

Paw Talk



A professional publication for the clients of East Valley Animal Clinic

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East Valley Animal Clinic
5049 Upper 141st Street West
Apple Valley, Minnesota 55124
Phone: 952-423-6800

Kathy Ranzinger, DVM
Pam Takeuchi, DVM
Katie Dudley, DVM
Tessa Lundgren, DVM
Mary Jo Wagner, DVM
www.EastValleyAnimalClinic.com



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Influenza Update

In 2015, a new strain of canine influenza virus (CIV), known as H3N2, emerged in the U.S. It spread quickly and has now been documented in at least 25 states. Another strain, H3N8, has been in the U.S. since 2004 and has been documented in 41 states. CIV is rarely fatal, but since very few dogs have ever been exposed to the new H3N2 strain, most dogs who are exposed to the virus will become sick for a week or two.

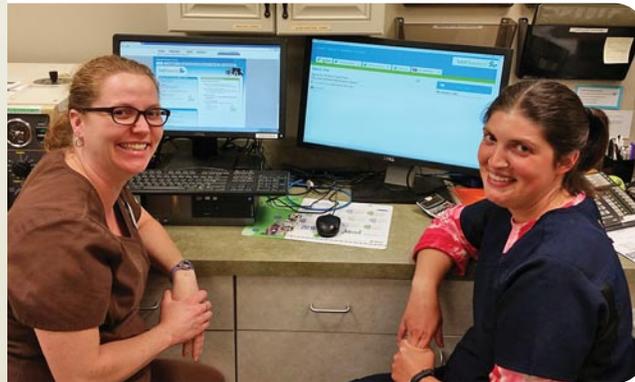
CIV is a highly contagious respiratory disease that is easily spread by dog-to-dog contact or through contaminated surfaces, such as kennels, dog toys or bowls. Dogs that go to dog parks, dog shows, doggy day care and kennels are at highest risk. There is some evidence that the H3N2 variant is spreading more easily than previous variants, potentially because dogs can remain contagious for about three weeks, even if they are not showing symptoms of the virus.

Signs of infection in dogs include
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VetSource Pharmacy is Here

East Valley Animal Clinic is happy to announce that our clients now have access to VetSource Online Veterinary Pharmacy. VetSource is an online pharmacy that offers access to prescription medication, foods and supplements. All you have to do is go to our website, EastValleyAnimalClinic.com, and click on the VetSource icon.

VetSource is a Veterinary Verified Internet Pharmacy Practice Site (Vet VIPPS) certified pharmacy, which means they have undergone a rigorous accreditation process by the National Association of Boards of Pharmacy. This ensures that the products and the service that you get are the highest quality.



Erin, CVT, and Heather, CVT, waiting to help you with any VetSource questions.

Once you click on the site, you can choose the medication, supplement or food that you are looking for, and if the product requires a prescription, we will receive your request. Once approved, the product will be shipped directly to your address. You can even set up an autship option, which makes sure that you never run out of the food or medication your pet needs.

VetSource also offers a convenient "Remind Me" program, where they will send you a single dose of your pet's monthly heartworm and flea and tick preventive every month. Each month, a single dose will arrive by mail at the time your pet is due for it, and all you do is open the package and give it to your pet. No more trying to remember when your pet is due for its medication, or if you already gave it!

We are happy to be offering this convenient service for our clients. So now, you don't even need to leave your couch to make sure your pet is getting their medications.

Seniors and Pets

There's a growing body of research about the health benefits of pet ownership, and two recently published studies have added to our understand of the benefits dogs provide to senior citizens.

The first study, by the Oregon State University and published in *The Gerontologist*,
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Bobcat Fever

Ticks! The incidence of tick-borne diseases is increasing throughout the country. Most everyone has heard of some common tick-borne diseases, such as Lyme disease and anaplasmosis. Another disease carried by ticks is called cytauxzoonosis, or "bobcat fever," and it can be fatal to domestic cats.

Cytauxzoonosis can be spread by the Lone Star tick and the American dog tick. Originally discovered in Missouri, incidence of the disease has spread and has now been reported in a number of states.

Bobcats are considered the main reservoir for this disease, and it is usually not fatal to them. It appears to effect all kinds of cats, and has been documented in Florida panthers, mountain lions and even tigers. It is not known to infect humans or dogs.

Veterinarian Leah Cohn, a small animal disease expert at the University of Missouri, calls the disease "the Ebola virus for cats," stating that it often causes a quick and painful death. Initial signs include depression, lethargy and lack of appetite. As the disease progresses, cats develop a high fever and often vocalize as though they are in pain.

