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Expert information on medicine, behavior, and health in collaboration with a world leader in veterinary medicine

O THIS JUST IN

Petting Therapy Dogs

Enhances thinking skills

programs focused on petting therapy dogs improved stressed-out student skills more effectively than traditional methods, according to new research.

Researchers measured executive functioning—plan, organize, motivate, concentrate, and memorize—in 309 students. In the three-year study, students were randomly assigned to one of three academic stress-management programs featuring varying combinations of human-animal interaction and evidenced-based academic stress management.

"The results were very strong," lead author Patricia Pendry says. "We saw that students who were most at risk ended up having most improvements in executive functioning in the humananimal interaction condition. These results remained when we followed up six weeks later."

Human-animal interaction programs help by letting students relax as they talk and think about their stressors. Through petting animals, they are more likely to relax and cope with these stressors rather than become overwhelmed and can then learn more easily.

Pendry, P., et al. Incorporating Human— Animal Interaction Into Academic Stress Management Programs: Effects on Typical and At-Risk College Students' Executive Function. AERA Open, 2021; 7: 233285842110116 DOI: 10.1177/23328584211011612. Science Daily.

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Overheated-Dog Emergency

If you're too warm, it's dangerous for your dog

eat exhaustion, heat stress, and heat stroke are all terms for the same condition: a marked elevation in body temperature caused by external/environmental factors, not fever. This can be a life-threatening emergency. Normal body temperature for dogs is 102°F.

Anything 105°F or higher is a concern.

As you know, dogs can't sweat like we do. Pretty much all they can do is pant. With every breath, evaporative cooling occurs as air passes over the moist tongue and upper respiratory tissues. As the dog gets hotter, the tongue will get wider and longer as his body tries to increase the available surface area for evaporative cooling. It's not a great system even in the best of times.

Full-blown heat stroke in dogs has a 50% mortality rate, so it's extremely important you avoid an overheated dog. Watch for early signs of heat stress. Take extra care with overweight dogs and brachycephalic breeds. Both have a diminished capacity for cooling due to decreased air flow over the upper respiratory tract, so may overheat more quickly. By the time your dog shows obvious signs, it may already be too late.

These signs indicate take action:

- Heavy panting
- ▶ Wide, long tongue
- ▶ Glazed-over eyes
- Excessive drooling.

These signs indicate an emergency:

- Weakness
- Disorientation
- Incoordination
- ▶ Bloody diarrhea
- ▶ Collapse
- Seizures
- Coma.

At the first sign of heat stress, stop exercise and get the dog to a shaded area. The dog needs cold water on his trunk, belly, arm pits, and groin areas. Running water is best, but if all you have are cold wet towels, use them—just get cold water on the dog's body. Some experts suggest



This overheated Bulldog's tongue is long and wide, and he is panting heavily.

an ice pack around the dog's head, too, as brain injury is common with heat stroke.

While you are doing all this, ask someone to start your car and get the AC blasting. Keep cold wet towels on the dog, and drive to the veterinary clinic. Call ahead to tell them you are on your way. Once you arrive, your veterinarian will take over and, hopefully, your dog will be one of the 50% who survive.

What You Can Do

- Be sure your dog has shade and access to fresh, cool water outside.
 Do not leave high-energy dogs unattended on hot days—they may overdo it.
- Never leave your dog unattended in a vehicle even for "a minute." It gets hot fast, and the risk is too high.
- If it's hot and humid, walk your dog in the early morning or late evening.
- If you don't have air conditioning, keep fans on the dog and pay close attention to his comfort level.

Kids and Pets Sharing a Bed May Be Good

Pets may enhance children's sleep quality

new study from researchers at the Pediatric Public Health Psychology Lab in Concordia, Canada, found that the sleep quality of the surprisingly high number of children who share a bed with their pets is indistinguishable from those who sleep alone. "Sleeping with your pet does not appear to be disruptive," says researcher Rowe. "Children who frequently slept with their pet endorsed having higher sleep quality."

Children and parents answered questionnaires about bedtime routines and sleep hygiene, including whether they share a bed with a pet. One in three said yes. Researchers found studies about adults sleeping with animals on the bed but little with children. The researchers categorized the children into one of three groups based on how often they sleep with their pet: never, sometimes, or frequent. They

then compared the three groups across a diverse range of sleep variables to see if there were any significant differences between them and found no impact on sleep.

