OCEAN COUNTY VETERINARY
HOSPITAL GROUP

Caring for the Dog You Love

Ocean County Veterinary Hospital

838 River Avenue
Lakewood, NJ 08701
Phone: 732-363-7202
www.ocvh.com

Bridge Veterinary Hospital

2700 Bridge Avenue
Point Pleasant, NJ 08742
Phone: 732-475-6022
www.bvhvet.com

Fischer Veterinary Hospital

877 Fischer Boulevard
Toms River, NJ 08753
Phone: 732-3270-5300
www.fischervet.com

New Prospect Veterinary Hospital

165 S. New Prospect Road
Jackson, NJ 08527
Phone: 732-363-4500
www.newprospectvet.com

OUR VETERINARIANS

DR. WARREN BRIGGS received his Doctorate of Veterinary Medicine in 1992 from the University of Guelph, Canada.

DR. LAURIE PEARLMAN received her Doctorate of Veterinary Medicine in 2003 from Iowa State University.

DR. BILLY DANOWITZ received his Doctorate of Veterinary Medicine in 2003 from Virginia-Maryland Regional College of Veterinary Medicine.

DR. LORRI MITCHELL received her Doctorate of Veterinary Medicine in 1997 from the University of Prince Edward Island, Canada.

DR. JENNA KOENIGSTEIN received her Veterinary Medicine Doctorate in 2012 from Tufts University Cummings School.

DR. ZACH WEINER received his Doctorate of Veterinary Medicine in 2006 from the Tufts University Veterinary School.

DR. ERICA IAQUINTO received her Doctorate of Veterinary Medicine in 2003 from Texas A&M University.

DR. ROSS GOTTLIEB received his Doctorate of Veterinary Medicine in 2015 from Ohio State College of Veterinary Medicine.

DR. PAUL CRAWFORD received his Doctorate of Veterinary Medicine in 2014 from St. Georges School of Veterinary Medicine.

DR. CHRISTINA MARTINS received her Doctorate of Veterinary Medicine in 2014 University of Pennsylvania School of Veterinary Medicine.

DR. CORI BLAIR received her Doctorate of Veterinary Medicine in 2015 from Auburn University College of Veterinary Medicine.

Ocean County Veterinary Hospital has been caring for pets in the Monmouth/Ocean County area for over 50 years. In 2006, we opened our first affiliate facility in Toms River, Fischer Veterinary Hospital. In 2012, we opened our second affiliate facility in Jackson, New Prospect Veterinary Hospital and in 2015 we opened our 3rd affiliate facility in Point Pleasant, Bridge Veterinary Hospital . OCVH, FVH, NPVH and BVH offer a wide array of services for companion animals in modern and clean facilities. Although some services may not currently be available at all of our locations, your puppy will receive the same personal care at all of our hospitals. We are committed to a higher standard of care, constantly integrating new technologies and proven treatments into our practice. But most important, we provide each pet and owner with the individual attention they deserve.

About OCEAN OCVH GROUP

Our large staff of doctors has a variety of interests including internal medicine, surgery, dentistry, ophthalmology, cardiology, ultrasonography, and the care of exotic pets. This diverse staff of doctors enables us to consult with each other about your pet's health and provide a higher quality of care at no extra cost to you.

Office Care

At every visit, your pet will receive a complete physical examination. During your appointment the doctor will inform you about all your pet's healthcare needs and can provide:

- Wellness evaluations and preventative care
- Vaccinations that are appropriate for your pet's age and lifestyle
- Health profiles specifically tailored to puppies, kittens or senior pets
- Post-purchase/Post-adoption examinations of newly acquired pets
- Parasite control (fleas, ticks, worms, etc.)
- Treatment for acute illness or injury
- Care and monitoring of chronic conditions
- Nutritional advice
- Prescription medications
- Behavioral counseling
- Referral to Board-Certified Specialists when uncommon procedures are required
- Humane and compassionate end of life services

Laboratory & Diagnostic Testing

The veterinarians at OCEAN COUNTY VETERINARY HOSPITAL GROUP can perform a wide array of diagnostic tests to quickly assess your pet's health and determine what therapy is required. These include:

- Blood tests performed on premises or at an accredited lab with rapid turnaround time
- Ultrasound examinations of the chest and abdomen (OCVH)
- Telemedicine consultations with Board Certified Specialists
- Endoscopy (OCVH)
- X-rays
- Electrocardiograms
- Blood pressure screening
- Glaucoma screening
- Microscopic examinations of skin, hair, etc.
- Fecal examinations for parasites

About OCVH GROUP

Hospitalization at OCVH

If your pet needs to be hospitalized we will work as a team to provide the special attention your pet deserves. Your pet's comfort and recovery will be top priority with our competent doctors and staff.

- Inpatient examinations, evaluations and diagnostics
- Emergency and critical care
- IV fluid therapy
- Oxygen therapy
- Special feeding and nutrition
- Doctor supervised nursing care

Surgery & Dentistry at OCVH

Our doctors are qualified to perform a wide range of surgical and dental procedures in modern facilities. Services provided include:

- Sedation and Anesthesia
- State of the Art Anesthetic Monitoring
- Spaying and Neutering
- Laparoscopic Spaying and Neutering
- Obstetrics
- Declawing
- Soft Tissue and Orthopedic Surgery
- Laparoscopy
- Endoscopy
- Biopsies
- Routine Dental Cleaning
- Digital Dental X-rays
- Tooth Extractions and Oral Surgery
- Pre and Post-Operative Pain Management

Therapy at OCVH

- Laser therapy—Advanced pain relief, drug and surgery free

Welcome!

Dear New Dog Owner,

Congratulations on the new addition to your family! We are excited to be part of what will surely be many wonderful and enjoyable years ahead, and we would like to start your puppy on a lifetime program of good health.

Our doctors and staff are pleased to provide you with this guide detailing the most current and optimum recommendations for your new puppy. Excellent preventative medicine through regularly scheduled examinations and vaccinations along with proper nutrition and behavior education can help foster a healthy and special bond between you and your new puppy. It is also an opportune time to address any questions or concerns that may arise as your puppy enters different life stages. Veterinary examinations are one of the most valuable investments you can make towards your puppy's health and happiness.

It is our hope that you will find this booklet very helpful, and that it will serve as a tool for your family for many years to come. Please do not hesitate to contact us with any questions about the information provided.

We welcome you and your new puppy to the family here at Ocean County Veterinary Hospital Group. We wish you the very best in the years to come.

