

New Puppy Information

Congratulations on your new addition! We hope that the information included will help you as you begin this exciting journey. If you have any questions about the information we discuss please feel free to ask one of our doctors or veterinary nurses, we are here to help!

VACCINES

When a baby kitten or puppy is born, its immune system is not yet mature; the baby is wide open for infection. Fortunately, nature has a system of protection. The mother produces a certain kind of milk in the first few days after giving birth. This milk is called colostrum and is rich in all the antibodies that the mother has to offer. As the babies drink this milk, they will be taking in their mother's immunity. After the first couple of days, regular milk is produced and the baby's intestines undergo what is called closure, which means they are no longer able to take externally produced antibodies into their systems. These first two days are critical to determining what kind of immunity the baby will receive until its own system can take over.

How long this maternal antibody lasts in a given puppy or kitten is totally individual. It can depend on the birth order of the babies, how well they nursed, and a number of other factors. Maternal antibodies against different diseases wear off after different times. We DO know that by 14-20 weeks of age, maternal antibodies are gone and the baby must be able continue on its own immune system.

While maternal immunity is in the puppy's system, any vaccines given will be inactivated. Vaccines will not be able to "take" until maternal antibody has sufficiently dropped. Puppies and kittens receive a series of vaccines ending at a time when we know the baby's own immune system should be able to respond. We could simply wait until the baby is old enough to definitely respond, as we do with the rabies vaccination, but this could leave a large window of vulnerability if the maternal antibody wanes early. To give babies the best chance of responding to vaccination, we vaccinate intermittently (usually every 2-4 weeks) during this period, in hope of gaining some early protection.

When a vaccine against many diseases is started for the first time, even in an adult animal, it is best to give at least two vaccinations. This is because the second vaccination will produce a much greater (logarithmically greater) response if it is following a vaccine given 2-4 weeks prior. There are a few exceptions, your veterinarian will determine what is best for your pet.

Core Vaccines (Regardless of Lifestyle)

Distemper Vaccine – This is a combination vaccine that provides protection from several common diseases that dogs will come in contact with in their lives. Both the *Canine Distemper* and *Parvovirus* components of the vaccine can be fatal for dogs that are not protected and at a minimum require lengthy intensive hospitalization if they are to survive. *Canine Adenovirus Type 2* (hepatitis) is also included in this vaccine along with *Parainfluenza* (different from canine influenza mentioned in the non-core section below). This vaccine is given without Leptospirosis before 8 weeks of age, but subsequent boosters will have the Leptospirosis component. The vaccine is given as early as 6 weeks of age and administered every 3-4 weeks until they reach 16 weeks of age. Once a dog has had an appropriate series of the vaccine, subsequent doses are only administered every 2-3 years.

Leptospirosis is a bacterial organism that our pets can come into contact with in the environment and the disease is zoonotic (meaning humans can also then contract it). Leptospirosis is often life-threatening but caught early may have treatment options. Leptospirosis is administered annually once the initial series is given (this means that some of the wellness visits will only need a Leptospirosis booster and not the full Canine Distemper vaccine).

Rabies – *Rabies virus* is a zoonotic disease (can be transmitted to humans) and is always fatal. It is often passed through bite wounds from an infected animal. Wisconsin does have a number of positive rabies cases each year and Wisconsin law does require the vaccine to be given to all dogs before they turn 6 months old. Puppies can get the vaccine at or after their 16 week visit and it is revaccinated at the one year visit. An adult that has been given the vaccine will be revaccinated every 3 years. Unvaccinated animals that have potentially bitten someone will require action for follow-up determined by the laws in our state. This can lead to significant costs to the owner of the animal and can include euthanasia of your pet (testing can only be done on a deceased animal).

