



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

THIS JUST IN

## Dog Communication Accuracy and owners

Given the sensitivity of dogs to human sounds, gestures, and gazes, researchers wondered if dogs had similar methods of communication.

On this basis, researchers designed an experiment to test the success of dog-human interactions in a hidden-object task. Using 30 dog-owner pairs, researchers focused on a communicative behavior called showing, in which dogs gather the attention of a partner and direct it to an external source.

While the owner waited in another room, an experimenter in view of a dog hid a favorite toy in one of four boxes. When the owner entered the room, the dog had to show its owner where the toy was. If the owner found the toy, the pair could play as a reward. Participants were tested in a close setup that required more precise showing and a distant setup that allowed for general direction.

Dogs performed similarly in both setups, however, owners who encouraged their dog to show where the toy was hidden increased their dog's showing effort but decreased their showing accuracy.

Although the researchers found no effects of communication history or the principal of least effort, the current study indicates for the first time that owners can influence their dog's showing accuracy and success.

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## Keep That Coat Glossy and Soft

Help from essential fatty acids omega-3 and omega-6

Good nutrition is what makes a healthy, shiny coat. Important nutrients include fats, adequate good quality protein, and essential vitamins and minerals. Some individual dogs and some breeds need additional support in the form of specific nutritional supplements, however. For example, some Northern breeds (Akita, Elkhound, Malamute, Samoyed, Husky, Keeshond) may require the addition of a zinc supplement for the best coat quality.

"Dull, dry coats will often respond to increases in fat in the diet. It really does not matter which source of fat, but we often discuss use of plant/vegetable oils since they are easy to use and are relatively inexpensive compared to animal-fat sources. Since vegetable sources are high in linoleic acid, they often can help with dander since they help in the formation of ceramides, which are the glue between the keratinocytes (cells in the outermost layer of the skin)," explains Joe Wakshlag DVM PhD, DACVN DACVSMR, Professor, Sections of Clinical Nutrition and Sports Medicine and Rehabilitation and Section Chief of Nutrition at Cornell.

Your dog needs the essential fatty acids omega-6 and omega-3 for an ideal hair coat. A low-fat diet tends to be especially low in omega-6 fatty acids, which contributes to a dull, dry, brittle hair coat. Vegetable oils are good sources of omega-6 fatty acids.

"From a nutritional standpoint, linoleic acid would be on the top of the list to help a dry coat. This is an essential omega-6 fatty acid, so should be provided in abundance in most commercial diets that meet AAFCO standards (the American Association of Feed Control Officials sets nutritional requirements). For itchy dogs, or ones with inflamed skin, the omega-3 fatty acids EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) might be more helpful," says John P. Loftus, PhD, DVM, DACVIM Assistant Professor, Small Animal Internal Medicine at



Few things are as beautiful as a dog with a healthy, glossy coat.

Cornell. EPA and DHA are plentiful in fish oils. "Certainly, protein and certain vitamins and minerals in general have some importance in coat quality," says Dr. Loftus. "Again, most foods are plentiful in nutrients, so I would consider potential medical skin conditions or investigate the diet more carefully. For example, a dog on a nutritionally unbalanced home-cooked diet could certainly have coat issues." ■

### Did You Know?

Shedding season usually results in a temporarily dull coat. All dogs shed to a mild degree all year, but big sheds occur in the fall and the spring. Breeds with a thick undercoat and longer hair shed more. That doesn't mean that short-coated dogs don't shed—ask any Dalmatian owner about hair!

Corgis and German Shepherd Dogs are notorious "hair factories," with a thick undercoat. The breeds known for low shedding, such as Poodles, tend to have a long growth phase for their hair. While most dogs grow hair to a certain length and then stop, Poodles will grow much longer.

You can speed things along with some extra grooming and a warm bath to loosen up the hair.



## Peace in a "Mixed" Household

Owners of cats and dogs often wish for a calmer home

A recent study from the United Kingdom looked at the efficacy of pheromones to help calm the waters, using the commercial products Feliway Friends and Adaptil. Both products contain synthetic appeasement pheromones that can help signal a safe environment to cats and dogs, respectively.

A six-week period of testing was done with 17 participants in two groups, with each group using one of the pheromone products. Owners did not know which product they were using and were asked to report weekly on the frequency of 10 specific undesirable interactions and seven specific desirable interactions.