Sincerely,

The Doctors and Staff of Ocean County Veterinary Hospital Group

Caring for the Pets You Love

Recommended Lifetime Health Plan

Boarding & Grooming at OCVH

- Supervised boarding for pets that need a home away from home
- Professional grooming to keep your pet looking and feeling great
- Veterinarian-supervised sedation

To learn more about these recommendations, please refer to the Vaccinations section.

Remember . . .

- Regular physical examinations
- Vaccinations
- Nutrition
- Parasites, flea and tick control
- Heartworm disease
- Lyme Disease
- Grooming and bathing
- Puppy school
- Behavior training
- Crate training
- Oral care and brushing teeth
- Ear and skin care
- Spay or neuter discussion
- Blood testing and panels
- Hip dysplasia and radiographs
- Elbow dysplasia and radiographs
- Traveling with your puppy

Puppies always receive one-year vaccination for Rabies.

Three-year Rabies vaccines are administered to adult dogs that have valid proof of previous Rabies vaccination.

Recommended Lifetime Health Plan

Age	Date	DHP/P	Bordetella	Lyme	Rabies	Lepto	Fecal	Heartworm
wks.								
wks.								
wks.								
wks.								
wks.								
1 yr.								
2 yrs.								
3 yrs.								
4 yrs.								
5 yrs.								
6 yrs.								
7 yrs.								
8 yrs.								
9 yrs.								
10 yrs.								
11 yrs.								
12 yrs.								
13 yrs.								
14 yrs.								
15 yrs.								
16 yrs.								
17 yrs.								
18 yrs.								
19 yrs.								
20 yrs.								

Recommended Lifetime Health Plan

Approximately 6 Weeks

- Complete Physical Examination
- Fecal analysis
- 1st DHPP vaccine
  Distemper, Hepatitis, Parainfluenza, Parvovirus
- 1st Deworming

Approximately 8 Weeks

- Complete Physical Examination
- Fecal screening
- 2nd DHPP vaccine
  Distemper, Hepatitis, Parainfluenza, Parvovirus
- 1st Bordetella vaccine
- 2nd Deworming
- Begin heartworm preventative
- Begin flea and tick control program

Approximately 12 Weeks

- Complete Physical Examination
- Fecal analysis
- 1st DHLP-P vaccine
  Distemper, Hepatitis, Leptospirosis, Parainfluenza, Parvovirus
- 2nd Bordetella vaccine
- 3rd Deworming
- 1st Lyme vaccine

Approximately 16 Weeks

- Complete Physical Examination
- Fecal analysis
- 2nd DHLP-P vaccine
  Distemper, Hepatitis, Leptospirosis, Parainfluenza, Parvovirus
- 2nd Lyme vaccine
- 1 year Rabies vaccine

Your dog's annual physical examination is the perfect time to talk to us about any concerns you have about your dog's

A canine health screen includes a CBC, biochemistry profile, thyroid level, heartworm test and urinalysis. This profile is recommended at each annual examination starting at five years, but may be performed at any age.

Recommended Lifetime Health Plan

4 to 6 Months

- Pre-surgical physical examination
- Pre-surgical blood test
- Spaying or neutering procedure
- Hip/elbow radiographs (if applicable)

One Year

- Annual physical examination
- Three-year DHP/P vaccine
  Distemper, Hepatitis, Parainfluenza, Parvovirus
- Annual Leptospirosis vaccine
- Annual Lyme Disease vaccine
- Annual Bordetella vaccine
- Three-year Rabies vaccine
- Fecal Analysis
- Heartworm and Tick Borne Disease screen

Two Years

- Annual Physical Examination
- Annual Leptospirosis vaccine
- Annual Lyme Disease vaccine
- Annual Bordetella vaccine
- Fecal analysis
- Heartworm and Tick Borne Disease screen
- Early detection profile annually starting at two years of age

Three Years

- Annual Physical Examination
- Annual Leptospirosis vaccine
- Annual Lyme Disease vaccine
- Annual Bordetella vaccine
- Fecal analysis
- Heartworm and Tick Borne Disease screen
- Early detection profile annually

Between the ages of three and five, your dog should have a full blood panel performed to verify their normal values. This will help us pinpoint early signs of illness or disease. Early detection provides a better opportunity for effective treatment and/or cure.

Four Years

- Annual Physical Examination
- Three-year DHP/P vaccine
  Distemper, Hepatitis, Parainfluenza, Parvovirus
- Annual Leptospirosis vaccine
- Annual Lyme Disease vaccine
- Annual Bordetella vaccine
- Three -year Rabies vaccination *as needed every three years*
- Fecal screening
- Heartworm and Tick Borne Disease screen
- Early detection profile annually

The Annual Physical Examination

Five Years

- Annual Physical Examination
- Annual Leptospirosis vaccine
- Annual Lyme Disease vaccine
- Annual Bordetella vaccine
- Fecal screening
- Heartworm and Tick Borne Disease screen
- Canine Health Screen

Six Years

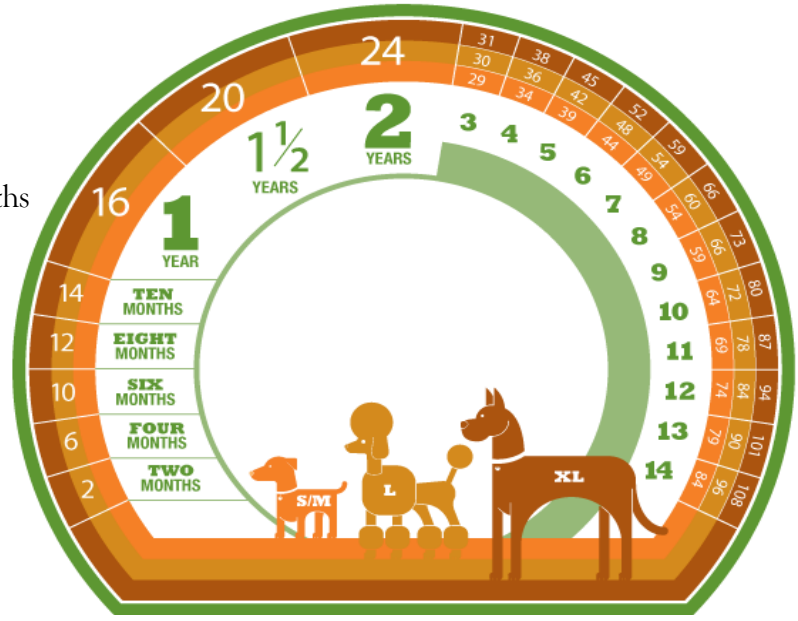
- Annual Physical Examination
- Annual Leptospirosis vaccine
- Annual Lyme Disease vaccine
- Annual Bordetella vaccine
- Fecal screening
- Heartworm and Tick Borne Disease screen
- Canine Health Screen

