

THIS JUST IN

New Cat Friendly Veterinary Guidelines

Released by ISFM and AAFP

Two new Cat Friendly Guidelines protocols for veterinary clinics have been released to promote positive, respectful interactions with feline patients and to reduce the stress associated with veterinary environments.

The guidelines are published jointly by the International Society of Feline Medicine (ISFM) and the American Association of Feline Practitioners (AAFP). They cover all aspects of a cat's veterinary experience, including the journey to the practice with the owner and interactions with the veterinary team during clinical assessments.

These publications offer clinics guidelines to implement cat friendly interactions and promote minimal handling so cats have a sense of control and choice when being handled in an effort to reduce feline stress. They also help educate cat owners to understand how to make the trip to the veterinary clinic less stressful.

The goal is to create an experience that considers a cat's natural behaviors and reduces fear and anxiety. The guidelines were written by experts in feline medicine and behavior and draw upon the experience gained over 10 years of the groundbreaking ISFM Cat Friendly Clinic and AAFP Cat Friendly Practice initiatives. ■

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Why Does My Cat Need an Exam to Get a Refill?

Front-desk workers hear that question every day

Your cat is close to running out of her prescription medications, but you're out of refills. You call your veterinarian, hoping to pick up the medication. The receptionist tells you that your cat needs to be seen first, but if you are out, you can pick up a few pills to hold you over until the appointment. Why all the fuss?

Many reasons! First and foremost, your veterinarian must monitor your cat's health. While you may not have noticed, your cat's health may have changed. She may have lost or gained weight, making the previous dosage inappropriate. She may be exhibiting symptoms that the medication is not performing as well as expected or is causing side effects and needs to be changed. And, of course, her health problem may have improved or deteriorated, requiring a medication adjustment.

If your cat switched from being an indoor-only cat to indoors/outdoors or



Prescribing medications without a valid patient-client relationship is illegal in many areas and does not fit the American Veterinary Medical Association Code of Ethical Practices.

What You Should Know

Refill times. Plan ahead rather than waiting till you gave your cat her last dose. If your veterinarian needs to see the cat back in six months, you will not be given refills for any longer than that. The label on the medication shows how many refills you can get. Keep in mind laws may regulate how many refills you can be given.

Available pharmacies. An increasing number of pharmacies can fill pet prescriptions and may save you money, but it's often wise to get those first pills from your own veterinarian so you can begin treating your cat immediately. Your veterinarian will write a prescription for you for the remaining refills if you ask for a written prescription.

vice versa, she may now need some added medications or may be able to stop some. (The same is true of vaccinations!)

Antibiotic resistance. Overusing antibiotics or improperly using them can lead to resistant bacteria that can harm people and pets. Your veterinarian may

(continues on page 8)

What You Can Do

Plan for refills. Know when you will need medication refills and make an appointment for that time now. Veterinary appointments can be difficult to secure. If you're moving and will need to change veterinary clinics, ask your current veterinarian for enough medication to hold you over until you get established at the new clinic.

Cat Writers' Association Annual Awards

CatWatch earns eight Certificates of Excellence and three major awards in the 2022 awards contest

Each year the Cat Writers' Association conducts a contest in which they choose the best articles published, awarding these titles Certificates of Excellence. From these, major awards are given. *Cornell CatWatch* earned eight Certificates of Excellence and three major awards. In addition, *Cornell CatWatch* earned a Certificate of Excellence as an overall publication.

Debra M. Eldredge, DVM, earned Certificates of Excellence for:

- ▶ "Alert: Urinary Emergencies" (December 2021)
- ▶ "Toxoplasmosis: Still A Concern" (July 2021)
- ▶ "Asthma Can Be Controlled" (March 2021)
- ▶ "Reality and Rabies In Strays" (August 2021)

Eileen Fatcheric, DVM, earned Certificates of Excellence for:

- ▶ "End the Wave of Fat Cats" (August 2021)
- ▶ "Living With an FIV-Positive Cat" (October 2021)
- ▶ "The Aging Cat Needs a Careful Eye" (September 2021)

Katherine Basedow, LVT, earned a Certificate of Excellence for:

- ▶ "Rescue or Rotten" (January 2021)

In the major awards, Dr. Eldredge earned the coveted Muse Medallion for the highest-scoring written article in veterinary medicine and research (long) for "Asthma Can Be Controlled." The article also earned Dr. Eldredge the Dr. Jim Richards Cornell Feline Health Center Veterinary Issues Award, which is presented for the highest-quality entry on the topic of technological advances, research, new medical developments, or innovations in feline veterinary medicine.

