

Health Care Focus

Preventative Care for Dogs

Specially prepared for:



Overall, your pet appears to be in good general health based on examination. Please see the examination and health care report card your vet has supplied for details on any abnormal examination findings. Based on your pet's examination and consultation, the following has been chosen by your Veterinarian as your pet's health care focus.

Preventative Care

Preventative care is the health care provided that prevents disease and helps keep your pet healthy. It is crucial to practice appropriate preventative care measures tailored to your pet's breed, age, and lifestyle in order to best assure their well being. This care can serve to extend your pet's lifespan, improve your pet's quality of life, and decrease veterinary costs over time by preventing potentially high veterinary bills that can be associated with diagnosing and treating illnesses.

Vaccines are sometimes referred to as "shots" and they are needed to prevent the disease(s) in which they are named for. They give your pet immunity to the disease and can work in 2 ways:

1. If your pet is exposed to the disease then they cannot contract the disease because the immune system completely clears it
2. They do contract the disease but their clinical signs and illness that result are significantly less than if they were not vaccinated because the immune system controls it. In these cases they may show mild clinical signs or they may not even show signs which require any veterinary care at all.



Most vaccines need to be boosted 3-6 weeks after the initial vaccine because immunity to the initial vaccine is short lived and does not last without the follow up vaccine. In puppies, their immune systems are not yet adequately developed to receive full protection from one vaccine. For this reason, some vaccines need to be boosted every 3 weeks from the time they are 6 weeks of age until the time they are 4 months of age. If your pet is a puppy, your Veterinarian will supply you with their vaccine plan and schedule.

Care that may be needed for your pet is highlighted below.

General Care

All Dogs need the following health care measures to assure best health:

1. Rabies vaccine

This vaccine is needed by every dog every year in the beginning of vaccination and every 3 years after. It is first given around 4 months of age. This vaccine prevents against a deadly virus causing neurologic disease that is spread to people and other animals through bites. There is no treatment available for Rabies and if contracted it will cause death. This vaccine is required by law in all dogs. If your dog were to bite another animal or human, or if someone claimed your pet bit another animal or human, then there can be significant penalties for not having your pet vaccinated. These penalties include mandatory relinquishment of your pet that could lead to mandatory quarantine or euthanasia. Not having your pet registered and certified for their rabies vaccine with the county also leads to strict financial penalties.

Some people may feel that rabies does not exist anymore or is very unlikely to occur in their pet. Thanks to vaccines, the Rabies virus has drastically decreased among the animal population. However, the virus can still be contracted by pets and wildlife that are not vaccinated, including raccoons, opossums, bats, and feral cat populations. In the past 20 years there have been 305 cats, 58 dogs and 2585 raccoons that have tested positive for rabies in the state of Florida as well as one human death. In addition to this, over 2000 people have had encounters with animals in which they have required treatment due to possible Rabies exposure. (<https://edis.ifas.ufl.edu/uw282>)

2. Distemper, Adenovirus, Parvovirus, Parainfluenza (DA2PP) vaccine

These viruses cause life threatening vomiting, diarrhea, pneumonia, and/or neurologic signs. There is nothing that can be given to “cure” any of these diseases. Some pets will survive with supportive care until the virus runs its course. However, supportive care often requires hospitalization and can be expensive, in many cases costing \$1000-\$3000 or more. In addition to this, some pets never recover and unfortunately die from these diseases.