Seven Years

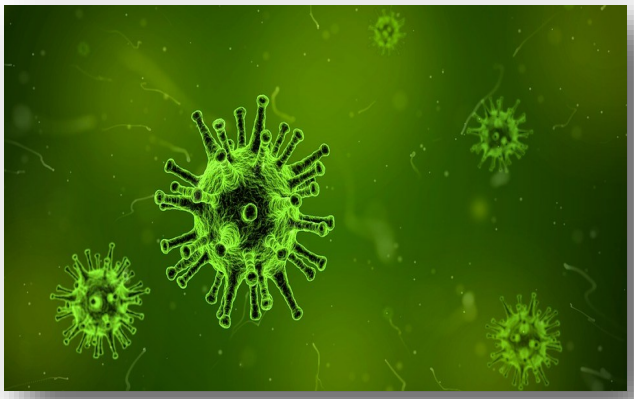
- Annual Physical Examination
- Annual Leptospirosis vaccine
- Annual Lyme Disease vaccine
- Annual Bordetella vaccine
- Three-year DHP/P vaccine Distemper, Hepatitis, Parainfluenza, Parvovirus
- Three-year Rabies vaccine
- Fecal screening
- Heartworm and Tick Borne Disease screen
- Canine Health Screen

Eight Years and More

- Annual Physical Examination every six months including canine health screen
- Annual Leptospirosis vaccine
- Annual Lyme Disease vaccine
- Annual Bordetella vaccination
- Three-year DHP/P vaccination as needed every three years



Vaccinations



The physical examination involves a head-to-tail evaluation performed by a veterinarian. Your dog's eyes, ears and mouth will be inspected for any abnormalities. The heart and lungs will be auscultated with a stethoscope to listen for any heart murmurs, arrhythmias (irregular beats) or abnormal lung sounds. The doctor will palpate your dog's entire body, feeling for appropriate organ size and looking for any skin growths or abnormalities. During the examination you may be asked additional questions in order to obtain an overall assessment of your dog's current health status. Depending on your dog's particular circumstance, we may recommend more specific laboratory or diagnostic tests for further evaluation.

Because dogs age at a much faster rate than we do it is important to have your dog examined annually before the age of eight and then bi-annually after the age of eight. In this manner health problems may be detected at an earlier time, allowing us to start therapy earlier and possibly improve the prognosis or outcome.

There are many infectious diseases that are fatal to dogs. Fortunately, we have the ability to prevent many of these diseases through the use of vaccines. In order to be effective, these vaccines must be given in a series when your pet is a puppy, and then continued at one-year or three-year intervals (depending on the vaccine) throughout your dog's adult life.

The timing of the initial series of vaccines is very important. Ideally, vaccines are started between 4-8 weeks of age, and then given at monthly intervals until 16 weeks of age. Puppies require a series of vaccines due to an immature immune system. At the time of nursing, a puppy acquires a temporary form of immunity through antibodies contained in the milk of the mother. These antibodies provide protection for the puppy for the first few weeks of life, after which

Vaccinations

the puppy needs to develop its own production of its own antibodies. Vaccines provide a stimulus for the puppy's immune system to produce antibodies against infection. Since the puppy's immune system is not yet fully developed, the response to a single vaccine is not strong enough to protect the puppy for a full year. Therefore, a series of repeated vaccines are required to provide optimal protection against common infectious diseases that affect puppies and adult dogs. Vaccinations will protect your puppy or dog from the following diseases:

Distemper virus is widespread in the dog population. A dog with distemper may have diarrhea, fever, respiratory disease, seizures, muscle twitches and watery discharge from eyes and nose. All of these symptoms may not always be present in distemper, which can be fatal to puppies and adult dogs. The distemper vaccine is included in the DHP/P vaccine and it is administered at 3-4 week intervals until approximately 16 weeks of age.

Hepatitis is spread primarily through infected urine. The virus attacks internal organs throughout an unprotected dog's body, producing fever, respiratory disease, diarrhea, liver disease, eye damage, and changes in the blood. This disease can also be fatal to dogs. Included in the DHP/P vaccine, it is administered at 3-4 week intervals until 16 weeks of age.

Leptospirosis is a bacterial disease that can be found in most animals including livestock and wildlife. The bacteria are passed via the urine into water sources, where they can reside. The bacteria can be present in any stagnant surface water, moist soil, and recreational water sources such as ponds and lakes. Your dog can become infected by drinking, swimming in, or walking through contaminated water.

Parainfluenza is a common respiratory virus than can compromise the immune system of the dog or puppy and leave them vulnerable to secondary bacterial infections (pneumonia). Included in the DHP/P vaccine, it is administered at 3-4 week intervals until 16 weeks of age.

Parvovirus affects the lining of the intestinal tract causing vomiting and diarrhea, often accompanied with blood. This disease is spread easily as millions of viral particles remain in

the loose, watery stool of an infected dog. Viral diarrhea in puppies can cause death due to loss of fluids and immune suppression. Included in the DHP/P vaccine, it is administered at 3 -4 week intervals until 16 weeks of age.

Bordetella is a stubborn respiratory infection also known as *kennel cough* or tracheobronchitis. This bacterial infection is often accompanied by other bacterial infections. Since it is an airborne germ, boarding your dog in a facility is not the only reason to administer this vaccine, as your dog can acquire this disease from the environment at any time. The vaccine is administered at 3-4 week intervals until 16 weeks of age.

Rabies is a deadly disease that can infect all mammals, including humans. Usually dogs and cats are infected by a bite from a rabid raccoon, bat or skunk. Once the virus enters the animal, it moves to the brain. The animal either becomes unusually aggressive or lethargic and withdrawn. Death occurs from paralysis and respiratory failure. Once infected, there is no treatment and the disease is fatal. The Rabies vaccine is initially administered at 16 weeks of age.