Non-Core Vaccines (Based on Lifestyle)

Bordetella bronchiseptica – Commonly referred to as "*Kennel Cough*", this vaccine is recommended for any dogs that visit boarding or grooming facilities, attend doggy daycare, visit dog parks, or socialize with other dogs. This is often not life threatening but it can progress to pneumonia which can be more costly and require more intensive treatment. This vaccine, like others, doesn't provide 100% immunity but it is proven to lessen the symptoms of the disease if they do contract it. Many grooming and boarding facilities require the vaccine for animals visiting or staying at them. Most lifestyles will require the vaccine to be given once and then an annual booster of the vaccine.

Canine Influenza – Different from the Parainfluenza included in the Canine Distemper vaccine, **Canine Influenza CIV H3N2 & CIV H3N8** is administered to dogs that come in contact with other dogs, including at boarding and grooming facilities, doggy daycare, dog parks, and socializing with other dogs. The symptoms of canine influenza can be more severe than those of the Bordetella or Kennel Cough disease and can lead to pneumonia and requirement of hospitalization to treat. The vaccine is administered with an initial vaccine and then revaccination is required 2-4 weeks later. After the initial series the vaccine is administered annually.

Lyme (Borreliosis) Disease – The Deer Ticks also known as the Black-Legged Tick (*Ixodes sp.*) are carriers of the *Lyme disease* bacteria we see infect humans and pets in Wisconsin. Though prevention with flea and tick preventatives is the best option for most dogs, dogs that live a lifestyle where exposure to ticks is more common are recommended to also get vaccinated against Lyme disease. Though many patients are treated for Lyme disease and don't have long term effects, some patients will experience permanent damage to kidney function or other organs. The vaccine is administered with an initial vaccine and revaccination is done 3-4 weeks later. After the initial series the vaccine is administered annually.

PARASITES & PREVENTION

Intestinal parasites (frequently referred to as worms) are very common in young puppies, in fact many are born with them as they are transferred from an infected mother in utero or even just after birth. They are diagnosed with a technique used to increase the chance of seeing the eggs of the worms from a fresh stool sample. Dewormers are often used regardless of known history in the first few weeks of life but a fecal examination is the best way to ensure that your pet is treated for the appropriate parasite as there are several types we often see in young animals. The CDC recommends deworming all puppies through 16 weeks of age due to the possibility of some of the parasites being passed to humans. We recommend checking at least two fecal samples (with the goal of having two consecutive samples without parasites being seen) due to the shedding cycle of the parasites. If your puppy has parasites and a dewormer is given you may see these parasites pass in their stool (in severe cases possibly even in vomit). Heartworm preventative commonly has an intestinal dewormer as well; we recommend monthly heartworm prevention through the life of your dog.

Heartworms are transmitted by mosquitos, and in Wisconsin mosquitos can be found in many homes year round. When an infected mosquito bites your pet they introduce the immature heartworms into them. The immature heartworm (microfilaria) then undergoes a change over a few months and will enter the bloodstream and make their way to the heart where they will finish their development. Because the heart is where the adult lives infected animals may show little to no signs if the parasite load is low. In more severe cases the heartworms can cause coughing, exercise intolerance, shortness of breath, difficulty breathing, and heart failure. Left untreated heartworm disease is life threatening. Annual heartworm testing is recommended to ensure it is safe to continue to give prevention and detect the presence of adults early to improve the recovery outcomes after treatment. Heartworm prevention is recommended to be given as a monthly preventative and often comes in the form of a treat. Topical versions of the preventative are also available for those dogs that have food sensitivities or won't take the chewable form.