Rowe, H., et al. The curious incident of the dog in the nighttime: The effects of pet-human co-sleeping and bedsharing on sleep dimensions of children and adolescents. Sleep Health, 2021; DOI: 10.1016/j.sleh.2021.02.007. Science Daily.



The Dog Aging Project

Cornell Veterinary Biobank joining the project

he latest in the world of citizen science is a collaborative research project that relies on the participation of dog lovers across the United States to help collect data that will improve our understanding of aging in (wo)man's best friend and their humans.

With funding through a five-year grant from the National Institute on Aging, part of the National Institutes of Health, the Dog Aging Project is an innovative initiative that brings together a large community of dogs, owners, veterinarians, researchers, and volunteers to carry out the most ambitious canine science project

The massive project, kicked off by researchers at the University of Washington and Texas A&M, has added a third institutional collaborator, Cornell University's College of Veterinary Medicine with the Cornell Veterinary Biobank serving as the official biobank for the project. The Biobank will archive samples from Dog Aging Project participants across the United States.

Calls are still going out for nominations, and as researchers receive survey data from dog owners about their dog's lifestyle, exercise, diet, and much more, nominees will be narrowed down to a cohort of canines who will then contribute samples to be studied more deeply, including through sequencing.

Some of these samples will be processed, tested for quality, and stored at the Cornell Biobank, aiding in research that will inform scientists about canine and human health and diseases of aging such as cancer, diabetes, arthritis, and more. In addition to the Dog Aging Project, scientists anywhere can access the samples for other innovative projects. "All of the samples we're banking are to be potentiated into future projects, allowing for new hypotheses to be tested as new research tools become available," says Dr. Marta Castelhano, director of the Cornell Veterinary Biobank and Cornell's principal investigator on the Biobank's grant.

Since we share the same environment, lifestyle and often the same food, studying the aging process in the dog allows researchers to help dogs live longer, healthier lives while learning new ways to improve human health.

The Dog Aging Project continues to enroll dogs, both mixed breed and purebred, of all ages and sizes, from all regions of the country. It is a priority of the Dog Aging Project to ensure inclusive representation among participating dog owners. For more information or to nominate your dog visit, www. DogAgingProject.org.■



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Perfect Poop: Why It Matters

What your dog's stool consistency means

our dog's poop can tell you a lot about what is going on in his gastrointestinal tract. Its consistency tells us about how quickly ingesta is traveling through the digestive tract as well as your dog's hydration level and can alert your veterinarian to some illnesses.

Poop Scoring

Oh yes, there is a formal system for evaluating stool consistency. The most commonly used fecal scoring chart grades stool on a scale from 1 to 7, with 1 being extremely hard, dry pellets and 7 being watery puddles of poo. The perfect poop is usually a 2, firm but pliable and able to maintain its shape when picked up (plus not leaving much residue behind).

One of the easiest ways to describe consistency over the phone is to used common household items as a comparison. Gross though it may seem, food items are commonly used for this purpose. For example, your dog's stool may be soft but still hold some shape when it lands on the ground, like soft-serve ice cream on a cone. Diarrhea can be thick like a good New England chowder or extremely thin and runny like water. Play Doh and toothpaste are other common comparisons.

Describing your dog's stool with specific details helps your veterinarian gauge the severity of your dog's symptoms. It helps supplement the evaluation of the stool sample that you bring in to the office, in case that sample isn't quite the same as what you have been seeing.

Loose Stool

Loose stool and diarrhea are the consistencies that trouble owners the most. The No. 1 cause of loose stool is dietary indiscretion, a fancy term for when your dog eats something he shouldn't have that upsets his GI tract. Other causes include stress, internal parasites, viruses, abrupt change in diet, toxicity, a new medication, bacterial infection, and disease.

If your dog is having soft stool and vomiting, he should be examined promptly. Dogs quickly become dehydrated when losing water from both ends, and the underlying cause needs to be identified as soon as possible. If he has loose stool and acts ill, he should be seen.

Diarrhea without other symptoms may be treated at home, but if it lasts more than two days, it requires veterinary attention. Start by fasting your dog for 12 to 24 hours. This gives the GI tract a break and a chance to recover. Make sure your dog has access to fresh water. Fasting is not appropriate for puppies or dogs with conditions such as diabetes.

