

## 10 Household Plants That Are Dangerous to Dogs and Cats

Asparagus fern (also called emerald feather, emerald fern, sprengeri fern, plumosa fern, and lace fern) is toxic to dogs and cats. The toxic agent in this plant is sapogenin—a steroid found in a variety of plants. If a dog or cat ingests the berries of this plant, vomiting, diarrhea, and/or abdominal pain can occur. Allergic dermatitis (skin inflammation) can occur if an animal is repeatedly exposed to this plant.

## 10 Ways to Help an Arthritic Dog

Here are tips to manage this condition and minimize your dog's discomfort.

## A Pet Owner's Guide to Flea Control

Fleas are blood-feeding parasites that can infest many species of birds and mammals. Although fleas on dogs and cats don't infest people, fleas may bite people if an area is heavily infested. Flea infestation is one of the most common medical problems veterinarians see, and pets suffer greatly from this condition. Fleabites can trigger severe allergic reactions in some pets. The intense itching caused by flea infestation causes pets to scratch and bite themselves. This can lead to skin wounds, skin infections, and general misery for your pet. Even if your pet is not allergic to fleabites, fleas can transmit serious diseases, such as bartonellosis (the bacteria that causes "cat scratch disease" in people), and other parasites, like tapeworms.

## ACTH Stimulation Test

Glucocorticoids (primarily cortisol) and mineralocorticoids are two important types of hormones produced by the body's adrenal glands. Glucocorticoids and mineralocorticoids help regulate numerous complex processes in the body and participate in critically important functions.

## Abdominal Radiography

A radiograph (sometimes called an x-ray) is a type of photograph that reveals the body's internal organs. The procedure for obtaining a radiograph is called radiography. Radiography is a very useful diagnostic tool for veterinarians because it can help obtain information about almost any organ in the body, including the heart, lungs, and abdominal organs, as well as the bones.

## Acetaminophen Toxicity

Acetaminophen is the active ingredient in Tylenol and some other related medications that are used to treat pain and fever in people. Unfortunately, this drug can be extremely toxic (poisonous) to cats and dogs. Acetaminophen toxicity occurs when a cat or dog swallows enough of the drug to cause damaging effects in the body.

## Addison's Disease

Glucocorticoids (primarily cortisol) and mineralocorticoids are two important types of hormones produced by the body's adrenal glands. Under normal conditions, the brain releases a hormone called adrenocorticotropic hormone (ACTH) that stimulates the adrenal glands to release their hormones. Addison's disease occurs when the brain doesn't release adequate amounts of ACTH, or the adrenal glands fail to release their hormones in response to ACTH. The medical term for Addison's disease is hypoadrenocorticism.

## Administering Injectable Medication to Your Dog

Certain medications, such as insulin, can only be administered by injection. Depending on the formulation and the type of medication, several routes can give injectable medications. They can be given through direct injection into a vein (known as intravenous, or IV injection), injection into a muscle (known as intramuscular, or IM injection), or injection directly under the skin – a procedure known as subcutaneous (SC or SQ) injection. It is very important that you understand how your pet's injectable medication needs to be given; for example, if you accidentally give a medication intravenously instead of subcutaneously, complications can result. Most injectable medications given at home are intended to be given subcutaneously.

## Administering Medications to Your Dog

The first part of successfully administering medication to your dog is making sure that you understand the instructions for giving the medication. These instructions include route of administration (for example, by mouth, into the ears, or into the eyes), dosing frequency (such as once daily, every 12 hours, or every 8 hours), duration of treatment (for example, 7 days, until gone), and other special considerations (for example, give with food and follow with water).

## Administering Subcutaneous Fluids to Your Dog

Fluid administration is a regular part of veterinary medical care. Any time that a patient is dehydrated or needs fluids, your veterinarian determines the best way to provide them. Fluids can be given by mouth, injection into a vein (known as intravenous fluids or IV fluids), or injection directly under the skin – a procedure known as subcutaneous fluid administration.

## Adopting Instead of Buying a Pet

While the estimates vary, approximately three to four million dogs and cats are euthanized (“put to sleep”) each year in the United States because too few people spay or neuter the pets they have, too few adopt their new pets, and too many give up their pets. Because space at shelters is limited, staff members must make the difficult decision to euthanize healthy animals that aren't adopted within a certain amount of time.

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## Aggression in Dogs

The most common and serious behavior problems of dogs are associated with aggression. Canine aggression includes any behavior associated with a threat or attack (e.g., growling, biting).

## Agility Training for Dogs

Dog agility is a competitive sport in which a person (handler) directs a dog through a timed obstacle course. Handlers and dog's race against the clock as the dogs jump hurdles, climb ramps, run through tunnels, cross a seesaw, and weave through a line of poles. Scoring is based on faults, similar to equestrian show jumping. Dog agility competition has become an exciting spectator event, and training for it is a great form of exercise for dogs and handlers, can harness a dog's energy and boost his or her confidence, and can help improve the human–animal bond.

## Alkaline Phosphatase Level

Alkaline phosphatase (ALKP) is an enzyme that is produced by many cell types. Although it is considered a “liver enzyme,” it is mostly made by the liver and bones.

## Allergy Testing

The most common types of allergies in pets are flea allergy, food allergy, and a condition called atopy. Atopy is sometimes called atopic dermatitis or allergic inhalant dermatitis, and it occurs when allergens that are inhaled or that contact the skin cause an allergic reaction in the body. In dogs (and, less commonly, cats), this allergic reaction is focused largely in the skin. Animals with atopy become very itchy; the resultant scratching can lead to skin injuries and subsequent skin infections. Atopy is usually first noticed in dogs younger than 3 years of age, although older pets can also be affected. Unfortunately, some pets that develop atopy continue to have problems throughout their lives.

## Alopecia

Alopecia is the medical term used to describe hair loss. Alopecia can occur when hair fails to grow at a normal rate, or when hair is lost more quickly than it can grow back. Alopecia should not be confused with increased shedding. Shedding (even year-round shedding in some pets) is a normal process and is not an illness. Shedding should only be a cause for concern if it is heavy enough to create areas of thinning hair or baldness consistent with alopecia.

## Anal Sac Disease

Anal sacs are a set of glands that are just under the skin near your pet’s anus. The two glands are located at the 4:00 and 8:00 o’clock positions from the anus. The anal sacs fill with a foul-smelling fluid that is normally expressed through a tiny duct when animals defecate. Animals may use their anal glands to mark territory or repel aggressors, although a nervous dog or cat may accidentally express these glands when frightened.

## Anemia in Dogs

Anemia develops when number of red blood cells in the bloodstream is reduced. Red blood cells carry oxygen throughout the body.

## Antibiotic Therapy for Ear Infections

The medical term for an ear infection is otitis. Ear infections generally begin as inflammation of the skin inside the outer ear canal (the tube-shaped part of the ear visible under the earflap). Once inflammation is present, discharge, redness, and other characteristics of an ear infection become established. Inflammation of the canal leads to the overgrowth of normal bacteria and yeast that live in the ear; other “opportunistic” bacteria can also take advantage of the inflammation and unhealthy environment inside the ear to establish infection. The overgrowth of these organisms causes more inflammation and other unhealthy changes inside the ear. In some cases, ear infections that start in the outer ear canal can progress to involve the middle ear and inner ear. Deep infections can lead to deafness and other complications.

## Antifreeze Toxicosis

Most antifreeze solutions contain high levels of ethylene glycol, an ingredient that, once metabolized, is extremely toxic to dogs and cats. Pets are often attracted to the liquid because of

its sweet taste. Even small amounts can be lethal to animals. A cat that walks through spilled antifreeze and then licks its paws may ingest enough to be fatal. As little as 2.5 tablespoons of antifreeze could kill a 20-pound dog.

## Aspirin Toxicosis

Aspirin has been considered a safe and reliable over-the-counter fever and pain medication for decades. Because aspirin is considered very safe, some pet owners give aspirin to their pets. There are also aspirin formulations specifically for dogs. However, high doses of aspirin can be dangerous for dogs and even more hazardous for cats. Aspirin toxicosis occurs when a cat or dog swallows enough of the drug to cause damaging effects in the body.

## Atopy

Some animals may have several of these clinical signs, whereas others may have only one—perhaps an ear infection.

## Avoiding Injury: Tips for Interpreting Signs of Aggression in Dogs

While dogs have been domesticated by people for a long time, it is important to remember that they are still animals with a very strong instinct for “fight or flight” when danger is present. When presented with a threat, many dogs will try to escape; however, some dogs will choose to fight against the danger and may bite in response to the threat. It is important to follow certain safety guidelines when working with dogs to avoid injury for you and your dog. Remember, an adult large breed dog may weigh as much as a person, and all sizes of dogs have sharp teeth that can easily injure a person with minimal effort. In fact, small breed dogs weighing less than 25 pounds are more likely to bite than larger breed dogs.

## BUN

BUN stands for blood urea nitrogen. The BUN level is a measurement that represents the level of urea in the blood. Urea is considered one of the body’s waste products. It is produced when the liver participates in protein metabolism, and it is usually eliminated from the body by the kidneys. Therefore, both the liver and kidneys must be functioning properly for the body to maintain a normal level of urea in the blood.

## BUN and Creatinine Levels

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## Barking

Barking is one of several types of vocal communication by dogs. You may appreciate your dog’s barking when it signals that someone is at your door or that your dog needs something. However, dogs sometimes bark excessively or at inappropriate times. Because barking serves many purposes, determine why your dog is doing it before attempting to address a barking problem. Does your dog use barking to get what he or she wants? For example, dogs that get attention for barking often learn to bark for food, play, and walks as well. Therefore, training your dog to be

quiet on command is important so that you can teach your dog a different behavior (such as “sit” or “down”) for getting what he or she wants. Dogs of certain breeds and dogs that aren’t spayed or neutered may bark more than other dogs; therefore, it can be more difficult to reduce barking in these dogs.

## **Bathing Your Dog**

Regular bathing can help keep your dog’s skin and hair coat healthy, and if you can teach your dog to enjoy being bathed, it can be another way to strengthen your relationship with your dog. The ASPCA recommends bathing your dog about every 3 months; however, certain breeds and dogs that spend a lot of time outside may need to be bathed more often. Some medical conditions may benefit from medicated shampoo products that your veterinarian can prescribe or recommend.

## **Bee Stings in Dogs**

Bee stings can be a serious event and even life threatening in some cases. Dogs are at greater risk for bee stings than people are, as they tend to chase or play with things that move. Dogs are likely to get stung in the mouth or on the nose, face, or feet by several different insects, including bees, wasps, and hornets.

## **Biopsy**

A biopsy is a surgical procedure in which a tissue sample is removed from the body and examined under a microscope. In some cases, only a small sample is removed for analysis. In other cases, several samples may be removed, or an entire growth may be removed and examined.

