An Owner’s Manual to:

WHAT ARE ALL THESE VACCINES?

by the

AMERICAN KENNEL CLUB
ABOUT THIS SERIES

At the AKC, we know better than anyone that your dog can’t be treated like a car or an appliance, but we’ve named this series “An Owner’s Manual” because sometimes you probably wish your lovable companions came with one.

These concise guides give you the tools, tips, and direction to be a responsible and confident dog owner who brings out the best in your dog. Give them a test drive!
Going to the vet repeatedly over several months for vaccinations, and then for boosters throughout your dog’s life, may seem like a bother, but the diseases from which vaccines shield our pets are truly dreadful, potentially deadly, and largely preventable.
Always discuss vaccine schedules with your vet, since not all dogs need every vaccination. But to let you know why vaccinations are important, here are descriptions of the diseases they will help your pet avoid.
BORDETELLA BRONCHISEPTICA is a highly communicable bacterium that causes severe fits of coughing, whooping, vomiting, and, in rare cases, seizures and death. It is the primary cause of kennel cough (see right). There are both injectable and nasal spray vaccines available.
**CANINE DISTEMPER**

is a virus that attacks the respiratory, gastrointestinal (GI), and nervous systems of dogs, wild canids, raccoons, skunks, and other animals. It causes discharges from the eyes and nose, fever, coughing, vomiting, diarrhea, seizures, twitching, paralysis, and, often, death. There is no specific drug for the virus—the symptoms can be alleviated, giving the dog’s immune system a chance to fight it off.
CANINE HEPATITIS
is a disease of the liver caused by a virus that is unrelated to the human form of hepatitis. Symptoms range from a slight fever and congestion of the mucous membranes to severe depression, vomiting, jaundice, stomach enlargement, and pain around the liver. Many dogs can overcome the mild form of the disease, but the severe form can kill. There is no cure, but doctors can treat the symptoms.
CANINE PARAINFLUENZA
is one of several viruses that can contribute to kennel cough (see below).
CORONA VIRUS
is a nasty virus that usually affects dogs’ gastrointestinal systems, though it can also cause respiratory infections. Signs include most GI symptoms, including loss of appetite, vomiting, and diarrhea. Doctors can keep a dog hydrated, warm, and comfortable, and help alleviate nausea, but there is no drug that kills coronaviruses.
HEARTWORM

Though there is no vaccine for this condition, it is preventable with regular medication. The name is descriptive—these worms lodge in the right side of the heart and the pulmonary arteries (that send blood to the lungs), though they can travel through the rest of the body and sometimes invade the liver and kidneys. The worms can grow to 14 inches long and, if clumped together, block and injure organs. A new infection often causes no symptoms, though dogs in later stages of the disease may cough, become lethargic, lose their appetite or have difficulty breathing. Infected dogs may tire after mild exercise. Unlike most of the diseases listed here, which are passed by urine, feces, and other body fluids, heartworms are transmitted by mosquitoes.

The disease is treatable if caught early.
KENNEL COUGH
Also known as infectious tracheobronchitis, kennel cough results from inflammation of the upper airways. It can be caused by bacterial, viral, or other infections (see bordetella and canine parainfluenza), and often involves multiple infections simultaneously. Usually the disease is mild and self-limiting, causing bouts of harsh, dry coughing, sometimes severe enough to spur retching and gagging, along with a loss of appetite, but in rare cases it can kill. It is easily spread between dogs kept close together, which is why it passes quickly through kennels. Antibiotics are usually not necessary, except in severe, chronic cases. Cough suppressants can make a dog more comfortable.
LEPTOSPIROSIS
Unlike most diseases on this list, leptospirosis is caused by bacteria, and sometimes evinces no symptoms at all. When symptoms do appear, they can include fever, vomiting, abdominal pain, diarrhea, loss of appetite, severe weakness and depression, stiffness, muscle pain, or infertility.

Antibiotics are effective, but the sooner they are given, the better.
LYME DISEASE
Unlike the famous “bull’s-eye” rash that people exposed to Lyme disease often spot, no such telltale symptom occurs in dogs. Instead, an infected dog often starts limping, his lymph nodes swell, his temperature rises, and he stops eating. The disease can affect his heart, kidney, and joints, among other things, or lead to neurological disorders if left untreated. If diagnosed quickly, a course of antibiotics is extremely helpful, though relapses can occur months or even years later.
PARVOVIRUS
attacks the gastrointestinal system and creates loss of appetite, vomiting, fever, and often severe, bloody diarrhea. Extreme dehydration can come on rapidly and kill a dog within 48 to 72 hours, so prompt veterinary attention is crucial.

There is no cure, so keeping the dog hydrated and controlling the secondary symptoms can keep him going until his immune system beats the illness.
**RABIES**
is a virus that invades the central nervous system, causing headache, anxiety, hallucinations, excessive drooling, fear of water, paralysis, and death. Treatment within hours of infection is essential, otherwise death is highly likely. Most states require rabies vaccination at set intervals (every one to five years). Check with your vet about local rabies vaccination laws.
Of course, your veterinarian should weigh in and can always provide more information and guidance if needed.
WHO AND WHAT WE ARE:
The AKC is a not-for-profit organization and the largest purebred dog registry in the world. We are the sports-governing body for over 22,000 dog events a year, including conformation (dog shows) and exciting sports like agility, obedience, rally, tracking, lure coursing, earthdog, herding trials, among others.
But the AKC is so much more! Here are just some of the ways we support and enrich the lives of dogs—purebreds and mixed-breeds alike—and their families. We:

- Created the [AKC Humane Fund](http://www.akc.org), which supports breed rescue activities, assists shelters that permit domestic-abuse victims to bring their pets, and educates dog lovers about responsible dog ownership.

- Offer the [Canine Good Citizen® program](http://www.akc.org/canine-good-citizen/): A 10-step test that certifies dogs who have good manners at home and in their community. Over 725,000 dogs across the United States have become Canine Good Citizens, and 42 states have passed resolutions recognizing the program’s merit and importance.

- Founded [AKC Reunite](http://www.akc.org/reunite), which has brought more than 400,000 lost pets back together with their owners.

- Created the [AKC Canine Health Foundation](http://www.akc.org/health), which funds research projects and clinical studies. Since 1995 the AKC has donated over $24 million to the CHF. (The AKC is the only registry that incorporates health-screening results into its permanent dog records.)

- Conduct thousands of kennel inspections annually to monitor care and conditions at kennels across the country and ensure the integrity of the AKC registry.

- Offer the largest, most comprehensive set of DNA programs for parentage verification and genetic identity to ensure reliable registration records.

- Support one of the world’s largest collections of dog-related fine art and artifacts at the [AKC Museum of the Dog](http://www.akc.org/museum-of-the-dog), and we have the world’s largest [dog library](http://www.akc.org/library) at AKC headquarters in New York, both of which are open to the public.
THANK YOU FOR READING!

We hope this information was valuable to you in helping your puppy live a long, healthy, happy life. Below, find additional books in our Owner’s Manual series designed to strengthen the bond between you and your furry family member.