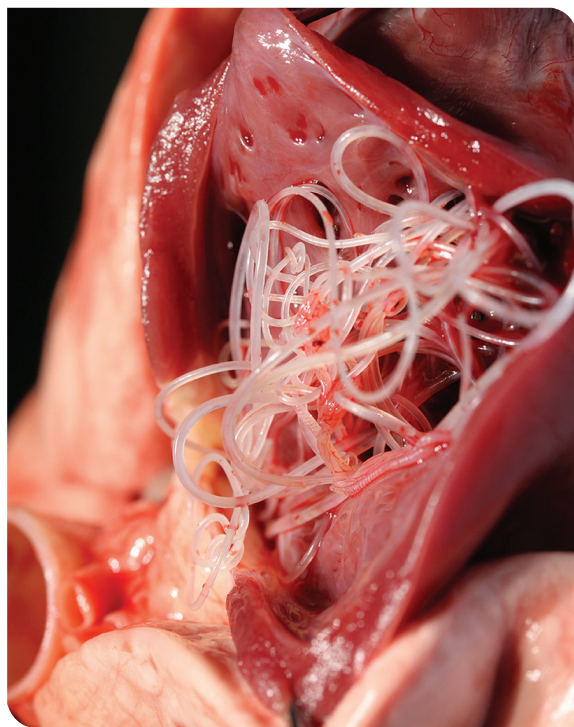
Distemper and Adenoviruses are spread through the respiratory tract through sneezing, coughing, and other secretions. Parvovirus is a highly common infection among unvaccinated or incompletely vaccinated puppies and dogs. Parvovirus is very prevalent in this region and is spread through fecal material. It causes severe vomiting and bloody diarrhea with rapid dehydration. Your pet does not have to be exposed to other dogs to contract these diseases however!!! These viruses live as microscopic particles for extended periods in the environment including in dirt/soil, on grass and other materials. Even if your pet never goes outside you can track the virus into your home on your clothes or shoes either from contact with other pets or contact with the environment.

These vaccines are available as a combination vaccine (all in one vaccine) and should be started around 6 weeks of age. These vaccines must be boosted every 3 weeks until a pet is 4 months of age. After this time, this vaccine is needed by every dog 1 year later and then every 3 years after, for life.

3. Heartworm disease testing and prevention

Heartworm disease is a life threatening disease spread by mosquitoes. It only takes 1 bite from a mosquito infected with heartworms to transmit the disease to your pet. Heartworm larvae travel into a pet's bloodstream through the mosquito bite and then go to the heart vessels where they develop into adults. Adults then reproduce and produce microfilaria (essentially baby heartworms). The adult heartworms grow within the vessels and eventually clog the vessels, leading to heart and/or lung failure. The heartworms can also clog the vessels going to the liver, causing liver failure. The most common sign of heartworm disease is cough however cough is not specific for heartworm disease. Some pets do not show signs but die suddenly from the disease.

A blood test is used to screen for heartworms. Testing for this disease needs to be done every 6 months. Testing is important, even if your pet is on a monthly heartworm preventative, because no heartworm preventative is 100% effective. In addition to this, missing a heartworm prevention dose by even a day can leave a pet susceptible to infection and it can be difficult to dose every 30 days. Testing every 6 months is also very important because diagnosing and addressing heartworms early (before clinical signs develop) is imperative to minimizing damage to a pet's organs and decreasing risks associated with the disease and with treatment. In addition, after a pet is infected with heartworms it takes 6 months to show up on testing. There are 2 types of blood tests to screen for heartworms. The antigen test screens for adult heartworms while the microfilaria test screens for microfilaria.



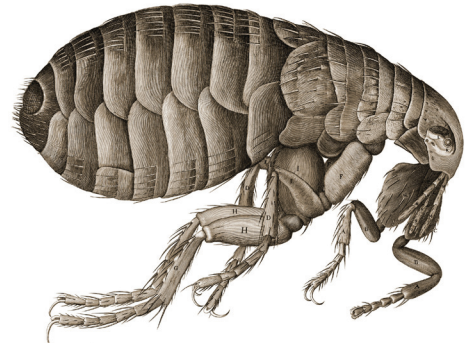
Testing and prevention is important even if your pet spends little to no time outdoors because mosquitoes are very prone to making their way indoors. Managing your pet's environment by eliminating sources of standing water may help to decrease the mosquito load in the environment but mosquitoes are not 100% preventable.

Treatment is available for heartworm disease however it can be expensive- generally \$1500-\$2000. Cost can be even higher if a pet is affected significantly enough that other treatments are needed. Treatment also carries risk of side effects due to dying heartworms, which can be serious. For these reasons and more, prevention is key!!!!

