

Dog Tips

Why Is Your Dog So Afraid of Thunderstorms?

Uncover the real reasons behind your dog's storm phobia, including sensitivity to thunder and barometric pressure changes, and explore proven methods to help you soothe them during those frightening moments.

Reviewed by **Dr. Becker**

STORY AT-A-GLANCE

- There are certain common sounds that many dogs respond negatively to, including vacuum cleaners, thunderstorms, fireworks and gunshots, alarms and sirens, and several others
- Canine noise phobia is a condition characterized by a fearful or apprehensive response to certain sounds that
 makes the dog want to put distance between herself and the racket; it's important to understand the
 difference between fear, anxiety, and phobia in your dog
- Noise phobia causes tremendous suffering for dogs, so it's important to tackle the problem as soon as it appears; dogs who develop sensitivity to one noise typically become reactive to other noises as well
- There are many things you can do to help your noise-phobic dog, including providing a safe place to rest, offering natural calming remedies, and employing behavior modification techniques designed to alleviate noise aversion
- If what you're doing isn't helping your dog's noise phobia, it's important to work with a qualified animal behaviorist before the behavior escalates

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Our canine friends have better hearing than we do — it's more sensitive and has more range, especially at higher frequencies. This is important to keep in mind, because noises that sound fine or are even inaudible to you, can seem painfully loud or jarring to your dog. Certain sounds are commonly bothersome to most dogs, including:²

- **Vacuum cleaners** are loud, can make high-pitched whistling sounds, smell weird, move unpredictably from your dog's point of view, and produce vibrations in the floor.
- **Thunderstorms** create sudden loud booms that unnerve both humans and dogs. Some dogs are considered "storm-phobic" not only due to their sensitivity to thunder, but also the barometric pressure changes, lightning, wind, and rain the storms also produce.
- **Fireworks and gunshots** nearby are explosively loud and sudden, and come with flashes of light and a burning smell that can be extremely frightening to dogs.
- **Alarms and sirens**, from the tweet of a smoke alarm with a low battery to fire trucks or police cars racing down the street, generate high-pitched, repetitive, jarring sounds that can unnerve even the calmest dog.
- More dog-unfriendly sounds include blow dryers, power tools, lawnmowers, screeching toddlers, loud
 TV shows or videos, slamming doors, and car horns.

When Noise Sensitivity Becomes Phobic

It's entirely natural that sudden loud noises startle both humans and dogs. If your furry family member jumps at the sound of something heavy dropped on the floor, she's having an entirely normal reaction (probably similar to your reaction, unless you were the one who dropped the object). And if she gets right back to whatever she was doing, showing no further signs of distress, you need do no more than realize your dog is sensitive to sudden loud sounds, and try to keep them to a minimum just as you would with a noise sensitive human family member.

On the other hand, if a sudden loud sound sends your dog running, and she hides for a while, refuses to come into the room where the noise occurred, or becomes anxious whenever she thinks a loud noise is imminent, her sensitivity is becoming a problem.

Canine noise aversion, or **noise phobia**, is a condition characterized by a fearful or apprehensive response to certain sounds that makes the dog want to put distance between herself and the racket.

Noise Phobia vs. Fear and Anxiety

Fear is a normal reaction because it prompts dogs to respond to dangerous situations.

"Fear is a physiologic, emotional and behavioral response to animate or inanimate things that pose a threat of harm," explains veterinary behaviorist Dr. Stephanie Borns-Weil in PetMD.³

Anxiety describes a persistent fear or apprehension of everyday situations or something that is not present or imminent.

A phobia — including noise phobia — is an extreme, persistent fear of or aversion to a stimulus that is entirely out of proportion to the danger, if any, the stimulus poses.

"There is no survival advantage conferred on an animal that panics in response to things that are not truly threatening or dangerous," says Borns-Weil.

Causes of Canine Noise Aversion

According to a 2008 study, dogs tend to develop noise aversion in one of four ways:⁴

- **Lack of habituation** The dog encounters a novel, startling sound and fails to learn that it has no consequence or meaning, continuing to show fear instead.
- **Stress-induced dishabituation** The dog experiences a stressful event and is therefore at a higher level of stress at the same moment of the environmental sound and is unable to cope with the noise as he previously had, resulting in a fear response.
- **Sensitization** A noise bothers a dog more and more over time, causing her to be more sensitive to it rather than learning to ignore it.
- **Social transmission** The dog learns to fear a noise from another dog in the household.

Any dog can develop a noise phobia, but for some reason herding dogs — including the Australian Shepherd, Border Collie, German Shepherd, Old English Sheepdog, Pembroke Welsh Corgi, and Shetland Sheepdog — are more predisposed than other breeds.

Early spay/neuter has also been linked to noise phobias, including thunderstorm phobias, in certain breeds. Many functional medicine veterinarians and owners also anecdotally see progressive sound-sensitivity when pets are repeatedly vaccinated unnecessarily.

Signs Your Dog Has a Noise Phobia

Not all canine responses to a startling noise look the same. For example, some dogs become hyper-vigilant, some hide in fear, and others completely panic. Your dog's reaction may be to freeze and withdraw, chew through her leash or crate door, or crash through a window.