Previous treatments had a low success rate, but this year, Dr. Cohn and Adam Birkenheuer, of North Carolina State University, revealed a treatment that is effective in about 60% of infected cats.

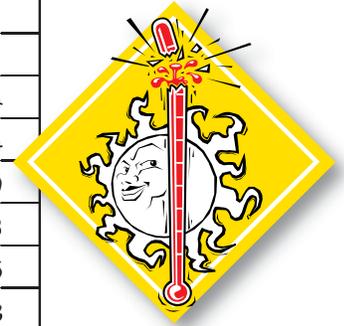
Although bobcat fever is not common, its very existence is a reminder that tick prevention is key. Outdoor cats are at higher risk due to increased likelihood of tick exposure. Keeping dogs and cats current on tick preventives helps keep your pets and family safe from a number of tick-borne diseases. Never use products intended for dogs on your cats, as the active ingredients in some dog products are toxic to cats. Be sure to read all labels carefully. Ask your veterinarian if you have questions about tick and other parasite prevention in cats.

Heatstroke and Cars

Every summer, there are news reports of pets dying after being left unattended in parked cars. These tragic deaths should never occur. Even in the shade and with the windows down, the inside of a car can reach deadly temperatures within minutes. This chart shows how quickly the temperatures inside a parked vehicle can change:

Estimated Vehicle Interior Air Temperature vs. Elapsed Time

Elapsed time	Outside Air Temperature (F)					
	70	75	80	85	90	95
0 minutes	70	75	80	85	90	95
10 minutes	89	94	99	104	109	114
20 minutes	99	104	109	114	119	124
30 minutes	104	109	114	119	124	129
40 minutes	108	113	118	123	128	133
50 minutes	111	116	121	126	131	136
60 minutes	113	118	123	128	133	138
> 1 hour	115	120	125	130	135	140



Courtesy: Jan Null, CCM, San Jose State University / Learn more at www.noheatstroke.org

The normal body temperature for dogs ranges from 100 to 102.5 degrees. Generally, a temperature over 103 degrees is considered elevated. Heatstroke occurs when a dog's body temperature reaches 105 degrees or more, and exceeds the body's ability to dissipate the heat.

Unlike humans, dogs only have minimal sweat glands in areas such as their paws and nose, so their primary method of dissipating heat is through panting. Panting is less effective in poorly ventilated areas and increasing temperatures – like the inside of a parked car. To compensate, the heart starts pumping faster. As the dog's body temperature continues to increase, the heart loses the ability to circulate the blood effectively. The combination of poor blood flow and increased body temperature can ultimately damage all of the major organs, leading to shock and death.

Be aware of the signs of heat stroke in dogs. They include panting, drooling or excessive salivation changing to dry gums as the condition progresses, a rapid pulse, weakness and confusion. If you notice these signs, immediately attempt to cool the dog using lukewarm water (do not use cold water or ice), and seek immediate emergency veterinary care!

Any age, breed and sex of dog may be affected by heatstroke, but older dogs, puppies, brachycephalic dogs (those with "pushed in" noses such as pugs) and dogs with chronic health conditions, such as obesity and heart disease, are at higher risk.



"What greater gift than the love of a cat."

– Charles Dickens



Longevity

Who among us wouldn't jump at the chance to extend the lifespan of our pets?

Two University of Washington researchers, Dr. Daniel Promislow and Dr. Matt Kaeberlein, have initiated a study of aging in dogs, which they've called The Dog Aging Project. Their goal is to "help dogs live the longest, healthiest lives possible by taking advantage of recent breakthroughs in the science of aging."

The study of aging and age-related diseases is known as geroscience. Because aging increases the risk factors for almost every non-genetic chronic disease, a better understanding of aging could help in the discovery of disease prevention and cures. The causes of aging are very complex, and with humans, it can take decades to gauge how early life exposures affect aging. Scientists can observe the same thing in dogs in just five to seven years. "Everything is sped up. We can learn a lot in a relatively short amount of time," states Dr. Promislow.

"The Dog Aging Project has two major aims," according to their website, "... a longitudinal study of aging in dogs and an intervention trial to prevent disease and extend healthy longevity in middle-aged dogs."

The intervention trial involves a drug called rapamycin, which seems to make mice live longer and improve heart function. The drug is currently used in humans help prevent organ transplant rejection. The researchers would now like to see if the drug can improve heart function in large breed dogs. The first phase was a safety trial, and found no severe adverse effects. Phase two will be a larger scale study involving middle-aged dogs from across the country, and possibly, around the world.