Preventatives come in several forms. Examples of the oral form (given by mouth) include Heartgard and Triheart. Topical forms (given on the skin), and injectable forms are also available. Some preventatives also protect against fleas and certain intestinal parasites- examples of these include Trifexis and Sentinel (oral) and Revolution (topical). Most heartworm preventatives need to be given every 30 days. The injectable form is given every 6 months and is called Proheart.

4. Flea Prevention

Fleas are a threat year round in Florida. Even if you do not see fleas on your dog it does not mean they are not attacking. Some dogs are flea allergic and can have severe skin reactions to even a single flea bite. Fleas are great at hiding and by the time you notice a flea on your pet there are likely already 1 million eggs in your house waiting to hatch out!!! Fleas can live in cocoons in the environment for up to a year or longer and nothing kills fleas when they are inside of their cocoons. This makes it even more difficult to rid a house of fleas once they are present.



Fleas also transmit diseases such as blood borne parasites and bacteria and in some cases can lead to anemia (low red blood cell count due to blood loss from fleas feeding on a pet's blood). Some cases of anemia require emergency care and blood transfusions.

Even if your pet spends little to no time outside they are at risk of getting fleas. Fleas seek warm blooded creatures and quickly target animals. They can also easily get into cracks under doors or even make their way inside on your shoes, socks, or pants. They prefer animals to people so you may not even know they are there as they are feeding on your pet and not you. They don't just live in carpet either- they live in cracks of floors like tile and wood and in folds and creases of furniture including sofas and beds. Treating the environment can often require multiple treatments from exterminators and personal home treatments and some chemicals used to treat the environment can carry risks to humans and animals.

Prevention is key!! Prescription strength preventatives are best (available through a Veterinarian) as most over the counter products are not strong enough to effectively kill and prevent fleas. Some over the counter products can also be irritating to your pet's skin. Fleas baths and some flea collars are also not adequately effective and may be irritating to your pet's skin. Recommended preventatives available include the combination flea and heartworm medications listed above as well as Comfortis (oral) and Activyl (topical).

5. Fecal Parasite testing (microscopic testing)

This test needs to be done every 6 months to screen for gastrointestinal parasites. Parasites are rarely seen in the feces because they stay inside the intestinal tract and pass eggs into the feces which are microscopic. The microscopic eggs can live in the environment, including in dirt/soil, grass and other surfaces for extended periods of time.

Examples of intestinal parasites include roundworms, hookworms, tapeworms, whipworms, coccidia, giardia. Most heartworm preventions also protect against one or more of these parasites. Unfortunately, some parasites do not have a prevention available therefore routine testing is important.

Even if your pet spends most of their time indoors or never goes outdoors they can be exposed to parasites. Microscopic parasite eggs can be carried into your household on your shoes. These parasites can cause diarrhea, vomiting, malnutrition and weight loss and most can be spread to people. People most at risk are children and immune compromised individuals. They also are spread very rapidly between pets in the household and can be difficult to eliminate from the environment therefore early detection and prevention is key!!!

6. Oral Care

Dental disease is a predominant disease in pets as they are not able to care for their oral health as we can. Dental disease involves bacteria that live in the mouth and release enzymes that cause inflammation of the gums, breakdown of periodontal ligaments leading to loose teeth, and decay of the tooth surface that can lead to

fractured teeth. Disease causing oral bacteria can also lead to tooth root abscesses/infections. They can also spread to the bloodstream and colonize different organs of the body leading to infections of heart valves, kidneys, and the liver.

Periodontal disease is also very painful. Many times our pets will not demonstrate signs of mouth pain and will instead compensate by chewing on the opposite side of the mouth to avoid painful areas or not chewing at all.



At home the best oral care is daily tooth brushing with a dog formulated enzymatic toothpaste. Dog formulated dental chews, mouth rinses, or drinking water additives (www.healthymouth.com), and special oral health food may also be beneficial.