Dr. Fatcheric's article "Living With an FIV-Positive Cat" earned the Lorie Huston Health Award, which is presented for the most outstanding single article, column, or blog (print or online) reporting on feline health care issues. Entries are judged on excellence of writing and technical accuracy, the significance of the topic, and public education impact on feline health.

We are proud of our writers, who strive to help our readers better understand and care for their cats. ■

Survival in Cats with High Rise Syndrome

Study finds that the severity of injury reflects the mortality rate

High rise syndrome (HRS) is a term used for injuries sustained when pets fall from buildings. While retrospective studies investigating the prevalence of injuries to various organ systems and of survival in canine HRS have been published, few studies focusing on predictors of survival in feline HRS have been published. A study published in the *Journal of Feline Medicine and Surgery* evaluated the prognostic utility of the Animal Trauma Triage Score (ATTS) and Modified Glasgow Coma Scale (MGCS) in cats with high-rise syndrome.

Using information from 25 cases in the study, the researchers found that the mortality rate in this cohort of cats with HRS was 16%. Univariate statistical analysis showed that lactate, creatinine, body weight, and ATTS were higher and MGCS lower among non-survivors.

Multivariable statistical analysis showed that ATTS was the only factor significantly associated with mortality. The researchers concluded that ATTS is predictive of severity and outcome in cats with HRS and can help facilitate decision-making by owners and veterinarians. ATTS is calculated using physical examination findings from the vascular, cardiac, neurologic, skeletal, respiratory, and eye/muscle/integument systems. ■

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Cornell CatWatch

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CONTRIBUTING WRITERS

Eileen Fatcheric, DVM
Katherine Basedow, LVT

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College of
Veterinary Medicine

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Send questions and letters to the editor:

CatWatch
535 Connecticut Ave.
Norwalk, CT 06854-1713
catwatcheditor@cornell.edu

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Advanced Imaging Benefits

CTs and MRIs help pinpoint diagnosis and treatment

Most people are familiar with standard diagnostic imaging. You expect an x-ray—technically called a radiograph—for a broken leg and an ultrasound for a bladder problem. Many veterinary clinics have the equipment to perform these diagnostic imaging tests in-office at a reasonable cost from \$75 to \$500, respectively.

Specialty clinics and university hospitals often have computed tomography (CT) and magnetic resonance imaging (MRI) capabilities. CT and MRI equipment is expensive and requires skilled technicians and veterinarians trained to interpret the results. The scans are expensive, ranging between \$1,500 and \$4,000. Luckily, most pet health insurance companies will cover these studies if medical necessity is documented by your veterinarian.

“Both of these techniques are state of the art and require careful evaluation by a specialist radiologist to ensure all the lesions and abnormalities are detected,” says Philippa Johnson BVSc, MRCVS, associate professor of diagnostic imaging at Cornell University’s College of Veterinary Medicine. “They are incredibly useful tools to help us diagnose disease in our case work ups.”

CT’s Diverse Ability

In simplest terms, a CT takes a series of detailed, thin cross-sectional radiographs of your cat. The scans are digitized and processed through a computer to provide virtual two- or three-dimensional views. One helpful description describes the individual radiographs as slices of a

loaf of bread. Then the 3D computer manipulations show you the whole loaf.

CT scans provide a detailed look at the body, including the musculoskeletal system, organs, bones, blood vessels, and even fat. At Cornell, Dr. Johnson predominantly uses CT to screen for bone diseases such as complicated fractures and bone tumors, but a CT may be ordered to evaluate lung and heart disease and tumors. CT can be used for 3D reconstructions of a complicated fracture.

Bone and lung conditions are often best viewed with CT, as the contrast between the tissue being studied and surrounding tissues is great. Bone is dense and lung has a fair amount of air, so opposite situations, but both provide excellent contrast.

Newer CT machines can image a cat in less than 15 minutes, which may allow the use of sedation instead of general anesthesia. This may make CT an option for an elderly or very ill cat.

CT scans are an especially good choice to evaluate dental disease, ear problems, head trauma, possible tumors (masses), and brain lesions. They are a good choice for chest issues because a CT scan can adjust for respiratory movements while an MRI cannot. CT scans often include use of “contrast,” which involves injecting a dye that will be highlighted on the scan.