## **Bladder Stones and Kidney Stones**

Bladder and kidney stones are hardened accumulations of minerals found in urine. Common minerals involved include struvite, calcium oxalate, and urate. Dogs and cats can develop stones anywhere in the urinary tract. Stones can form in many different shapes and sizes.

## **Blood Pressure Test**

A blood pressure test measures the pressure of blood against arterial walls as the blood is pumped through the body. As a general rule of thumb, blood pressure should not exceed about 160/100 mm Hg in dogs and cats. The first number is the systolic blood pressure, or the pressure when the heart contracts. The second reading is the diastolic blood pressure, which is lower because it is the pressure when the heart relaxes between contractions. Blood pressure is measured in millimeters of mercury (mm Hg).

## **Bordetella bronchiseptica**

*Bordetella bronchiseptica* (*B. bronchiseptica*) is a bacterium that is commonly associated with respiratory disease in dogs. It can also infect cats, rabbits, and, in rare cases, humans. It is one of the most common bacterial causes of canine infectious tracheobronchitis, which is also sometimes called kennel cough. *B. bronchiseptica* is highly contagious, easily transmitted through direct contact or the air, and resistant to destruction in the environment.

## **Breast Cancer in Dogs and Cats**

Breast cancer is the uncontrolled growth of abnormal mammary gland (breast) cells. If left untreated, certain types of breast cancer can metastasize (spread) to other mammary glands, lymph nodes, the lungs, and other organs throughout the body.

## **Breeding Your Dog**

Most shelters and rescue organizations are overflowing with mixed breed and purebred dogs that are perfectly friendly and adoptable, but there simply aren't enough homes for them. As a result, approximately three to four million unwanted dogs and cats are euthanized each year, according to the Humane Society of the United States. Producing more puppies, for any other reason than to improve the breed, just exacerbates the problem.

## **Bringing a New Kitten Home**

Bringing a new kitten home is exciting. These guidelines will help you and your kitten adjust to this big change in your lives.

## **Brushing Your Dog's Teeth**

Periodontal (gum) disease can lead to tooth loss and affects most dogs before they are 3 years old. Bacteria from periodontal disease can spread to affect other organs and cause illness. One of the best ways to help prevent periodontal disease is to brush your dog's teeth on a regular basis—daily, if he or she will allow it.

## **CBC and Chemistry Profile**

Blood testing is commonly used to help diagnose disease or pinpoint injury in animals. It can also help determine the state of your pet's health during regular physical exam visits. Although a CBC or a chemistry profile can be performed separately, these tests are frequently done at the same time; when the results are interpreted together, they provide a good overview of many of the body's functions. As with any other diagnostic test, results of a CBC and chemistry profile are not interpreted in a vacuum. Your veterinarian will combine this information with physical exam findings, medical history, and other information to assess your pet's health status and determine if additional testing should be recommended.

## **Calcium Level**

Calcium is an important nutrient that the body needs to maintain many of its organs. Bones, the heart, intestines, and muscles are just a few of the organs that rely on a healthy blood calcium level in order to function properly. If the calcium level in the blood drops too low or goes up too high, serious illness can result.

## **Canine Adenovirus Type 2**

Canine adenovirus type 2 (CAV-2) causes respiratory disease in dogs and is one of the infectious agents commonly associated with canine infectious tracheobronchitis, which is also known as kennel cough. Canine infectious tracheobronchitis is usually spread from dog to dog through coughing. Dogs that are around other dogs, such as at boarding facilities, grooming salons, or dog parks, are at increased risk for exposure.

## Canine Anesthesia

Anesthesia is defined as the loss of ability to feel pain. However, the term anesthesia is more commonly used to refer to a state of deep sedation or unconsciousness during which a patient is unable to feel pain.

## Canine Arthritis

Arthritis is a joint problem that can reduce mobility and cause pain. Often seen in older dogs, arthritis can be caused by injury, infection, the body's own immune system, or developmental problems. The most common form of arthritis is called osteoarthritis (osteo = bone; arthr = joint; itis = disease) or degenerative joint disease. Normally, joints form smooth connections between bones. Osteoarthritis involves thinning of joint cartilage (a protective cushioning between bones), buildup of fluid within the joint, and the formation of bony growths within the joint. Over time, this can lead to reduced joint mobility as well as pain. Osteoarthritis affects one of every five dogs.

## Canine Bladder Infections

The bladder is an expandable sac, like a balloon, that lies toward the back of the abdomen and is part of the system that removes waste from the body. Urine flows from the kidneys through the tube-shaped ureters and into the bladder, where it is stored before being eliminated from the body through a tube called the urethra.

## Canine Chronic Otitis

Canine chronic otitis is recurrent or persistent inflammation of the ear. One or both ears may be affected. Inflammation of the ear often leads to secondary infection caused by yeast or bacterial overgrowth. This condition can be quite painful.

## Canine Clothing

In cold weather, some dogs may be more comfortable in outerwear (sweaters or coats). Some dog breeds (like malamutes, huskies, Newfoundland's, and other breeds with thick coats) thrive in cold temperatures, so these dogs don't need outerwear. However, outerwear can help short-haired dogs (like boxers, greyhounds, and vizslas) stay comfortable longer in the cold, allowing them to conserve body heat as well as energy for walking and running. When it's cold, outerwear is recommended for dogs recovering from surgery (anesthesia can disrupt a dog's ability to regulate his or her body temperature). If your dog seems to be reacting poorly to cold temperatures (such as prolonged shivering), contact your veterinarian right away.

## Canine Coronavirus Infection

Coronavirus infection is a highly contagious infection of puppies and older dogs that primarily attacks the intestinal tract. The disease is spread from dog to dog through contact with feces. After coronavirus has been transmitted to a dog, the incubation (development) period of the disease can be as short as 1 to 4 days.

## Canine Diabetes Mellitus

Diabetes mellitus is an illness caused by the body's inability to either make or use insulin, which is a hormone produced and released by specialized cells in the pancreas. Insulin permits the body's cells to take sugar (glucose) from the blood and use it for their metabolism and other functions. Diabetes mellitus develops when the pancreas doesn't make enough insulin or when the body's cells are unable to use available insulin to take glucose from the blood.

## Canine Distemper

Canine distemper is a serious contagious disease caused by canine distemper virus (CDV), which attacks the respiratory, stomach/intestinal, and brain/nervous systems of dogs. It can also infect ferrets and many wild animals, including raccoons, skunks, minks, weasels, foxes, and coyotes. The death rate can reach 50%, and animals that do recover are often left with permanent disabilities. There is no effective treatment, but virus-associated disease is largely preventable through vaccination.

## Canine Heartworm Testing

Heartworm disease is a serious and potentially fatal condition that affects dogs, cats, and up to 30 other species of animals. It is caused by parasitic worms (heartworms) living in the major blood vessels of the lungs and, occasionally, in the heart. These worms are transmitted (as microscopic larvae) through the bite of an infected mosquito. The scientific name for the heartworm parasite is *Dirofilaria immitis*.

## Canine Hip Dysplasia

Canine hip dysplasia is a painful disease that affects millions of dogs each year. It is an inherited developmental disorder of the hip joint and can lead to debilitating arthritis. Its progression can be influenced by environmental factors, such as weight gain, nutrition, and exercise. Certain breeds, especially larger ones, are particularly prone to hip dysplasia, but the disease can affect dogs of any size and breed.

## Canine Influenza

Canine influenza virus (CIV) was first detected in 2004 in racing greyhounds in Florida. Investigators learned that this new canine influenza developed when an equine influenza virus adapted to infect dogs. This was the first time that an equine influenza virus had been found to "jump" from horses to dogs. According to Dr. Cynda Crawford of the University of Florida College of Veterinary Medicine, canine influenza does not infect people, and there is no documentation that cats have become infected by exposure to dogs with CIV.

## Canine Nutrition

A high-quality, complete and balanced diet is important for the health and longevity of your dog. Among other benefits, a proper diet helps build strong bones, promotes healthy gums and teeth, protects immune function, and results in a lustrous haircoat. Unlike cats, which are carnivores (meaning that they must eat meat), dogs are omnivores, meaning that they can eat meat and plants as their primary food sources.

## Canine Obesity

Obesity (the storage of excess fat) is usually caused by excessive food intake and insufficient exercise. According to estimates, 40% to 50% of dogs are overweight and 25% of dogs are

obese. Obesity is more common in older, less active pets. Dogs that are fed homemade meals, table scraps, and snacks are more likely to be overweight than dogs that are fed only a commercial pet food.

## **Canine Pancreatitis**

The pancreas is an organ in the abdomen that is involved in helping the body digest food. The pancreas releases enzymes (proteins that are involved in chemical reactions in the body) into the digestive tract to help break down fats and promote digestion. When the pancreas becomes inflamed, the condition is referred to as pancreatitis.

## **Canine Parvovirus**

Canine parvovirus is a deadly disease that is caused by the canine parvovirus type 2 (CPV-2) virus. The virus attacks the gastrointestinal tract and immune system of puppies and dogs. It can

## **Canine Senior Wellness**

With many dogs living well into their teens, many owners wonder: When is a dog truly senior? The answer is that there is no specific age at which a dog becomes senior. Individual pets age at different rates. However, most dogs become senior at 7 to 10 years of age, and most large- and giant-breed dogs become seniors earlier than small-breed dogs.

## **Canine Urine Marking**

Canine urine marking is a natural, instinctive behavior in dogs, but it is not appropriate inside the house. Dogs, especially sexually intact male dogs, urinate on objects to mark their territory or to leave a message for other dogs. Urine marking behavior usually begins when the dog reaches sexual maturity.

## **Canine Vaccine Recommendations**

Companion animals today have the opportunity to live longer, healthier lives than ever before. One of the main reasons for this is the availability of vaccines that can protect pets from deadly viral and bacterial diseases. Over the past several decades, the widespread use of vaccines against canine distemper, parvovirus infection, rabies, and other diseases have saved the lives of millions of dogs and driven some of these diseases into relative obscurity. Unfortunately, these diseases still pose a significant threat to dogs that are unvaccinated; so, although vaccine programs have been highly successful, pet owners and veterinarians cannot afford to become complacent about the importance of keeping pets up-to-date on their vaccinations.

## **Cardiac Arrhythmias in Dogs**

A cardiac arrhythmia is an abnormality in a dog's heartbeat. It may be associated with the rate (too fast or too slow), an irregularity in the heartbeat pattern, or a problem in the location where electrical signals are formed in the heart. Some arrhythmias may be harmless and do not require treatment, while others can be serious and life threatening.

## **Cardiac Exam**

A cardiac examination is an evaluation of the cardiovascular system, which includes the heart, lungs, and blood vessels. Many elements of a cardiac exam are usually performed (to some extent) during a routine physical examination in pets of all ages. However, for older animals, pets

with a history of heart problems, or pets that are at risk for developing heart disease, more extensive testing is sometimes recommended.