After fasting, feed a bland diet such as boiled chicken with plain cooked rice for a couple days. This diet is easy on the digestive tract but is not appropriate for long-term feeding.

Give probiotics. You can get a good probiotic made for dogs over the counter from your veterinarian at any time. These help restore the good bacteria in your dog's GI tract to correct any imbalances contributing to the diarrhea. Probiotics can be used short term to correct an issue, proactively before a stressful event such as boarding, or long term for dogs with chronic GI troubles.

Give a small amount of plain canned pumpkin with each meal. The added fiber will help to bulk up your dog's stool and improve the consistency.

Your veterinarian may prescribe medication:

Metronidazole (Flagyl). The champion of dog owners everywhere, metronidazole works to knock out pathogens while normalizing and soothing the GI tract.

Tylosin tartrate (Tylan). This antibiotic comes in either a powder or capsules and is used for colitis and chronic diarrhea.

Hard Stool

tumors.

Extremely hard, dry stool indicates that your dog is dehydrated or that ingesta is moving through his GI tract too slowly. This can lead to constipation. A constipated dog strains while defecating and may appear hunched and uncomfortable. Some potential causes for constipation include lack of fiber in the diet, prostate and anal gland problems, hypothyroidism, stress, nerve damage, and

A single hard stool is usually nothing to worry about, but if

What You Can Do

- If your dog has abnormal stool and is vomiting or ill, or has had abnormal stool for longer than three days, see your veterinarian.
- Give probiotics to help normalize the GI tract and correct diarrhea.
- Add plain canned pumpkin to his food to increase fiber and make stool easier to pass with better form (pumpkin helps both too soft and too hard stools).

this continues, your dog should have an exam. Straining could indicate a physical problem. If your dog has really hard stools and shows other signs of illness, he should be seen.

For hard stools without illness:

- ▶ Make sure your dog is drinking plenty of fresh water. Adding water to his food or feeding a canned diet can help with hydration.
- Give a small amount of plain canned pumpkin with each meal. The added fiber will help to create larger stools that pass more easily.

Things your veterinarian may do to help with constipation:

- Perform an enema to loosen up the trapped feces.
- Prescribe a laxative for either short- or long-term use. Many laxatives safe to use in dogs are available over the counter, but don't give one without consulting your veterinarian for an appropriate dosage.
- Remove the blockage manually or surgically. Both procedures require general anesthesia.

Most minor poop consistency issues can be managed at home, but if your dog is having issues for several days, your veterinarian can help to get his poop back to a perfect 2.



If your dog is showing any other symptoms beyond abnormal stool, it's time for a veterinary visit.

Your Dog Is in Renal Failure

These devastating words are a call to action

e can't cure chronic renal failure, which is the one most older dogs face, but with dietary changes, regular veterinary checkups, and supportive care, we can extend our dog's time with us.

About one in 10 dogs develop kidney disease over their lifetime. Typically, these dogs have a congenital defect, were exposed to a toxin, or are aging. Because the kidneys are essential organs, paying attention to early signs of disease is important to ensure an early diagnosis and treatment.

A dog can do quite well with just one healthy kidney—so well that kidney function has to drop below about 66% before clinical signs are apparent.

Signs of Disease

You might notice your dog drinking more than usual and urinating a lot—or not at all. Some dogs will vomit and may have tarry stools. Lethargy is common.

Internally, potassium levels will rise, which can lead to drastic cardiac effects, slowing and potentially stopping the heart. Bad breath, drooling, and neurologic signs may be present.

Causes

Acute kidney failure is almost always related to a toxin exposure, although some infections such as Leptospirosis can cause acute renal damage. The most common renal toxins are raisins and grapes, antifreeze ingestion, and some human medications. Heatstroke, dehydration, and snake bites may also cause acute, severe kidney damage.

Chronic kidney failure is usually the result of aging. Dogs with chronic kidney failure show many of the same signs as dogs with acute conditions, but because



Consuming an unusual amount of water is a common sign of renal disease.

the changes are more gradual, owners may not notice them at first. Drinking more and bad breath may not register right away. Some dogs will vomit off and on or develop ulcers in the mouth, with concomitant drooling. Weight loss and lethargy may be dismissed as aging changes. Hypertension and anemia may not be readily apparent at home.

