



# A Typical Vaccination Schedule for Your Puppy's First Year

Bringing a new puppy home means taking on a great deal of responsibility. You're in charge of making sure your puppy eats well, learns to play nicely, gets enough exercise and stimulation, and, perhaps most importantly, stays healthy. One of the first steps you should take toward helping your puppy live a long and healthy life is to make sure they get the right vaccines at the proper times. This will keep them safe from a number of potentially fatal diseases, many of which are preventable but difficult, costly, or impossible to treat.

Puppy vaccines work the same way human vaccines do. They contain antigens, which resemble the organism that causes a specific disease. The antigens mildly stimulate your puppy's immune system but don't actually cause the disease. This preps the immune system to recognize and fight that disease off—or at least reduce the symptoms of the disease—if your puppy happens to encounter it.

# Why Are Some Vaccines Optional?

Over the course of your puppy's first year, they'll need several vaccines. Some, such as canine parvovirus, canine distemper, and rabies, are considered core vaccines, which means they are absolutely necessary for all dogs, regardless of where they live and their medical history. This is generally because the dog is likely to encounter the disease, and the disease is extremely dangerous and/or it can be transmitted to humans. It's worth noting that the rabies vaccine isn't just required by your veterinarian; by law almost every state requires proof of rabies vaccination.

Non-core vaccines, such as *Bordetella bronchiseptica* and *Leptospira bacteria*, may not be necessary for some puppies because the risk of exposure (either based on location or lifestyle) can be low. Talk to your veterinarian about all recommended vaccines, even the non-core ones, and provide truthful information about any travel or boarding plans you have for your puppy. Your honesty may influence your vet's recommendations as to which vaccines your puppy needs.

# **Are There Any Side Effects?**

As is the case with any type of medical treatment, there is some risk of your puppy having a mild, short-term reaction to vaccinations, but in most cases, those risks are not nearly as serious as the disease the vaccine is designed to prevent. Veterinary experts agree that the benefits of vaccination, which include keeping your puppy (and other animals and people in your community) safe from disease, outweigh the risks.

While most pets respond very well to vaccines, it's vital that you know what to watch out for and how to tell whether your puppy's reaction is normal or not. Side effects, which are typically minor and short-lived, may include a bit of swelling or discomfort at the injection site, mild fever, decreased appetite, lethargy, and, in the case of intranasal vaccines, sneezing and congestion. If these symptoms last more than a couple of days, contact your veterinarian. Very infrequently, a pet may experience more serious side effects, such as persistent vomiting or diarrhea, itchy skin or hives, facial swelling, severe coughing or difficulty breathing, collapse, or seizure, that require immediate veterinary care.

## while the benefits of vaccination outweigh the risks, here are side effects to look out for

- Keeping your puppy safe from dangerous diseases far outweighs the minimal risks associated with vaccinations.
- While most puppies do not experience any side effects, it's important to know what to look out for.

#### Side effects include:



Fever



Sluggishness



Facial swelling and/or hives



Loss of appetite



Vomiting



Diarrhea



Lameness



Collapse



Seizures



Difficulty breathing



Pain, swelling, redness, scabbing or hair loss around the injection site

- Try to schedule your puppy's appointment on a day that you can monitor him or her for any side effects.
- If you notice any of these or other side effects, call your veterinarian immediately.



source: aspca.org

## What Vaccines Should My Puppy Receive?

As noted above, some vaccines are considered core or required. Others are dependent on several factors, including:

- Whether your puppy will have contact with unknown animals, such as with dogs at a dog park or wild animals in a wilderness setting
- The likelihood of boarding your puppy or taking them to doggy daycare (both because these may expose your puppy to more diseases and because many facilities will require certain vaccination records before they allow your puppy to stay)
- Age, breed, and health status
- Whether the dog will be used for breeding
- Risk of disease local to where the dog lives
- Whether your puppy will travel to areas where other local disease risks are present

That said, your vet is likely to recommend vaccines against some, if not all, of the following diseases. While you probably envision vaccines as injections, be aware that some vaccines can be intranasal and administered as a nasal spray.

#### Canine distemper

Often transmitted by foxes, coyotes, raccoons, and dogs through airborne exposure or shared food and water bowls, this is a viral disease that begins with respiratory symptoms but moves on to seizures, vomiting, diarrhea, and potentially death.

#### Canine hepatitis (adenovirus)

The virus that causes this viral disease is passed in the urine, and can lead to liver and kidney infections.

#### Parvovirus

This virus, which attacks the digestive and immune system and causes diarrhea and vomiting (and in the case of very young puppies, can affect the heart), is highly contagious through direct contact and contaminated feces. It is very serious and has an extremely high death rate in untreated dogs.