“Tumors tend to have a high vascularity and so are enhanced when we use contrast in CT. This allows us to identify the margins of tumors on CT, and we therefore use this technique for

radiation and surgical planning,” says Dr. Johnson. A CT scan with contrast helps the surgeon or oncologist plan their treatment as precisely as possible and increases the probability of all the cancerous tissue being treated.

Time for an MRI

An MRI uses magnetic fields, combined with computer-generated radio waves, to provide a slightly different set of cross-sectional images that also can be combined into a three-dimensional view. No radiation is involved, but MRIs take 20 to 30 minutes to complete.

An MRI is superb for differentiating areas of low contrast, such as the brain, muscles, tendons and ligaments (as opposed to bones), the spinal cord, and the eyes. An MRI is the gold standard for brain or spinal-cord evaluations, says Dr. Johnson, because they give the most amount of detail. An MRI may detect brain changes compatible with seizures. For soft tissue, an MRI may be indicated for tendonitis in a shoulder or ligament tears in a stifle joint.

Risks

There are some risks associated with both scans. “MRI is a relatively low-risk procedure as it uses magnetic resonance energy. MRI can cause some burns to form on the skin in a rare number of cases. A CT scan does give every animal a relatively high dose of radiation. We don’t understand how this impacts animals, however in humans, this can predispose to cancers later in life,” says Dr. Johnson. With both, some cats can have reactions to the contrast agents. For an MRI, general anesthesia is recommended.

Hopefully your cat will never need advanced imaging. If she does, however, the information it can provide helps develop a more precise treatment plan. ■

PET Scan

Positron emission topography (PET scan) is used infrequently in veterinary medicine but can be useful in cancer cases. A PET scan uses radioactive material to provide contrast coupled with a special camera to record results. It takes longer than a CT and leaves some residual radiation in your cat’s body for a short period, but it shows normal and abnormal metabolic activity in the tissues and organs.



A. Thaler/istock

After the physical exam, your veterinarian will determine if imaging is needed..

Catch Kidney Disease Early

The sooner kidney disease is detected, the better your cat's quality of life and longevity

While chronic kidney disease (CKD) cannot be cured, it can often be managed for many years. As with most diseases, early diagnosis and proper management improves the long-term prognosis for your cat.

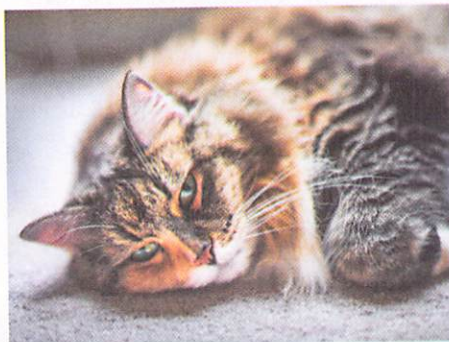
Early Clinical Signs

Between 30% and 40% of cats over the age of 10 will have some evidence of CKD. Despite this high prevalence, many owners miss CKD's early signs because they are usually subtle and nonspecific.

"I think many cat owners miss the early signs because those signs are usually so insidious," says Noelle Perry, DVM (Cornell 1996). "That is why screening diagnostics like blood and urine tests are so important." Dr. Perry says that most of her clients who own cats with CKD report an increase in wet spots in the litterbox and/or increased drinking to a level that seems unusual.

To increase your chance of catching kidney failure early, consider using water bowls that allow you to accurately assess water intake. You might choose a bowl with stripes or a design that offers an instant visual "gauge" so you can judge water consumption. Some cat bowls offer measuring lines that can be used to measure the volume of water consumed. Otherwise, when you change the water bowl daily—you do change the water every day, right?—you can use a measuring cup to measure its contents and keep a log for comparison.

If you use a water fountain, which is preferred by many cats, it is more difficult to judge water volumes with just a glance, but you can use the



If your previously active older cat has lost all her zest for life, discuss CKD with your veterinarian. The sooner you catch the disease, the better.

measuring-cup method with your daily change of water, too.

Monitoring food consumption is also important in identifying a lack of appetite promptly. This can be especially difficult if you have a multi-cat household. Consider feeding affected cats in a separate room or using an automated feeder if this is the case. As with water consumption, keeping a log for comparison over time can be helpful.

