



Recommended Veterinary Care for your Dog

We welcome you and your dog to Duxbury Animal Hospital. Below, we have listed our recommendations for veterinary care to give your dog a long, healthy life. The majority are based on national recommendations from various veterinary organizations as well as local specialists with knowledge of regional diseases.

Physical examination and vaccinations

Every year, a dog ages the equivalent of 3-10 human years depending on age and breed. Therefore, your dog should receive a full physical examination every year until 7 years of age. At 7, the aging process accelerates and physical examinations should be performed every 6 months or more.

•Required vaccinations:

1) “Distemper” combo (also includes hepatitis, parainfluenza, and parvo). Canine Distemper is very widespread, and nearly every dog will be exposed to distemper. Once the virus enters the nervous system, convulsions, twitches, or partial paralysis become evident. It is spread through all body secretions and is HIGHLY contagious. Parvovirus: since its devastating worldwide appearance in 1978, most dog owners have heard of parvo. It is transmitted through direct contact with an infected dog’s feces. A dog that recovers from the disease remains a “carrier”, spreading the virus in its bowel movements for 1-3 months. Signs include vomiting, fever, depression, and diarrhea (which often will contain large amounts of blood). The younger the pet, the GREATER the chance of death. Dogs remain susceptible to Parvovirus infection until TWO WEEKS AFTER THE LAST INJECTION in the vaccination series. This is the MOST SERIOUS and FATAL disease we see today. Infectious Canine Hepatitis affects the dog’s liver. Spread through an infected dog’s urine, exposure can mean anything from a mild infection to death. Puppies are at the most risk with this disease. Vaccination has controlled this disease for several years, making it rarely seen by the veterinarian today. Canine parainfluenza virus is a highly contagious respiratory virus and is one of the

most common pathogens of infectious tracheobronchitis, also known as canine cough. Although the respiratory signs may resemble those of canine influenza, they are unrelated viruses and require different vaccines for protection. The “Distemper” vaccine should be given every 3 weeks starting at 8 weeks of age through 16-20 weeks of age. It is boosted at one year of age and then given every 1-3 years depending on the patient.

2) Rabies is a FATAL INFECTION of the nervous system that attacks ALL WARM-BLOODED ANIMALS, INCLUDING HUMANS. Rabies has become synonymous with the image of a vicious dog or wild animal, but cats have outnumbered dogs in reported cases since 1981. Rabies is a public health hazard and a personal risk to all pet owners. Many states require vaccination against rabies, and most veterinarians recommend vaccination for all dogs and cats, regardless of state law. Rabies can be transmitted through the bite of an infected animal. Even dogs kept indoors can come in contact with a rabies carrier in a basement, garage, or attic. Because there is no cure for rabies, vaccination is your pet’s only protection. The rabies vaccine is usually given at the last puppy visit around 16-20 weeks of age. Your dog needs to have 2 rabies vaccinations within a 12 month period. After that time, the State of MA requires vaccination every 3 years.

3) Lyme Disease is very prevalent in this area and is a debilitating disease that affects the musculoskeletal system and can progress to destruction of the kidney tissue. Lyme is spread by the attachment of infected Black-legged Deer ticks on an animal and passage of the bacteria *Borrelia burgdorferi* into the bloodstream. Pets that are most at risk are dogs that walk in wooded and tall grassy areas, or travel in places where wild animals frequent. Even immature ticks pass the Lyme bacteria and are nearly impossible to find on your dog until it is too late. While flea and tick preventives will decrease risk, vaccination is still required to maximize protection. Two initial vaccinations are done 3-6 weeks apart, followed by a booster 6 months later. It is then given annually.

4) Leptospirosis is a bacterial infection that is passed by the urine of infected wildlife. This includes squirrels, raccoons, coyotes, deer, skunks, rats, and many other common animals in our community. It survives in the environment in wet conditions, including,

damp soil, puddles, and bodies of fresh water. The most ~~common~~ ~~common~~ way it gets into dogs' bodies is through small cuts and scrapes on the feet. Once inside, they begin to damage the liver, kidneys, and other organs. It is difficult to diagnose and expensive to treat, especially if kidney dialysis is required. Vaccination requires two initial doses, 3 weeks apart and then is performed annually. On the years when the Distemper vaccine is due, Leptospirosis is included in the dose to minimize risk of vaccine reactions.

•Non-core vaccines:

- 1) Bordetella/kennel cough - is given annually to dogs ~~whothat~~ will spend time at a groomer, kennel, daycare, or puppy class. Technically known as "tracheobronchitis," it is an upper respiratory infection with the major sign being a persistent, dry, hacking cough. It often lasts several weeks and is HIGHLY CONTAGIOUS. There is an oral, intranasal, and injectable form. The type used will depend on your dog's situation and will be discussed with you by your veterinarian.
- 2) Canine Influenza (H3N8) The same dogs who are at risk for Kennel Cough -are at risk of contracting Dog Flu. Much like human forms, this flu will cause damage to areas of the respiratory tract and allow secondary bacterial infections to establish themselves. These infections can be serious, leading to hospitalization and even death. The vaccine is given annually.

