immune systems face the real disease, they can fight it more easily. Think of vaccination like a training gym where athletes prepare their bodies and minds for actual competition.

### ***Which vaccines does my puppy need?***

When a disease is widespread, dangerous, or both, researchers develop a vaccine against it. Vaccination choices are based on an individual puppy's lifestyle and risk factors. The Evergreen team can tell you which vaccines are appropriate and how they can be given.

### ***Why does my puppy need to repeat vaccines as "boosters"?***

We know that an immune system remembers diseases from vaccines, but we do not know how long that memory is for each individual animal. Because we do not want to gamble with protection, pets receive booster vaccines, or the same vaccine every few weeks until a certain age (about 18-20 weeks old).

While puppies receive some immune protection from their mother after they are born, that does not last long for the dog's entire puppyhood. Eventually, puppies need to develop their own protection, and that is where vaccines come in. Since maternal immunity can interfere with the effectiveness of vaccines, we repeat them to make sure they are present when the puppy's own immune system takes over. This timeline varies between individual dogs, so we follow guidelines to protect as many puppies as possible.



*Are vaccines safe?*

Vaccines have been accused of being dangerous. There is no scientific evidence to support these claims for dogs. Vaccination has saved innumerable lives, both human and animal. There are isolated cases of allergic reactions, but these are rarely life-threatening when treated appropriately. It is important, however, that puppies not be vaccinated outside of published recommendations. Vaccines are not one-size-fits-all and should be tailored to the individual puppy.

Do not hesitate to ask an Evergreen Veterinary Team member today about your puppy's vaccinations!