The 10 undesirable interactions were: cat blocking dog's path, dog chasing cat/cat running away (not in play), dog growling at cat, cat hiding from dog or up high, staring, cat swiping at dog, dog barking at cat, cat hissing at dog, dog interrupting fuss over (attention toward) the cat (i.e., causing disruption when the owners fuss over the cat), and cat interrupting fuss of dog. The seven desirable interactions were: playing (pets enjoying play together), sleeping near each other, dog grooming cat, friendly greeting, cat grooming dog, sharing a bed, and both relaxed in the same room.

At the end of the study, the researchers determined that both pheromone products worked, with no major differences in effectiveness between the two. Both were associated with a decrease in dog chasing cat/cat runs away, cat hiding from dog, cat/dog staring at the other, and dog barking at cat. Adaptil also appeared to increase friendly greetings and time spent relaxed in the same room. The least successful situations had multiple cats, which may have been a confounding variable. ■

<https://www.frontiersin.org/articles/10.3389/fvets.2020.00399/full>



## An Active Lifestyle May Reduce Fear

Study finds non-social fears related to living environment

An active environmental lifestyle may help reduce fearfulness in dogs, says a study from the University of Helsinki. For example, noise sensitivity, fear of novel situations, and fear of slippery surfaces and heights are common behavioral problems among dogs. According to a behavioral survey of nearly 14,000 dogs, these non-social fears are associated with factors related to the dog's living environment, lifestyle, and breed.

Dogs that were engaged in activities the most and were actively trained were found to be the least fearful. The survey indicates that insufficient socialisation of puppies to various situations and new environments in particular has a strong link with fearfulness related to novel situations and loud noises as well as different walking surfaces, such as slippery surfaces, transparent stairs, or metal grilles. On the other hand, the company of other dogs reduced the occurrence of non-social fear. Fear of fireworks and surfaces were more prevalent among the dogs of first-time dog owners, while differences were also seen between rural and urban dogs.

Significant differences between breeds were identified in the study, with Cairn Terriers among the most fearful breeds and Chinese Crested Dogs among the least fearful. However, variance was seen between different non-social fears in the fearfulness of individual breeds. For instance, Pembroke Welsh Corgis expressed a lot of noise sensitivity but little fearfulness of surfaces. At the same time, the latter was common among Lapponian Herders, Miniature Schnauzers, Chihuahuas, and Labrador Retrievers, while noise sensitivity was less so. ■

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# Extracorporeal Shockwave Therapy

*This technology is great for osteoarthritis*

**E**xtracorporeal shockwave therapy is an emerging treatment option in canine physical rehabilitation. While more research still needs to be done to work out some of the details, this therapy benefits dogs with a variety of conditions, including the challenging osteoarthritis.

Shockwave therapy uses pressure to provide pain relief. The shockwaves are high pressure sound waves that travel at a high velocity. Most of us think of shockwaves occurring after an explosion or when something like a fighter jet moves faster than the speed of sound. But they can also be created on a smaller, more controlled scale and directed at a specific target.

There are three ways to create focused shockwaves: electrohydraulic, electromagnetic, and piezoelectric. Each machine uses different methods to turn electricity into a shockwave. The shockwave machine generates a shockwave and then delivers it to the area requiring treatment. When the shock hits a change in tissue density, such as a bone, joint capsule, or tendon, energy is released, causing a reduction in pain and promoting healing. This is repeated many times until the desired "dose" is achieved.

## Shockwave Pros/Cons

### Pros:

- ▶ Increases weight bearing
- ▶ Little to no side effects
- ▶ Long-acting relief up to six months
- ▶ Noninvasive

### Cons:

- ▶ Area being treated must be shaved (but hair grows back!)
- ▶ May cause bruising – contraindicated for dogs with clotting disorders
- ▶ Should not be used around head, eyes, spinal cord, or major organs, blood vessels, or nerves
- ▶ Some machines require sedation for treatment



*Shockwave therapy promotes chemicals in the body associated with feeling good, inhibits those associated with pain, and may block the transmission of pain signals to the brain.*

So how does it help? We aren't totally sure. "In general, the exact mechanism of shockwave therapy has yet to be fully defined," says Chris Frye, DVM, DACVSMR, CVA, Assistant Clinical Professor, Sports Medicine and Rehabilitation at Cornell University Hospital for Animals. "However, there appears to be both a biological effect (increased growth factors and mediation of inflammatory signaling) as well as a potential mechanical effect (potential reduction of nerve conduction of pain signals)." Basically, shockwave therapy promotes chemicals in the body

associated with feeling good, inhibits those associated with feeling pain, and may block the transmission of pain signals to the brain

Dr. Frye says, "A knowledgeable user will have a strong background in physics and clinical science, selecting protocols that appropriately target the desired site of application (number, depth, and intensity of shocks)."