#### Canine parainfluenza

A virus that causes mild respiratory disease. This viral disease is a kennel cough contributor. Dogs contract the virus by inhaling tiny droplets of nasal secretions from other dogs. Canine parainfluenza leads to upper respiratory infection and coughing.

#### Leptospirosis

A bacterial disease that attacks the kidneys and liver. It's not common in all areas so the vaccine is generally considered noncore. Leptospirosis is a zoonotic disease, meaning an infected animal can transmit the bacteria to human companions.

#### Coronavirus

This viral disease is highly contagious, causing vomiting and diarrhea by attacking the intestinal tract. Similar to leptospirosis, it's generally only recommended in areas where it's common and may not be necessary for all dogs.

#### Bordetella bronchiseptica

One of the most common bacterial causes of kennel cough, *Bordetella* is a very resistant bacteria that can be transmitted by both direct contact and through the air, making it extremely contagious. It's typically recommended for dogs at higher risk of contracting it from other dogs at dog parks, boarding facilities, and doggy daycare, or from a groomer.

#### Rabies

This viral disease affects mammals by attacking the central nervous system and is usually transmitted through the bite of an infected animal. An animal with rabies will have headaches, anxiety, hallucinations, excessive drooling/foaming at the mouth, fear of water, paralysis, and death. Rabies is zoonotic and can be transmitted to humans from the bite of an infected animal. There is no cure for rabies. This is the only vaccine administered by veterinarians that is required by law.

#### Lyme disease

Just as in humans, Lyme disease is an infectious, tick-borne disease. You won't see a tell-tale spot on your puppy like you might on yourself. Lyme could cause your puppy to limp and suffer from swollen lymph nodes, fever, and loss of appetite, followed by heart, lung, joint, and neurological symptoms if left untreated.

# does your puppy need non-core vaccines?

While many vaccines are required, some are considered non-core and depend on factors such as:



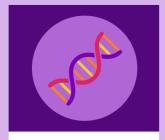
Whether your puppy will have contact with unknown animals, such as with dogs at a dog park or wild animals in a wilderness setting



The likelihood of boarding your puppy or taking it to doggy daycare, because either situation may expose your puppy to more diseases, and many facilities will require vaccination records before they allow your puppy to stay



Age, breed, and health status



Whether the dog will be used for breeding



Risk of disease local to where the dog lives



Whether your puppy will travel to areas where other local disease risks are present

## When Should My Puppy Be Vaccinated?

Your puppy may already have received a first round of vaccines before coming home. Typically shelters and rescues do this prior to putting a puppy up for adoption, and if your puppy came from a breeder, you should have full medical records and instructions regarding next veterinary steps. Even if your puppy received an initial round, they're not done getting vaccinations.

Little puppies have immature immune systems, which makes them susceptible to infectious disease. Their mother's milk provides some protection to start, but after they part ways with their mother, you'll need to begin a series of at least three vaccinations. These are typically spaced three to four weeks apart, beginning when your puppy is 6 to 8 weeks old (though there are a few exceptions). The initial vaccine primes your puppy's body against the bacteria or virus, while the following doses stimulate the immune system further to create the antibodies that will keep your puppy safe. The final vaccination in the series typically occurs around the 4-month mark, although your vet may change that schedule depending on your puppy's health and risk factors.

After this series is complete, you and your vet can discuss an appropriate vaccination schedule going forward, because even though your puppy is protected now, they'll need to be vaccinated again to remain immune from certain diseases. Puppies will often need a vaccine booster around their first birthday. The adult vaccine schedule should be discussed with your veterinarian.

Some veterinarians use antibody titers, which are blood tests measuring blood antibodies. This won't take the place of vaccinating your pet, but your veterinarian can determine whether a booster is needed or if it can wait.

Timely vaccination—including all vaccines in a series—is a proven way to give your puppy a healthy start in life. Sticking to a vaccination schedule means you can look forward to a lifetime of adventures (or even just couch cuddles) together.

# a typical puppy vaccination schedule



Age	Core vaccines	Non-core vaccines
6 weeks	Distemper/Parvo/ Adenovirus/ Parainfluenza (DAPP)	
8 weeks		<ul><li>Bordetella</li><li>Coronavirus</li></ul>
12 weeks	DAPP  Rabies (in some states)	<ul> <li>Coronavirus</li> <li>Leptospirosis</li> <li>Lyme</li> <li>Canine influenza (emerging disease in some areas)</li> </ul>
14 to 15 weeks	Rabies (in some states)	<ul> <li>Coronavirus</li> <li>Leptospirosis</li> <li>Lyme</li> <li>Canine influenza         <ul> <li>(emerging disease</li> <li>in some areas)</li> </ul> </li> </ul>
16 weeks	Rabies (in some states)	<ul> <li>Boosters of coronavirus, leptospirosis, lyme or canine influenza if needed</li> </ul>