

## Health

### ***I love my puppy. What can I do to protect his health?***

Vaccinations are the first and most important thing you will do for your puppy. Without vaccinations your new friend will soon be defenseless in a world of deadly diseases.

The second step is the annual wellness exam. Dogs age much faster than we do, and they have difficulty telling us when something is wrong. Our veterinarians are trained to detect problems before they become serious health issues. The doctor will examine your dog at his/her annual wellness exam for any hidden health problems, update necessary vaccinations, do the annual heartworm test and any other necessary lab work, and take time to answer any questions you might have about your dog.

The third way you can protect your dog's health is to help your dog maintain an ideal weight. A combination of regular play and proper nutrition will not only go a long way to keeping your dog healthy and wise, it will help you protect your wealth from unnecessary veterinary bills.

### ***When should my puppy be vaccinated?***

There are many fatal and debilitating diseases that are waiting to attack your puppy. Fortunately, we have the ability to prevent several of these by vaccinating your puppy. In order to be effective, these vaccines must be given as a series of injections. Ideally, they are given at about 6, 9, 12, and 16 weeks of age, but this schedule may vary depending on several factors.

The routine vaccination schedule will protect your puppy from 7 diseases: distemper, hepatitis, leptospirosis, parainfluenza virus, parvovirus, bordetella and rabies. The first 5 are included in one injection that is given at 6, 9, 12, and 16 weeks old. Bordetella vaccine is given at 12 and 16 weeks to protect against kennel cough. Rabies vaccine is given at 16 weeks of age. If your dog will be exposed to ticks, the carriers of Lyme disease, we recommend he/she be vaccinated against this disease at 12 and 16 weeks.

After your puppy has finished their puppy shots we will send you reminders when he's due for booster vaccinations.

### ***Why does my puppy need more than one vaccination?***

When the puppy nurses their mother, they receive a temporary form of immunity through their mother's milk. This immunity is in the form of proteins called maternal antibodies. For about 24-48 hours after birth, your puppy's intestine allows absorption of these antibodies directly into his/her blood stream. This immunity is of benefit during the first few weeks of your puppy's life, but at some point, this immunity fails and he/she must be able to make his own long-lasting immunity. Vaccinations are used for this purpose. As long as the mother's antibodies are present, vaccinations do not have a chance to stimulate your puppy's immune system. The mother's antibodies interfere by neutralizing the vaccine.

Many factors determine when the puppy will be able to respond to the vaccinations. These include the level of immunity in the mother dog, how much antibody has been absorbed, and the number of vaccines given to the puppy. Since we do not know when your puppy will lose his/her short-term immunity, we give a series of vaccinations.

We hope that at least 2 of these will fall in the window of time when your puppy has lost immunity from their mother, but has not yet been exposed to disease. A single vaccination, even if effective, is not likely to stimulate the long-term immunity, which is so important.

Rabies vaccine is an exception to this, since one injection given at the proper time is enough to produce immunity for one year in puppies and two years in adult dogs.

### ***What are 'required' vaccinations?***

All dogs in Iowa are required to have proof of a current rabies vaccination. Iowa also requires all dogs that are hospitalized or boarded have a current distemper vaccination. Almost all hospitals and boarding kennels will also require a vaccination against bordetella prior to any boarding or hospitalization.

### ***Do all puppies have worms?***

Intestinal parasites are common in puppies. Puppies can become infected with parasites before they are born, or later through their mother's milk. The microscopic examination of a stool sample will usually help to detect the presence of intestinal parasites. We strongly recommend this exam for all puppies. Even if we do not get a stool sample, we recommend the use of a deworming medication that is safe and effective against roundworms and hookworms. We do this because your puppy does not pass worm eggs every day, so the stool sample may not detect worms that are present.

Because some of these internal parasites can be transmitted to humans good hygiene is very important when playing with your pet or handling stool. For example, roundworm eggs, when ingested by a child, can lead to severe problems including blindness. It's very important that you pick up your puppy's stool promptly, and that you and your children wash your hands after playing with or petting your puppy and before eating. Teach children to avoid putting their hands in their mouths after playing with the puppy.

Our deworming medication has no side effects and is given every 2 weeks until 6 months of age. It is important that it be repeated on a regular schedule because the medication only kills the adult worms. Within 2-4 weeks, the larval stages will become adults and need to be treated. Dogs remain susceptible to re-infection with worms and periodic deworming throughout the dog's life may be recommended.

Tapeworms are another intestinal parasite of dogs. Dogs become infected when they eat rabbits or swallow fleas when grooming themselves. The flea is digested within the dog's intestine, allowing the tapeworm eggs living inside the fleas to hatch and anchor themselves to the intestinal lining. Tapeworm infections can become apparent in as little as two weeks after ingesting a flea.

Dogs infected with tapeworms will pass small segments of the worms in their stool. The segments are white in color and look like grains of rice and may be seen crawling on the surface of the stool. They may also stick to the hair under the tail. If that occurs, they will dry out, shrink to about half their size, and become golden in color. Tapeworm segments do not pass every day or in every stool sample; therefore, inspection of several consecutive bowel movements may be needed to find them. We may examine a stool sample in our office and not find them, and then you may find them the next day. If you find them at any time, please notify us so we may provide the appropriate drug for treatment.