Fleas are a commonly found parasite on many animals and there are many different species of them. The one we worry about with our pets is *Ctenocephalides felis*. This is the flea that we find on our pets (cats, dogs, rabbits, and other species) in 99.9 percent of cases. Fleas can cause serious health problems for you and your pet and they aren't just a nuisance, *fleas can kill!* Fleas suck blood and blood loss leads to anemia. A heavy flea burden is lethal, especially to smaller or younger animals. Fleas can cause severe itching and also other problems such as skin infections and hairloss. Some animals can become allergic to fleas, and flea allergy dermatitis is the most common skin disease we see in dogs and cats. Fleas can carry and transmit bacteria called *Bartonella* that can cause health issues in cats, dogs, and people. Fleas can carry a type of tapeworm called *Dipylidium caninum* that can suck nutrients from the pet's intestine and cause anal itching. The flea life cycle consists of egg, larval, pupal, and adult stages. Eggs are laid in the hair coat and are designed to fall off your pet and into your home. Larvae hatch from the eggs and develop in a pet's environment by feeding on adult flea feces (i.e. digested blood) that fall out of the hair coat of the pet. Larvae eventually spin cocoons, often within carpet fibers, for pupation. Pupae are resistant to freezing, drying, and insecticides, and can lie dormant for many months! New fleas develop from pupae and can begin feeding within hours of finding a dog or cat. The entire flea life cycle can be completed in as little as three weeks. Though some owners choose to use a flea

preventative seasonally it is recommended to use a flea preventative year round to reduce the chance of your pet getting a more frustrating infestation of the parasite. Stopping flea control products in the winter may make it much harder to gain the upper hand in the spring and summer when the populations are rising. Choosing a <u>SAFE</u> product is incredibly important, your veterinarian can help ensure you are using the product safest for your pet, many over the counter (OTC) preventatives have been found to have many adverse side effects that you will want to avoid. There are both oral treat versions of preventatives as well as topical preventatives and some will also help with the prevention of ticks.

Ticks are found throughout the United States and Wisconsin is no exception. Ticks can be very worrisome for our pets (as well as humans) to encounter as many of them can transmit diseases that can cause a variety of issues from mild illness to death. Prevention is key when it comes to ticks, some tick preventatives are available in an oral treat form and are often in a combination product that is for use against both fleas and ticks. Unfortunately some ticks can transmit diseases very quickly (faster than preventatives can work) so if your pet is at an increased risk for tick exposure additional preventatives such as the Seresto Collar or Preventic Tick Collar may be recommended. Choosing a <u>SAFE</u> product is incredibly important, your veterinarian can help ensure you are using the product safest for your pet, many over the counter (OTC) preventatives have been found to have many adverse side effects that you will want to avoid. The veterinarian can help you decide if that is right for your pet.

Mites and lice are less common parasites to see but based on your dog's history and lifestyle still parasites to be aware of. Mite infestations are often also referred to as mange. There are different mites that your pet may be affected by and diagnostic testing is often required to determine which one they may have. Less commonly we can see lice infestations of our pets. There are different species of lice that we can see and a brief microscopic exam can determine what type may be impacting your pet. Some flea and tick preventatives are also useful for preventing or treating mite and lice infestations. If you feel your pet may be affected by mites or lice please ask your veterinarian for a recommended plan for prevention or treatment.

Microchipping has become a very common way for helping to get lost pets back home. ID tags are helpful and easy to use, but unfortunately many pets aren't wearing them when they go missing for one reason or another. There are many different types of microchips available but they work best when the owner is active in keeping the information up to date. A microchip is about the size of a grain of rice and inserted just below the skin between the shoulder blades. Microchips do not emit a signal; rather they are detected when a scanner is used over the pet to read the number. Microchips are most often elected to be implanted during an anesthetic event such as a spay or neuter but they can be done any time when the veterinarian feels the pet is big enough to implant them.

SPAYING & NEUTERING

There is a very real pet overpopulation problem throughout the United States; Wisconsin is without exception to that. In addition to the reduction of unwanted and unplanned pets both spaying and neutering have many health benefits. The procedures are done under general anesthesia and proper pain management is helpful to make the recovery as smooth as possible. Both procedures are a medical procedure that require some healing time, but we employ the most up to date recommendations to help ensure your pet the best outcome and

fastest return to normal life as we can. The optimal age for the spay or neuter procedure will be determined by your veterinarian.