Diagnosis

Diagnosing a kidney problem starts with a CBC (complete blood count), a blood chemistry panel, and urinalysis. Changes in serum creatinine and anemia, phosphorus, and dilute urine can all indicate a kidney problem. Remember though, those changes may not show up until most of your dog's kidney function is already compromised.

A new screening test for renal problems is symmetric dimethylarginine (SDMA), a sensitive biomarker for kidney problems that shows positive results with just 25% of kidney function compromised. That gives you a big head

start on treating and controlling renal disease. Many veterinarians this test routinely as part of senior-pet screenings.

Fluids and Food

Chronic kidney failure is not curable, but progression can be slowed, often just with fluids, medications, and diet therapy.

The most important part of treating kidney failure is pushing fluids. For acute cases, this will almost always be via intravenous. Dogs with chronic kidney problems may get by simply with strategies to increase drinking and occasional subcutaneous fluids as needed.

If your veterinarian recommends a renal prescription diet, you'll find over 25 different diets for dogs with choices of wet or dry and varying formulations, flavors, and textures. A gradual switch from your dog's regular diet is important to encourage eating. If your dog isn't psyched about a certain food, then switch to another.

Renal prescription diets are designed to control protein, phosphorous, sodium, potassium, the omega 3 fatty acids EPA and DHA, vitamins E and C, antioxidants, and fat levels. B vitamins may need to be supplemented due to increased renal losses. Protein may or may not need to be limited, but it needs to be high quality. A probiotic can be helpful.

If your dog simply won't eat, "toppers" may increase interest and palatability. Good choices include honey, cottage cheese, or low sodium broth. Only a small amount is needed!

Capromorelin (Entyce) is an FDAapproved appetite-stimulant that works well for many canine renal patients. Some dogs are nauseous or have stomach ulcers and may require additional drugs to combat those problems. Consult with your veterinarian on any supplement choices.

Treatment

Dogs with acute renal failure need veterinary attention. For mild cases, pushing intravenous fluids and regulating potassium and other electrolytes may help the dog turn the corner. In other cases, more drastic interventions such as peritoneal dialysis or hemodialysis are needed (see sidebar).

Medical Management

Medical management will focus on treating any underlying conditions such as cardiac problems and urinary tract

Hemodialysis vs. Peritoneal Dialysis

Dialysis options include peritoneal and hemodialysis. For hemodialysis, a dog needs a large catheter placed in a vein. Blood is then channeled out of the dog and through a specialized machine that mimics the filtration ability of the kidney. The cleansed blood is then returned to the dog.

Peritoneal dialysis works through a tube placed into the abdomen. Special fluid is pushed through the tube into the abdomen. The fluid acts to draw out toxins and unwanted metabolites. The fluid is then withdrawn, taking the unwanted substances with it. Both procedures are expensive, require careful administration, and frequent laboratory testing to evaluate the effectiveness and check for infection.

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infections. Then, treatment is often "staged" using the guidelines of the International Renal Interest Society, which stages dogs with kidney failure from 1 to 4 based on creatinine levels in the blood, urine protein/creatinine ratio, and systemic blood pressure with corresponding risk of target organ damage (for example, retinal damage).

Treatment may start with angiotensin-converting enzyme (ACE) inhibitors such as benazepril (brand name Lotensin) and enalapril (Vasotec), calcium channel antagonists (CCAs) such as diltiazem (Cardizem), amlodipine (Norvasc), and verapamil (Verelan), and angiotensin receptor blockers (ARB) like telmisartan (Micardis) to help reduce and stabilize blood pressure.

Phosphate binders can be used if dietary restrictions are not adequate.

Calcitriol is a kidney-protective medication, and bicarbonate may be necessary to combat acidosis.

You may wonder about dialysis, which is often used for humans battling kidney disease. "Hemodialysis (HD) or blood dialysis is a highly effective method to remove toxins from the blood of dogs and cats and is preferential to peritoneal dialysis for several reasons. However, performing HD requires very specific equipment, including a hemodialysis machine, water purification system, and staff to perform the treatments. There are many different ways to provide HD and for various indications. Treatment of dogs and cats with HD is often performed for severe, acute kidney injuries that are not responding to traditional therapies and for certain ingested toxins," says Marnin Forman, DVM, DACVIM (SAIM), staff internist, Cornell University Veterinary Specialists, adjunct associate clinical professor of medicine, Cornell University's College of Veterinary Medicine.