## **Caring for Orphaned Puppies**

Orphaned puppies should be taken to a veterinarian immediately. Your veterinarian can give you advice on caring for puppies and might be able to provide you with contact information for animal rescue groups. During the first few weeks of life, puppies have specific needs for nourishment, warmth, socialization, and excretion.

## **Caring for Your New Puppy**

During the first 7 to 8 weeks of life, puppies have specific needs for nourishment, warmth, socialization, and excretion.

## **Cherry Eye (prolapsed nictations gland)**

Like people, animals have upper and lower eyelids. However, they also have a third eyelid on the inside corner of each eye for extra protection of the eye's surface. Tucked beneath this third eyelid is the nictations gland, a small, pinkish mass of tissue that helps produce tears to lubricate the eye.

## **Chest Radiography**

A radiograph (sometimes called an x-ray) is a type of photograph that reveals the body's bones and internal organs. The procedure for obtaining a radiograph is called radiography. Radiography is a very useful diagnostic tool for veterinarians because it can help obtain information about almost any organ in the body, including the heart, lungs, and abdominal organs, as well as the bones.

## **Chocolate Toxicosis**

Toxicosis is disease due to poisoning. Chocolate contains two ingredients that can be toxic to pets—caffeine, and a chemical called theobromine. While dogs and cats are both very sensitive to the effects of caffeine and theobromine, cats are usually not attracted to chocolate, so chocolate toxicosis tends to be less common in cats.

## **Chronic Kidney Disease**

Kidney disease is a very general term used to describe several conditions that can affect the kidneys or damage kidney cells. If kidney disease progresses, it can eventually lead to kidney failure and death.

## **Chronic Otitis**

Ear infections are usually secondary to inflammation of the external ear canals (the tube-shaped part of the ear visible under the earflap). Inflammation of the canals leads to the reproduction of normal bacteria and yeast that live in the ear to the point where the body is unable to control their numbers (called overgrowth). Other bacteria can also take advantage of the inflammation and unhealthy environment inside the ear to establish infection. The overgrowth of these organisms causes more inflammation. Inflammation of the ear canal causes swelling, making the tube narrower than usual. Inflammation also causes an increase in the production of wax. The ears

become very itchy and painful. Severe ear infections can lead to eardrum rupture and middle and inner ear infections. Deep infections can lead to deafness and neurologic signs.

## Coccidiosis

Coccidiosis is an intestinal condition caused by a microscopic, single-celled parasite. While there are several types of coccidia, dogs with this condition are usually infected with *Isospora canis*, while cats are infected with *Isospora felis*.

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## Cognitive Dysfunction

Most people are familiar with terms like Alzheimer's disease or senility as they apply to humans. However, elderly dogs and cats develop a very similar condition known as cognitive dysfunction (CD).

## Colitis

Colitis is the inflammation of the colon, which is the last portion of the digestive tract. Under normal conditions, the colon stores feces while absorbing fluid and nutrients. When the colon is inflamed, these functions are affected. Additional fluid is left in the colon, resulting in diarrhea.

## Common Household Poisons

Your home can hold many unrecognized dangers for your pet. Many common food items or household products can sicken or even kill animals. However, a few simple precautions can help keep your pet safe.

## Congestive Heart Failure in Dogs

Congestive heart failure is a broad medical term that means that a dog's heart cannot deliver sufficient blood to its body. This condition can be caused by a failure of the left side, the right side, or both sides of the heart.

## Conjunctivitis

Conjunctivitis is the medical term used to describe inflammation of the conjunctiva—the soft tissues lining the inside of the eyelids and the white portion of the eye.

## Coping With Cancer

Cancer is extremely common in pets. While a diagnosis of cancer in a beloved pet can be devastating, it is important for owners to realize that many forms of cancer can be successfully treated or managed to provide the pet with an excellent quality of life. It is also important to realize that in pets, just as in people, some types of cancer are now viewed as a chronic, rather than a terminal, disease. The best way to fight cancer is to detect it early and begin treatment promptly.

## Coping With the Loss of a Pet

Grief is a natural reaction to the loss of a pet. Regardless of whether the pet is old or young, or whether the loss is expected or sudden, family members and other people who were close to the pet will experience similar feelings when a beloved pet dies. These feelings, commonly called the five stages of grief, are the same as those experienced when a person passes away.

## Corneal Ulceration

The cornea is the thin, transparent covering of cells on the front of the eye. The cells that make up the cornea are very fragile, so anything that rubs, scrapes, or irritates the eye can damage this thin layer of cells or rub some of them off. This is called a corneal ulcer. Corneal ulceration can occur if the eye is irritated by chemicals, dust, or inadequate tear production. Trauma, such as scratching, can also cause a corneal ulcer.

## Cranial Cruciate Ligament Rupture

Cranial cruciate ligament (CCL) rupture is one of the most common orthopedic problems in dogs. A dog's stifle joint corresponds to the human knee joint, and the CCL is comparable to the anterior cruciate ligament (ACL) in humans. Just as in humans, a partial or complete rupture of this ligament is debilitating and extremely painful, resulting in lameness and joint instability. Untreated, CCL rupture results in additional degenerative changes in the joint and, eventually, osteoarthritis. CCL rupture can occur in any dog. Risk factors include obesity, existing osteoarthritis or instability in the knee, and a lack of proper conditioning for the activity taking place, such as a normally sedentary dog that suddenly begins vigorous play.

## Crate Training Your Puppy

Many veterinarians recommend crate training as a good way to housebreak puppies, and in some cases, adult dogs. This training method is based on the principle that dogs prefer not to soil where they sleep. A comfortable crate not only provides a puppy with a secure, den-like atmosphere but also prevents destructive behaviors (such as chewing inappropriate items) and protects against household dangers (such as electrical wires) when a puppy isn't being supervised.

## Creatinine Level

Creatinine is a substance that the body produces during normal metabolism. The body eliminates creatinine almost exclusively through the kidneys' filtration process, so measurement of creatinine is an accurate estimation of how well the kidney filtration processes are working. Anything that alters the ability of the kidneys to filter efficiently (such as dehydration) can cause changes in the level of creatinine in the blood.

## Cushing's Disease

Cushing's disease occurs when the body produces and releases excessive amounts of a hormone called cortisol. It is named after the doctor who first described it in people. The veterinary medical term for Cushing's disease is hyperadrenocorticism.

## Demodectic Mange

Demodectic mange is an inflammatory skin condition caused by microscopic mites of the genus *Demodex*. These mites are transmitted from mother dogs and cats to their puppies or kittens during nursing and become normal inhabitants of the hair follicles. In small numbers, the mites usually don't cause problems. However, in animals with certain genetic factors, metabolic disease, or a compromised immune system, the number of mites can increase, causing skin inflammation.

## Dental Care

Bad breath in pets may be a sign of periodontal disease that could lead to other health problems. Periodontal disease starts when plaque (a bacterial film) coats the tooth. Plaque hardens (calcifies) into tartar, a thick yellow or brown layer on the teeth. Tartar can irritate the gums, creating an environment where bacteria thrive. As the disease progresses, the gums become tender, red, and swollen and the bacteria continue to multiply. Eventually, the inflamed gums pull away from the teeth, creating pockets that trap more bacteria and food particles. The gums bleed, the roots of the teeth may become exposed, teeth may become loose, and your pet may feel pain when eating. If the bacteria enter the bloodstream, they can create problems for organs such as the heart, lungs, liver, and kidneys.

## Dental Cleaning

It's estimated that 85% of all pets have periodontal disease by the time they are 3 years of age. Periodontal disease is a progressive disease of the supporting tissues surrounding teeth and the main cause of early tooth loss.

## Dental Exam

The term dental disease in dogs and cats is very broadly used to describe gingivitis (inflammation of the gums) and periodontitis (inflammation of the bone and other support structures around the tooth). Another term commonly used to collectively describe these two conditions is periodontal disease.

## Dental Radiography

A radiograph (sometimes called an x-ray) is a type of photograph that reveals the body's bones and internal organs. The procedure for obtaining a radiograph is called radiography. Dental radiography involves obtaining x-ray images of the mouth, teeth, and jaws. Radiography is painless, safe, and completely noninvasive.

## Desoxycorticosterone Pivalate (DOCP) for Addison's Disease

Glucocorticoids (primarily cortisol) and mineralocorticoids are two important types of hormones produced by the body's adrenal glands. Under normal conditions, the brain releases a hormone called adrenocorticotrophic hormone (ACTH) that stimulates the adrenal glands to release their hormones. Addison's disease occurs when either the brain doesn't release adequate amounts of ACTH, or the adrenal glands fail to release their hormones in response to ACTH. The medical term for Addison's disease is hypoadrenocorticism.

## Dewclaw Removal

Dewclaws are the toes on the inner edge of your pet's paws. They look like thumbs because they are up higher than the other four toes and they don't touch the ground when your pet is walking. Some pets only have dewclaws on their front paws, whereas others have dewclaws on their front and rear paws. Some pets are born without any dewclaws, and others are born with extra ones.

## Deworming and Prevention of Gastrointestinal Parasites in Dogs and Cats

Gastrointestinal (GI) parasites include any parasites that live in the stomach or intestines of a host. A variety of GI parasites affect dogs and cats. They range from roundworms and tapeworms, which are visible with the naked eye, to microscopic organisms like coccidia

and Giardia. Regardless of their size, GI parasites can cause serious illness and sometimes even death in pets. Some parasites are zoonotic, which means humans can become infected.

## Dexamethasone Suppression Test

Dexamethasone suppression testing is used to help diagnose Cushing disease, a condition that affects the adrenal glands in dogs. Cushing disease is much less common in cats.

## Diabetes Insipidus in Dogs

When most of us think about diabetes, we think of a condition called diabetes mellitus. This is a disease in which the body doesn't make an adequate amount of the hormone insulin or the body is unable to use its available insulin effectively. The result is an inability to regulate the body's blood sugar level.

## Diarrhea

A pet with diarrhea has looser or more watery feces than normal and sometimes more frequent stools as well.

## Digoxin Level Test

The medication digoxin is used to treat congestive heart failure and a condition in which the upper chambers of the heart (the atria) beat faster than normal. This drug has a narrow therapeutic range, meaning that there is a narrow margin between the dose that improves the condition and a dose that could be toxic.

## Dog Licenses

A dog license is proof that you have registered your dog with your local (often a state, county, or city) government authority. Most locations throughout the United States have state or local laws that require dog owners to license their dogs.

## Dog Supplies

Every well-kept dog needs some basic supplies. Many kinds of supplies are available, so your choices will depend on your and your dog's needs and preferences. Here are some basic guidelines regarding dog supplies.

## Ear Cleaning

Ear cleaning can help treat or prevent ear problems. Some pets are prone to ear problems and may need regular ear cleanings between veterinary visits. Ear cleaning can help remove dirt and wax that can prevent medications from reaching inflamed areas. It can also get rid of allergens and microbes that may contribute to inflammation or infection.