Of course, all litterboxes should be cleaned daily, and you should be able to tell if the box is wetter than normal. With a multiple cat household, the problem is determining who is producing more urine if you do notice an increased wetness in the litter. The best way to do this is to isolate the cats and give each their own litterbox. Some people will isolate one cat at a time to save on rooms and litterboxes.

Some cats with CKD will vomit or have unusually bad breath, but these signs are not as common as the others listed above and usually occur in cats with more advanced disease.

Time for a Diagnosis

Over the years, advances have been made in diagnosing CKD in cats. Your veterinarian will take a thorough history and do a complete physical exam, including bloodwork and a urinalysis.

A basic urinalysis may show some changes indicative of an early kidney problem. Urine specific gravity, which tells how well your cat concentrates her urine, can be a clue, as can evaluating

protein in the urine. An inability to concentrate urine and/or loss of protein into the urine can be indicators of CKD. If protein is detected in your cat's urine, your veterinarian may suggest measuring the creatinine ratio. Creatinine is a waste product that is normally filtered from the blood by the kidneys, and it may accumulate in the blood when kidneys are not functioning appropriately.

Excess protein in the urine may be caused by things other than CKD. For example, microscopic blood and white blood cells found with urinary tract infections can result in excess urinary protein. Finally, urine samples can be contaminated by proteins found in the environment and/or the external genitalia if the sample is obtained by a free catch or is collected from a clean litterbox that has no litter in it.

A standard blood panel usually will show some changes if your cat has CKD. Among the first values to change are creatinine and blood urea nitrogen (BUN), another waste product of protein metabolism. The BUN and creatinine increase when the kidneys lose the ability to filter these metabolites out of the blood. Dehydrated cats may also show increased creatinine.

SDMA, or symmetric dimethylarginine, is an amino acid that is routinely broken down in your cat's body and eliminated via the kidneys. SDMA is a sensitive indicator of renal function, as levels may rise with 40% loss of renal function. In comparison, as much as 70% of the normal kidney function has been lost by the time levels of BUN and creatinine rise. Some blood chemistry panels for senior cats now include SDMA as part of the panel, but others do not.

Treatment Plans

Renal health professionals at the International Renal Interest Society (IRIS) developed a staging scheme that includes four stages of kidney failure to help evaluate cats.

A primary factor in classifying a cat's CKD is bloodwork, including creatinine and SDMA concentrations. Additional factors include protein loss in the urine and blood pressure, as the kidneys are vital to the maintenance of normal blood pressure. Cats with CKD may develop high blood pressure.

IRIS emphasizes considering two primary objectives when planning a treatment regimen for cats with CKD: maintaining good quality of life and

Signs of Kidney Disease

- ▶ Loss of appetite
- ▶ Weight loss
- ▶ Unkempt hair coat
- ▶ Increased thirst
- ▶ Increased urination
- ▶ Decreased activity
- ▶ Vomiting
- ▶ Bad breath

slowing the progression of the disease.

Encouraging water intake is vital. Place multiple bowls of fresh, cool water in easy-access spots around the house. You can add some water to your cat's food or switch from dry to canned food. If your cat isn't impressed with water on her food, try adding either a small amount of water from a can of tuna or low-sodium chicken broth to her water, as these may entice picky cats to drink. For some cats, a dripping faucet or a pet fountain gets them drinking more.

Cats who are resistant to drinking more or who get dehydrated for any reason may need supplemental intravenous (IV) fluids at the veterinary clinic or subcutaneous (SC, under the skin) fluids at home. Most cats tolerate SC, and most owners can be taught to administer SC fluids.

Your veterinarian will likely recommend a prescription renal diet that has lower protein and phosphorus levels than regular cat food. If this is the case, introduce the diet change gradually, i.e.: 75% old diet, 25% new diet for four days, then 50/50 for four days, then 25/75 for four days. At that point, switch to 100% of the new diet.

If your cat objects, try another brand. Many brands and flavors are available in both wet and dry food, and most cats will eat at least one of these. If not, a veterinary nutritionist can assist with designing an appropriate homemade diet for your kitty.

Hypertension

Increased blood pressure is a common side effect of kidney disease. Any cat

with CKD should have their blood pressure checked every three months, as uncontrolled hypertension can damage her heart, eyes, and brain, and can also worsen kidney function.