7. Weight control and diet

Obesity is the most common disease among canine and feline patients. Keeping your pet at a healthy weight can prevent disease such as arthritis, diabetes, heart disease, and certain types of cancers. Your Veterinarian will work with you on a dietary plan tailored for your pet. Feeding a high quality diet with essential nutrients, tailored to your pet's life stage and health needs, is important in obtaining maximum health. Portion control and minimizing or eliminating treats and table foods are also critical in maintaining health.



8. Microchip

This is a small electronic chip inserted with a needle under the skin between the shoulder blades. It serves to permanently identify your pet so that if they ever become lost or stolen then you can be contacted when they are found.

9. Health Insurance

Your pet deserves the highest quality of care and pet insurance will help you to afford this. **Trupanion** and **Nationwide** are the 2 preferred insurance plans recommended by our hospitals.

Trupanion offers a great insurance plan that although does not cover preventative care, does cover 90% of veterinary bills in the case of illness or injury after deductible. This is often the care that hasn't been planned or budgeted for. With this insurance, you don't have to worry about the cost of lab tests, surgery, or medications in the event that your pet becomes sick or injured. All you have to focus on is giving your pet the TLC they need to recover!

Nationwide's "Whole Pet with wellness plan" covers 90% of ALL veterinary bills after a \$250 per year deductible. This includes exams, vaccines, parasite testing, flea and heartworm prevention, x-rays, bloodwork, other diagnostics/testing, medications, surgeries, emergency care, and dental cleanings.

While insurance is best for your pet, not all insurance plans are created equal. The following are some points to consider when choosing an insurance plan for your pet:

- Most insurance plans have a monthly payment that you make to cover a premium. The amount of these payments vary based on plan, and sometimes on your pet's age and breed.
- Most insurance plans have a deductible. Some insurance plans, such as Nationwide, have a set yearly deductible. Other plans have deductibles that vary based on your pet's age and breed. Some insurance plans, such as Trupanion, allow you to choose the amount of your deductible or choose to not have a deductible at all.
- Some deductibles, such as Trupanion, are on a per problems basis. Some deductibles, such as Nationwide, are on a per year basis.

- Some insurance plans have limits on how much they will pay out per year, per problem, or per pet. The Trupanion and Nationwide plans do not have any limits on what they will pay out.
- Most insurance plans require you to pay your veterinarian in full at the time of services and then you are reimbursed in 2-4 weeks. Trupanion has a pre-approval process where they can pay the veterinarian directly so that you only pay your portion due the day of services.
- Some insurance plans, such as Trupanion, have high coverage for illness and injury but no coverage for preventative care. Some plans have coverage for illness, injury, and preventative care but the coverage may be lower or have limits. The Nationwide plan is the only plan to cover 90% of illness, injury, and preventative care.
- Some veterinarians may offer wellness plans. Wellness plans require a monthly payment but are not the same as insurance plans and can only be used at the vet you purchase the plan from. Trupanion and Nationwide insurance plans can be used at any veterinary hospital in the United States and in some countries outside of the U.S.
- All health insurance plans exclude conditions that are considered “pre-existing” therefore it is best to obtain health insurance before your pet shows any signs of disease. However, even if your pet has had health problems in the past, there are still many benefits to having health insurance in case additional problems arise in the future.

Please contact your veterinarian for additional help in choosing an insurance plan that will be most beneficial for your pet's needs.

Personalized care and Lifestyle Vaccines

1) If your dog will ever visit a groomer or boarding facility then they need the following health care measures to best assure health:

a. Influenza (CIV) vaccines

This vaccine is required by most boarding and grooming facilities. We require these vaccines at our hospital's boarding and grooming facility in order to prevent contamination and spread of this virus and give your pet the healthiest boarding environment possible. If not required by a boarding or grooming facility, your dog still needs to be protected as they will have an even higher risk of exposure in environments where they are around dogs that are not vaccinated. The virus causes Flu-like symptoms of respiratory and/or gastrointestinal disease and spreads rapidly between dogs in close contact.