## Ear Hematoma

An ear hematoma is a pocket of blood that forms within the exterior portion of a pet's ear. Although both dogs and cats can have ear hematomas, the condition is more common in dogs.

## Ear Infections and Your Pet

Ear infections generally begin as inflammation of the skin inside the outer ear canal. Once the inflammation is present, discharge, redness, and other characteristics of an ear infection become established.

### **Ear Mites in Dogs and Cats**

Ear mites are small parasites that live on an animal's body, particularly in the ears of dogs and cats. Ear mites sustain themselves by eating skin cells, blood, and earwax. They deposit their waste (a dark, crusty debris) in the ear of the host animal. They also mate and produce eggs in the ear of the host. The mite's entire life cycle is only about 3 weeks, and the mite spends its whole life on the animal. Ear mites are contagious to some other animals (for example, cats, dogs, and ferrets), but they are not contagious to humans.

### **Ehrlichia Testing in Dogs**

Ehrlichiosis is a disease caused by bacteria of the Ehrlichia family. There are several species of Ehrlichia bacteria, and some of them can affect humans. Ehrlichiosis (whether it occurs in dogs or humans) is transmitted through the bite of a tick. The tick that most commonly spreads the disease is called the brown dog tick.

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### **Elbow Dysplasia**

Elbow dysplasia is a painful, developmental disease that affects the elbow joints. The disease has a genetic basis, but nutrition and other factors play a role as well. Large breed dogs (such as Great Danes and Labrador retrievers) can be affected, as well as smaller dogs, like Dachshunds. Elbow dysplasia is essentially a failure of the bones and cartilage in the joint to grow and develop properly. Affected dogs experience pain, varying degrees of lameness, and may have elbow joints that are nonfunctional.

### **Electrocardiography**

The body sends electrical impulses through the heart that stimulate heartbeats to occur at a consistent rhythm and rate. An electrocardiograph machine can detect and record electrical changes associated with the beating of the heart. Your veterinarian can interpret this information to determine your pet's heart rhythm and rate. The process of using the electrocardiograph machine to assess heart rate and rhythm is called electrocardiography, and the result is an electrocardiogram (ECG).

### **Endocarditis**

Endocarditis is the infection of the heart valves and/or inside lining of the heart. In most cases, the infection involves bacteria, but a fungus may also be responsible. The disease typically occurs in dogs, especially mid-size to larger breeds, and is rare in cats. Male dogs are most commonly affected.

## Entropion

Entropion is a rolling inward of part of the eyelid or the entire eyelid. It can occur on the upper and/or lower eyelid, in one eye, or in both eyes. When the eyelid rolls inward, the eyelashes can rub against the cornea (the clear covering of the eye), resulting in painful scratches. If left untreated, these scratches can lead to corneal ulcers and blindness.

## Examination and Rabies Vaccine

Regular physical examinations are essential to maintaining your pet's health. A thorough examination checks every major body organ and system.

## Exercising Your Dog

Exercise can have many health benefits for your dog. Regular exercise burns calories, reduces appetite, improves muscle tone, increases metabolism, and improves temperature regulation. It can be a valuable contributor to weight loss and maintenance. Exercise can also help stimulate your dog's mind, thereby preventing boredom and destructive behaviors.

## Explaining Pet Loss to Children

Our companion animals are often treasured members of the family, and we mourn for them when they die or are euthanized. It is important to recognize your feelings of loss and grief and to express them in your own way. In addition, when your child is attached to a pet that dies or is euthanized, it is important to recognize his or her feelings of loss and help your child express those feelings.

## Eye Discharge

Eye discharge can refer to any type of fluid that comes from the eye. Most healthy pets have eyes that are clear, bright, and have minimal discharge. However, some types of eye discharge are completely normal. Each time your pet blinks, tears are released from tear ducts and bathe the surface of the eye to provide moisture and deliver oxygen and nutrients. Some pets produce more tears than others, so increased wetness of the eye is not always a medical problem. Some pets can also have crusty material at the corners of their eyes when they wake up. This is usually easy to clean with a damp tissue and is not considered a problem in most cases.

## Fecal Analysis

A fecal analysis is a test that examines your pet's stool to detect intestinal parasites, including worms (hookworms, roundworms, whipworms) and other organisms (coccidia, Giardia). It can also detect other abnormalities, such as increased numbers of bacteria in the stool. If your pet develops diarrhea, vomiting, or weight loss (clinical signs frequently associated with parasites), your veterinarian may want to perform a fecal analysis to help determine if parasites are part of the problem. However, some pets have intestinal parasites without any obvious clinical signs, so your veterinarian may recommend performing a fecal analysis during your pet's regular wellness examination visits.

## Fecal Flotation and Giardia Test

Roundworms, hookworms, whipworms, and microscopic intestinal parasites (like coccidia and Giardia) are relatively common in pets, but that doesn't mean that they can't cause serious illness. Young, sick, or debilitated pets can even die if they are heavily infected with parasites. If

your pet has parasites, accurate diagnosis, including identification of the parasite(s) present, is important to determine the best treatment and help ensure a full recovery. Fecal diagnostic tests, such as fecal flotation and Giardia testing, are an important part of this process.

## **Fecal Smear**

A fecal smear (sometimes called a direct fecal smear) is a diagnostic test that helps identify possible causes of diarrhea in a cat or dog. It is generally conducted in combination with a fecal flotation test, which is used to screen for intestinal parasite eggs.

## **Feeding Your New Puppy**

When deciding what to feed your new puppy, make sure you get reliable, professional veterinary advice.

## **First Aid and Your Pet**

Dealing with an injured pet can be scary and frustrating. In many cases, you don't know how bad the injury is, and your pet may not be acting normally. If your pet is injured, the first thing you need to do is try to remain calm. If possible, try to determine how severe the injury is, but remember that caution is extremely important when approaching an injured animal. Any pet, no matter how calm or friendly he or she may usually be, can bite or scratch when in pain.

## **Flea Allergy Dermatitis (FAD)**

Flea allergy dermatitis (FAD) is a severe allergic reaction to a flea bite. Both dogs and cats can develop FAD. Affected pets have an extreme allergic reaction to certain proteins in the flea's saliva, which the flea injects into the pet's skin during biting and feeding. Some pets are so allergic that even a single bite can cause a reaction.

## **Flea and Tick Prevention**

Fleas and ticks are external parasites that can cause extreme discomfort for your pet and can also cause serious diseases.

## **Fluorescein Stain**

A fluorescein test is a test that can help detect injuries to the cornea, which is the clear, thin layer of tissue that covers the front of the eye. The cornea must remain transparent to support vision, but this transparency makes detecting scratches or other injuries on the cornea very difficult because they are invisible.

## **Follow-up Examination**

If your pet is being treated by a veterinarian, it's likely that you will be asked to return for a follow-up examination. This physical examination is usually scheduled a few weeks after the initial examination and may be done for a number of reasons.

## **Food Allergy**

Food allergy (also called food hypersensitivity) refers to a type of physical reaction to food. Food reactions are classified into two categories: those that are the result of immune system stimulation and those that are not. Food allergy occurs when the immune system begins to overreact to ingredients that the pet has eaten with no problems in the past. Food

intolerance occurs when what is eaten has a direct, negative effect on the stomach and/or intestines, such as spoiled meat, chewed up toys, food additives, and abrupt changes in diet. Food intolerance is not an immune reaction.

## Foreign Body Surgery

Pets aren't picky eaters. It's common for them to eat objects, such as string, toys, rocks, and articles of clothing. Smaller objects may pass through the digestive tract uneventfully. Objects that don't pass through easily may cause obstructions that can damage or perforate the digestive tract, which can lead to death. A foreign body surgery is an emergency procedure to retrieve an object before it damages the esophagus, stomach, or intestines.

## Fructosamine Testing

Fructosamine testing involves checking the level of fructosamine in the blood, and this testing is one of the ways a diabetic pet is monitored. Fructosamine is a protein that binds very strongly to glucose (sugar) in the blood. Because fructosamine occurs in proportion to blood glucose, it can provide an accurate estimate of the amount of glucose in the blood. When fructosamine is measured, it helps determine the average glucose level for the previous 2 to 3 weeks.

## Fungal Culture

A fungal culture test is a method of identifying a specific fungus that is infecting an animal. Fungal infections are relatively common in cats and dogs and include conditions such as ringworm. Ringworm can cause hair loss, itching, and a skin rash, but in most cases it is treatable and not life threatening. However, there are other fungal infections that can cause serious illness (such as pneumonia) and death in cats and dogs.

## Gastric Dilatation' Volvulus

Gastric dilation–volvulus (GDV), or “bloat,” is a life-threatening condition in which a dog's stomach fills with air and becomes twisted. Gas builds up in the twisted stomach and stretches it. This stretching, also called distention, is extremely painful and limits the amount of blood that can reach other parts of the body. When blood can't reach body tissues to supply oxygen, those tissues can die. GDV is an emergency situation, and if not treated immediately, it can be fatal. While any size or breed of dog can develop this condition, it is more common in larger-breed dogs with deep chests, like German shepherds, golden retrievers, and Great Danes.

## Gastrointestinal Parasites in Dogs

Gastrointestinal (GI) parasites include any parasites that live in the stomach or intestines of a host. A variety of GI parasites affect dogs. They range from roundworms and tapeworms, which are visible with the naked eye, to microscopic organisms like coccidian and Giardia. Regardless of their size, GI parasites can cause serious illness in dogs and sometimes even death. Some parasites are even zoonotic, which means that humans can become infected.

## Getting Your Dog Back on Its Feet

The most effective way to treat lameness is to obtain an accurate diagnosis of what is wrong. If your dog is limping, don't try to guess what the problem is or wait to see if it gets better on its own. A veterinarian can evaluate your dog by a thorough physical examination; if necessary, laboratory tests can be performed and/or radiographs (x-rays) obtained. Lameness can be

caused by many things—infections (e.g., Lyme disease), stress fractures, soft tissue injuries, and arthritis, to name a few. Paying attention to signs that your dog is uncomfortable and having your dog evaluated quickly can help prevent smaller problems from becoming bigger ones.

## Giardiasis

Giardiasis is a diarrheal disease that can affect many species, including dogs, cats, and humans. It is caused by *Giardia*, a single-celled parasite that attacks the gastrointestinal tract of infected animals. Among experts, there is some question about (1) the number of *Giardia* subtypes that can cause disease in animals and (2) the potential of these subtypes to also infect humans. While humans are susceptible to infection with *Giardia*, infection by the same subtypes prevalent in animals is thought to be exceedingly rare but remains a point of controversy and investigation.

## Glucose and Fructosamine Testing

In diabetic patients, spot-checking the blood glucose (or blood sugar) is a quick and direct way to tell what the level is. The rapid result permits quick detection and management of a dangerously low or an extremely high level. However, blood glucose testing provides only a “snapshot” of the total blood glucose “picture.” The test result does not indicate what the blood glucose level will be 2 hours later, 8 hours later, or the next day. Your veterinarian needs to do other testing to obtain this information.