Laboratory Testing

•Fecal Testing for Intestinal parasites

Puppies frequently acquire intestinal parasites from their mother and should be screened every three weeks until 2 negative stool samples are seen. Adult dogs -will pick up parasites from the environment, mostly from microscopic eggs that stick to their feet and are ingested through their daily self-cleaning. The large amount of wildlife in our community means that parasite eggs are everywhere, including our yards. It has even been shown that most bagged soil from the store will contain parasite eggs. Please bring a fresh stool sample (no more than 12 hours old) for testing at the first 2 appointments. Please make sure samples are moist - not dry or hard. Intestinal parasites can be spread to people, especially children. In some cases, these worms can ~~euase-cause~~ serious disease in kids, including blindness. ~~So-fecal~~ Fecal screening for parasites is also very important for the wellbeing for the human members of your family. Therefore, the Centers for Disease Control recommend screening pets every 6

months. For more information on parasites and people, please visit the Companion Animal Parasite Control website, www.petsandparasites.org.

- **Heartworm/Lyme/Anaplasma/Ehrlichia screen (4Dx):** This disease screen is usually run at your dog's first adult visit, but may need to be run during puppy-hood. It is typically checked annually before major vaccines are given. The reason for this is that, if a dog is sick with these diseases, stimulating their immune system with a vaccine has been implicated in causing severe, autoimmune-like disease that may be fatal.

- **Comprehensive Blood Screens:** These include a complete blood count and blood chemistry panel are run at about 5 months of age and are required before anesthesia for the spay or neuter. This allows us to assess the function of your pet's vital organs and ensure that there are no signs of any blood-borne parasites or diseases. It is then run annually until they are 7-8 years of age. At that time, a more thorough blood chemistry panel is run in addition to a blood thyroid screen.

Heartworm preventative

Heartworm disease is a serious and potentially fatal disease caused by worms residing in the heart and major blood vessels of dogs, cats and other species, including humans. Heartworm is passed to dogs from mosquito bites where it will travel to the heart and clog the valves. Treatment once a dog has heartworm is both expensive and dangerous with fatal reactions occurring in a large number of cases. Untreated heartworm will eventually lead to heart failure and death. Therefore, prevention of the disease is imperative. Despite the fact that mosquitoes are not biting year-round, the life cycles of the immature worms require that preventive be used 12 months per year. In dogs two to six months of age, oral preventives are used once a month. After 6 months, the monthly preventive may be continued or the dog may start getting injections twice per year on the same schedule as their vaccinations.

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Ticks and Fleas

While fleas are a well-known nuisance which people want away from their dogs, many owners think that they don't need anything for ticks if their dogs has been vaccinated for Lyme disease. Unfortunately, while Lyme is a nasty disease itself, it is far from the only disease passed to dogs by ticks. Rocky Mountain Spotted Fever, Anaplasmosis, and Ehrlichiosis are just three of many serious and potentially fatal disease carried by ticks in this area. An addition, it is a common misconception that tick prevention is not required during the colder months because the ticks have been killed-off. The reality is that ticks s hibernate under leaves during the cold and only need the temperature to be 37 degrees to awake for feeding. Like a bear coming out of hibernation, they are starving which actually makes the colder months more dangerous. To prevent both ticks and fleas, your dog should be kept on preventive year-round. We recommend both topical and oral forms of prevention. The choice between products depends on your dog's lifestyle and should be discussed with your doctor during the exam.

Nutrition

The number of pet foods out there right now is pretty astounding. It is impossible to keep up with all of them. As a result, we only stock prescription foods designed to treat specific problems with your pet. We know that proper nutrition is one of the most important parts of maintaining your pet's health and will always be available to counsel you on your choices. When doing your research, we recommend you follow these three basic rules:

- 1) Dogs are not small humans: What we find appealing and healthy is not the same for dogs. You will see a lot of marketing about using prime cuts of meat and avoiding materials like corn, grains, and other plant materials because dogs in the wild don't eat those things. This is actually the opposite of reality. If you watch "Aanimal Pplanet", you will see that, when carnivores eat their prey, they actually leave the "steaks and prime cuts" for the vultures while they eat the innards full of the plant and grain material that had been eaten by their prey. Also, we are seeing a trend in which ~~where~~ exotic fruits, berries, and other items

(pomegranate, acai, etc.) are being added to foods. The problems with this is that we have no idea what this will do to dogs. We have only recently discovered that grapes are extremely toxic to dogs' kidneys and Western civilization has been using these grapes to make wine and other fun such items for a millennia. Until we know what these items will do to dogs, it is best to avoid them in dog food.