The longitudinal study of aging is intended to be the first large-scale study of aging in dogs. They plan to enroll 10,000 pet dogs and study them throughout their lives. The study will look at genetics, epigenetics (how cells are turned on and off) and other biological factors and environmental factors such as water quality, air quality and social settings. They want to involve the global scientific community, because they expect the volume of data will be too much for their team of about ten scientists to process.

This project is not yet fully funded, but they're actively raising funds and moving forward.

Intrigued? Go to DogAgingProject.com to learn more. You can enroll your dog on the website. If your dog is accepted in to the study, it will be followed for the rest of its life with routine veterinary exams and non-invasive tests.

Obesity in Labradors

Labs love food – almost any Labrador Retriever owner can attest to that fact. That food drive can be an incredibly useful tool for the savvy dog trainer, and Labs are known as friendly, intelligent, highly trainable dogs. The food drive can also lead to obesity, which shortens many dogs' lives. New research has revealed a genetic link to obesity in the Labrador Retriever and Flat-Coated Retriever.

The study, published in the journal *Cell Metabolism*, examined 310 pet and assistance dogs. Researchers searched for variants of three known obesity-related genes. They found a variant in a gene known as POMC is strongly associated with increased body weight, adiposity (fat) and food motivation.

According to the American Kennel Club (AKC), Labrador Retrievers have been the most popular breed in America for 25 years straight. They're also a popular breed for assistance dogs, and the study found the POMC gene mutation "... is significantly more common in Labrador retrievers selected to become assistance dogs than pets," which may explain why those dogs are so highly trainable with food rewards.

This research could lead to a better understanding of obesity in humans, and the study's authors note it may also open a path for research in to novel therapeutic approaches to treating certain forms of obesity in dogs.



"Ask your doctor if the embarrassing head cone is right for you."

SENIORS... continued from pg. 1

concluded that dog ownership correlates with lower systolic blood pressure in adults aged 60 and over. High systolic blood pressure is a risk factor for cardiovascular disease, which is the leading cause of death in America.

This study examined data taken from 373 dog owners and more than 1,000 non-dog owners. It did not determine the reason for the results, however, and the authors state, "Our results provide a foundation to further explore how dog ownership improves health status (loneliness, depression, and cognitive function) in older adults."

The second study, by the University of Missouri, explored the relationship between dog ownership, pet bonding and walking behavior in older adults. Why is walking behavior important? The Centers for Disease Control and Prevention

recommends that adults of all ages should get at least 2.5 hours of moderate exercise per week. Walking is an excellent choice for many seniors, because it is low-impact, self-paced and doesn't require any equipment.

This study results showed that "Dog walking was associated with lower body mass index, fewer activities of daily living limitations, fewer doctor visits, and more frequent moderate and vigorous exercise." The study also found that people who reported higher degrees of bonding with their dogs were more likely to walk their dogs, and spend more time doing so.



Melissa, one of our certified veterinary technicians, took this photo of her grandpa, Ron, and his pup, Abby.

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Join us for **World Rabies Day**
Wednesday, September 28th.
Learn about rabies
and have a treat on us!

INFLUENZA... continued from pg. 1

fever, lethargy, loss of appetite, coughing and nasal discharge. Most dogs experience only mild infections; however some dogs may develop pneumonia or other serious complications.

This spring, several cats in a northwest Indiana shelter displayed unusual respiratory symptoms, and tests showed that they were positive for the H3N2 strain. Signs in those cats included a runny nose, lethargy, congestion, lip smacking and excessive salivation. So far the virus has not been fatal in cats. It appears the virus can spread from cat to cat.

Vaccines for both the H3N2 and H3N8 strains are now available for dogs, and are considered "lifestyle" vaccines, meaning they're recommended for dogs at higher risk. Your veterinarian can help you determine whether to consider these vaccines for your dog. As of yet, no vaccine is approved or



Stress Relief

Many studies have shown the calming effects pets have on people, and some have shown that we humans have a calming effect on our dogs as well.

In a recent small experiment, researchers monitored the heart rhythms of the dogs and their owners to see the effect they had on each other. The dog-owner pairs were separated, and their heart rates increased, indicating stress. When they were reunited, the heart rates of the dogs and owners quickly began to decrease in a synchronized manner. The similarity in the heart rate patterns is striking to see. Watch the heartwarming video at www.pedigree.com.au/heartsaligned/