Spaying female dogs is a procedure that is done by surgical removal of the reproductive organs of the dog. The health benefits include eliminating the chance of Pyometritis (infection of the uterus requiring EMERGENCY attention and often a costly surgery), eliminating the risk of ovarian or uterine cancer (spaying removes both organs), and decreasing the risk of mammary cancer (as many mammary tumors depend on the estrogen that is present during heat cycles). Though there may be an increased risk to the procedure being done later in life (increased blood supply to the organs and age related risk to anesthesia) because of the health benefits of spaying it is never "too late" to spay a dog, there is some level of benefit regardless of age.

Neutering male dogs (also known as castration) is the most proactive step to prevent unwanted pregnancies of female dogs, help with some behavioral issues with unneutered males, and have long term health benefits. Neutering male dogs will not take away his "manhood" or change their personality, though neutered male dogs are have been found to be less likely to mark their territory by urinating, less likely to escape or run away, and are less likely to be attacked by other dogs. Neutered male dogs are not at risk for testicular cancer and will have a decreased risk of prostate cancer.

TRAINING YOUR PUPPY

Housetraining can be a challenging time for some owners as it takes a lot focus and attention with your new addition. It also requires patience, commitment, and most importantly consistency. It is unrealistic to expect your puppy to never have an accident but the more consistent you are the more likely it is your puppy will catch on to the idea of housetraining quickly. Establishing a routine with feeding and watering schedules and going outside can be very beneficial to housetraining; this can be difficult but also essential in the process. Taking your puppy outside frequently (in many cases every two hours), especially after waking from a nap, after eating and drinking, and after playing is also often necessary to reduce the chances of accidents in the home. Many dogs will respond well to having a "potty area" outside and it can help them to understand the plan when they are outside. Being patient and waiting for them to eliminate can be difficult but allowing them to focus on urinating and defecating before taking them on a walk or bringing them back into the house will help to ensure they are eliminating where you desire them to (outside rather than inside the home). Finding a "high value" reward will also be helpful for both housetraining and behavior training. Rewarding behavior you want to see can help increase the behavior in the future.

Reducing accidents in the house by supervising your puppy and keeping them to a limited area of the home is also important. When you are not able to supervise your puppy use of a kennel can be helpful, though use of a room with a small space for your puppy can also work. Freedom in the house is earned after they are more reliably housetrained.

Accidents will happen, even for the most astute pet owner. When that happens try to interrupt them in the act by saying their name getting their attention and immediately take them outside. When they finish eliminating where you want them to offer them praise and reward. If you find a soiled spot in the home it is too late to correct that action. Clean the area well with a pet-safe enzymatic cleaner to reduce the odor and chance they will be attracted to eliminate in that spot again. This is a good opportunity to assess what could have been done differently to reduce the chance of the undesired behavior again.

When you are away it is important to remember that your puppy can't hold their bladder as long as an adult dog. Many puppies will have a hard time holding it longer than just a few hours. Being able to provide time for your puppy to go to the bathroom every 4 hours is ideal. This may require for a pet sitter to be available to let them out if you are not able to. Training your puppy to eliminate in a particular spot indoors can slow the housetraining process.

Crate or Kennel Training from a young age can be very helpful for puppies. By nature dogs are a "den" animal and will often find comfort in their own comfortable space. Selecting an appropriate kennel or crate is also very important. With larger breed dogs it may be necessary to start with a smaller kennel and "upgrade" as they grow, ideally a kennel should be just large enough for them to stand up and turn around. Some kennels will allow you to block off parts of the kennel altering the size of the space as they grow and preventing from having to purchase several kennels as they grow. Kennels can be used as a safe area for your dog to go to, it is ideal to encourage them to like their space in their kennel. Most dogs will also not want to soil in their kennel so use during housetraining can be beneficial, but caution should be taken to not keep them in the kennel longer than their bladders can tolerate holding urine.