- 2) More expensive is not better: Many pet food companies, especially smaller brands, will charge exorbitant amounts of money for foods and market themselves as being "high quality", "all natural", and "clinically proven" despite having nothing substantial to back this up. Larger companies, such as like those that produce many foods s found right in the grocery store have put significant research into their foods and have large feeding centers where the food is tested for quality, palatability, and nutritional balance. Ironically, they tend to be cheaper than those without this research. In addition, the recent Chinese melamine poisoning in pet foods showed us that the larger companies are significantly more likely to use safer, US-sourced ingredients for their foods compared to the smaller, more expensive counterparts.
- 3) Look for AAFCO labeling: There are currently few major standards for quality and nutrition that pet food companies are required to follow. The Association of American Feed Control Officials (AAFCO) is made up of specialists who set up standards with the animals in mind, and companies can elect to follow these as guidelines for developing and testing their foods. High quality foods should state that they were developed using these standards and food trials were performed to assure adequate nutrition.

Spaying/Neutering

Ovariohysterectomy is the medical term for "spaying" the female pet. It is a surgical procedure, which removes both the ovaries and the uterus. In the dog and cat, one of the major reasons for performing the sterilization surgery is to eliminate the annoying "signs of heat" -which cause males to be attracted. If the uterus alone was removed, the pet would still "come into heat", but could not get pregnant. In addition, it has been shown that spaying early (before many heat cycles occur) will reduce the risk of mammary cancer later in life.

Castration is the medical term for surgically sterilizing the male dog. The testicles are removed because they are the major source of male hormones which cause sexual

interest, aggression, and urine marking of territory. Therefore, while neutering the male pet does not have major medical benefits early in life, it provides significant advantages to the pet owner, as well as eliminates the ability to produce unwanted offspring. Later in life, most un-neutered dogs will also develop prostate problems. Sometimes this can be serious and require castration to reverse these changes. For this reason, it is recommended to neuter dogs while they are still young enough to handle anesthesia safely.

Some points to remember about spaying and neutering:

- Surgery is performed painlessly while your pet is under anesthesia. Post-surgical pain is minimal and controlled with medication. Most pets go home the same day surgery is performed.
- There are thousands of cat, kittens, dogs, and puppies available for adoption at shelters, humane societies, pounds, and in the paper. Spay or neutering your pet DOES help ~~the~~ pet overpopulation.
- It is a case of “sooner is better than later”. Especially in females, the more heat cycles they go through before they are spayed, the greater the risk they could develop get cancer or infections later in life.
- Altered animals make better, more affectionate companions. It stands to reason animals that aren't preoccupied with mating have more attention to devote to their human friends.
- Neutered males are less likely to roam, run away, or get into fight and are less likely to start spraying if they have been neutered.

Nail trims/dental care

Train your puppy to allow daily handling of the paws and muzzle and rubbing of the gums (reward with treats and lots of love afterwards!). This training will help your pup become comfortable with nail trims and teeth brushing as an adult. Train your dog to stand or lay in a position that allows for one person to perform these activities. It is important to start at home dental health care when the puppy is young to prevent major medical issues and expenses as the pet ages. Start with brushing the teeth daily with a pet-specific toothpaste, just ask how to get started.

Dental disease is a major cause of illness in dogs. While daily brushing is the only effective preventive measure for dental disease, we realize and understand that this is difficult for most dog owners. Use of dental treats, such as ~~the~~ Hill's t/d, is recommended on a daily basis. Even with ~~this these~~ preventive care, most dogs will require dental care procedure every few years to every 6-9 months. Your veterinarian will assess this during the physical exam.

Microchipping

A microchip is an inert bead the size of a piece of small rice that can be inserted under your pet's skin to permanently identify your pet. Recent natural ~~disasters disastres~~ have reminded us that collars and tags are not reliable and should your dog be lost or stolen, this is the most likely way that he or she can be traced back to you. A microchip can be placed at any time, though it is commonly elected at they are spayed or neutered. For more information, visit homeagain.com.

Pet Insurance

Many clients have asked if pet insurance is available. The cost of pet ownership over the lifetime of the pet was determined in a 2006 survey by American Pet Product Manufacturers Association. For an average healthy pet, the yearly cost is \$919 or over a 10 year life span, the healthy pet can cost up to \$9,190, this includes vet care, food, pet lodging, toys and treats! Pet Insurance can help budget the veterinary costs of pet ownership, especially when it comes to unexpected illness or trauma.

There are general two types of pet insurance:

- ◆Comprehensive: Like human health insurance, it will cover part of your wellness visits, vaccines, and dental care. However, premiums are much higher, payout is lower, and there tends to be many more restrictions.
- ◆Sick/Injured: While this does not cover wellness care, it tends to be less expensive and will cover up to 90% of your bills for injuries or sickness. There are virtually no limitations on coverage.

Comprehensive companies:

- Veterinary Pet Insurance www.petinsurance.com, 1-866-VET-PETS

- Petplan Pet Insurance www.gopetplan.com, 1-866-GO-Petplan
- Pets Best www.petsbest.com, 1-877-738-7237
- ASPCA www.aspcapetinsurance.com/info, 1-866-861-9092

Sick/Injured:

- Trupanion www.trupanion.com 1-800-569-7913

Emergency care

During regular hours, we will handle any emergencies within our clinic's capabilities.

After hours emergencies are handled at:

- VCA South Shore Animal Hospital in Weymouth, MA 781-337-6622
- Cape Cod Veterinary Specialists in Buzzards Bay, MA 508-759-5125