## Grief in Dogs and Cats

Whether animals feel emotions in the same way people do is a mystery. However, their behaviors are commonly interpreted as reliable expressions of mood—for example, relaxed, fearful, or aggressive. Based on observed changes in behavior, it is thought that some dogs and cats grieve after losing a close human or animal companion. In 1996, the ASPCA conducted a study of mourning in companion animals and found that more than half of dogs and cats had at least four behavioral changes after losing an animal companion. Many of these changes, such as eating less and changes in sleep patterns were similar to behaviors exhibited by grieving people.

## Grooming Your Dog

Grooming does more than make your dog look good. Regular brushing, bathing, and—if necessary—trimming can help keep your dog’s skin and hair coat healthy, and if you can teach your dog to enjoy these activities, grooming can be another way to strengthen the relationship between you and your dog.

## Heart Murmurs in Dogs

A heart murmur is an abnormal sound that a veterinarian hears when listening to a dog’s heart through a stethoscope. Normally, a veterinarian hears two sounds, a “lub” and a “dub,” which are the sounds of the heart valves closing as blood circulates through the heart. An additional “whooshing” sound, known as a heart murmur, is usually associated with a disturbance of the smooth blood flow through the heart.

## Heartworm Disease in Dogs

Heartworm disease is a serious and potentially fatal condition that affects dogs, cats, and up to 30 other species of animals. It is caused by parasitic worms (heartworms) living in the major blood vessels of the lungs and, occasionally, in the heart. These worms are transmitted (as

microscopic larvae) through the bite of an infected mosquito. The scientific name for the heartworm parasite is *Dirofilaria immitis*.

## Heatstroke

The word stroke comes from “strike,” and heatstroke means “to be struck down by heat.” Heatstroke is a life-threatening condition suffered when a pet is unable to lower its body temperature. Cells in the body become damaged when the core body temperature is between 106°F and 109°F.

## Helping Your Itchy Pet

Itching can make pets absolutely miserable, but it is actually a sign of an underlying problem.

## Hematuria

Hematuria is the condition of having blood in the urine. In female dogs that have not been spayed, it is important to differentiate blood associated with a heat cycle from hematuria.

## Hookworms

Hookworms are internal parasites that generally live in the small intestines of puppies, kittens, dogs, and cats. These worms attach to the intestinal tissue and suck blood and other nutrients from their hosts.

## How to Administer Ear Medication to Your Dog

Many eye conditions in dogs require medicine to be put directly into the eye. This procedure can be relatively easy, as long as you follow a few simple guidelines. The most important guideline is to always put health and safety first. If, for any reason, your dog becomes so agitated that you feel you are at risk of being bitten, stop. If the procedure seems excessively painful for your dog, stop and get your veterinarian’s advice.

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## How to Administer a Topical Medication to Your Dog

Many conditions in dogs require medicine to be applied to the skin. This procedure can be relatively easy, as long as you follow a few simple guidelines. The most important guideline is to always put health and safety first. If, for any reason, your pet becomes so agitated that you feel you are at risk of being bitten, stop. If the procedure seems excessively painful for your pet, stop and get your veterinarian’s advice.

## How to Find a Reputable Breeder

Before you even look for a breeder, it’s important to fully research the breed you are considering. Ensuring that the breed’s temperament, exercise needs, and grooming requirements are a good match with your own lifestyle will make for a better long-term relationship for both you and the

pet. Talk to owners who have the breed you are considering and observe them interacting with their pets to aid your decision if this is the right breed for you.

### **How to Give Your Cat Liquid Medicine**

Liquid medications are prescribed to treat a variety of conditions. Some medicines that are usually prescribed as pills or capsules can be changed (compounded) to a liquid for easier administration. If you have trouble giving your cat pills, ask your veterinarian if compounding is possible for specific medicines.

### **How to Give Your Dog Liquid Medicine**

Liquid medications are prescribed to treat a variety of conditions. Some medicines that are usually prescribed as pills or capsules can be changed (compounded) to a liquid for easier administration. If you have trouble giving your dog pills, ask your veterinarian if compounding is possible for specific medicines.

### **How to Give Your Dog a Pill**

Medicines in pill or capsule form are prescribed to treat a variety of conditions, but many dogs dislike taking pills. Some medicines that are usually prescribed as pills or capsules can be changed (compounded) to a liquid or a powder for easier administration. Some medicines for dogs come in a chewable “treat” form. If you have trouble giving your dog pills, ask your veterinarian if compounding is possible or a treat form is available for specific medicines.

### **How to Tell if Your Dog Is Sick**

Despite the adage about a dog’s nose being warm, cold, wet, or dry, any of those signs may, in fact, be normal. Many other signs can give you a better indication of illness in a dog. For example, any changes such as decreases in energy level (e.g., sleeping more), decreased appetite, or weight gain/loss may signal that your dog is not feeling well.

### **Human Foods That Are Dangerous for Dogs and Cats**

A number of human foods are dangerous to pets. Many of these foods may seem tasty to our pets but can prove deadly if eaten. It can be very tempting to offer pets food from the table, but pets should not be given human food unless recommended by your veterinarian.

### **Hypertension and Your Pet**

Hypertension, or high blood pressure, occurs when blood moves through the body’s arteries with too much force. Blood pressure can be increased by several factors, including faster heart rate and increased cardiac output (the amount of blood that is sent out into the body with each heartbeat). In animals with hypertension, the increased force or “pressure” of the blood damages the arteries as the blood tries to move through. Imagine a firefighter trying to force a high-powered stream of water through a garden hose. The pressure would tear the hose apart. Similar damage to the body’s arteries is possible if high blood pressure is left untreated.

### **Ibuprofen and Naproxen Toxicosis**

Ibuprofen is the active ingredient in medications like Advil and Nuprin. Naproxen is similar to ibuprofen but is longer acting; it is the active ingredient in medications like Aleve and Naprosyn. Ibuprofen and naproxen are widely used to treat pain, fever, and inflammation in people.

Unfortunately, these drugs can be extremely toxic (poisonous) to cats and dogs. Toxicosis occurs when a cat or dog eats enough of one of these drugs to cause damaging effects in the body.

## **Immune-Mediated Hemolytic Anemia**

Immune-mediated hemolytic anemia (IMHA) is a type of illness known as an autoimmune disease. Autoimmune diseases result when the body's immune system does not recognize itself; cells that normally attack invading viruses and bacteria begin attacking the body's own cells, causing damage. In dogs and cats with IMHA, the body's red blood cells come under attack. When red blood cells are severely damaged, they can burst; this is known as hemolysis. Therefore, IMHA is a condition in which red blood cells are attacked by the body's immune system and destroyed by hemolysis, resulting in anemia (an inadequate quantity of red blood cells). Red blood cells can be destroyed within the blood vessels or in the spleen, liver, or bone marrow (where they are produced).

## **Immune-Mediated Thrombocytopenia**

Immune-mediated thrombocytopenia (IMT) is a type of illness known as an autoimmune disease. Autoimmune diseases result when the body's immune system does not recognize itself; cells that normally attack invading viruses and bacteria begin attacking the body's own cells, causing damage. In dogs and cats with IMT, the body's platelets are attacked and destroyed, resulting in reduced numbers of platelets in the blood vessels. Platelets (also called thrombocytes) are cells that are needed to form blood clots and repair damaged blood vessels. Thrombocytopenia occurs when there are too few platelets in the blood.

## **Injectable Medication**

Certain medications, such as insulin, can only be administered by injection. Some injections can be given at home after owners have received necessary instructions. However, in some cases, an injectable medication must be given by a veterinarian or trained veterinary professional.

## **Injection of Adequan Canine**

Canine osteoarthritis is an incurable disease that worsens over time. This means that managing the signs of osteoarthritis and trying to slow down how quickly the condition progresses are the only ways to improve the quality of life of dogs with this chronic illness. Managing the signs of osteoarthritis may involve giving medications to control pain and inflammation, promoting weight management, and conducting physical therapy sessions with the patient. Other treatments are aimed at slowing the progression of the disease. These products, known as disease-modifying osteoarthritis drugs (DMOADs), can be an important part of the effort to manage osteoarthritis. Adequan is classified as a DMOAD and has been shown to slow or alter the progression of osteoarthritis in dogs.

## **Intervertebral Disk Disease**

In dogs and cats, the vertebrae (bones of the spine) are cushioned on either end by disks of soft cartilage. Occasionally, these disks can rupture, or herniate, into the vertebral canal, causing compression of the spinal cord. This condition is known as intervertebral disk disease (IVDD).

Spinal cord compression is painful and can affect nerve supply to the legs and other areas of the body.

## Joint Arthroscopy

An arthroscope is a specially designed instrument that allows a veterinarian to look inside joints using a tiny, sterile, illuminated fiber optic camera. Arthroscopy is a minimally invasive procedure that can be used to examine joint structures for signs of degeneration and trauma without having to perform open surgery on a joint. It can be used for both diagnostic and therapeutic purposes. For example, if a veterinarian is examining your pet's joint for signs of degeneration, he or she can remove painful cartilage fragments or bone chips as part of the procedure.

## Keeping Your Pet at a Healthy Weight

Pet obesity has become a very common problem. Studies indicate that nearly 50% of adult dogs and cats in the United States are overweight or obese, and that percentage increases among older pets. Obesity increases the risk for other serious health problems, including osteoarthritis, diabetes (in cats), heart and respiratory diseases, and many types of cancers. Overweight pets are also at increased risk for complications during anesthesia if they need to undergo surgery or other procedures. And if a pet already has a health condition, obesity makes the problem that much harder to manage. Being overweight can also lower your pet's energy level and hamper his or her ability to enjoy an active lifestyle with you and your family.

## Kenneling Your Dog

Even being in the best kennel is stressful for many dogs. If your dog does not tolerate boarding well, consider using a pet sitter or arranging for your dog to stay with a friend or relative while you are traveling. If kenneling your dog is your only option, the following guidelines can help improve your dog's stay at a kennel.

## Kidney Disease in Pets

Kidney disease is a very general term used to describe any one of several conditions that can affect the kidneys or damage kidney cells. If kidney disease progresses, it can eventually lead to kidney failure and death.

## Laceration Repair

A laceration usually occurs as the result of a sharp object penetrating the skin and, possibly, the tissues beneath the skin. The resulting wound may be superficial, which involves a cut or tear in the skin only, or it may be deep, with damage to the tissues below the skin, such as muscles, tendons, blood vessels, or nerves. To repair a laceration, a veterinarian must clean and assess the wound before bringing the cut edges together with either suture material or skin staples.

## Laryngeal Paralysis

The larynx is the structure at the back of the throat (at the entrance to the trachea) that opens to allow airflow in and out of the trachea and lungs. It also closes to prevent the entry of food and liquids into the lungs during swallowing. Also known as, the voice box, the larynx enables dogs to bark and howl.