Though dogs will often be able to find themselves liking their kennels it is still a process to properly introduce them to it. Introduce them to the kennel by starting them in it with a happy experience. Bring them to the kennel and offer praise and rewards for going into the kennel. Ensuring that there isn't going to be a startling noise or swinging door is important. Do not close them in the kennel upon first introduction. Using the kennel as a place they get food for meals can be beneficial for getting them to accept the space. Once your dog has become more comfortable in the kennel you can start to lengthen the time they are in it. If your dog is showing signs of fear or anxiety in the kennel it will be important to condition that behavior to be a positive experience. Once you feel your dog is comfortably using the kennel you can begin to use it when you are gone, again starting with short time frames and increasing time as they tolerate it. It is recommended to make going in the kennel something that is done prior to you physically leaving the home and varying the time in your leaving routine can lessen the anxiety behaviors that can be triggered if they sense a departure is pending.

Kennels shouldn't be used as an isolation tool just for punishment, especially for older dogs. When housetraining you also should have the kennel in an area where you can hear your puppy if they alert that they need to go outside at night.

When returning home it is not recommended to encourage very excited behavior, this can be difficult when we are also happy to see our dogs when we return as well. We want to encourage calm behaviors when coming out of the kennel.

SOLUTIONS FOR TRAINING PROBLEMS

Vocalization and **whining** can be a problem for some puppies when adjusting to a new home, this can be especially problematic at night as they get accustomed to the routine. Vocalization or alerting when they need to go outside can be helpful so training to alert when they want to go outside is helpful. If a dog is in the process

of being kennel or crate trained and vocalization is an issue, it is ideal if removal from the kennel be done when the dog is quiet and relaxed so they don't associate being taken out of the kennel with the vocalization.

Chewing on objects or *play biting* can be a frustrating problem as puppies and dogs work through training. Redirecting their attention to an object or a behavior that is desirable is very important as soon as the chewing or biting is exhibited. Though it can be frustrating and damaging to have an animal chewing on things they shouldn't, it can also become a health risk if they are chewing on items that may be toxic or dangerous if ingested is also a risk. There are times in a puppy's life where chewing is inevitable. This is similar to a child teething and finding objects that are acceptable to chew is important. Dogs may also chew for other reasons that are often behavioral in origin; correction of the action often requires identification of the cause. Some causes may include boredom, separation anxiety, fear-related anxiety, or just attention seeking behavior. Increasing physical and mental exercise can be helpful for reducing behavioral chewing. Behavioral consultations may be necessary to work through behavior related issues efficiently and effectively.

When selecting toys that are acceptable for your puppy, select toys that are not going to be confused with other household items that you do not want them to chew. For example, allowing your pet to chew on knotted socks may make it difficult to distinguish with socks you don't want them to chew on. Supervision is also very important until your dog is well trained; you can't expect your dog to learn appropriate behavior if you aren't there to help them.

Management of chewing behavior starts with removing temptations and items that you do not want chewed and limiting access to things such as the garbage, clothing, remote controls, cords, and other items that you do not want your puppy to chew. If you find your dog chewing something they shouldn't, interrupt the behavior and redirect them to an acceptable item to chew. When they chew the desired toy give them praise and encouragement for the proper behavior. It may require offering them something more desirable in exchange for the item they have. If needed, deterrents such as bitterapple spray can be used on items to discourage chewing of particular items. Similar to the expectations of housetraining, you can expect your puppy to chew an item that you do not want them to chew at some point, being prepared when that happens is key. Also, similar to housetraining, finding the object chewed and they are no longer in the act limits correction. Punishment after the fact is not effective.

If your pet has eaten something they shouldn't it can cause a Gastrointestinal Obstruction. This is something your veterinarian should know about right away and can advise you about options as well as what to watch for.

PREVENTING ACCIDENTAL TOXIN EXPOSURE

Toxin exposure can be fatal for your pet and minimizing exposure to harmful substances is key to reducing accidental poisonings. There are many helpful resources that can be a guide to identifying harmful items your pet may be exposed to, we are also here to help if you have questions.