### ***How dangerous are heartworms?***

Heartworms are very dangerous parasites in our climate. They live in the bloodstream of your dog and cause major damage to the heart and lungs. Mosquitoes transmit heartworms so your dog does not need to be in contact with another dog to be exposed. Fortunately, we have medications that will protect your dog from heartworms. These medications are very safe and effective if given faithfully each month, from March through December. Because our heartworm preventive also protects against intestinal worms, we recommend it be given year round. Be aware that having a long hair coat or staying primarily indoors will not protect a dog against heartworm infection. We will help you choose the best product for your pet's needs and lifestyle.

Heartworm preventatives are dosed according to your dog's weight. As the weight increases, the dosage should also increase. Please note the dosing instructions on the package.

An important additional benefit of our heartworm preventive is that the pill also offers protection against roundworms, hookworms, and whipworms each month. For this reason we recommend giving Sentinel year around, especially if you have children in your family.

### ***What are ear mites?***

Ear mites are tiny parasites that live in the ear canals of dogs (and cats). The most common signs of ear mite infection are scratching of the ears and shaking the head. Sometimes the ears will appear dirty because of a black material in the ear canal; this material is sometimes shaken out. We can find the mites by taking a small amount of the black material from the ear canal and examining it with a microscope. Although they may leave the ear canals for short periods of time, mites spend the vast majority of their lives within the protection of the ear canal. Transmission generally requires direct ear-to-ear contact. Ear mites are common in litters of puppies if the mother has ear mites.

Ear infections may also cause the production of a dark discharge in the ear canals. It is important that we examine your puppy to be sure the black material is due to ear mites and not infection. Please do not ask us to just dispense medication without having the opportunity to make an accurate diagnosis.

***My puppy has episodes of hiccuping and a strange odor to his breath. Are these normal?***

Yes. Many puppies experience episodes of hiccuping that may last several minutes. This is normal and will not last but a few weeks or months. All puppies have a characteristic odor to their breath that is commonly called “puppy breath.” It is also normal and will last only until the puppy matures.

***What type of dental care does my puppy require?***

First, you should brush your puppy’s teeth. Good oral hygiene will not only protect you from the much-dreaded ‘doggie breath,’ but, more importantly, it will protect your dog’s health and extend his life. Poor oral hygiene and gum disease can lead to tooth loss and other serious diseases. Puppyhood is the perfect time for you and your puppy to get in the habit of regular teeth brushing. We have included a finger toothbrush and sample of pet toothpaste in your puppy pack. Be sure to use pet, not people, toothpaste. Human toothpaste causes fluoride toxicity because dogs will swallow the toothpaste, not spit and rinse their mouths out.

Second, your dog will need to go to the ‘dentist.’ Our doctors and staff are trained in veterinary dentistry and can perform regular prophylactic cleaning of your dog’s teeth and do extractions, dental x-rays, and other procedures that may be necessary. An examination of your dog’s teeth is part of his annual wellness exam, and we will let you know when it is time for a professional dental cleaning.

***Why should I have my female dog spayed?***

Spaying offers several advantages. The female heat cycle results in about 2-3 weeks of vaginal bleeding, and repeats about every 6 months. This can be quite inconvenient if your dog is kept indoors, and will result in lots of uninvited guests, and almost certain pregnancy if she spends much time outside. Male dogs are attracted from blocks away and, in fact, seem to come out of the woodwork. They seem to go over, around, and through many doors or fences to reach your female. Spaying is the removal of the uterus and the ovaries. Therefore, heat cycles no longer occur. Spaying prevents unplanned litters of puppies and is the responsible thing to do.

It has been proven that as the female dog gets older, there is a significant increase in the incidence of breast cancer and uterine infections if she has not been spayed. Spaying before she has any heat cycles will virtually eliminate the chance of either. If you do not plan to breed your dog, we strongly recommend that she be spayed anytime between 5 and 6 months of age, before her first heat cycle.

***Should I breed my dog before spaying her?***

We do not recommend breeding your dog. The myth that a dog will make a better pet if she has a litter of puppies is simply that- a myth. Pregnancy and whelping are not without risk. What was planned as a ‘wonderful experience for the kids’ can turn into an expensive Caesarian section with seriously compromised or dead puppies. Many of the small breed and short-nosed dogs have a higher risk of delivery problems. Having a litter of puppies in the house can be very time consuming. It can also be expensive. Dog food,

dewclaw removal, vaccinations, and advertising can add up to a considerable total. And, most importantly, there are unwanted puppies everywhere; do you really want to contribute to the problem?

If you do decide to breed your dog, she should have at least 2 heat cycles first. She will then be more physically mature allowing her to be a better mother. We do not recommend breeding after 5 years of age unless she has been bred prior to that. Having her first litter after 5 years of age increases the risk of complications during the pregnancy and/or delivery. Once your dog has had her last litter, she should be spayed to prevent the reproductive problems older dogs have.

***Why should I have my male dog neutered?***

Neutering offers several advantages. Male dogs are attracted to a female dog in heat and will climb over or go through fences to find her. Male dogs are more aggressive and more likely to fight, especially with other male dogs. As dogs age, the prostate gland frequently enlarges and causes difficulty urinating and defecating. Neutering will solve, or greatly help, all of these problems that come with owning a male dog. The surgery can be performed anytime after the dog is 5 to 6 months old.