## Leptospirosis

Leptospirosis is a potentially serious disease caused by the bacterium *Leptospira interrogans*. It affects dogs but can also infect a wide variety of domestic and wild animals and humans. The bacteria can survive for long periods of time in water and are frequently found in swamps, streams, lakes, and standing water. The bacteria also survive well in mud and moist soil, and localized outbreaks can occur after flooding. Infected animals can continue to shed the bacteria in their urine for months or even years after recovery. Carriers of the bacteria include raccoons, opossums, rodents, skunks, and dogs. The disease is transmitted to dogs when they have contact with urine or contaminated water or soil.

## Lick Granuloma

A lick granuloma is thickened, raised area of skin that is often hairless, inflamed, infected, or ulcerated, resulting from excessive, repetitive licking or chewing. These lesions are typically found on the lower legs, and may occur alone or on more than one limb.

## Lipoma

A lipoma is a benign (noncancerous) mass that is made of fat cells. Owners often notice these lumps on the chest, abdomen, and limbs of their pets, but lipomas can also occur inside the chest and abdomen.

## Liver Disease Testing

“Liver disease” is a very general term used to describe several conditions that can damage liver cells. If the problem progresses, it can eventually lead to decreased liver function, liver failure, and death.

## Lyme Disease Tests and Vaccine

Lyme disease is an infection caused by the *Borrelia burgdorferi* bacterium. Lyme disease is transmitted through the bite of an infected tick and can affect many species, including dogs and humans.

## Lymphoma (Lymphosarcoma)

Lymphocytes are white blood cells that normally work to protect the body as part of the immune system. Occasionally, a change occurs within the cells that causes them to become destructive and reproduce uncontrollably. This is a type of malignancy, or cancer, called lymphoma or lymphosarcoma. Dogs and cats may be diagnosed with lymphoma. Boxers, golden retrievers, and basset hounds are dog breeds that are at a higher risk for developing this type of cancer.

## Macadamia Nut Toxicosis

Macadamia nuts are a common ingredient in cookies and candies. In dogs, eating macadamia nuts is associated with illness. Toxicosis occurs when a dog ingests enough of the nuts to cause damaging effects in the body.

## Malassezia Dermatitis

Malassezia dermatitis (MD) is a yeast infection of the skin caused by the organism *Malassezia pachydermatis*. *Malassezia pachydermatis* is a yeast organism that normally lives in small numbers in the ears and on the skin. The infection occurs when this organism grows in large

numbers. In its most severe form, the infection can cause a thickening of the skin (lichenification), making it resemble an elephant's skin (hence the name pachydermatis).

## Medical Causes of Weight Loss

Weight loss can result from decreased intake of calories, malnutrition (inappropriate diet), inadequate absorption or digestion of food (leading to malnutrition), or alterations in metabolism that make the body burn more calories than it is taking in. However, weight loss is not always an immediate cause for concern—it can be normal for pets to lose or gain small amounts of weight from time to time. For example, dogs may gain a little weight in the winter due to decreased activity and then lose those extra pounds when the weather warms up and activity increases. In fact, many pets fluctuate within a range of a few pounds on a regular basis.

## Medication Monitoring

Medication monitoring can have many components. It can involve testing the levels of a drug in your pet's blood to ensure that those levels are high enough to be effective, but not too high (which may cause problems or side effects). It may include discussing your pet's medical history to help ensure that your pet is not experiencing any unwanted side effects from a medication. It may also involve having your veterinarian examine your pet periodically to ensure that the clinical signs associated with the illness being treated are responding appropriately to therapy.

## Microchipping Your Pet

It is recommended that you identify your pet even if you don't plan to let him or her go outside. Even "indoor" pets can get out by accident, and many lost pets are never returned to their owners because they have no identification. Collars and tags are popular, effective methods of identification, but they can come off. Microchips, which are implanted just under the pet's skin, are one way to permanently identify pets.

## Motion Sickness in Dogs

Just like people, dogs can have motion sickness, which can make even short car rides stressful for dogs and their owners. Fortunately, there are ways to ease or eliminate your dog's motion sickness, including conditioning your dog to car rides and using medications recommended by your veterinarian.

## Neutering

Neutering, also known as castration, is a surgical procedure that involves removal of the testicles. It is a common surgical procedure performed on male dogs and cats to eliminate the ability to impregnate females. Neutering is also used to treat certain medical conditions, such as testicular cancer, anal tumors, and some forms of prostate disease.

## Nipping and Mouthing by Dogs

Nipping and mouthing are natural, usually nonaggressive behaviors that dogs use to communicate during play and normal interaction with other pets and people. However, most people don't appreciate nipping and mouthing by dogs, and adult dogs can inadvertently cause injury while nipping and mouthing. Therefore, these behaviors should be discouraged starting in puppyhood.

## Obesity in Pets: Tipping the Scale in Your Favor

Currently, studies estimate that approximately half of the pets in the United States are either overweight or obese. The health consequences of obesity in pets include increased risk for joint disease, heart and respiratory problems, and diabetes. Some researchers also have redefined obesity as a chronic inflammatory condition that can have other harmful effects in the body. Being overweight is not cute and it is not just a nuisance; it is now being recognized as a medical problem that should be managed long-term to reduce associated health risks.

## Ophthalmic Exam

During an ophthalmic (eye) exam, a veterinarian may perform a number of tests. These tests can help identify (1) problems with the eyes or (2) underlying diseases that may affect the eyes. Your veterinarian may conduct the exam or recommend that a veterinary ophthalmologist (an eye-care specialist) evaluate your pet.

## OraVet' Dental Sealant

Most dental disease starts with the accumulation of plaque and tartar on a pet's teeth. These substances contain bacteria, which can get under the gums and weaken the supporting tissue around the teeth. As a result, abscesses (pus-filled swellings) can form, and teeth may loosen, become painful, or fall out. Bacteria may also enter the bloodstream and infect the heart, kidneys, and liver. A professional veterinary dental cleaning is required to remove plaque and tartar from the teeth and beneath the gum line.

## Panosteitis

Panosteitis is a painful inflammation of the long bones in the limbs of young, medium- to large-breed dogs. The disease is common in German shepherds, German shepherd mixes, and basset hounds. Male dogs are four times more likely to experience panosteitis than females. The condition usually appears between the ages of 5 months to 1½ years.

## Patellar Luxation

Normally, the patella (kneecap) sits in a groove at the bottom of the femur (the major bone of the upper leg), where the femur and tibia (the major bone of the lower leg) meet at the knee. The patella is held in place by tendons and ligaments that keep it relatively stable against the femur. Patellar luxation occurs when your pet's patella luxate from (slips out of) its normal position. The kneecap can slip to either the inside (medial patellar luxation) or the outside (lateral patellar luxation) of the femur.

## Pemphigus

Pemphigus is an autoimmune disease in which the body attacks the connections between its own skin cells, causing blisters to form on the skin and mucus membranes. Autoimmune diseases result when the body's immune system does not recognize itself. Cells that normally attack invading viruses and bacteria begin attacking the body's own cells, causing damage. The term pemphigus comes from the Greek word for pustule (a blister on the skin that is filled with pus).

## Perianal Fistulae in Dogs

Perianal fistulae are draining openings in the skin around the anus that do not heal. The word fistulae is the plural of fistula, which is an abnormal tract or passageway from an abscess, organ, or body cavity to the body surface. The term perianal describes the area around the anus.

## Periodontal Disease in Dogs

Your veterinarian can see signs of gingivitis and tartar buildup by examining your dog's mouth. However, since most periodontal disease occurs beneath the gum line, the only way to truly assess your dog's mouth is to perform an examination while your pet is under anesthesia. Your veterinarian can use a dental probe to measure any loss of attachment around each tooth and take dental radiographs (x-rays) to assess for bone loss, abscesses, and other problems.

## Pet Cardiopulmonary Resuscitation (CPR)

Cardiac arrest means that the heart is not beating and breathing has stopped, resulting in a lack of oxygen and blood throughout the body. If your pet has a cardiac arrest, you may be able to help save his or her life by performing cardiopulmonary resuscitation (CPR), which is sometimes called cardiopulmonary–cerebral resuscitation (CPCR), until help arrives or you can get your pet to your veterinarian. By distributing much-needed oxygen and blood throughout a pet's body, CPR can help do the work that the lungs and heart have stopped doing.

## Pet Health Insurance: What's Right for Your Pet?

Pet insurance can help you budget for unforeseen medical expenses for your pet. Generally, the premium cost for a good policy is low compared with the relative peace of mind and financial help it can offer. Sorting through the various plan choices and options, however, can be daunting. Here are some tips to help you make sense of the process.

## Pet Sitter Instructions

The best way to develop a good relationship with your pet sitter is through open, honest communication. To help ensure that your pet is properly cared for, give your pet sitter detailed written instructions, and discuss them with the sitter. Ask the sitter whether he or she has any questions regarding the instructions. Give the sitter the written instructions before your trip and leave a copy in plain view in your house.

## Pet Toy Safety

Pet toys, whether homemade or purchased, can pose hazards to your pet, so it's important to know what the hazards are and how to avoid them. When possible, supervise your pet while he or she plays with a toy. In addition, help keep your pet safe by following these toy safety tips.

## Phenobarbital Level Test

Animals that have seizures are often given phenobarbital to help control and prevent seizure activity. Many animals, especially those with epilepsy, require lifelong therapy with phenobarbital. Because animals can absorb and metabolize this medication differently, it's important to monitor blood levels on a regular basis.

## Physical Therapy and Rehabilitation

Physical rehabilitation for pets is the use of therapeutic exercises and range-of-motion therapy combined with additional treatments (see the list below for examples) to improve the recovery of patients with acute or chronic health conditions. Physical therapy may be recommended for patients recovering from fractures, orthopedic surgery (including cranial cruciate ligament repair, total hip replacement, or spinal surgery), and neurologic events (such as spinal injury).

## **Pica and Coprophagy**

Pets with pica or coprophagy eat substances that are not considered food. Pica involves the eating of objects. Dogs may be more likely to eat objects such as rocks and toys, while cats may eat clothing, strings, and kitty litter. Oriental breeds of cats are more likely to eat fabrics and wool.

## **Pneumonia in Dogs**

Most lung tissue is made up of tiny clusters of air “balloons” (called alveoli). Each balloon is lined by a thin layer of cells and surrounded by a network of very small blood vessels. When you breathe in, air fills the balloons. The cells in the lining and the small blood vessels exchange oxygen from the air for carbon dioxide, which you then breathe out. The main pathway from the lungs to the outside of the body consists of the trachea (the large airway that begins at the back of the throat and continues down into the lungs) and the nostrils.

## **Polyuria and Polydipsia**

Polyuria (PU) and polydipsia (PD) are the medical terms used to describe excessive urination and excessive drinking, respectively. Because these two abnormalities tend to occur together, the abbreviation PU/PD is commonly used.