HD facilities are few and far between. Peritoneal dialysis (PD) is more available, says Dr. Forman. "PD is also technically challenging to provide but can be done with routine treatment supplies available at most veterinary specialty hospitals. PD can be performed on a chronic, maintenance basis, including having pet owners perform the treatments at home; however, this is rarely done and requires a very competent and committed pet owner," says Dr.

Prognosis

Adequate monitoring is essential to manage a pet with chronic kidney disease. Routine bloodwork along with urinalysis is important and should be done at least every three to four months. You will need to be diligent and watch for changes so care can be adjusted as needed such as upping medication dosages, changing diet, or adding fluids. A dig;s weight needs to be checked frequently as well, so that any weight loss is noted early on. Be sure to alert your veterinarian.

A last resort that owners may think of is a kidney transplant. "Kidney transplants are performed in both cats and dogs; however, the success rates are higher in cats," says Dr. Forman. Some of the early research was actually performed in dogs rather than in cats, however,

canine transplants are challenging to manage after surgery due to issues with blood clots and immunosuppression. Many of the specialty clinics that offer feline kidney transplants do not offer canine ones.

Kidney failure can't be cured, but with the exception of some acute cases and those that may require dialysis, it can be greatly slowed. That means doing routine bloodwork and screening tests as your dog becomes a senior and being alert to changes such as water intake or urination amounts and frequencies.

Once diagnosed, control of kidney problems may rely heavily on diet. Chronic kidney disease is common in dogs, but these pets often can be managed with medicines and diet therapy for years.

© CONSUMER ALERT

What You Need to Know About Recalls

It seems we're hearing about them more frequently

et food recalls can seem frequent and overwhelming at times, but it shows that our safety protocols are working and we're catching more cases sooner than later. The Food and Drug Administration (FDA) has three classes of recalls, and the FDA puts out notices to provide consumers with information so they can avoid or return tainted products. The classes are:

Class I recall: The use of or exposure to a violative product has a resonable probability of causing serious adverse health consequences or death.

Class II recall: Exposure to a violative product may cause temporary or medically reversible adverse health consequences or where the probability of serious adverse health consequences is remote.

Class III recall: Use of or exposure to a violative product is not likely to cause adverse health consequences.

For pet foods, the most common problems resulting in a recall are:

Bacterial contaminants. The most common are Salmonella, and recently, Listeriosis. Both can cause problems for pets and for people and have been the cause of recalls for many foods from treats to processed kibble to raw diets.

Fungal toxins. Aflatoxin is common and is difficult to diagnose and treat. Foreign material. Although less commonly found, these include insect parts, rodent hairs, or plastic or metal fragments.

Nutritional errors. Deficiencies or toxicities can range from minor to deadly. If a pet owner or veterinarian suspects diet as a cause of a pet's health problem, they can contact the FDA.

If the FDA feels it is warranted, they contact the company to require testing to be done on the "retain sample," which is a sample of the batch of food held by the company in case a problem arises. These samples are often used to verify shelf life but also to evaluate quality, look at ingredients, and check for contaminants later in case something was missed in original screening.

If you suspect a problem with your pet's food, you can file a report with the FDA. Go to: http://bit.ly/DW-FDA-Complaints.

Information from your original packaging is important, so always save the label or take a photo of the lot number and date. If you have that information, when a recall is released you can quickly and easily determine whether you fed that particular lot or not.

Forman.

Yes, You Can Rotate Dog Foods

For most dogs, mix-and-match feeding is fine

veryone has an opinion when it comes to dog food, and one topic that can elicit strong reactions is rotational feeding. Rotational feeding is when, instead of feeding a single diet every day long term, you switch up what you feed your dog on a regular basis.

"Many ways to feed a dog!" says Joseph Wakshlag DVM, PhD, DACVN, DACVSMR, professor in the department of clinical sciences at Cornell University's College of Veterinary Medicine. "There really are no pros or cons to either approach."

Individual Tolerances

"Healthy dogs without [gastrointestinal issues] can mix and match pretty regularly within a brand," says Dr. Wakshlag. Many dogs can eat a wide variety of ingredients and foods and will tolerate a rotational diet well.