Lyme Disease **(Borreliosis)** is caused by infection with an extremely small organism called a spirochete, which is transmitted by the Deer Tick. This disease can cause a variety of clinical signs in dogs, including joint swelling, intermittent lameness, and lethargy. Chronic forms of Lyme disease can cause kidney failure. Use of the vaccine on a yearly basis combined with an anti-tick therapy such as Vectra or Simperica on a monthly basis will help to protect your dog from this disease. The Lyme vaccine is given using a series of 2 injections give about 3 weeks apart and is started between 9 and 13 weeks of age.

After one year of age, the DHP/P and Rabies vaccines may be given at three-year intervals, while Bordetella ,Lyme, and Leptospirosis must be given annually.

(vaccines continued) This schedule may be altered depending on your dog's state of health, age at first visit, etc. We will recommend a schedule that is most beneficial to your puppy/dog.

Common Diagnostic Tests

Heartworm Test / Accuplex

This is a blood test for the heartworm parasite that can cause a potentially fatal disease of the heart and lungs. Transmission to dogs occurs through mosquito bites. Every dog must have a heartworm test performed annually and should remain on a heartworm preventative, such as Heartgard Plus, monthly all year around. This test also screens for exposure to three additional tick borne diseases: Lyme Disease, Ehrlichiosis and Anaplasmosis.

Fecal Analysis

This test examines a dog's feces for the eggs and cysts of common intestinal parasites such as roundworms, hookworms, whipworms, coccidia, giardia and tapeworms. Intestinal parasites can cause diarrhea, vomiting and colitis, among other problems which are transmissible to other dogs. Roundworms and hookworms can potentially cause health problems in humans.

CBC Blood Test

This blood test examines the red blood cells, white blood cells and platelets. This test is useful for detecting infection, inflammation, anemia and clotting problems.

Biochemistry Profile

This complex of blood tests examines many metabolic organs of your dog, including the kidneys, liver and pancreas. In addition it measures blood glucose, protein levels, calcium and electrolyte levels.

Urinalysis

This test examines a pet's urine for specific gravity (dilute or concentrated) and the presence of many substances including: protein, blood, white blood cells, bacteria, and crystals. This test is useful in screening for many types of metabolic diseases, including diabetes mellitus, kidney

Common Diagnostic Tests

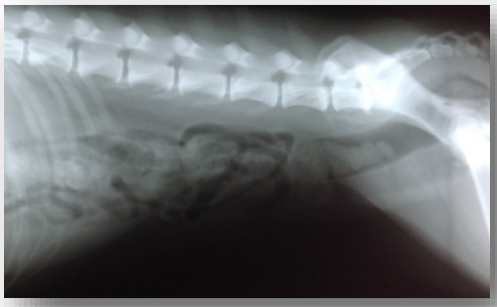
disease
and liver disease, as well as diagnosing urinary tract infections.

Urine Culture and Sensitivity

This test uses a urine sample and grows any bacteria present in your dog's urine. Any bacteria that grows is tested to determine how effective different antibiotics are at eliminating the infection. This test is very useful to help your veterinarian decide which type of antibiotic to use to treat a urinary tract infection.

Canine Health Screen

This series consists of a biochemistry profile, CBC, heartworm test, thyroid level and a urinalysis. It is an important screening tool used in otherwise healthy animals during their annual examination to detect early signs of disease. Early detection will ensure prompt treatment and improve prognosis of some disorders.



Radiographs (X-Rays)

X-rays are very useful for examining numerous problems throughout the entire body, including the teeth and skull, chest, abdomen, and musculoskeletal system.

Ultrasound (Abdominal and Cardiac)

Ultrasound uses sound waves to create an image that allows the veterinarian to see inside many organs to help diagnose and treat disease. There are two commonly used types of ultrasound studies, abdominal and cardiac. An abdominal ultrasound evaluates the organs in the abdomen, including the liver, stomach, spleen, kidneys, intestine, pancreas, and urinary bladder. A cardiac ultrasound, or echocardiogram, is a study that focuses on the heart, evaluating each of the four chambers (atria and ventricles), the heart valves and their function.

Blood Pressure

There are many different diseases that can affect a dog's blood pressure. High blood pressure (hypertension) and low blood pressure (hypotension) and lead to significant illness that often need medical treatment. Blood pressure is also monitored during surgery and during the treatment of critically ill animals to evaluate the pet's circulatory status.

Glaucoma Screening

Your pet's veterinarian quickly and painlessly can measure your pet's intraocular eye pressure. This test screens for glaucoma a common cause of blindness in dogs and cats. This is done while you wait with your tonopen.

Intestinal Parasites

Intestinal parasites are common in puppies and dogs that spend a great deal of time outdoors. Puppies can become infected with parasites before they are born, through the mother's milk or acquire them from the environment.

The microscopic examination of a stool sample will usually help us determine the presence of intestinal parasites. We recommend that a fecal examination be a part of the annual exam each year for the lifetime of your pet. Even if the fecal examination is negative **in puppies**, we may recommend a course of treatment for the most common intestinal parasites. This is often recommended because the medication does not have any adverse side effects, and because dogs do not pass worm eggs into the feces everyday, therefore an individual stool sample may not detect all the worms that are truly present. If given, the de-worming medication is repeated in 1-4 weeks, since the medication only kills the adult worms and does not affect the younger worms or eggs. By repeating the treatment in 1-4 weeks the younger worms and eggs become adults and will be eradicated. Dogs remain susceptible to re-infection with intestinal parasites throughout their lifetime.

Adult hookworms and roundworms are not considered to be infectious to humans, however the larval forms have been reported to invade the skin or internal organs of humans who contact dog feces. These cases are rare, however, when it occurs it is usually a child who contacted feces or contaminated grass. Although extremely rare, it important for people with

children to clean their yard of feces and to keep their dog on a monthly prevention program to prevent this potentially serious complication.

Roundworms are typically found in puppies. They are either born with or acquire roundworms through their mother's milk. Older dogs can become infected through contact with soil containing roundworms. Dogs contract roundworms environmentally and health risk to humans IS possible! Infected dogs may or may not possess visible worms in their stool.

Tapeworms are the most common intestinal parasite of dogs. Puppies become infected with them when they swallow fleas (tapeworm eggs live inside the flea). When the dog licks or chews its skin as a flea bites, the flea may be swallowed. The flea is digested within the dog's intestine; the tapeworm hatches and anchors to the intestinal lining. Therefore, exposure to fleas may result in a new infection within two weeks. Dogs infected with tapeworms will pass small segments of the worms in their stool. The segments are white in color and look like rice. They are about 1/8 inch 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 yellow in color. Worm segments are not shed in every stool sample from an infected pet. For this reason, false negative fecal analysis can occur. If you find what you suspect is a worm on your pet or in the stool, bring a fecal sample to us to be analyzed.