Choosing exact settings and dose parameters is still something of an art, as research has not yet determined ideal protocols for all conditions and locations in the body. The three types of shockwave device have differing properties, so the user must be familiar with the particular shockwave unit. Settings will also depend on the site being treated and the individual patient.

### Uses

"Shockwave has little to no adverse effects and has been shown to significantly increase weight bearing in the affected joints," says Dr. Frye. "It has been studied in hips, knees, elbows, and shoulders for dogs. I like to augment pain management for osteoarthritis with extracorporeal shockwave therapy as there has been relatively good and consistent support of its use for this disease. However, shockwave may have other indications like tendon disease and bone healing."

Conditions that may benefit from shockwave therapy include:

- ▶ Fractures that are not healing
- ▶ Hip dysplasia
- ▶ Large wounds
- ▶ Lick granulomas

## Shockwave at Cornell

Cornell University Hospital for Animals now offers shockwave therapy for its patients. Dr. Frye says, "We now thankfully have a new piezoelectric unit generously gifted to us by the Derald H. Ruttenberg Foundation to help provide the best rehabilitation and pain management for our animals. The mechanisms in this unit (unlike other traditional types of shockwave, such as electrohydraulic) allow us to comfortably deliver our dosing to awake patients. We find this ideal for certain pets in which sedation is not desired. Furthermore awake therapy typically lends itself to an easier experience and shorter trip to the hospital for the patient and the family."

A typical shockwave therapy session for osteoarthritis at Cornell involves your dog and the veterinary staff sitting on a padded dog bed while your dog's affected joint(s) is/are shaved and then the treatment is performed. The base price for a session is about \$60 and includes two joints (you can also add additional joints if your dog has more problem areas).

Providing the most effective therapy for your animal relies on private donations for our equipment. We at Cornell are grateful to the Derald H. Ruttenberg Foundation and others for their support. If you are able to help a family or donate to our program, contact [petfriends@cornell.edu](mailto:petfriends@cornell.edu).



## Did You Know?

- ▶ Extracorporeal means “outside the body.”
- ▶ Human physical therapy also utilizes shockwave treatments.
- ▶ Shockwave therapy is also used to bust up kidney stones.

- ▶ Osteoarthritis
- ▶ Osteochondritis dissecans (OCD)
- ▶ Tendon and ligament injuries

Shockwave therapy is, for the most part, safe and has minimal side effects because of its noninvasive and targeted nature. The most common side effects are bruising and swelling at the treatment site, which usually resolve quickly. Pain medications can be used if needed.

Because of the potential for bruising, dogs with clotting disorders should not receive shockwave therapy. Other conditions that contraindicate shockwave therapy include: infections (including infectious arthritis), cancer, pregnancy, or neurologic deficits. It should not be used around the head, eyes, spinal cord, or major organs, blood vessels, or nerves.

### In Practice

Extracorporeal shockwave units consist of a box that generates the sound waves and a therapy head that looks like a thick wand that delivers the waves to the patient. The area being treated must be shaved to ensure that the therapy head has adequate contact. Gel will be applied to the application site. Some units can be loud, requiring the dog to be sedated. Treatments can be uncomfortable, depending on the pain level at the site.

Dr. Frye says, “Most studies using shockwave on osteoarthritis incorporate a series of three sessions one to two weeks apart that provide benefit for about three months, rarely up to six months. We follow similar protocols; however, such protocols may change depending on the patient and/or application site.” Some owners observe an improvement in their dog’s comfort even after the first session, but others may require the full series before seeing progress.

