



## Puppy – Recommendations for New Owners Part I – Veterinary Care

Congratulations on the acquisition of your new puppy! Owning a dog can be an extremely rewarding experience, but it is also a large responsibility that lasts the entire lifetime of the dog. This handout will give you information needed to make some excellent decisions regarding the care of your puppy. Check our handouts on "Recommendations for New Owners Part II – General Care", and handouts on specific training exercises for further information and guidance.

If you have questions concerning any subject related to your puppy's health, please consult with your veterinarian.



### When should my puppy visit the veterinarian?

Most puppies will begin going to the veterinarian at two to three weeks of age for an initial health-check and de-worming, and then at six to eight weeks of age to begin vaccinations, heartworm, and flea preventive treatments; receive behavior and training advice; and get permanently identified with a microchip. It is important to follow your veterinarian's recommended exam schedule to ensure that your puppy receives proper protection and that you receive timely and appropriate advice.

### When should my puppy be vaccinated?

There are many fatal diseases that can affect dogs. Fortunately, your veterinarian has 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 timely injections. Ideally, they are given at about 6 to 8, 12, and 16 weeks of age, but the recommended vaccines and schedule of injections may vary depending on your pet's individual needs.

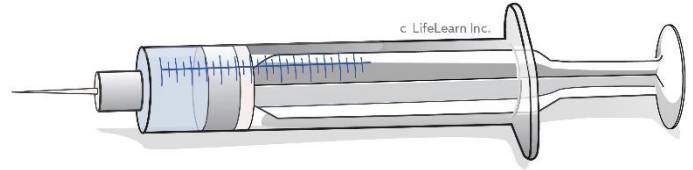
**"The core vaccination schedule will protect your puppy from several common diseases..."**

The core vaccination schedule will protect your puppy from several common diseases: distemper, hepatitis, parvovirus, and rabies. The first three are generally included in one injection that is given at 6 to 8, 12, and 16 weeks old. Some puppies will receive an additional booster vaccination at 20 weeks of age. Rabies vaccine is given at 12 to 16 weeks of age. Other optional vaccinations are appropriate in certain situations. These may include Bordetella, Lyme, and Leptospirosis vaccines if there are risks of those particular diseases based on your geographic location and your family's lifestyle. Your veterinarian will help you determine which vaccines are recommended for your pet based off of your lifestyle.

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

When the puppy nurses its mother, it receives a temporary form of immunity through the colostrum, the milk that is produced in the first days after delivery of the puppies.

Colostrum contains high levels of maternal antibodies that can provide passive protection against diseases that the mother has been exposed to, either naturally or by vaccination. This passive immunity is of benefit during the first few weeks of the puppy's life, but at some point, its levels decline and the puppy must be able to develop its own active long-lasting immunity. Vaccinations are used to provide this long-lasting protection.



**As long as the mother's antibodies are present, vaccinations are unable to stimulate the puppy's immune system because the mother's antibodies neutralize the vaccine.**

Many factors determine when the puppy will be able to respond to vaccinations. These include the level of immunity in the mother at the time of birth, how many antibodies the nursing puppy absorbed, and the general health of the puppy. Since it is unknown when an individual puppy will lose its short-term maternal immunity, a series of vaccinations are given. The goal is for at least two of these to fall into the time frame when the puppy has lost immunity from its mother but has not yet been exposed to disease. A single vaccination, even if effective, is not likely to stimulate long-term immunity, which is critically important.

Rabies vaccine is an exception to this, since one injection given at the proper time is enough to produce long-term immunity due to the lack of maternal antibody interference.

## How can I provide permanent identification for my dog?

The most widely recommend pet identification device is the microchip. This tiny device is implanted with a needle much like administering an injection. A special scanner can detect these chips; veterinary hospitals, humane societies, and animal shelters across the country have these scanners. A national registry assists in the identification and return of microchipped pets throughout the United States and Canada.

The microchip can be quickly and painlessly implanted during any regular veterinary appointment. Ideally, you should have your puppy identified with this permanent form of identification at its first puppy visit.

## Do all puppies have worms?

Intestinal parasites are very common in puppies. Puppies can become infected with some types of intestinal worms before they are born or later through their mother's milk. Microscopic examination of a stool sample will usually help your veterinarian to determine the presence of most intestinal parasites. This exam is recommended for all puppies, especially during their first few veterinary visits.

**"The routine use of a deworming medication that is safe and effective against several of the common worms is recommended..."**

Even if a stool sample is not obtained, the routine use of a deworming medication that is safe and effective against several of the common worms of the dog is recommended. This protocol is followed because 1) deworming medication has little, if any, side effects and 2) your puppy does not pass worm eggs every day so the stool sample may not detect worms that are present, but not shedding eggs. Additionally, some of these intestinal parasites can be transmitted to humans. It is important that the deworming is repeated because it only kills the adult worms.