Dogs with more sensitive stomachs are more likely to experience gastrointestinal upset when their diet is changed. For these dogs, additional care is needed when choosing what food(s) to feed and how to approach the transitions between diets. "Often there are more problems from a GI perspective if the nutrient composition changes a lot, let's say a 10% fat diet and then they try a 20% diet," says Dr. Wakshlag. Switching abruptly to the richer diet can cause problems, particularly diarrhea.

Less Stress Over Stocking

With the issues we've experienced during COVID-19 with foods being out of

stock or backordered, many owners are concerned, especially if the dog has eaten one diet long-term or has had problems

with other foods in the past. If you rotate what diets you feed your dog, you will likely already know some other options that have worked out in the past so you can have a backup plan if the food you were hoping to purchase is unavailable (see sidebar).

Transition Gradually

"We recommend a three- to five-day transition for most dogs and even longer when there are GI problems," says Dr. Wakshlag. Start by mixing a small amount of the new food with your dog's current diet, and each meal gradually alter the proportions until he is eating half and half and then completely switch over to the new diet.

By transitioning gradually, you give your dog's gastrointestinal tract a chance to adjust to the new food a little at a time rather than having an abrupt change in the nutrients available. For dogs with a history of stomach problems, transitions may need to be done over a couple weeks to avoid causing diarrhea.

Watch the Calories

Not all foods are the same, even within the same brand! When considering a switch, always compare calorie densities and the fat and protein content. If the new food will be lower in calories than your dog's current food, he will need to eat more of the new food to get the same amount of energy. If the new food is higher in calories, his portion sizes will

need to be decreased to keep him at his optimal weight.

Changes in protein and fat content can cause GI upset and illnesses like pancreatitis in susceptible dogs. Ideally, the diets you switch between should be somewhat similar in protein and fat content. This is especially true of dogs with sensitive stomachs. If the two diets have a very different nutrient makeup, plan on taking some extra time with the transition to give your dog plenty of time to adjust.

Mind Special Needs

Many health conditions limit dietary options. For example, dogs with diabetes mellitus should often be on low-carb diets that are higher in fat and protein, while dogs with kidney disease should be on low-protein diets. Dogs with a history of pancreatitis should stick to low-fat diets to avoid triggering a relapse.

Dogs with GI disorders like inflammatory bowel syndrome or food allergies have even less wiggle room with their diet. Every diet (and treat!) fed must meet your dog's needs and not include ingredients that could trigger his symptoms.

If your dog is on a prescription diet, rotational feeding may not be an option. Hills, Royal Canin, and Purina are three companies that produce prescription diets, so checking out what a different brand has to offer for your dog's situation is a good place to start.

Your veterinarian or veterinary nutritionist can guide you when choosing compatible diets that are appropriate for your dog's unique health needs.

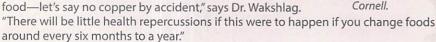
Bottom Line

As long as you feed a complete and balanced diet that meets AAFCO standards and that your dog likes, you're fine! Some dogs and owners do best with a set diet that they stick with all the time, while others thrive on variety. If trying rotational feeding, compare nutrient levels and calories between foods and plan ahead so you can take a few days to transition your dog between foods, and work to rotate among foods with similar fat, protein, and calories.

A Potential Safety Net

One of the pluses to rotational feeding or to mixing multiple diets together is that it provides you with a safety net in case something goes wrong with a particular food. Dog-food recalls due to contamination or problems with a specific batch of food are somewhat common, and can gum up the supply chain. If your dog has tolerated multiple diets well, you already have other options lined up if one of your chosen foods is subject to a recall.

"I have heard one nutritionist say she likes to change it up once a year just in case there was a formulation error in a dog food—let's say no copper by accident," says Dr. Wakshlag.





Dr. Joseph Wakshlag is Section Chief of Nutrition at Cornell.

Finding a Tick on Your Dog

Products that repel and kill ticks aren't like bug zappers

any effective products are good tick preventives, provided you follow the directions exactly as printed and be timely in your application.

"Tick prevention is a must for pets that go outdoors, especially if they go hiking or to areas where ticks are abundant. If deer or wildlife are in areas where you walk or hike your dog, tick prevention is absolutely necessary," says Leni Kaplan DVM MS, senior lecturer, section of community practice service at Cornell University's College of Veterinary Medicine.