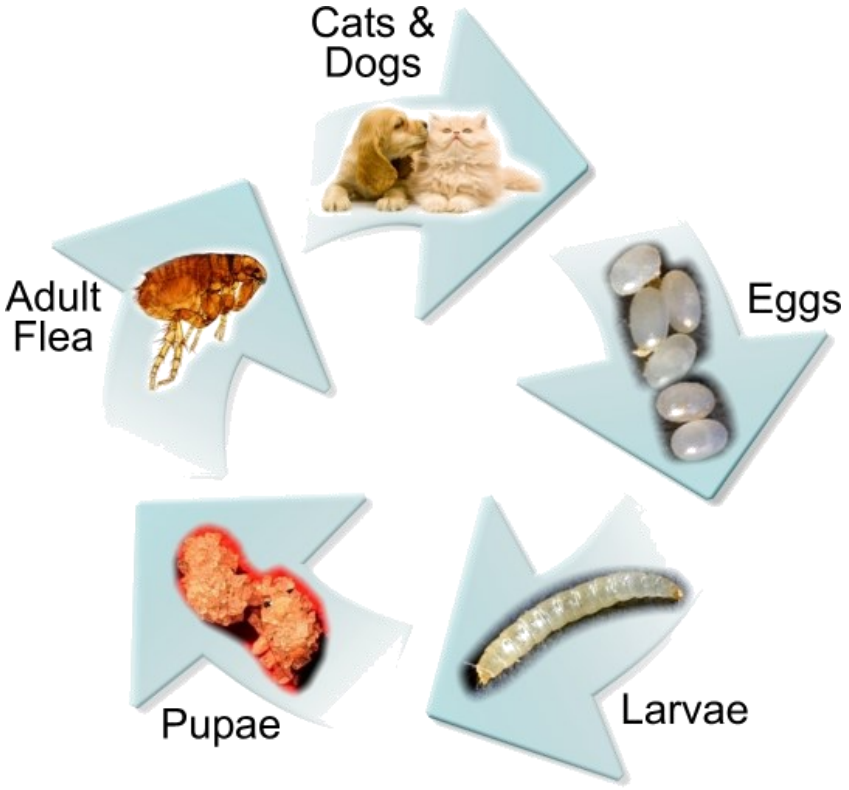
Coccidia are a single-celled organisms that infect the intestine. They are microscopic parasites that are not worms, and they cannot be seen by the naked eye. This common parasite can cause watery diarrhea and can be life-threatening to a puppy. Dogs acquire this parasite from contaminated ground, and re-infection after treatment is a common and frustrating problem.

Giardia are also a single-celled organisms that infect the intestine. Giardia are protozoa that are not visible to the naked eye. This infection can cause severe diarrhea in puppies and adult dogs. Infection occurs when an animal ingests giardia cysts from contaminated water or the environment. Diagnosis and treatment of this parasite can be challenging.

Hookworms attach to the dog's intestinal lining with hook-like teeth and feed on blood. Their eggs are released into the intestine and passed through the feces. The eggs then hatch into larvae which can be swallowed by another dog or penetrate through the dog's skin. Dogs

contract hookworms from the environment and health risk to humans IS possible! These worms are not usually visible in the stool to the naked eye.

Whipworms live in the large intestine and cecum of the dog. They can cause diarrhea, colitis, weight loss and dehydration. This parasite is sometimes very challenging to detect. Elimination from the environment is not always possible, frequently causing re-infestation in dogs and cats even after successful initial treatment.



One female flea can lay up to 2,000 eggs in her lifetime, which is why just a few fleas can cause a terrible infestation on your pet and in your house in a very short time. The flea life cycle occurs in four stages: the egg stage, the larval stage, the pupae stage and finally the adult stage.

Flea Control

Typically all you see are the adult fleas, which account for only 5% of the total population. The presence of fleas can pose many health problems as well. Infections of the skin, tapeworms, and anemia are a few of the health threats that fleas can introduce. For an allergic pet, one flea bite can cause such intense itching that your pet may chew out their hair, traumatize their skin, and develop skin infections. In addition, fleas can be carriers of several diseases that can be dangerous to you and your family.

The products now available for flea control are more effective and safer than they have ever been in the past. **Vectra 3D** is a topical product which repels and kills ticks, fleas and mosquitoes

when applied monthly, it also repels biting flies. Simparica is a flavored tablet that is administered orally once monthly and is extremely effective at killing fleas and ticks. Seresto is a flea collar that provides 8 months of protection against fleas and ticks. Sprays and shampoos / dips can also be helpful, but are usually not as effective as the above-mentioned medications.

Determining the most effective pest management approach can be confusing, as there are so many products available on the market. Many pet stores carry products that are designed to look very similar to **Simperica** and **Vectra 3D**, but they are neither as effective nor as safe. We urge you to discuss flea and/or tick control with us and together the optimal prevention program can be formulated.

Heartworm disease (dirofilariasis) is a serious and potentially fatal disease in dogs. It is caused by a parasite called *Dirofilaria immitis*, and is transmitted by mosquitoes. As many as 30 species

Heartworm Disease

of mosquitoes can transmit the infected larvae, which develop into adult heartworms after being introduced to the dog. Mosquitoes can transmit heartworm disease during any season, not just during the summer. Adult heartworms live in the heart and pulmonary arteries of the infected dogs. They have been found in other areas of the body, however, this is unusual. They can survive up to 5 years, and during this time the females can produce millions of young worms, referred to as microfilariae. These microfilariae live in the small blood vessels of the dog. The microfilariae are unable to grow to adulthood in the dog, as they require the mosquito to complete their life cycle of development; the immature worms can, however, cause problems in the dog.

Adult heartworms cause disease by clogging the heart and major blood vessels leading from the heart. They interfere with valve action in the heart. By clogging the main blood vessels, the blood supply to other organs of the body is reduced, particularly in the lungs, liver and kidneys,

leading to malfunction of these organs. Dogs may not show any signs of disease for up to two years after being infected, however this is entirely dependent upon the number of worms he/she is infected with. Unfortunately, by the time symptoms appear, the disease is well advanced. Affected dogs may show: a soft, dry, chronic cough, shortness of breath, weakness, nervousness, listlessness, loss of stamina, or in rare cases acute death. Signs are often exaggerated after exercise. The prognosis of heartworm disease depends upon the number of adult worms present, the location of the worms, the length of time that the worms have been present, and the degree of damage to the heart, lungs, liver and kidneys from the adult worms and the microfilariae. In advanced cases, congestive heart failure may develop, and the abdomen and legs may swell from fluid accumulation. Severely affected dogs may die suddenly during exercise or excitement.