Medications that can be used to control hypertension in cats include a calcium channel blocker like amlodipine or an angiotensin receptor blocker like telmisartan. Luckily, these are both only given once a day, although some cats may require both.

Electrolyte Balance

Since the kidneys help maintain normal electrolyte balance, cats with CKD may have abnormal blood electrolyte concentrations. These can usually be managed via diet, but some affected cats may need phosphate binders, supplemental potassium, or other therapies to restore normal blood electrolyte concentrations.

The kidneys normally produce erythropoietin, a hormone that increases red blood cell (RBC) production, so a cat with CKD may have low levels of this hormone, which can cause him to become anemic because he's not producing enough red blood cells. He may need transfusions or erythropoietin administration to restore RBC levels.

Prognosis

CKD is a progressive disease. While early diagnosis and treatment can slow the progression and improve a cat's quality of life, there is no cure.

The prognosis for cats with CKD depends upon the IRIS stage at the time of diagnosis. Cats in IRIS stage 2, for example, have a median survival time of 15 months to three years. Cats in IRIS stage 4 at the time of their diagnosis have a median survival time of between 20 days and a little over three months.

In many, if not most cases, cats with CKD are humanely euthanized once their quality of life diminishes significantly. Your veterinary professional team is vital in providing support and guidance to owners of cats with CKD during the difficult time that they are considering this option. ■

Transplants, Dialysis

While offered at a few institutions, dialysis is rarely an option for cats, except in cases of short-term acute renal failure in which kidney function is expected to return to near normal with appropriate support, such as that which may be caused by a toxin.

Kidney transplants can, in theory, be performed, but this procedure is quite expensive. It requires the adoption of the right donor cat and lifelong medications to prevent immunologic rejection of transplanted kidneys. Cats with underlying health conditions are not usually eligible for transplants.

Possible Tests for CKD

If your cat has symptoms of CKD, your veterinarian may recommend some or all of these tests to determine whether treatment is needed.

Bloodwork

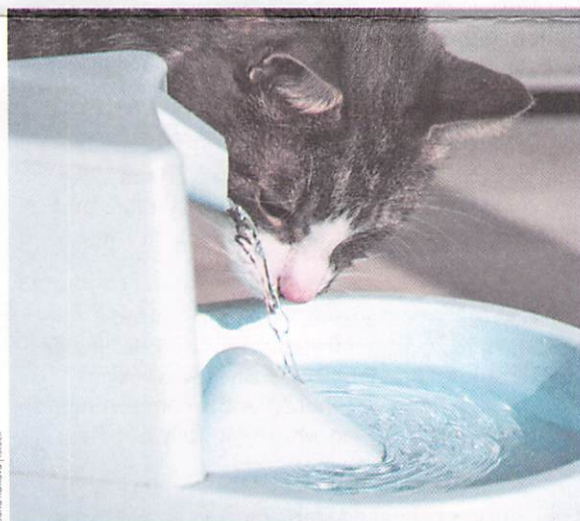
- ▶ Blood urea nitrogen (BUN)
- ▶ Creatinine
- ▶ Electrolytes (sodium, potassium)
- ▶ Red blood cell count
- ▶ Symmetric dimethylarginine (SDMA)
- ▶ Protein concentrations

Urinalysis

- ▶ Concentration
- ▶ pH levels
- ▶ Protein concentration
- ▶ Presence of red blood cells
- ▶ Presence of other cells
- ▶ Urine culture for bacteria

Other Tests

- ▶ Abdominal ultrasound
- ▶ Radiographs (X-rays)
- ▶ Blood pressure
- ▶ Microscopic evaluation of biopsy samples



Daria Kulicova | iStock

A pet water fountain can encourage some cats to consume more water.

Treating Frostbite in Cats

The cat's paws, ears, and tail are most at risk

With the depths of winter upon the northern states, frostbite is a threat for cats who venture outside. When our cats are exposed to the cold, their bodies prioritize keeping their internal organs warm. The blood vessels in their extremities—legs, ears, and tail—constrict, decreasing the blood flow in those areas to divert it to their core. In the short term, this is a great strategy. But over time, the tissues with decreased blood flow are more vulnerable to freezing.

Who's At Risk

Brief outings into the cold are relatively low risk for most cats. Frostbite becomes a concern in extreme cold temperatures or if the cat has prolonged exposure to the cold. Being wet or damp and wind chill factors increase risk.