**"Within three to four weeks, the larval stages of the intestinal parasites will become adults and need to be removed."**

Within three to four weeks, the larval stages of the intestinal parasites will become adults and need to be removed. Dogs remain susceptible to re-infection with hookworms, whipworms, and roundworms throughout their life. Periodic deworming throughout the dog's life may be recommended for dogs that spend time outdoors.

Tapeworms are another common intestinal parasite. Tapeworms require an intermediate host, meaning that tapeworms are not passed from dog to dog. Depending on the type of tapeworm, puppies become infected with them when they swallow fleas or when they eat contaminated raw meat or infected mice, birds, or rabbits.

Dogs infected with tapeworms will intermittently pass small segments of the worms in their stool. The segments are white in color and look like grains of rice or cucumber seeds. They are about an eighth of an inch (3 mm) long 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 or light brown in color. If you observe tapeworm segments on your dog's stool, please collect them and bring them into your veterinarian for identification so that the appropriate drug for treatment can be prescribed.

### What can be done about fleas on my puppy?



Contrary to popular belief, the majority of the flea life cycle is spent off the dog; only the adult lives on the animal. The egg, larva, and pupa feed and develop in the environment. Therefore, flea control must include treatment of the environment, as well as the pet. Many of the flea control products that are safe on adult dogs **are not safe** for puppies less than two to three months of age. Be sure that any flea product you use is labeled safe for puppies. Consult with your veterinarian to determine which flea medication is appropriate for your puppy.

### What are heartworms?

Heartworms are important parasites, especially in warm and humid climates where mosquitoes are prevalent. They live in the dog's bloodstream and cause major damage to the heart and lungs and often result in death. Heartworms are transmitted by the bite of mosquitoes. Heartworm preventives are dosed according to your dog's weight. As your dog's weight increases, the dosage should also increase. They are very safe and effective if used as directed. Many of these products also protect your dog against certain intestinal parasites and external parasites such as fleas.

## What are ear mites?

Ear mites are tiny parasites that live in the ear canal of dogs and cats. The most common sign of ear mite infection is violent and persistent scratching of the ears. Sometimes the ears will appear dirty because of a black material in the ear canal. The tiny mites can be seen with magnification, either directly in the ear with an otoscope, or by examining a sample of the ear discharge under a microscope. Ear mites spend the vast majority of their lives within the protection of the ear canal and transmission requires direct contact with an infected animal. Ear mites are more common in cats than in dogs.

In dogs, ear infections are the most common cause of a dark discharge in the ear canals. It is important that your puppy is examined to differentiate between infection and ear mites. It is inappropriate for a veterinarian to dispense medication without an accurate diagnosis.



## Why should I have my female dog spayed?

"Spaying is the surgical removal of the uterus and the ovaries..."

Spaying is the surgical removal of the uterus and the ovaries, and eliminates the dog's estrus, or "heat" cycles. In an intact dog, these heat periods result in about 2–3 weeks of vaginal bleeding and discharge approximately every 6 months. During this time, male dogs are attracted from blocks away and, in fact, seem to appear out of thin air when a female is in heat!

Male dogs will go over, around, and through doors or fences to reach a female in heat. Apart from the risk of unplanned pregnancies, it is well documented that intact female dogs have a significant risk of developing breast cancer and/or uterine infections. Spaying before the dog experiences her first estrus cycle has 3 benefits: it eliminates the risk of unplanned pregnancy and helps control the problem of dog overpopulation; it eliminates any possibility of uterine disease; and it virtually eliminates any chance of developing breast cancer. If you do not plan to breed your dog, it is strongly recommended that your puppy is spayed before 6–7 months of age.

## Why should I have my male dog neutered?

Intact male dogs are attracted to a female dog in heat and will climb over or go through fences to find her. Intact male dogs tend to be more territorial towards other male dogs. Intact male dogs are prone to develop prostatic disease as they age and testicular cancer is relatively common in intact male dogs.

"Neutering or castration is the surgical removal of the testicles..."

Neutering or castration is the surgical removal of the testicles, and will prevent or decrease these problems, as well as being an effective method of controlling the problem of overpopulation. The surgery can be performed any time after the dog is six months old.

## If I choose to breed my female dog, how old should she be?

If you plan to breed your dog, she should have at least one or two heat periods first. She will then be more physically mature allowing her to be a better mother. Breeding after five years of age is not recommended unless she has been bred prior to that. Having her first litter after five years of age increases the risk of complications during the pregnancy or delivery. For more information, see the series of handouts on "Breeding for Dog Owners".

As always, if you have any concerns or questions about your new puppy, contact your veterinarian.

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