If your dog is sore immediately after the treatment session, don’t be alarmed. Pain medications can be given if needed (ask your veterinarian), and watch for an improvement in the days and weeks following the treatment. ■

# Hind-End Weakness

*Causes vary, but prompt intervention can help*

**A**s our dogs age, many begin to experience weakness in their hind legs. This does not mean, however, that hind-end weakness is normal and can be ignored. Getting a prompt diagnosis for the cause of the weakness will allow you and your veterinarian to formulate a plan to keep your senior dog moving longer.

### Many Potential Causes

“Weakness is most typically caused by a neurological disease or a musculoskeletal disease,” says Christopher W. Frye DVM, DACVSMR, CVA, Assistant Clinical Professor and Section Chief Sports Medicine and Rehabilitation at Cornell. “Nerves supply both sensory feedback on limb position and balance and anticipatory movement (sight), as well as provide signals to muscles to coordinate desired movements based on that feedback and thought processing. When there is dysfunction in feedback or motor output, weakness may be noted.

“Injury to muscle, bone, tendon, ligament, or joint may cause mechanical disruption and pain that contribute to lameness and weakness. Therefore, a variety of disease processes from acute trauma to slowly progressive osteoarthritis and cancer can affect these tissues responsible for movement of the back limbs,” says Dr. Frye.

### When to Seek Help

“Some diseases demand immediate attention whereas others are more insidious in their onset,” says Dr. Frye. “Quicker action with a diagnosis typically allows for earlier intervention and better results. Even hind-limb weakness caused by a slowly progressive and non-fatal disease like hip dysplasia responds best over the life of the animal with earlier intervention. Early medical management of hip dysplasia could prolong or prevent the need for surgical intervention. Other causes of hind-limb weakness such as a slipped disc (intervertebral disc disease), infection of the spine, and cranial cruciate ligament rupture (equivalent to human ACL) need to be addressed as soon as possible. Lastly, we find patients can even suffer from more than one issue at the same time, complicating the diagnostic process. These patients often



The technology available to help dogs with hind-end weakness runs from medications to custom orthopedic braces.

benefit from examination by a veterinary specialist (orthopedics, neurology).”

Diagnosing the cause of hind-limb weakness will always start with a physical exam, which will direct your vet to the next step for your dog. If an orthopedic issue is suspected, x-rays will be taken of the affected leg(s) to check for things like arthritis, structural abnormalities, fractures, bone cancer, spondylosis, or issues with the intervertebral discs in the spine. For neurologic issues, a magnetic resonance imaging (MRI) of the brain or parts of the spinal cord may be the next step. Computed tomography (CT) scans and MRI can also be enlightening for some orthopedic issues.

It may be necessary for your dog to be seen by a specialist. While visiting a specialty clinic can be expensive, it is often well worth the cost to get an

## Causes of Hind-End Weakness

- ▶ Cranial cruciate ligament rupture
- ▶ Degenerative lumbosacral stenosis
- ▶ Degenerative myelopathy (DM)
- ▶ Fractures
- ▶ Hip dysplasia
- ▶ Intervertebral disc disease (IVDD)
- ▶ Luxating patellas
- ▶ Osteoarthritis
- ▶ Spondylosis
- ▶ Trauma
- ▶ Tumors



## Common Symptoms of Hind-End Weakness

- ▶ Abnormal gaits
- ▶ Slowly stands up
- ▶ Difficulty urinating or defecating due to stance
- ▶ Reduced coordination and balance
- ▶ Reluctance to run, do stairs, jump on bed or chair

accurate diagnosis and an expert's take on what you can do to help your dog.

### Treatment

"Some diseases are best treated with surgical intervention whereas others can be medically managed. We see a wide variety of patients and causes of hind limb lameness resulting in weakness on our service (from traumatic fractures to chronic spinal cord disease) and are comfortable achieving the right diagnosis and treatment options depending on the situation," says Dr. Frye.

Some examples of possible treatments for a few conditions include:

- ▶ **Hip arthritis:** pain medications, joint supplements, underwater treadmill
- ▶ **Intervertebral disc disease:** pain medications, muscle relaxers, surgical correction, therapeutic laser, electrical therapy
- ▶ **Degenerative myelopathy:** therapeutic laser, acupuncture, underwater treadmill therapy

Your dog's veterinary team will come up with a treatment plan that fits his unique situation. If you have travel or financial limitations, those will also be factored into the treatment plan. "Periodic rechecks or out-patient physiotherapy is often recommended to augment home care and help change and optimize home management strategies over time," says Dr. Frye.