Barn cats often do well, as they come and go as they please and have ready access to shelter, but be sure they are inside when closing the barn up at night, or make sure there is a kitty access area.

House cats who get out by accident and strays who do not have a home are at higher risk. Indoor cats are often scared when they end up outside and more worried about avoiding predators than staying warm. They also are not accustomed to cold temperatures and may have a thinner undercoat because of being used to a heated house.

Cats with health conditions that decrease circulation, such as diabetes or heart disease, are at increased risk of frostbite and can sustain tissue damage more quickly than healthy cats. Kittens and senior cats with minimal body fat are also at increased risk.

As frostbite progresses, the frozen tissue will die, turn black, and slough off. This process can also lead to secondary

infections because of the damage caused by inflammation of the tissue.

It can take several days to truly assess the extent of the damage from frostbite. Even if caught "in time," the affected areas will usually swell as the tissues thaw and will be painful and inflamed.

Treatment

If you are suspicious of frostbite in a cat, the first step is to get him warm and dry. Use warm towels right out of the dryer if

available and wrap the cat. Pat him dry. Avoid rubbing the areas, as this action can cause additional damage to the compromised tissues.

Veterinary care is recommended. The veterinarian will do a thorough exam to get an initial estimate of the damage and may run bloodwork to check for signs of organ failure in severe cases. Any sores will be cleaned and treated as appropriate. Antibiotics may be given to prevent infection as the body deals with the damaged tissues, and pain medications will be given as needed.

Once the cat is warm, dry, and stable, he will be monitored for several days. He might be able to go home with you and

Nilla's Story

This tiny calico kitten was found nearly frozen to death in a pipe

On Valentine's Day 2020, a roughly 4-month-old calico kitten was found partially frozen in a pipe. The men who found her heated the pipe enough to get her out and brought her to Eagle's Nest Veterinary Hospital in Plattsburgh, N.Y., wrapped in blankets inside a cardboard box. As the only technician vaccinated for rabies, she became my project. I opened the box to find her wide-eyed and terrified, with large chunks of ice still frozen to her body.

We used warm water and heated towels to get the ice off and warm her up and treated the mild burns on her sides from where the pipe had been heated to thaw her enough to free her. Once ice-free and dry, we bandaged her paws. Only time would tell how extensive the damage was.

Over the next several months, she healed. Gradually, we were able to stop bandaging each paw, one by one. Several of her toes are malformed, particularly on her left paws, but she kept all her feet and her ear tips, and only lost the last inch of her tail. She blossomed into a sassy little cat, playing with toys and exploring the hospital during free time after hours, and giving Dr. Eaglefeather attitude when he checked on her.

Bringing a cat home wasn't in the plan, but I adored this feisty little calico. And when she bopped a dog who strayed too close to her kennel on the nose, I knew I had to have her. After cajoling my landlord and perhaps bullying my husband, she came home on Memorial Day weekend. My husband dubbed her Nilla.

Now, we can't imagine life without a cat. Nilla and my oldest dog recognized kindred spirits and became friends. She lords over our three current dogs (all lesser beings) and has my husband wrapped around her dainty paw. She loves clicker training and must be shut out of the room when it isn't her turn. She comes running to have her teeth brushed every night and sits in my lap while I carefully trim her nails, even on her "bad" paws.

Every night when she curls up in my husband's lap and starts purring away, I am so grateful to the men who found her and gave her a chance. - Kate Basedow, LVT



Kate Basedow Photo

Nearly frozen, Nilla was brought to a nearby clinic and saved.

Signs of Frostbite

- ▶ Pale, bluish, or gray skin
- ▶ Firm or brittle texture
- ▶ Skin cold to the touch
- ▶ Pain when touched
- ▶ Swelling
- ▶ Blisters and sores

What You Can Do

- ▶ Ensure that any barn and indoor-outdoor cats have a way to get in the barn or other shelter in case they're left out. If you have strays, be kind and build them a shelter.
- ▶ Watch for signs of frostbite, including pale, bluish, or blackened skin, lameness, swollen paws, or red, inflamed skin.
- ▶ Warm a cold cat gradually with blankets warmed up in the dryer.
- ▶ Do not rub the cat, as rubbing can cause further tissue damage.
- ▶ With frostbite, seek veterinary care as soon as possible.

just come in for checkups, or he may need to stay in the hospital. Dead tissue may need to be debrided (removed) over the next week or two. In severe cases, the cat may require amputation of the affected body part or may even die.