There is good news—Heartworm disease is completely and easily preventable!

This horrible disease can be prevented by initiating a prevention program when your dog is a puppy. A chewable tablet given once a month or a 6 month injection can prevent heartworm infection. These medications are extremely safe and very effective. Annual heartworm testing must be done in conjunction with preventative medication for a complete prevention program. Pro-Heart 6, Interceptor Plus and **Heartgard** are excellent heartworm preventatives recommended by the OCVH Group.

Heartworm disease is easier to prevent than it is to treat!

Treatment for heartworm disease once a dog is infected requires a prolonged hospitalization and administration of a compound that kills the adult worms. This treatment is not without risk, however, as dead adult heartworms in the bloodstream of a dog can cause additional problems. Treatment is frequently successful depending upon the degree of infection and stage of disease, however it always requires hospitalization and considerable expense. Administrating a chewable tablet once a month for your dog's life is much easier than having go through this treatment, and will help guarantee your pet's health!

Dental Disease

At 2 to 3 weeks, dogs develop 28 temporary teeth. Around 4 months, 42 permanent teeth begin to emerge. Studies show that by age 3, 80% exhibit signs of gum disease. Smaller breeds are more likely than larger breeds to develop periodontal disease because teeth of small dogs are often too large for their mouths forcing teeth closer together.

Dental disease is as common in dogs and cats as it is in humans. The most common form of dental disease in humans is caries (cavities). However, in dogs and cats, the most common form of dental disease is tartar buildup. This buildup causes irritation of the gums around the base of the teeth (gingivitis), resulting in painful exposure of the roots. Ultimately, this leads to infection and tooth loss. One of the main factors determining the amount of tartar buildup is the individual chemistry in the mouth, as some dogs or cats will tend to be more susceptible to developing dental disease than others. If tartar is allowed to remain on teeth, several things may happen:

Introduce a brushing program. Begin by dipping your finger into pet toothpaste and rubbing gently over mouth and teeth. Make initial sessions short and positive. Gradually, introduce gauze over the finger and gently scrub in a circular motion. Finally, introduce a sensitive or ultra-soft toothbrush designed for people or a brush designed for pets. Please note, human toothpaste may upset your pet's stomach; we have flavored pet toothpaste at OCVH Group

1) The tartar will mechanically push the gums away from the roots of the teeth. This allows the teeth to loosen in their sockets and bacterial infection to enter the root socket. The teeth will loosen and fall or out or eventually need to be extracted.

2) A bacterial infection will accumulate in the mouth, resulting in gingivitis, tonsillitis, and pharyngitis (sore throat). Although antibiotics will temporarily suppress the infection, if the tartar is not removed from the teeth the infection will return quickly.

3) Infection within the mouth will be picked up by the bloodstream and carried to other parts

of the body. Kidney and liver infections, as well as infections involving the heart valves, frequently arise from the mouth.

4) **Dental care for your puppy can be started at an early age**. Developing good habits while the dogs are young will help prevent, or even slow, the progression of dental disease later in life. Brushing a dog's teeth several times a week can be started as early as 12-16 weeks of age. Performing this task regularly will help maintain dental health, and the **delay or** prevent the need for a dental cleaning performed under general anesthesia. There are also specialized chews, diets, and treats which can help prevent tartar accumulation. Please ask a staff member for a recommendation. When sufficient tartar buildup has accumulated, your veterinarian will advise you that a dental cleaning performed under general anesthesia is in the best interests of your pet. This procedure involves thoroughly cleaning the teeth and removing tartar using both hand instruments and an ultrasonic scaler, flushing using a disinfectant and polishing the teeth. Extractions or dental x-rays may also be required depending on the degree of disease present. Dental cleanings can significantly improve the health as well as the breath of your dog!

Nutrition

A good diet is extremely important as your puppy grows. While there are many different brands of dog food on the market in our area—most of which are perfectly adequate—puppies should be fed a food that is made especially for puppies. This food should be fed until your puppy is 10-18 months old, depending on the breed.

There are specific types of puppy foods designed for large breed puppies (for example, Great Danes, Labrador Retrievers, German Shepherd Dogs, etc.) Feeding this type of diet has been show to reduce the incidence of orthopedic problems in rapidly growing, large breed puppies.

Feeding either dry or canned food is acceptable. Each type of food has its advantages and disadvantages. Dry food is the least expensive, and can be more beneficial than canned to the dog's dental health. The premium brands of dry food are just as nutritious as the canned diets and can be fed as the sole source of nutrition. Canned foods are often more appealing to a dog's taste, but they are not more nutritious than dry food.

Switching foods frequently can cause a finicky appetite in your dog. It is better to start with a high quality diet and stick to it. As humans, we enjoy eating a variety of foods, but most dogs prefer not to change from one food to another. Do not feel guilty if your dog is happy to eat one type of food day after day, week after week.

Table food is not recommended. Since it is generally very tasty, dogs who are accustomed to table food may hold out and not eat their well-balanced food. If you choose to give your puppy table food, be sure that at least 90% of his or her diet is a good quality puppy food, and that the table food is very low in fat. Fatty foods are some of the biggest causes of vomiting and diarrhea disorders in dogs seen by veterinarians.

Puppies should be fed at specific times of the day, as opposed to leaving food out all day for them to nibble at will. A measured amount of food should be fed three time per day, divided equally using the guidelines on the dog food packaging. For instance, if the dog food label indicates that a puppy within your puppy's weight range should receive 3 cups per day, simply offer your puppy one cup in the morning, one cup mid-day and one cup in the evening. If the puppy does not eat all of the food within 30 minutes of putting it down, pick it up and don't offer food again until the next scheduled feeding. Puppies can be transitioned to two

meals per day when they are between six and twelve months old.

We recommend Hill's Healthy Advantage for your puppy and adult dog. It has numerous health benefits. Please ask your veterinarian for more information.