For many causes of rear weakness, such as hip dysplasia or degenerative myelopathy, your dog will never be fully cured. He will require ongoing treatment and therapy to keep his limbs functioning at their best and to slow the progression of his condition. Fractures, soft tissue injuries, and intervertebral disc disease (after surgery) may be cured after treatment. But don't forget that older dogs frequently experience muscle

wasting, so your dog will still require extra protein and low-impact exercise to keep his muscles as strong as possible and preserve his mobility.

### Homework

Depending on the exact cause(s) of your dog's hind-end weakness, your veterinarian may give you some exercises to do at home to strengthen the muscles in his hind legs and core. Exercises may target range of motion in affected joints or improve balance and spatial awareness.

Environmental management is also often part of the plan of care. If your dog has trouble navigating slick floors, put down rubber-backed rugs to help him get a good grip. Ramps can help with going up and down stairs, getting in and out of the car, or getting on and off furniture. In a pinch, a towel or thick scarf can be used as a sling under your dog's belly to help him get up or support him as he walks.

Another way to help a dog with mobility issues is to use an assistive harness, such as the Help-Em-Up Harness. Dr. Frye says, "Harnesses are assistive devices that can be used temporarily for short term care (such as post-surgical recovery) or perhaps for longer term geriatric care for larger



Hip arthritis is a common ailment, especially in larger dogs.

more immobile patients as part of their physical therapy and to improve mobility and ease physical burden. Other assistive devices for short and or long term use can be custom orthotics and carts."

It is imperative that these products be fitted properly. Even with a custom-made and fitted product, don't leave the harness or brace on all the time and check your dog's skin daily for signs of wear or abrasions. Constant pressure can damage the skin, leading to the formation of sores. These harnesses are best used for helping your dog move about for appointments or throughout the day, then taken off overnight or when your dog will just be resting at home. ■

## Degenerative Myelopathy

"DM (degenerative myelopathy) is a non-painful disease of the spinal cord that can be relatively rapidly progressing with insidious onset and lacks curative treatment options," says Dr. Frye. Affected dogs usually start out by showing proprioceptive deficits in the hind legs, knuckling over with their paws or dragging them. As the condition progresses, the dog will gradually lose control of the entire hind end, with wobbly movement, difficulty moving or standing, incontinence, and eventually impaired breathing. "Physical therapy however has been shown to improve patient quality of life and duration of life after diagnosis with DM," says Dr. Frye.

There is a genetic test for degenerative myelopathy, but the presence of the DM gene does not mean that the dog will get DM. "A DM test must be interpreted with caution as degenerative myelopathy is typically a diagnosis of exclusion," says Dr. Frye. "In other words it should fit the signalment, history, and clinical exam without explanation from other standard diagnostics such as an MRI of the affected spine. A 'positive' DM test shows a patient may be predisposed to acquire DM but does not mean that it is the disease currently causing their dysfunction (something else could be causing the weakness). Therefore, assuming that DM is the cause of weakness without appropriate workup may hinder or prevent a true diagnosis and treatment of a potentially curable or more responsive disease."

The German Shepherd Dog is the poster child of DM, but any breed can be affected. Breeds that the Orthopedic Foundation for Animals lists as having a proven correlation between an at-risk test result and developing the condition include: American Eskimo Dog, Bernese Mountain Dog, Borzoi, Boxer, Cardigan Welsh Corgi, Chesapeake Bay Retriever, German Shepherd Dog, Golden Retriever, Great Pyrenees, Kerry Blue Terrier, Pembroke Welsh Corgi, Poodle, Pug, Rhodesian Ridgeback, Shetland Sheepdog, Soft Coated Wheaten Terrier, and Wire Fox Terrier.



# Inherited Bleeding Problems

*Hemophilia A is a common, severe coagulation disorder*

**H**emophilia A disorders are found in animals and human beings. In dogs, as in other species, the disease arises as the result of spontaneous gene mutation. Once the mutation has occurred, it can be passed on to future generations. The bleeding tendency of Hemophilia A is caused by the specific deficiency of a single clotting factor, called Factor VIII.

## Genetics

The gene for Factor VIII is carried on the X chromosome. If a dog has just one copy of the normal gene, he will have normal clotting. As you may recall from Biology 101, male dogs only have one X chromosome, which they inherit from their dams.