## **Porphyromonas in Canine Dental Disease**

When a dog's teeth are not properly cleaned or cared for on a regular basis, plaque and tarter can build up on the tooth surface and underneath the gum line. This material can irritate the gums, causing inflammation known as gingivitis. If left untreated, gingivitis can lead to the development of periodontitis, which is the infection and inflammation of structures that support the teeth. Periodontal disease tends to include both gingivitis and periodontitis.

## **Potassium Bromide Level Test**

Potassium bromide is used alone or in combination with other anti-convulsing medications to help control and prevent seizures. Potassium bromide is administered primarily to dogs and less frequently to cats.

## **Pregnancy in Dogs**

Pregnancy is the time between conception and birth when puppies develop and grow inside the mother's uterus. By day 40, the fetus has eyelids, claws, and hair, and the gender is apparent. While toy breeds tend to have smaller litters of one to four puppies, larger breeds may carry as many as eight to 12 puppies. After 56 and 70 days, or about 2 months, puppies are ready to be born.

## **Preventing Heartworms and Fleas**

Heartworm disease is serious and potentially fatal. It affects dogs, cats, and up to 30 other species of mammals. Heartworm disease has been reported in all 50 states. It is caused by

parasitic worms (heartworms) living in the major vessels of the lungs and, occasionally, in the heart. Heartworms are transmitted (as microscopic larvae) through the bite of an infected mosquito. The scientific name for the heartworm parasite is *Dirofilaria immitis*.

## ProHeart' 6 Injection for Dogs

Heartworm disease is a serious and potentially fatal condition that affects dogs, cats, and up to 30 other species of mammals. It is caused by parasitic worms (heartworms) living in the major vessels of the lungs and, occasionally, in the heart. The scientific name for the heartworm parasite is *Dirofilaria immitis*.

## Probiotics

During the birthing and nursing processes, puppies and kittens ingest bacteria that make themselves at home in the intestines. Some of these bacteria are beneficial to the pet, and some are potentially harmful. The beneficial bacteria help digest food, produce energy for the cells lining the digestive tract, and help with immune function. They also help keep the potentially harmful bacteria to a minimum.

## Pulmonary Edema

Most lung tissue is made up of tiny clusters of air “balloons,” called alveoli. Each air balloon is lined by a thin layer of cells in contact with very small blood vessels. When you breathe, air fills the alveoli, and the cells lining the alveoli and the small vessels next to them take in oxygen from inhaled air and release carbon dioxide into the exhaled air.

## Puppy Socialization

Socialization is the learning process through which a puppy becomes accustomed to being near various people, animals, and environments. By exposing puppies to different stimuli in a positive or neutral way, before they can develop a fear of these things, owners can reduce the likelihood of behavior problems in the future and help build a stronger bond between pets and the rest of the family. The critical time to socialize a puppy is during the first 3 to 4 months of its life.

## Puppy Training

Like children, puppies need to learn the appropriate behavior for living in a household and interacting with others. Puppies also seek positive reinforcement and are willing and able to learn.

## Puppy or Adult Dog: Which Is Right for You?

Whether you are deciding to adopt a puppy or an adult dog, there are some things you should consider.

## Pyoderma

Pyoderma is a bacterial infection of the skin. It can occur when the skin's natural defenses break down, allowing common skin bacteria to multiply out of control (called overgrowth). Bacteria from another source may also take hold when given the opportunity. Other organisms, such as yeast and fungal organisms, can take advantage of the skin changes that occur with pyoderma and establish their own infections. Dogs and cats of any age can be affected by pyoderma.

## Pyometra

Pyometra is a severe bacterial infection of the uterus that can be potentially life threatening. The condition is most common in older, unsprayed female dogs that have never had a litter, but it can occur in any female dog or cat that has not been spayed. In dogs, pyometra is most likely to happen in the first few weeks to months after a heat cycle.

## Rabies

Rabies is a deadly disease caused by a virus that attacks the central nervous system. All warm-blooded animals, including wild animals, dogs, cats, and humans, are susceptible to it. Once clinical signs appear, rabies is generally fatal. However, the disease is also generally preventable through vaccination.

## Radiography

A radiograph (sometimes called an x-ray) is a type of photograph that reveals the body's bones and internal organs. The procedure for obtaining a radiograph is called radiography. Radiography is a very useful diagnostic tool for veterinarians because it can help obtain information about almost any organ in the body, including the heart, lungs, and abdominal organs, as well as the bones.

## Rattlesnake Vaccine

Each year, about 150,000 dogs and cats are bit by venomous snakes in the United States. Most bites occur during warmer months (between April and October in the northern hemisphere). Snakebites are painful, and the injected venom can result in tissue swelling, impaired blood clotting, shock, and sometimes death. Treatment may include antivenin (a serum that neutralizes the venom), pain medications, IV fluids, and antibiotics to control secondary infections. Even if the pet recovers, there may be long-term complications.

## Refilling Medications

Many illnesses in pets can require long-term administration of medication, including some very common medical conditions.

## Rehabilitative Medicine for Dogs with Osteoarthritis

Traditionally, treatment for arthritis in dogs (more commonly called osteoarthritis) has focused on using medications to relieve joint pain and inflammation. Many veterinarians also incorporate joint supplements, weight control, and other management tools to give arthritic dogs more help. However, medications can't improve a dog's strength or fitness level, which directly affects mobility. Rehabilitative medicine, also known by the term rehab, can help meet this therapeutic need. Properly undertaken, a rehabilitative medicine program can dramatically increase strength and mobility, improving overall quality of life for dogs with osteoarthritis.

## Ringworm

Despite the name, ringworm is not caused by worms, but by a fungus. Most infections in pets are caused by one of three types of fungi, the most common being *Microsporum canis*. The fungi invade the superficial layers of the skin, hair, and/or nails. Because fungi thrive in moist environments, these organisms are especially persistent in humid climates and damp surroundings.

## Rodenticide Poisoning

Rodenticide poisoning occurs when dogs and cats accidentally eat mouse or rat poison. These products contain a wide range of ingredients that differ in potency and effect. In general, most rodent poisons cause one of three effects in animals.

## Roundworms

Roundworms are extremely common parasites that spend their adult lives in the intestines of puppies, kittens, dogs, and cats. There are several species of roundworms. Some can grow to about seven inches in length and cause severe illness, especially in younger pets.

## Sarcoptic Mange

Sarcoptic mange (scabies) is an intensely itchy skin condition of dogs that is caused by microscopic mites called *Sarcoptes scabiei*.

## Schirmer Tear Test

Tears are produced by the eyes to reduce irritation, supply oxygen, and help keep the surface of the eyes moist. When tear production is inadequate, the eyes become painful, red, and irritated. This condition is commonly called dry eye, but the medical term is keratoconjunctivitis sicca (KCS).

## Seborrhea

Seborrhea is a general term used to describe skin and hair that has excessive amounts of flakes (like dandruff) and/or grease. In most cases, the term describes the clinical signs, and not a disease itself.

## Seizures and Epilepsy

A seizure (convulsion) is the sudden transmission of nerve impulses from the brain that causes involuntary muscle activity. The seizure may affect just one part of the body, such as the face, or the entire body. When the whole body is affected, it is called a grand mal seizure. A seizure may be a one-time event, but if seizures occur repeatedly over the course of weeks or months, they are categorized as epilepsy. Epilepsy is common in dogs but relatively rare in cats.

## Selecting a Groomer

Choosing a grooming facility based on an ad in the Yellow Pages or on the Internet is not the best way to select a groomer. Because groomers are not regulated or licensed by any government agency, the skills and experience of groomers can vary greatly.

## Selecting a New Puppy

While a puppy can tug at anyone's heartstrings, choosing a puppy should be more than an emotional decision. All too often, the cute and cuddly puppy that is purchased on impulse is relinquished to a shelter because it grew up to be a large, rambunctious dog. That's why it pays to do your homework before you even look at a puppy.

## Separation Anxiety

Separation anxiety is a behavior problem in which a dog panics after (and sometimes before) being left alone. Dogs with this problem may vocalize, pace, urinate, defecate, and/or engage in destructive behavior before and/or after their owner leaves. Escape attempts by affected dogs can result in self-injury and household destruction, especially around windows and doors.

## **Serum Biochemistry Profile**

Blood testing is commonly used to help diagnose illness in animals. It can also help determine the state of your pet's health during regular wellness visits, and it is commonly performed before sedation or anesthesia to help determine if a pet is healthy enough to undergo the procedure.

## **Skin Problems and Your Pet**

A wide variety of skin and coat conditions can cause your pet to itch and scratch, but pinpointing the problem can sometimes be difficult because many skin disorders have similar outward signs. Below are four major categories of skin conditions seen in cats and dogs.

## **Spay Surgery**

A spay, also known as an ovariohysterectomy (ovario – hyster – ectomy) is one of the most common surgical procedures performed on female dogs and cats. This surgery removes the entire uterus and both ovaries. The primary reason for performing a spay is to prevent unwanted pregnancy. However, the procedure has other uses, including treatment for uterine cancer and uterine infection.

## **Spaying or Neutering Your Pet**

Spaying and neutering are surgical procedures used to remove the reproductive organs of dogs and cats. Spaying is the removal of the uterus and ovaries of a female dog or cat. Neutering is the removal of a male dog's or cat's testicles. These procedures are also sometimes referred to as "sterilizing" or "fixing" pets.

## **Submissive Urination in Dogs**

Dogs may urinate inappropriately in response to a perceived threat, which may be intentional (for example, when an owner scolds the dog) or unintentional (for example, when an owner displays a dominant behavior, such as looking directly into the dog's eyes). Submissive urination is the dog's way of communicating that he or she is not a threat and is submitting to the person's dominance.

## **Summer Hazards and Your Dog**

Dogs that spend most of their summer days inside are protected from many warm weather hazards, but only if the temperature inside the home remains within a healthy range. In an effort to reduce energy usage and costs, some pet owners shut off fans and air conditioning when they leave the house in the morning and turn them on when they return later in the day. However, when temperatures outside reach dangerous levels, temperatures inside the house can, too. Being shut inside a hot house can be deadly for your dog. Dogs can't sweat; they rely heavily on panting to cool themselves off. When the temperature in the environment increases, panting becomes less effective. This means that your dog could be locked inside with minimal options for cooling down.

## **Tail Docking**

Tail docking, also known by the term caudectomy, is the surgical removal of a portion of the tail.

## Tapeworms

Tapeworms are long, flat, parasitic worms that live in the intestines of dogs and cats. Several species of tapeworms can infect pets. Most have a head that attaches to the intestinal wall and a series of segments, called proglottids, that make up the worm's body. An adult tapeworm can reach 6 inches or more in length and has the appearance of a white piece of tape or ribbon.