Spaying and Neutering

FEMALE DOGS

A spay, or ovariohysterectomy, is the surgical removal of the uterus and ovaries. Spayed females will no longer have heat cycles, attract male dogs, and will no longer be able to become pregnant. Spaying prevents litters of unwanted puppies. Intact male dogs will often go to great efforts to mate with a female that is in heat; unintentional mattings are common when female dogs are not spayed.

There are very important health reasons for spaying. It has been proven that as a female dog ages, there is a significant increase in the incidence of breast cancer and uterine infections if she has not been spayed. Pyometra is a bacterial infection of the uterus which is very serious and life-threatening. Spaying eliminates the chance of developing this disease. In addition, spaying your female dog prevents ovarian and uterine cancer. If you do not plan to breed your dog, we strongly recommend that she be spayed before her first heat, typically around 6 months of age.

MALE DOGS

A neuter, or castration, is the surgical removal of the testicles. It offers several advantages for male dogs. Male dogs that have not been neutered are more likely to roam in search of females. They are also more likely to fight and be aggressive, especially with other males. Neutering does not calm a hyperactive dog or change his personality.

There are important reasons why neutering a male dog is beneficial to his health. As un-neutered male dogs age, the prostate gland frequently enlarges and can cause difficulty urinating or defecating. The prostate gland in un-neutered male dogs is more prone to developing infections (prostatitis) or cancer (prostatic adenocarcinoma and perianal adenomas). Neutering will greatly reduce the incidence of these diseases and will completely eliminate the chance of developing testicular cancer. This surgery may be performed at any age

Safe Pets, Safe Home with Crate Training

but is typically performed around 5-6 months of age. eliminate the chance of developing testicular cancer. This surgery may be performed at any age but is typically performed around 5-6 months of age.

Dogs are highly sociable animals that make wonderful pets. They are excellent companions for play and exercise, and are a source of affection and comfort. Most will also be effective watchdogs. However, for the majority of families, dogs must learn to spend a portion of the day at home, while their human family is away at school, work, or recreational activities. During those times when you are away or unavailable to supervise, your dog may feel the need to dig, chew, play, explore, eat or eliminate. These behaviors are especially present as a puppy.

Preventing undesirable behaviors in your puppy while you are absent requires both scheduling and confinement. Scheduling means that your puppy has an opportunity to play, eat, and eliminate before you leave him/her. Confinement involves keeping your puppy in a crate where he/she is secure, safe, and can do no damage to itself or your possessions.

Crate training is neither cruel nor unfair. On the contrary, leaving the dog unsupervised to wander, investigate, destroy or perhaps injure itself is far more inhumane than confinement. The crate should be an appropriate size for your puppy, and once again it is very important to ensure that your puppy receives sufficient food, play, exercise and attention before they are confined. It is also important to return before your puppy will need to urinate or defecate. The crate provides a place of comfort and security where the dog can relax, sleep or chew on a favorite toy. The key to making the crate become a dog's favorite retreat and sleeping area is to associate the crate with as many positive and relaxing experiences as possible (food, treats, chew toys, bedding) and to place the dog in its cage only at scheduled rest and sleeping periods. A radio or television playing in the background may help to calm the dog when it is alone in its cage, especially during the daytime. These may also help to mask environmental noises that can stimulate your puppy to vocalize.

One of the greatest benefits of crate training is that it is one of the quickest and most effective

ways to house-train a puppy. Since most dogs instinctively avoid eliminating in their sleeping and eating areas, dogs that use their crate as a bed or den will seldom eliminate inside unless they have been left in the crate for too long. It is important when using a crate with a new puppy, however, that the area you provide for your pet is not too large, as puppies will sometimes use one area of a large crate for elimination purposes. Often owners will employ "dividers" in a crate to accommodate a growing puppy. Your veterinarian will help you to determine if your crate is too large or small.

As soon as your dog is released from its crate, immediately take him/her outside to the desired location for urination and defecation, and reward any elimination behavior with verbal praise or treats.

Since dogs are social animals, an ideal location for the crate is a room where the family spends time, such as a kitchen, den, or bedroom rather than an isolated laundry room.

CRATE TRAINING – STEP-BY-STEP

1) Introduce your puppy to the crate as soon as he/she is brought home and as early in the day as possible. Place a variety of treats in the cage throughout the day so that the puppy is encouraged to enter voluntarily. Food, water, toys, and bedding can also be offered to the puppy in the open cage.

2) Choose a location outdoors for the puppy to eliminate. Take the puppy to the location, wait until the puppy eliminates, and reward the puppy lavishly with praise or food. After some additional play and exercise, place the puppy in its crate with water, a toy and a treat, and close the door.

3) If the puppy is tired and calm, than it may take a "nap" shortly after being placed in his/her crate.

4) Leave the room but remain close enough to hear the puppy. Escape behavior and vocalization is to be expected when a dog is first placed in its crate. If the "complaints"

are short and mild, ignore the dog until the crying stops. Never release a puppy unless he/she is quiet. This teaches that quiet behavior, not crying, will be rewarded. Release the puppy after a few minutes of quiet or a short nap.

5) Repeat the crate and release procedure a few more times during the day before bedtime. Each time, increase the amount of time that the puppy must stay in the crate before letting it out. Always give the puppy exercise and a chance to eliminate before placing him or her in the crate.

6) At bedtime the dog should be exercised, then placed in its crate, and left for the night. Do not go to the dog if he/she cries. Young puppies (< 3 months) may not be able to last through an 8-hour night without eliminating, and may need to be let out one time. This should be performed at your schedule and when the dog is quiet, however, and not in response to crying.

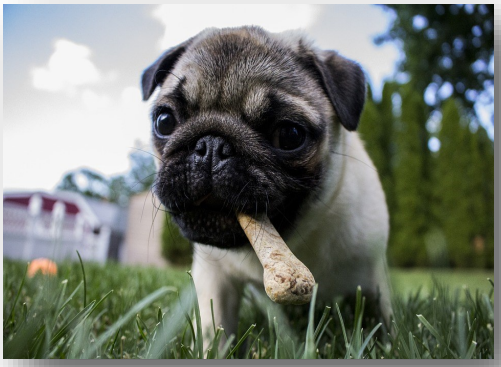
7) Never leave the puppy in its crate for longer than it can control itself, or it may be forced to soil its crate.

8) Although there is a great deal of variability, many puppies can control themselves through the night by 3 months of age. During the daytime, once the puppy has relieved itself, a 2-month old puppy may have up to 3 hours control, a 3-month old puppy up to 4 hours, and a 4-month old puppy up to 5 hours.