Female dogs have two X chromosomes—one from their sire and one from their dam. If one copy has the mutation, the normal copy is dominant and will give them normal clotting ability. These females are asymptomatic carriers, meaning they show no signs of the disorder, which is how Factor VIII is unknowingly spread in breeding.

Male dogs who have the abnormal gene are affected with hemophilia. They will pass that defective gene on to all female offspring via the X chromosome (their sons only get a Y chromosome from them).

Female dogs with two copies of

the mutation will be clinically affected themselves and will pass a copy of the mutation on to all their puppies.

## Clinical Signs

Clinical signs vary greatly among affected dogs. Some dogs will show bruising under the skin, including the formation of hematomas from normal rough and tumble puppy play. Lameness is common due to bleeding into joint spaces and muscles. The lameness may shift from leg to leg depending on the location of the most recent bleed.

Depending on the severity of the individual case, puppies may bleed extensively after losing a deciduous tooth or if a nail gets nicked during routine trimming. Spontaneous nosebleeds also may be a sign.

Fatal hemorrhages may occur in the chest or abdomen from minor trauma. Some dogs make it all the way to a routine surgery such as a spay or neuter, when unusual bleeding is noted.

## Diagnosis

The first step in diagnosis is to ask your veterinarian to do nonspecific clotting disorder tests. An abnormal prolonged aPTT (activated partial thromboplastin time) test result covers several different clotting disorders. The next step is doing specific factor assays, such as looking at Factor VIII. Depending on the result,

additional tests may be done for the genetic mutation.

Genetic mutation is especially important if you plan to breed your dog (and it's information you should share with your dog's breeder, so everyone knows the defect is in the line). Affected dogs should not be bred. Carriers should only be bred to known normal (determined by testing) dogs and only if the dog involved is exceptional. All puppies produced from a breeding with a carrier should be tested in regard to Hemophilia A.

## Treatment

During serious bleeding episodes, treatment for Hemophilia A requires repeated transfusions of fresh plasma, fresh-frozen plasma, or cryoprecipitate two to three times a day until the bleeding is under control.

Plasma and cryoprecipitate transfusions are preferred to whole blood due to the possible sensitization to red blood cell antigens (incompatible blood types). This is especially important since these dogs will require multiple transfusions over their lifespans. Cryoprecipitate is generally more effective than fresh or fresh-frozen plasma in the treatment of hemophilia A. Veterinary clinics with known Hemophilia A patients will often keep these products on hand.

A study from North Carolina State (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3101869/>) shows that recombinant Factor VIII can be used as a treatment and to help prevent bleeding episodes. This same study looked at gene transfer to ameliorate the effects of this mutation.

Gene-transfer treatment has been even more successful than giving recombinant factors. Dogs who responded to the gene-transfer therapy showed a marked decrease in bleeding episodes over several years when compared to dogs treated the average four to six bleeds a year with "on demand" transfusions.

Gene transfer is not a cure, but dogs treated this way have greatly reduced incidence and severity of bleeding episodes, according to the study.

Luckily, most dogs with Hemophilia A can be managed to minimize bleedings and treat bleeding when it occurs. These dogs can lead normal or close to normal lifespans, especially if they have a mild form of the disease. ■

## Genes Matter

A few dogs with Factor VIII may reach breeding age, thus disseminating the genetic defect widely. Indeed, most German Shepherd Dogs with Hemophilia A are thought to have descended from one male dog from Germany, who was a highly desirable,

prolific sire. The Veterinary Genetics Laboratory at UC Davis offers breed specific tests for the Factor VIII mutations in German Shepherd Dogs and Boxers.





# Oh Poop! What a Mess!

## What to do when a dirty business gets worse

**W**hile picking up poop is part of daily life for dog owners, cleaning poop and pee off your dog is a bit more unpleasant . . . especially if you don't notice it until your dog hops up onto the couch next to you.

### Why It Happens

Dogs can get their own urine and feces on themselves for many reasons including stepping in feces, diarrhea, or a urinary tract infection causing leaking. Diarrhea is a messy business, and the *more watery it is, the more likely it will stick on some of your dog's coat.* Urinary tract infections can cause leaking because if it is painful to urinate, your dog may hold his or her urine longer than usual, resulting in an overflow or leakage.