If you ever suspect that your pet may have been exposed to a toxin please call the clinic immediately. Signs may include abnormal behavior such as stumbling, being lethargic or listless, vomiting, diarrhea, drooling, among others. If you know your pet potentially had contact with a poisonous item please bring in the packaging or take a picture of it whenever possible and bring it to the clinic with your pet. Calling the pet poison helpline is also

helpful at 1-800-213-6680 or visiting <u>www.petpoisonhelpline.com</u>. The following is a list of some of the more common plant toxins that our pets are exposed to in and around the home.

Cardiovascular Toxins

Avocado (in some species)	Lil-of-the-valley	Oleander
Japanese pieris	Bleeding heart	Hyacinth bulbs
Yew	Milkweed	Rosary Pea
Azalea (entire rhododendron family)	Castor bean	Hydrangea
	Mistletoe berries	Tobacco Products
Kalanchoe	Foxglove (Digitalis)	
Autumn crocus (Colchicum autumnale)	Mountain Laurel	
Gastrointestinal Toxins		
Avocado (to some species)	Mistletoe berries	Pencil cactus/plant potato
Chocolate	Bird of Paradise	Caladium
Iris corms	Cyclamen Bulb	English Ivy (All Hedera species
Amaryllis bulb	Moldy foods	of ivy)
Chrysanthemum (a natural	Bittersweet Boxwood	Rosary Pea
source of pyrethrins)	Dumb Cane	Cannabis (Marijuana)
Lily (bulbs of most species)	Narcissus, daffodil (Narcissus)	Hyacinth bulbs
Azalea (entire rhododendron	(Dieffenbachia)	Spurge (Euphorbia species)
family)	Buckeye Bulbs (most kinds)	Castor beans
Clematis Crocus bulb	Eggplant	Holly berries
Macadamia nuts	Onions	Tomatoes (leaves and stem)
Autumn crocus (Colchicum autumnale)	Buttercup (Ranunculus)	
Croton (Codiaeum species)	Elephant's ear	
Respiratory Toxins		
Chinese sacred or heavenly bamboo	English Ivy	

Toxins that Affect the Blood

Onions	Garlic	
Neurological Toxins		
Alcohol (including ethanol,	Moldy foods	Buckeye caffeine castor bean
methanol, isopropyl)	Azalea (entire rhododendron	Lupine species
Chrysanthemum (natural source of pyrethrins) Morning glory	family)	Tomatoes (leaves and stem)
	Eggplant Tobacco products Bleeding heart Jimson weed	Chocolate
		Macadamia nuts
Amaryllis bulb		Choke cherry, unripe berries
Crocus bulb, delphinium, larkspur, monkshood		Marijuana (Cannabis)
	Potato (leaves and stem)	
Kidney/Organ Failure Toxins		
Amanita mushrooms	Rhubarb leaves	Grapes/raisins
Day lily	Asiatic lily	Shamrock
Oak	Easter lily	Calla lily
Anthurium	Scheffelera	Jack-in-the-pulpit
Elephant's ear	Begonia	Star-gazer Lily
Other toxins or harmful items include		
Medications such as ibuprofen or aspirin	Detergents & Cleaners	Fly Bait
	Bleach	Mothballs
Acetaminophen	Potpourri	Antifreeze/Coolant
Cold and flu medications	Lead	Gasoline

Diet and Energy Pills

Vitamins

Anti-cancer medications

OTC Flea/Tick Products Rodent Bait

Paint & Paint Remover

Pesticides

Insecticides

Oil

Fertilizer

Compost

Non-pet-safe Deicer

As your life changes and questions or concerns come up about how to work through situations, we are here for you. If you are adding to your family, moving, or adding another furry or feathered family member we are here to help the transition go smoothly.

Sources:

VeterinaryPartner.com

CDC.gov

Other Valuable Sources You Can Turn To:

VeterinaryPartner.com

Pet Poison Helpline (Some microchip companies allow access as a part of their service)