"Not only do we worry about the dogs getting tick-borne diseases, but if a dog is not on prevention, he can carry a tick into the house, which can then fall off and find a human host. Humans get much sicker with tick-borne diseases (including Lyme disease) than dogs, so canine tick prevention is for the humans as much as the dogs. Thankfully, we have many veterinary-approved tick products available these days including topical products (Advantixx or Frontline), orals (Bravecto, Nexgard, Simparica), as well as the Seresto collar (see sidebar)," says Dr. Kaplan.

See a Tick?

If the tick is crawling on your dog, collect it up in a tissue (ticks walk; they can't jump) and either put it in a bottle of rubbing alcohol or flush it down the toilet.

Ticks who have attached require more effort and care on your part."My preferred ways of removing ticks include using the "Ticked Off" Spoon tick removal device, using tweezers, or removing the tick with your fingers," says Dr. Kaplan. Avoid those old wives' tales instructing you to use oil, gas, or matches. These can harm your dog and usually are not successful. Grasp the tick as close to your dog's body as possible. Don't grab just the tick's body. You want to get down close to the skin, so you get its head and remove it intact. Pull straight back, slowly and steadily. Be sure to wash your hands thoroughly afterward.

Check the spot where you removed the tick, says Dr. Kaplan. "Most of the time you do not have to do anything once the tick is removed. There may still be a raised irritated area where the tick was, similar to us reacting with a raised bump from a mosquito bite. This bump will clear up over time, usually by two weeks or so. It will not hurt to apply antibiotic ointment on the site or hydrocortisone cream to treat the redness and inflammation. Most of the time, the tick heads are removed with the body (ticks do prefer to stay in one piece). Make sure to remove the tick slowly so the tick has a chance to release from the dog. If a tick head was left behind, it will ultimately be taken care of by the body (either digested or rejected via a tiny draining tract)."

Three percent hydroxide could be used to clean the spot, which may kill any Lyme-disease spirochaetes. You can clean the spot with warm soap and water, then apply any ointment needed.

Diseases

Does your tick need to be checked for infectious diseases? Check with your local health department or

cooperative extension office for labs in your area.

Most of the evaluations are used to track trends in infectious pathogens in an area, not for treatment of an individual pet or person. "Identifying and evaluating a tick does not tell me if it was latched on long enough to actually transmit disease (most diseases require 24 to 48 hours of attachment to infect a new host), so it will not alter my course of case management no matter what the result is," says Dr. Kaplan.

"Tick prevention is key to preventing concerns for tick borne disease in dogs and humans. Use veterinary-approved topicals diligently (do not skip months or add a few days to stretch the time before reapplication)," says Dr. Kaplan.

"After walking or hiking with your dog, make sure to do a tick check, which means check over the entire dog from nose to tail tip (including underneath, legs) and immediately remove any ticks that are found. I typically check my dogs before we get back in the car (if we drove to a hike) and again when we get home before we go in the house. My dogs are diligently on prevention and get tick checks after every walk," she says.

For a short-hair dog, a visual inspection will catch most ticks, though you need to look closely for tiny deer ticks. Some people use a masking-tape lint-remover tool to grab ticks before they attach. Running a flea comb through your dog's coat will catch many as well.

For long-hair dogs, a comb will help you find ticks, but the best option is to use a blow dryer set on cool to move the hair so you can inspect the skin to be sure no ticks have walked aboard.



Seresto Collars

The Seresto collar has been accused of being responsible for severe illness in pets. Most of these reports are anecdotal; no clear causation has been established. It is possible that counterfeit versions are responsible for severe side effects. "Rest assured that the U.S. House Subcommittee on Economic and Consumer Policy and Elanco are investigating these allegations. My advice to pet owners: Make sure to purchase the collar from your veterinarian or a veterinary-approved distributor," says Dr. Kaplan.



Veterinary experts have found no reason to be alarmed about geniune Seresto collars.

Rescue Struggling with Trust

A positive attitude and a basket muzzle for safety

My daughter is a subscriber, and we have Brodie, a 5-year-old rescue. He arrived with a number of issues, and he still doesn't trust people and gets scared by sudden moves and noises.