Longer-term issues that can have this gross side effect include having long hair around the rear, posture when urinating, and conformation of the penis or vulva. While long hair is beautiful to look at, it catches both urine and fecal matter, and can collect them over time.

Some male dogs pee on their front legs when they urinate. This can happen when lifting a leg or squatting depending on your dog's conformation and how he postures to urinate. His penis sheath may also be naturally angled so that he will always urinate on his front legs. This is problematic because as well as being gross, urine can irritate the skin and cause urine scald over time.

Female dogs can have a recessed vulva, which causes urine to pool in the dip and then drip out. This can result in urine scald to her skin. A recessed vulva on a puppy may resolve on its own after she has her first heat cycle, but in other bitches it can be a permanent problem.

Surgical correction may be an option for dogs with structural abnormalities in the penis sheath or vulva that cause them to chronically urinate on themselves. Thankfully, for most cases there are simpler solutions.

### Bowel Regulation

Normal, firm stool generally does not catch on hair much, even in longhaired dogs. Chronic issues with diarrhea are a health concern and need to be addressed by your veterinarian. Some good practices to prevent diarrhea include:



*If you get your dog professionally groomed, ask the groomer if she can trim away some hair under the tail.*

- ▶ Follow a regular deworming schedule
- ▶ Pick up poop in your yard regularly to prevent parasite infections
- ▶ Transition to a new diet gradually over several days
- ▶ Avoid giving overly rich or fatty treats or people food
- ▶ Keep garbage cans secure or out of reach
- ▶ Give a dog-appropriate probiotic (either daily or when needed)
- ▶ Follow feeding instructions for dogs with specific nutritional needs or issues

Stool can usually be easily rinsed off your dog with a hose or shower hose, or you can brush it out once it dries. Big chunks of poop may need to be carefully trimmed off with scissors or clippers.

If your dog has diarrhea for more than two days, or has diarrhea as well as vomiting and/or other signs of illness, she should be seen by her vet.

## The Hygienic Clip

If hair is catching your dog's eliminations, you can just clip it out of the way! A hygienic clip is when your groomer or veterinary staff shaves just the hair in problem areas, such as around the anus, penis, or vulva. For dogs with long feathering, it may be necessary to also trim some hair on the underside of the tail and the back of the thighs. Any hair that chronically catches stool or urine can be shaved.

For male dogs who pee on their front legs, clipping feathering short may help. Trimming hair around the penis sheath opening should be done carefully. Many male dogs have a curl of hair coming off the tip of the sheath. While at first this hair may seem an ideal candidate for shaving, it may also act to direct the stream of urine down and away from your dog's body. For these dogs, just wipe that area periodically to keep it clean.

### Pee Control

If your female dog is urinating on herself, she should be examined by your veterinarian to check for a urinary tract infection and/or a recessed vulva. Treatment will depend on the cause.

For male dogs, a urinalysis to check for infection is a good place to start, but conformation and posture are the more common culprits. Pay attention to your dog's urination habits and if there are any patterns to when he pees on himself. If he does fine when he lifts his left leg but has poor aim when he lifts his right, position him so that his left side is toward objects that he may pee on.

You can also teach your male dog to pee a particular way. If he has fewer issues when he squats to pee versus lifting his leg, reward him with praise and treats when he squats and ignore him when he lifts his leg (do the reverse if he's better when he lifts his leg). If he tends to stand with his front legs far back under his body, grab his collar when he starts to pee and gently pull forward to encourage him to step forward. Each of these methods takes time and patience, but can be effective for some dogs.

An alternative is to wrap your dog's front legs with a waterproof boot or covering so that the pee runs off. While you will still need to clean the wraps, they will protect your dog's skin from urine scald. There is also a doggy urine deflector available online that is brilliantly simple—a strap that wraps around your dog's waist supports a plastic sheet that hangs in front of the penis, deflecting the stream of urine down to the ground.

The simplest way to clean urine off your dog is to rinse him/her with a hose or in the shower, then dry with a towel. Baby wipes can also work for small amounts of urine. ■



## Sorting Through Phobia

*This Lab is worrying her owner.*

**Q** My wonderful Black Lab, Gretchen, has two worrisome behaviors: First, any time Gretchen is riding in her crate in the car with me (her crate is right behind my driver's seat), when we stop at a light and she sees somebody or something, she starts to "scream." She stops when I can get out of the car, open the door, and get to her crate.