Whatever form noise phobia takes, it's important to understand your dog is experiencing intense suffering and damage to nerve cells. The most common signs of noise phobia include:

- Hiding or escape
- Trembling and pacing, or freezing in place
- Vocalization
- Destructive behaviors
- Excessive panting and/or salivation
- Uncontrolled urination and/or defecation

Most noise aversion behaviors seem to develop in dogs who are 1 to 2 years of age, and left untreated, worsen as the animal matures. In addition, dogs who react to one noise typically develop sensitivity to other noises. For example, if your dog has a fear of thunderstorms, he has a 95% chance of responding similarly to fireworks.

Helping a Dog with Noise Phobia

If your four-legged family member is displaying signs of noise aversion, the first thing you'll want to do is make sure you're not inadvertently rewarding her fear and anxiety. For example, if you tell her she's a "Good dog" when she performs a desirable behavior, take care not to use that term when she's showing fear or anxiety.

The same goes for petting your dog to comfort her. To her, petting is a reward, so again, you could be inadvertently reinforcing her anxious behavior if you pet her when she's feeling fearful. On the flip side, for some dogs being petted during a phobic episode is just one more anxiety-producing element in their environment.

Rather than saying or doing something that might reinforce anxious behavior, try simply observing your dog during a fearful episode and see what you can do to help calm her. For example:

• Try coaxing her to a quiet area of your home where she's completely unable to hear the noise stressor and either leave her alone there to self-soothe (as long as she's not frantic) or stay quietly with her. A silent, still environment can often provide relief.

- Some phobic dogs will seek out dark, quiet corners on their own where they can calm themselves, so consider providing a darkened room, a closet floor, or space under a table or desk. The goal is to give your dog a secure spot that helps her calm herself. If she continues to panic in her dark, quiet space, it isn't what she needs to help her relax.
- Play calm, soothing music like **MusicMyPet** before a potential stressor occurs. This may help to relax your dog and drown out distressing noises. Even "white noise" apps or devices can be beneficial in moderating your dog's stress response.
- Try putting gentle, continuous pressure on your pet to calm her. If she'll allow it, try leaning gently on or against her without petting or stroking. If this is helping, you'll feel her muscles begin to relax. If instead she seems to grow more anxious, this isn't a technique that will be beneficial for her.

If your dog seems to respond well to pressure applied to her body, there are wraps available like the **ThunderShirt** that many pet owners and veterinarians find extremely helpful.

- **TTouch** is a specific massage technique that may also help anxious pets.
- Consult your integrative veterinarian about herbal, homeopathic, TCM (Traditional Chinese Medicine) and flower remedies that could be helpful in alleviating your dog's stress.
- Place a few drops of the essential oil of lavender on your dog's collar or bedding before a stressor occurs, if
 possible. Even better, learn more about zoopharmacognosy, which allows your pet to self-select remedies that
 best soothe her during periods of anxiety.
- Try blocking the intensity of the sounds your pet hears. Ear protection for dogs is available from **Mutt Muffs**.
- Invest in an **Adaptil** collar or diffuser for your dog. Adaptil is a pheromone designed to have a calming effect on dogs.
- If your dog is crate trained, he may go there voluntarily to self-soothe, or you can lead the way. A blanket draped over the crate may help him relax. However, if your dog doesn't normally use a crate, or worse, has a fear of crates due to a past bad experience, this isn't the time to use one. Under no circumstances should a fearful pup be forced into a crate either when he's already anxious, or in anticipation of a panic response to weather or other noises. Your dog will feel trapped, which will make both his phobia and his reaction to it worse.
- If your dog is afraid of storms or other loud outside noises, leaving her outdoors while she's anxious or panicked is the worst thing you can do. Dogs regularly run away or seriously injure themselves attempting to escape outdoor enclosures or runs during storms, fireworks, and other noisy events.

Behavior Modification for Dogs with Noise Aversion

In addition to learning what calms your phobic dog, it's also important to work to extinguish the overreaction, and the sooner the behavior is addressed, the better. Behavior modification techniques like desensitization and counterconditioning are often used to help anxiety-related canine behaviors.

Desensitizing involves exposing your dog to the noises he overreacts to. There are tapes, records, CDs and Internet sites that mimic all sorts of noises, including storms, exploding fireworks, car backfires and even gunshots.

This approach works better with dogs in the beginning stages of a phobia, and not so well with dogs suffering from fully entrenched phobias. Consult with a professional on how best to address your dog's fear issue, as there isn't a one-size-fits-all approach to fixing the problem that can be applied to every dog and doing it wrong can make the

situation worse.

Counterconditioning involves rewarding your dog for not reacting, typically with a food treat that competes with his ability to react to a noise stimulus.

Dog trainer Susan Garrett uses fun games as a great way to help dogs focus on something besides their fear. Games need to be taught prior to the sound stressor occurring and need to be instituted before the scary sounds commence, but this is often an effective way to help dogs work through noise phobias.

Below is one of Susan's videos in which she discusses using games to help with fireworks anxiety:

Sources and References

¹ Barber, A. et al. Comparative Cognition & Behavior Reviews, Volume 15, 2020

² Whole Dog Journal, May 22, 2024

³ PetMD, June 30, 2022

⁴ The Veterinary Clinics of North America, Small Animal Practice, 2008 Sep;38(5):1081-106