The cat may need to wear an Elizabethan collar (cone) at points during the recovery process to prevent him from chewing at the affected areas. Think of the sting as your hands warm up after being outside in the cold!

Thankfully, frostbite is relatively rare for our pet cats. But if you do suspect frostbite in your cat or a stray that you have found, seek veterinary care as soon as possible. Prompt treatment for frostbite is the best option to preserve the cat's limbs and extremities. ■



A cat periodically lifting his foot out of the snow may be signaling it's freezing.

Annual Top 10 Cat Toxins

Reminder that potential poisons are everywhere

It's tough to be aware of all the things in our environment that could harm our cats. Cats are especially susceptible to poisoning due to their small body size, unique metabolism, and because they lick themselves frequently, which predisposes them to ingesting things. And, as we all know, feline curiosity is tough to control. If there's something new around, your cat will quickly find it.

According to the Pet Poison Helpline and Morris Animal Foundation, the top 10 household toxins for cats are:

1. Lilies, including day, tiger, and Easter lilies. The entire lily plant is toxic, even water from the vase. We can minimize risk to our cats by not having lilies in the house or yard.

2. Spot on flea/tick medication for dogs. If you use a canine flea/tick medicine that is not safe for cats—and some of the most commonly used ones are not—you must be extra careful that the cat does not come in contact with the product itself or even the dog you put it on until that product is thoroughly dried (watch for “greasy spots” in the dog's hair). Always check with your veterinarian and read the product label of any canine product to be sure it says safe around cats and kittens. Never put any canine product on a cat, as it can be fatal in some cases. It's wise to get your flea and tick products from your veterinarian or at least use the exact brands recommended by your veterinarian. Some “knockoff” products have caused serious health problems in pets.

3. Household cleaners. Household cleaners should be safely stored out of reach. Store them in a garage or basement closed off to your cat. If they must be in a cabinet, be sure the cat cannot open the cabinet. Watch for leakage from old products. When cleaning, shut your cats out of the room you're working in. Make sure the area is well ventilated until the air is clear.

4. Antidepressant medications. Store medications safely. Cats aren't the big chewers that dogs are, but they can work at a pill bottle to loosen a cap or chew

into some packaging. Note that human medications and supplements make up 40% of this list of potential toxins.

5. Essential oils. Consider passing on using essential oils in your home for the safety of your pets. If you must use them, do not let your cat near you or the oil and never put oils on your cat or allow them to lick your skin if you use oils. Provide good ventilation.

6. Anti-inflammatory medications. Use cat-proof storage methods.

7. Rodenticides. These kill rodents and pets. Store them safely behind locked cupboards or in an inaccessible garage or basement. Keep packaging in case your cat does get into some, as you need to let poison control know the exact ingredients if this happens. Don't let your cat hunt in areas where you have used rodenticides. Consider humane traps, snap traps, or electronic traps to get rid of uninvited critters.

8. Stimulant medications, such as medications for ADD or ADHD. Keep them locked away from your pets.

9. Onions and garlic. When using garlic and/or onions in cooking, keep the food away from your cats, even little bits that might tempt a curious cat.

10. Vitamin D preparations. These are found in tablets and creams—and rat poison. Signs of Vitamin D poisoning can start within 12 hours of ingestion by a cat. ■

<https://www.morrisanimalfoundation.org/article/toxins-poisons-dogs-cats?eType=EmailBlastContent&Id=7d8dfec8-cbaa-4a85-b165-35c1e86c214f>

Signs of Poisoning

- ▶ Uncharacteristic sluggishness
- ▶ Unsteady gait
- ▶ Drooling
- ▶ Heavy breathing
- ▶ Diarrhea
- ▶ Seizures
- ▶ Vomiting

Prefers Fabric Over Litter

Kitten will only use litter if no fabric is available

Q My stepdaughter is having a problem with her 7-month-old kitten who is inappropriately eliminating outside of her litterbox when any material/fabric is around. She prefers the fabric to pee on. She eliminates in the box when there isn't any fabric around.

This kitten was living at a construction site and was approximately 3 months old when she found by a construction worker who took her to a vet clinic. My stepdaughter worked at the clinic and adopted her. Soon afterward, the kitten developed a bladder infection. After it cleared up, the kitten was spayed.

