Canine Distemper
Vaccination against distemper is absolutely essential. This often-fatal, hard-to-treat disease is highly contagious. The distemper virus attacks many organs, including the nervous system. Signs include listlessness, fever, coughing, diarrhea, and vomiting. Convulsions and paralysis may occur in its final stages. It is most commonly spread through airborne droplets during coughing and sneezing.

Canine Parvovirus
The disease caused by this virus is very contagious, debilitating, and widespread. Spread through infected feces, the highly resistant virus can remain in the environment for many years. Signs are most severe in young puppies and include high fever, listlessness, vomiting, and diarrhea. Vaccination is the best way to prevent this potentially fatal disease.

Infectious Canine Hepatitis
This disease is transmitted by contact with secretions, such as nasal discharge, urine, or feces of infected dogs. Its signs are similar to early stages of distemper. Causing respiratory disease and eye damage in mild to moderate cases, this virus can potentially cause pneumonia, liver failure, and eye damage in more severe cases.

Rabies
Rabies affects the central nervous system of almost all mammals, including humans. It is spread through contact with the saliva of infected animals through bites or breaks in the skin. The most common carriers of rabies are bats, skunks, raccoons, and foxes. Vaccination provides your dog with much greater resistance to rabies if he or she is exposed to the disease. There is no cure for rabies. For this reason, many municipalities require that all dogs receive regular rabies vaccinations. If you plan to travel with your dog across the country or around the world, you will need proof of vaccination.

Canine Influenza (Dog Flu)
Two different canine influenza strains (H3N8 and H3N2) have been isolated in the United States. The two strains are not related. Strain H3N8 is of avian origin (horses), while strain H3N2 is of avian origin (birds). Dogs at risk should be vaccinated against both. If your dog gets vaccinated for canine cough (see below), influenza vaccination is recommended, since dogs that mingle with other dogs at parks, kennels, training facilities, dog shows, veterinary hospitals, or groomers are at risk for both diseases.

Canine Tracheobronchitis (Canine Cough)
A highly contagious infectious disease of the upper respiratory tract, canine cough is spread through coughing and sneezing from other dogs. Co-infection of Bordetella bacteria commonly causes canine cough as well as respiratory viruses, such as canine parainfluenza virus and canine adenovirus type 2. Your dog can catch canine cough simply by being in close proximity to an infected dog, which is why boarding facilities require vaccination against it.

OTHER VACCINATIONS
After evaluating your dog’s particular situation and risk factors, your veterinarian may also recommend vaccination against other infectious diseases. These may include:

Leptospirosis is an infectious disease, caused by bacteria that live in standing water, that attacks the kidneys and liver. Risk factors include exposure to or drinking water contaminated with the urine of an infected animal.

Lyme disease is most prevalent in the Northeast, upper Midwest, and West Coast areas of the United States. Lyme disease is transmitted by infected ticks, and, if not treated, can cause arthritis and other health problems in dogs.

Canine coronavirus attacks the intestinal system.

Dog vaccination guide
In their first few weeks, puppies receive disease-fighting antibodies from their mother’s milk, which provides immunity from disease. These antibodies quickly decline, so vaccines are needed to create longer-lasting antibodies to protect your dog.

When should my dog be vaccinated?

Your puppy should begin their vaccination schedule as soon as your veterinarian recommends, which, in some cases, can start as early as 4 weeks old. Vaccinations are typically repeated every 2 to 4 weeks until your puppy is 16 weeks of age or older. Your dog will require repeat vaccinations at regular intervals for the rest of his or her life in order to remain protected.

How do vaccines work?

Vaccines contain small quantities of altered or “killed” viruses, bacteria, or other disease-causing organisms that stimulate your dog’s immune system to produce antibodies.

Which vaccinations should my dog receive?

Veterinarians agree that your pet should be protected against common diseases that are highly contagious and cause serious illness. This includes canine distemper, infectious canine hepatitis, canine parvovirus, and rabies. Your veterinarian may recommend additional vaccinations based on your dog’s environment and lifestyle.

Is vaccination safe?

There is a small chance of side effects with vaccination. Common side effects are mild and include soreness or swelling at the injection site, fever, or decreased appetite. Risks of side effects are much smaller than risks posed by disease. Rare side effects, such as allergic reactions, may occur within hours. If this happens, call your veterinarian immediately.

Help your veterinarian determine what vaccines are right for your dog.

Put a checkmark in the circles to the right which best describe your dog’s lifestyle and share this with your veterinarian. This will help them decide which vaccines your dog needs.

<table>
<thead>
<tr>
<th>Geographic location (urban/rural &amp; risk)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age and spay/neuter status</td>
</tr>
<tr>
<td>Social activity (boarding, dog parks, etc.)</td>
</tr>
<tr>
<td>Outdoor activity (running, roaming)</td>
</tr>
<tr>
<td>Water-based activity (drinking from rivers or lakes; drinking from puddles)</td>
</tr>
</tbody>
</table>

Your veterinarian will know the vaccinations your dog needs in order to stay protected.

Why does my dog need to be vaccinated?

Your veterinarian will know the vaccinations your dog needs in order to stay protected.