9) If your puppy sleeps at one end of the crate and eliminates in the other, a divider can be installed to keep your puppy in a smaller area.

Puppy Training Basics

AGE TO START: You will be training your puppy from the moment you bring it home. Puppies start learning from birth, and excellent breeders encourage handling and socialization from birth. Some training can begin as soon as the puppy can open its eyes and walk. Young puppies have short attention spans, but you can expect them to begin to learn simple obedience commands such as "sit", "down" and "stay" from as young as 7-8 weeks of age. Methods of training at this age should rely on positive reinforcement and gentle teaching. Training sessions with young puppies should be kept brief and performed multiple times a day.



FOOD LURE TRAINING: Puppies can be taught "sit", "down" and "stay" using a method called food lure training, which involves small pieces of food/treats to entice the dog to follow its nose into the proper positions. Provided the reward is sufficiently appealing, the puppy can be prompted to give the desired response by showing the puppy the reward, giving a command, and moving it to get the desired response. For example, food held up over a puppy's nose and moved slowly backwards should elicit a sit response; food drawn down to the floor should encourage a down response; food held at your thigh while you walk should get the puppy to heel or follow. By pairing a command phrase or word with each action, and giving the reward for each appropriate response, the puppy should soon learn the meaning of each command.

PHASING OUT FOOD LURE TRAINING: Soon your puppy is going to expect a treat each time a task is performed. To phase out food, signal and give the command, but when he/she performs the task, reward only with praise and give the puppy an affectionate pat. Next, you can begin to vary the frequency, giving the "good dog!" and perhaps patting each time, but

giving the food randomly, perhaps every 3-4 times. In time, the puppy should respond to either a hand signal or verbal command. The words "good dog!" or an affectionate pat become secondary reinforcement. Since they have been paired with food in the past, they take on more meaning and become important reinforcement themselves. It is important to use secondary reinforcement because you will not always have food with your when you want your puppy to obey.

TIME DEDICATED TO TRAINING A PUPPY: You do not necessarily need to train in a set session daily. A goal is to strive for fifteen minutes of training every day. These can be short, five-minute sessions spread throughout the day. Try to have all family members ask your puppy to perform these tasks. Remember to try to train in every room of your house. Use these tasks as you integrate the puppy into your life. For example, ask the puppy to sit prior to receiving food, going in or out a door, and before your pet him/her. These are all times that a puppy wants something, and is more likely to comply with your commands. In this way you are training your dog all the time, and establishing yourself and your family members as the leaders, the ones who control the resources. To have a well-trained dog, you need to be committed to reinforcing the training tasks on a daily basis for the first year. The more you teach and supervise your puppy, the less opportunity she will have to engage in improper behaviors.

PROFESSIONAL TRAINING CLASSES: Training classes can serve many different functions for you and your new puppy. Trainers can demonstrate techniques and help guide you through the steps in training. They can advise you on training problems, and can help you advance to more difficult exercises. The puppy can be learning in a group situation, with some real life distractions. If you take your puppy to a class you will be expected to practice (homework) throughout the week if you don't want to fall behind the other puppies in your class. A training class is an excellent place to meet and talk to other new puppy owners and see how their puppies learn. Another great benefit of training classes is that they are a wonderful way to socialize your new pet to a variety of people, other dogs, and stimuli, in a controlled

environment. Since the primary socialization period for dogs ends by 3 months of age, puppy classes are most valuable for socialization between 8-12 weeks of age. If all the puppies in the class have had initial vaccinations, are healthy, and parasite free, the health risks are low and the potential benefits are enormous.

PRIMARY SOCIALIZATION: There is a sensitive period in the development of most species when they develop social attachments with their own and their species, independent of punishment and rewards. The primary socialization period for dogs begins at 3 weeks of age and is diminished by 12 weeks (3 months). Peak sensitivity is 6-8 weeks. Beyond 12 weeks there is a tendency to act fearful towards new people, animals, and situations. Many young dogs will regress and become fearful if they do not receive continued social interaction up through the entire first year of their life.

BEST AGE TO OBTAIN A NEW PUPPY: Since it is so important for puppies to develop and maintain social attachments to their own kind, puppies ideally will remain with their mother and littermates until about 7 weeks of age. Then, when placed in the new home, they can expand their contacts to new people and species while still in their primary socialization period. By this time puppies will also begin to develop preferences for elimination sites, so this timing can be helpful for housetraining.

ASSISTING YOUR PUPPY IN SOCIAL DEVELOPMENT: There should be little problem with a puppy that is less than 12 weeks of age developing healthy and lasting attachments to the people, sights, and sounds in its new home. Your puppy is most likely to become fearful of stimuli that are not found in its day-to-day routine. Make a conscious effort to identify those people and situations that the puppy is not regularly exposed to. For example, if there are no children in your home, you may want to arrange play sessions with children. If you live in the country, make a few trips to the city, so that the puppy can be walked on city streets or in neighborhood plazas. Many local stores allow pets, which is another excellent socialization opportunity. Construction sites and noises can be helpful to assist the puppy in adapting to thunderstorms later in life. Introduce your puppy to as many new people, dogs, and situations

as possible during the first three months of development. People in uniforms, babies, toddlers, the elderly, and the physically challenged are just a few examples that might lead to fear and

anxiety, unless there is sufficient early exposure for your puppy. One way to facilitate the introduction of the puppy to new situations and people is to provide a reward such as a favorite toy or biscuit each time it is exposed to a new stimulus. Having a stranger offer a biscuit to the puppy will teach him/her to look forward to meeting people and discourage hand-shyness since the puppy will learn to associate new friends and an outstretched hand with something positive. Be sure that your puppy has the opportunity to receive treats from a wide variety of people of all ages, races, appearance, and both sexes during the formative months.

YOUR YOUNG PUPPY'S HEALTH DURING SOCIALIZATION: There is always a concern about the risks of taking the puppy out of its home before it is fully vaccinated because it may be exposed to infection before the vaccines have had time to be protective. These concerns must be weighed against the great benefit of introducing your puppy to a large amount of stimuli and other animals during the primary socialization period of 2-3 months. Talk to your veterinarian about vaccination and the risks of introducing your puppy to other dogs at a very young age, as each individual case may vary. In general, having your puppy interact with other puppies that are up to date on their vaccinations is a low risk situation. Taking the puppy for walks along the sidewalk and avoiding neighborhood park where stools and urine might accumulate is generally safe and effective.