I have started to hook a spare leash to her collar, with the handle up in the front seat. When she starts the noise, I jerk on it, and it quiets her somewhat. I've tried anxiety meds, CBD, food, calming sprays.

Second, she seems to have a phobia about something around her butt. She will stop dead in her tracks in the middle of anything—even an agility run or a heeling pattern in obedience—to stare at her butt.

My veterinarian can find no reason for the behavior. Once I get her moving, her performance is wonderful. Thank you so much for your time and any help you can give us.

**A** These behaviors are frustrating, and you are clearly very invested in helping Gretchen through these problems.

I worry about your safety (and Gretchen's) when you are reaching for her leash to give her a correction while you



*Dogs should be confined in the car and never in the front seat, as they could be injured if the airbag explodes or escape in an accident.*

are simultaneously trying to drive. The easiest way to deal with the screaming is to use a Pet Travel Tube Car Crate Kennel, so she can't see the things that heretofore have made her scream.

As for the butt or rear checking, this is either a compulsive problem or a neurological problem. It is most apt to happen when the dog is in an uncomfortable situation, such as at a competition. Seeing your veterinarian to rule out medical problems was wise!

If your veterinarian rules out pain or pruritus (itchiness) in that area, the problem is usually caused by a neurological or a compulsion. This may respond to antiseizure medication, if it is neurological, or anti-depressant medication, if it is a compulsive disorder. The antidepressants must be gradually increased to high dose to ameliorate compulsive behavior. Thank you for reaching out with your questions. ■

### © HAPPENING NOW...

**Hero Delivery Driver**—A delivery driver making his rounds in Woburn, Mass., took a fateful wrong turn. When he stopped to reprogram his GPS, he heard a strange sound, almost a beeping sound. He followed the noise, says the report from CNN, and found a dog with just her head sticking out in a pool. He leaped the fence and dove into the pool to get the dog, who was in the middle of the pool, and dragged him. He then called Animal Control, who found the grateful owner. She said that she was certain she had shut the pool gate. ■

## Aggressive Westie

*Grooming is a problem*

**Q** I have a problem dog, a West Highland White Terrier, who looks a lot like yours. He is 10 years old and has become impossible to groom. He has been banned from groomers and does not respond to tranquilizers. He fights grooming, biting people trying to hold him. I have used a muzzle, but ultimately, he is able to remove it. He has gotten to be extremely unkempt and really needs a good going over.

**A** What, an aggressive Westie? How can that be? Actually, all too many Westies can be aggressive. That is because they are very smart. They quickly associate any pain with the location (the groomer's) or the tools (the clippers) and try very hard to protect themselves. You have already tried two options that I would have suggested, but you may have to reconsider them. Your dog may not respond to one tranquilizer and one dose, but there are many. He may need a combination of drugs to lower his fear. Consult your veterinarian. You have also tried a muzzle, but he could get it off. I don't know what muzzle you tried, but I like the Baskerville muzzles because they are softer than a cage-type muzzle and allows him to take treats unlike a cloth muzzle. You should take the time to train him to love his muzzle. Here are three muzzle training sites:

- Michael Shikashio's lazy trainer muzzle acclimation: at <https://tinyurl.com/MuzzleFacebook>
- Muzzle training (Blue Cross): <https://tinyurl.com/MuzzleBlue>
- Muzzle training (Melissa Spooner): <https://tinyurl.com/MuzzleSpooner>

You can teach old dogs new tricks so let's try to teach him to love clippers, using quiet clippers. This week have the clippers lying beside his food bowl. Next week have the clippers running while he eats. The third week hold the clippers against his back upside down so he feels the vibration but his hair isn't pulled. If he accepts all that and has learned to wear his muzzle, gather a helper and his most favorite treat to let him chew while you clip his back. Someone should be giving the treats only while you are clipping and withdrawing the treats as soon as you lift the clippers. Good luck. ■

### 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](mailto:dogwatcheditor@cornell.edu) or send by regular mail to DogWatch, 535 Connecticut Ave., Norwalk, CT 06854-1713.



### Coming Up ...

- ▶ Stop Eating Poop!
- ▶ Joint Injections vs. Oral Supplements
- ▶ How to Teach "Drop It"
- ▶ 2020 Annual DogWatch Index