He is registered as an emotionalsupport animal, and I am training him to become a psychiatric service dog. It's going well, but when people get too close to me, he growls or barks sometimes.

Brodie is instrumental for my mental health. I lost my husband four months ago and two sisters three weeks ago. I need to be able to take him everywhere and not be afraid of him getting aggressive.

When we eat in a restaurant, he is fine and sits down under the table. We go to the grocery store and he is fine, but one day a kid poked him and he growled at the kid. On another occasion in a restaurant, a girl got really close to me and he growled too.

He goes to the daycare twice a week, and we walk around the neighborhood several times a day. He ignores most of the distractions when we walk around, but sometimes he gets very upset when we cross paths with other dogs. I am not happy with it.

When I am not at home and a friend comes to try to walk him, he gets defensive and goes to my room and

Do You Have a Behavior Concern?

Send your behavior questions to Cornell's renowned behavior expert Katherine Houpt, VMD, Ph.D., shown here with Yuki, her West Highland White Terrier. Email to dogwatcheditor@cornell.edu or send by regular mail to



by regular mail to DogWatch, 535 Connecticut Ave., Norwalk, CT 06854-1713.

Coming Up ...

- Let's De-Skunk That Smelly Dog
- What to Look For in a Safe Car Carrier
- ► Hypothyroid Dogs—More Than Excess Weight
- Arthritis Therapies That Work and Don't Work



A comfortable basket muzzle allows your dog to pant and drink water, but keeps everyone around him safe. As a bonus, it also causes people to stay away from your nervous dog. But, you need to train your dog to accept it.

growls. Since my husband's departure, he is becoming more protective. What can I do to avoid this aggression?

I am so sorry for your losses. How difficult it must be for you to cope with so many tragedies in such a short period of time. I am sorry that Brodie cannot offer you the support you need. I am not sure he is being protective. Given his history, he is most likely acting out of fear.

Also, just to clarify, an emotional support animal is not a service animal and is not automatically granted access to the same public places.

I am sure you don't want to hear this, but you should consider muzzling him when he will be in public. It won't make him more aggressive, and it won't make him less aggressive, but it will discourage people from approaching him and protect them if they do.

To train him to accept the muzzle you have to be positive. Don't say, "Oh, Brodie, I am so sorry to have to do this to you." Instead say, "Look, Brody. See the beautiful new collar I bought you!"

Choose a basket muzzle, preferably a padded one, not a sleeve-type muzzle that is good only for short-term use when something unpleasant must be done to him, usually at a veterinary office.

First, smear the inside of the muzzle with squeeze cheese, peanut butter, or liverwurst. Hold it up to his nose and let him lick the sticky stuff off the inside of the muzzle. Remove the muzzle before he is finished. Repeat this many times a day until he eagerly sticks his nose in the muzzle for his treat.

The next step is to fasten the muzzle behind his ears. Remember to remove the muzzle before he is finished with his treat. Once fastening the muzzle goes well, you can leave the muzzle on and take him for a walk or something exciting to take his mind off it. Be sure the muzzle fits so well that he cannot remove it.

You should be able to relax when he is wearing the muzzle and that should help him relax too.

You can also try to reduce his fear by pairing the things he fears (close proximity of people and other dogs) with things he likes (yummy treats).

When you are walking him and a dog appears say, "Look at the nice dog," and give him a delicious treat before he can react. You also should try to do this when people, especially children, approach.

Finally your veterinarian should be able to prescribe medication that will reduce his anxiety.

We're Spending More—According to American Pet Products Association and the Pet Industry Distributors Association veterinary spending rose 7.2% from 2019 to 2020, while sales of pet food and treats rose 9.7%.

More Pests Ahead—The Companion Animal Parasite Council says to expect an increase in Lyme disease, ehrlichiosis, and anaplasmosis this year. Heartworm will also be on the rise as mosquitoes are expected in large numbers this year. Go to petdiseasealerts.org/forecast-map to see the expected surge in your area.

Please, Please Stay—According to Veterinary Practice News, a new study from the University of Guelph shows that dogs "showed heightened levels of physiological and behavioral signs of fear and stress when examined alone as compared to having their owners in the room."

Dog Finds Missing Woman—According to Patch.com, a missing elderly woman from New Jersey was found by police dog Rico, who followed her scent and led rescuers to the woman, who had fallen down a steep embankment. ■