We took her to the veterinarian recently to see if an illness was causing her to inappropriately urinate outside of the box. No medical condition was found. My stepdaughter has tried different litters and Feliway to see if the kitten would start using the litterbox when fabric was present. It hasn't worked. What would be the next step?

A Thank you for getting in touch, and I am sorry to hear of this kitty's problem. If a medical issue has been ruled out, it is possible that, for whatever reason, she has developed what is called an elimination substrate preference for fabric. This may have occurred when she had her bout of urinary tract infection and/or when she was hospitalized for her spay. In some cases, cats can develop aversions to eliminating on particular surfaces, and I presume that she has not developed an aversion to her litter, as it sounds like she will eliminate in her box if she doesn't have her presumptive preferred substrate for elimination (i.e., fabric). I presume she is defecating in the litterbox regularly.

Basic things like making sure that the litterbox is cleaned daily, has not been moved to a place that she doesn't prefer (i.e., too out in the open where she may



Litterboxes should be appropriate for the size of your kitten or cat, containing litter the cat is comfortable using.

feel vulnerable), and provides easy access via sides that are not too high are good ideas. Minimizing stress by avoiding the introduction of new pets, new people in the home, and construction noise to the extent that you can is also a good idea, as is making sure that any fabric she has soiled is well cleaned to remove the scent of her urine.

If she has developed a preference for urinating on fabric, the first very important step is to deny her access to any fabric outside of the litterbox. I know that this sounds simple, but it is very important, as allowing her to eliminate on fabric outside the box at all will only reinforce the problem and make it more difficult to address. If you need to isolate her to do this, that is reasonable.

In some cases, cats that develop a preference for fabric will do better with litter that is softer and finer. You can also try placing a small piece of the fabric in the litterbox and cover it with some litter to prompt her to urinate there. If this works, gradually increase the amount of litter that covers the fabric over time until you ultimately remove the fabric.

If you catch her in the act of urinating outside the litterbox, immediately stopping her and placing her in the litterbox may be helpful, but do not scold or

admonish her. Whenever she urinates appropriately in the litterbox, praise her with kind words and perhaps a food treat.

These are reasonable things to try, but consultation with a veterinary behaviorist may help if they are not successful. In some cases, anti-anxiety medications can be a useful adjunct to behavioral modification in addressing inappropriate elimination, but these are often more successful at addressing urine spraying. Best of luck, and please send an update when you can. ■

(refills, continued from page 1)

need to examine your cat to see if more antibiotics are truly needed or if your cat might need a change in antibiotics.

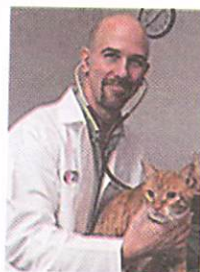
If your cat did not improve on the initial drug, a culture and sensitivity may be recommended along with a change in medication. The same holds true for antifungal medications.

Heartworm worries. If your cat is on a monthly heartworm medication, she must be tested annually for the rare cases when a heartworm "broke through" the medication and set up shop. If indeed the medication somehow failed, and your cat now has heartworms, she may benefit from medications to reduce inflammation in her lungs.

Monitoring chronic health conditions. If your cat is on a life-long medication, such as methimazole for hyperthyroidism, your veterinarian needs to assess your cat physically to see if the dosage is working.

If your cat is on a seizure medication, blood levels will need to be checked to ensure that your cat has the correct levels in her bloodstream to help prevent seizures but also minimize side effects.

Bringing your seemingly well cat back to the veterinarian for an exam to check her progress and refill the same medications seems like an annoyance to many people, but when you realize that it's all for the cat's wellbeing and good health, you realize that it's well worth making the appointment. ■



Do You Have a Health Concern?

Send your health questions to Bruce Kornreich, DVM, PhD, DACVIM, Director of the Cornell Feline Health Center and Editor-in-Chief of CatWatch. Email to catwatcheditor@cornell.edu or send by regular mail to CatWatch, 535 Connecticut Ave., Norwalk, CT 06854-1713.



Scan this code for more information on the Cornell Feline Health Center.

Coming Up ...

- ▶ Diabetic Syringes and Insulin for Cats
- ▶ Handle Your Cat's Heat Cycles Like a Pro
- ▶ Gain Control of Hyperthyroidism
- ▶ Understanding Feline Idiopathic Cystitis
- ▶ Answers to Questions on Carbohydrates