## The Wellness Examination

A wellness examination is a complete physical examination along with diagnostic testing that may include bloodwork, urinalysis, and checking a stool sample for parasites. In many cases, a wellness examination can help detect the early stages of disease. Often, your veterinarian will schedule this exam when your pet is due for vaccinations.

## Thrombocytopenia (decreased platelet count)

Thrombocytopenia is the term used when a patient does not have enough platelets in the blood. Platelets (also called thrombocytes) are cell fragments that are necessary for forming blood clots and that help in repairing damaged blood vessels. Platelets are formed in the bone marrow. Their numbers can be low if not enough are being made or if too many are being used or destroyed by the body. Causes of thrombocytopenia include blood loss, immune system disorders, clotting disorders, cancer, and infectious diseases such as Rocky Mountain spotted fever and feline leukemia virus.

## Thyroid Level Test/Thyroid Profile Tests/Canine Hypothyroidism

Feline hyperthyroidism is the most common glandular disorder of cats older than 8 years. The disorder is usually caused by a benign tumor in one or both of the thyroid glands, which are located on either side of the neck. These tumors cause the thyroid glands to over-produce thyroid hormones. In rare cases (1% to 2%), the tumors may be cancerous.

## Ticks and Your Dog

Ticks are small, eight-legged parasites that must drink blood in order to survive and reproduce. Ticks don't fly, and they can't jump (unlike fleas). In fact, ticks are more closely related to spiders and mites than to "insects" like fleas. Of the hundreds of tick species, approximately 80 are found in the United States. Ticks can feed on a variety of hosts including birds, dogs, cats, and people.

## Tracheal Collapse

The trachea is the main airway that starts at the back of the throat and continues down into the lungs. Under normal circumstances, the trachea (made mostly of cartilage) is fairly stiff and shaped like a tube. However, in some dogs, the cartilage of the trachea loses some of its stiffness over time. As a result, the wall of the trachea begins to collapse inward as the dog breathes. Instead of the inside of the trachea being shaped like a circle (tube), it can take on a half-moon shape or collapse even more severely into a more flattened shape. This is what occurs with tracheal collapse. [Read More](#)

## Training Your Dog

Obviously, if a dog will be working as a search and rescue dog or service assistance dog, proper training is extremely important. But what if you're just looking for a dog to share your life and be a couch potato with you? In truth, even companion dogs, large and small breeds alike, need training to learn proper behavior among people and other dogs.

## Training Your Dog to Wear a Muzzle

There is a training technique that can be used to train your dog to wear a nylon or basket muzzle. Your dog should think that learning to wear a muzzle is a fun game. You will know whether you have trained your dog well if he or she looks forward to wearing a muzzle.

## Traveling With Your Dog

Our pets share so much of our lives that many of us don't want to consider traveling without them. Whether you are flying, driving a car, or RVing, sharing a trip with a pet can add richness to the experience. Proper planning can make the travel experience better and less stressful for you and for your pet.

## Treating Heartworm Disease

Heartworm disease is a serious and potentially fatal condition that affects dogs, cats, and up to 30 other species of mammals. It is caused by parasitic worms living in the major vessels of the lungs and, occasionally, in the heart. The scientific name for the heartworm is *Dirofilaria immitis*.

## Trimming Your Dog's Nails

Nail trimming is an important aspect of grooming your dog. Your dog's nails should be trimmed when they grow long enough to touch the ground when the dog walks. Dogs that aren't very active might require weekly nail trimming. Dogs that are regularly walked on sidewalks might never need their nails trimmed. Dewclaw nails need to be trimmed because they don't wear down from walking. Ask your veterinarian or a veterinary technician to teach you the safest way to trim your dog's nails.

## Ultrasonography

Ultrasonography is a type of diagnostic technique known as an imaging study. This means that when a doctor performs ultrasonography (sometimes called an ultrasound study) he or she can see pictures, or "images," of parts of the patient's body. Other examples of imaging studies include x-rays (radiography) and MRI (magnetic resonance imaging).

## Understanding Pet Food Labels

Pet owners can be passionate about choosing the best food for their pets, but with thousands of pet food products on the market, how do pet owners make the best choice? Pet food labels are a good place to start. Understanding the label information can help pet owners make informed decisions about the food they feed their pets.

## Urinalysis and Early Kidney Disease Detection

Kidney disease is a broad term meaning that the kidneys are not functioning properly. Acute kidney disease occurs quickly, often over the course of a few days, and is caused by a lack of oxygen to the kidneys or exposure to toxins such as antifreeze, pesticides, and some medications. If treated promptly, acute kidney disease may be reversible. Chronic kidney disease

occurs over the course of months to years and is usually progressive, meaning that it worsens over time. Early detection and treatment of chronic renal disease can slow the progression of the disease and help keep your pet more comfortable.

## Urinary Tract Disease in Dogs

**Kidney failure:** Acute kidney failure is the sudden loss of kidney function, which may be caused by a number of factors, including decreased blood pressure, toxins such as antifreeze, ureteral or urethral obstructions, and diseases, such as leptospirosis and Lyme disease. If diagnosed early and treated aggressively, acute renal failure may be reversible. Chronic kidney failure is long-term loss of kidney function that cannot be reversed, but treatment may help slow the progression of the disease.

## Urine Culture Test

Urinary tract infections are common in dogs and, to a lesser degree, in cats. Signs of a urinary tract infection include increased drinking, increased or more frequent urination, urinary accidents, bloody urine, or urinating small amounts at a time.

## Urine Specific Gravity Test

The kidneys have several important functions in the body, including eliminating waste products through the urine and regulating the body's fluid balance. The urine specific gravity (SG) test tells your veterinarian how concentrated your pet's urine is (how much water it contains). If the SG is too high, it can mean inadequate amounts of water are being eliminated through the urine. If the SG is too low, it can mean the body is losing too much water through the urine. There is a relatively wide range of normal readings for a urine SG test, but there are also several medical conditions that can affect the result.

## Vaccine Titer Testing

Vaccine titer testing is a way of measuring a pet's immune system response when the pet is vaccinated against a specific disease. Titer tests detect antibodies, which are proteins produced by the body when the immune system detects a disease-causing organism (e.g., virus, bacteria) or another "foreign" substance, like a vaccine. Antibody-stimulating substances are called antigens. Titer test results tell your veterinarian not only whether your pet has antibodies to a specific antigen, but also the level of these specific antibodies.

## Valvular Heart Disease

In dogs and cats, the heart contains four valves. Opening of a heart valve allows blood to flow freely from one heart chamber into the next chamber or vessel. Closing of the valve prevents blood from "back flowing" (flowing into the previous chamber).

## Vestibular Disease

Vestibular disease is an illness that affects a group of small organs called the vestibular apparatus. The vestibular apparatus is located in the brain and inner ear. These organs are responsible for an animal's ability to remain balanced, detect the degree of head rotation, and determine overall body position. Vestibular disease can result if the vestibular apparatus is damaged.

## Vomiting

Vomiting is defined as the forceful emptying of the stomach's contents. It is caused by a signal from the brain to the stomach that originates in a part of the brain known as the vomiting center. Vomiting initially developed because it helps save animals from poisoning. Nerves in the abdomen or certain substances in the bloodstream indicate to the brain that the animal may have eaten something toxic, and vomiting can help to rid the body of the toxic substance. Although this does occur now, the actual ingestion of toxins has become less of a threat to our pets than to their wild ancestors; over time, many more triggers began to induce the brain to signal vomiting. Prolonged vomiting can be dangerous because it can lead to life-threatening dehydration.

## Von Willebrand's Disease

Von Willebrand's disease is the most common inherited bleeding disorder in humans and dogs. The disease rarely occurs in cats.

Dogs with this disease cannot clot blood normally, which results in bleeding, especially after surgery or trauma. While this disease has occurred in more than 50 different dog breeds, the breeds most commonly affected include Doberman pinschers, German shepherds, golden

## Weight Check

When checking your pet's weight, your veterinarian will not only weigh your pet on a scale but also assess the appearance of your pet's body condition. Body condition is usually evaluated on a scale of 1 to 9, with 1 being too thin, 9 being obese, and 5 representing the ideal weight. A similar body condition scoring system uses a 1-to-5 scale, with 1 being too thin, 3 being ideal, and 5 indicating obesity.

## West Nile Virus and Your Pet

West Nile virus (WNV) is a virus that causes encephalitis (brain inflammation). WNV is usually transmitted to dogs and cats through the bite of an infected mosquito. Some birds, including crows, jays, sparrows, finches, grackles, and robins, are competent reservoirs for the virus (meaning they are able to infect mosquitoes). Some infected birds can shed WNV in their feces and other body fluids. In theory, cats and dogs can become infected through ingestion of (or contact with) an infected bird, but mosquito bites remain the primary route of infection.

## When to Consider Euthanasia

Euthanasia is the painless, humane termination of life. There are times when medical science has exhausted all of its capabilities and euthanasia is the only way to prevent an animal from suffering needlessly. However, the decision regarding when to euthanize is fraught with medical, financial, ethical, religious, moral, and sometimes legal considerations. Euthanasia is therefore a medical procedure that needs to be discussed (however painful that discussion may be) and considered fully before a final decision is made.

## Whipworms

Whipworms are one of several internal parasites that can live in the large intestines of dogs and, rarely, in cats. This type of worm is named for the whip-like appearance of its body, which has a thicker head that tapers into a thinner tail.

## Why Do I Need To Vaccinate My Pet?

Companion animals today have the opportunity to live longer, healthier lives than ever before, in part due to the availability of vaccines that can protect pets from deadly infectious diseases. Over the past several decades, the widespread use of vaccines against diseases like rabies has saved the lives of millions of pets and driven some diseases into relative obscurity. Unfortunately, infectious diseases still pose a significant threat to dogs and cats that are unvaccinated; therefore, although vaccine programs have been highly successful, pet owners and veterinarians cannot afford to be complacent about the importance of keeping pets up-to-date on their vaccinations.

## Winter Hazards and Your Dog

As the temperatures outside start to get lower and you prepare for colder weather, it is important to also prepare your dog for the winter. Whether your dog lives indoors or outdoors, there are dangers in colder conditions. Your dog's health, food, and environment all need to be taken into consideration when "Old Man Winter" approaches.

## Xylitol Toxicosis

Xylitol is a sugar substitute that is commonly used in sugar-free gum and candy, nicotine gum, toothpaste, baked goods, and chewable vitamins. Xylitol has been used safely in these human products for many years, but it is toxic (poisonous) when eaten by dogs. Xylitol toxicosis occurs when a dog eats enough of the product to cause damaging effects in the body. Currently, xylitol is not known to be toxic in cats. Other artificial sweeteners, such as aspartame, are not known to be toxic in pets.

## Your Pet's Prescribed Diet

If your pet is on a prescribed diet, keeping him or her on that diet is essential for the best possible health and quality of life. Your veterinarian has carefully selected your pet's prescribed diet based on his or her specific needs, so this food should not be changed.