There are currently 2 strains of influenza vaccines available. H3N8 is a strain of influenza that was first recognized in Florida and spread rapidly among the canine population. H3N2 is a more virulent strain of flu virus (causing more severe clinical signs and even some deaths) that has been recognized initially in the northeastern and midwestern states however has been travelling throughout America, including to Florida, as pet owners travel with and board their pets. It spreads rapidly in conditions such as grooming or boarding facilities where pets are in close contact. Pets can be carriers and not even show signs of the disease yet spread it to an animal that can then develop severe and even life threatening disease. This is why vaccination is so important!!! These vaccines will need to be boosted in 3-4 weeks and then once yearly. It is best to have the booster performed before boarding or grooming in order to ensure full protection against these viruses.

b. Bordetella (Kennel cough) vaccine

This is a disease that causes inflammation of the respiratory tract that leads to severe coughing and can result in difficulty breathing. Some cases can also develop into pneumonia. It is another disease that can spread quickly between dogs, especially in environments such as grooming and boarding facilities.

2) If your dog is ever around grass/dirt/soil or water that could be contaminated by the urine of wildlife such as raccoons; opossums; rats; or mice, or if your dog ever hunts these animals, then your dog needs to be vaccinated for Leptosporosis.

Leptospirosis

This organism is shed in the urine of wildlife and lives in the environment such as in water (ponds, lakes, rivers, streams or standing water in yards) and in soil/dirt. If contracted, it causes severe rapid kidney and liver failure. This virus is also zoonotic, meaning it can be spread to humans from animals. If a pet were to become infected with this disease then there is a high chance of spread to individuals within the household, especially children or immune compromised individuals. The University of Florida has seen a rising number of cases of this disease in the past several years. Prevention is important.

3) If your dog visits the northeast or great lake regions of the United States then they should be vaccinated for Lyme Disease.

Lyme Disease

This is a disease spread by ticks that inhabit the above regions. It can cause fever, lethargy, kidney disease, and joint pain/arthritis.

4) If your dog is of the age of 7 years or over they are considered a senior pet and need the following preventative care measures listed below

a. Senior labwork screening (bloodwork and urine analysis)

This labwork is designed to catch disease early. Often times your dog will never show signs of disease until the disease is very advanced and severe. This is because they are genetically adapted to hiding disease, as in the wild, they would become prey if they were to show illness or weakness. This testing helps us to identify disease early so that we can attempt to prevent or slow progression before it's too late. In doing so, we have the chance to extend your pet's lifespan and quality of life.

b. Blood Pressure

High blood pressure can occur with kidney disease, heart disease, or other causes. High blood pressure can also lead to blindness, strokes, heart disease, and kidney failure. Early intervention can prevent these devastating side effects.

6) If your dog is one of the following breeds or a breed mix of Boxer, Cocker Spaniel, Doberman, Great Dane, Irish Wolfhound, Newfoundland, Scottish Deerhound then they should have genetic disease screening listed below:

Cardiac screening (EKG)

The breeds listed above have a genetic risk for cardiomyopathy (disease of the heart muscle). This disease results in failure of the heart to pump blood efficiently which can in turn lead to exercise intolerance, oxygenation problems, arrhythmias, collapse, heart failure and/or sudden death. Early detection and treatment can improve the length and quality of life.

7) If your dog is one of the following breeds or a breed mix of Bedlington terrier, Cocker Spaniel, Dalmation, Doberman, Labrador, Scottish Terrier, Skye Terrier, Standard Poodle, West Highland White Terrier then they should have the genetic disease screening listed below:

Chronic Hepatitis Screening

The breeds listed above have a genetic risk for this inflammatory liver disease. This lab test should be performed yearly in these breeds as early detection and treatment can improve the length and quality of life.

Please contact your veterinarian should you have any additional questions or are seeking additional information regarding preventative care. It has been a pleasure caring for your pet and we hope to continue in helping you to provide the care that they need to live a happy, healthy, and long life!

