Fear of Thunderstorms, Fireworks and Noise Phobias

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What causes fear of storms, fireworks, and other noises?

It is unknown why some pets become afraid of noises such as thunder and fireworks; it is a common problem in dogs, but less so in cats. The fear can soon become a phobia, which is defined as a persistent, excessive, and irrational fear response. In the case of thunderstorms, pets may also be fearful of storm-associated events such as a change in barometric pressure, lightning, electrostatic disturbances, and even smells associated with the storms. Noise phobias can include fear of thunderstorms, fireworks, gunshots, and even the sound of birds.

A recent study has found that certain breeds of dogs have an above average risk of developing noise phobias. These include some of the working and sporting breeds such as Collies, German Shepherds, Beagles, and Basset Hounds. This survey was quite small, however, and more research needs to be done in this area. The study also found that dogs who had separation anxiety were more likely to also have noise and thunderstorm phobias.

A noise phobia may be traced to a particular bad experience of a noise, but often, no triggering event can be ascertained. In almost all instances, the fear of noises and storms escalates, worsening with each exposure. Soon the pet may become fearful of similar sounds or events associated with the noise. For example, a pet afraid of thunder may also become afraid of rain, or a dog afraid of gunshots may show fear at the mere sight of a hunting rifle.

The owner's attitude can influence the severity of the fear. For instance, if owners themselves are nervous during storms, noise phobias in their pets may occur more often or become more severe. Similarly, if the owner attempts to overly comfort the animal, the animal interprets it as confirming there really is something to be afraid of. The over petting or comforting is really positive reinforcement of an undesirable behavior.

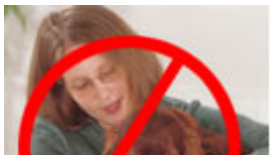
What are the signs of noise phobia?

Different animals may display different signs of noise phobias which include:

- Hiding (most common sign in cats)
- Urinating
- Defecating
- Chewing
- Panting
- Pacing
- Trying to escape (digging, jumping through windows or going through walls, running away)
- Drooling
- Seeking the owner
- Expressing anal glands
- Not eating
- Not listening to commands
- Trembling or shaking
- Dilated pupils
- Vocalizing (barking or meowing)

Consult with a veterinarian experienced in animal behavior problems, and/or an animal behaviorist if your pet is showing signs of noise phobia. They can help develop a treatment plan for your pet.

How is noise phobia treated?



There is no guarantee that a noise phobia can be totally resolved, but in many instances the fear can be managed effectively. The effectiveness of treatment depends on a number of factors including the severity of the phobia; how long the pet has had it; whether it is ongoing, seasonal, or unpredictable; and the amount of time the owner is willing to commit to the behavior modification techniques.

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The first thing to remember is that you should refrain from giving excessive attention or punishment for fearful behavior. Constant petting or consoling may be interpreted by the pet as a reward for the fearful response. In the event of overcomforting a dog during a storm, for example, it may signal to the pet that the storm really is something he should be afraid of. Similarly, the pet should not be punished for showing fear. This will only increase his anxiety level. Instead, project confidence, and give your dog attention in the form of playing, grooming, or other activities your pet enjoys.

Usually treatment includes three other facets: medications, changing the environment, and behavior modification.

Administer medications: Medications may be given individually or in combination. In some instances, the medication may be administered during an entire thunderstorm season. Others may be given when a storm or noisy event (Fourth of July fireworks) is expected. A common protocol is to give amitriptyline during the storm season, and valium when a storm is predicted. The valium or other quick-acting medication needs to be given prior to the development of any behavioral or physical signs of anxiety. If there is a chance of a storm predicted for the afternoon, the pet should start receiving the valium or similar medication in the morning. Pets who also exhibit separation anxiety may need a different combination of medications. Several combinations may need to be tried before the optimum regimen for a particular animal is determined. Many of the medications that would be used on a daily basis, e.g.; Amitriptyline, Prozac, and Buspirone, may take 3-4 weeks to see an effect. Others, such as Alprazolam work within 30 minutes. Often a combination of medications is needed. Examples of medications used to manage noise phobia include:

- Alprazolam (Xanax)
- Amitriptyline (Elavil)
- Buspirone (Buspar)
- Clomipramine (Clomicalm)
- Clorazepate (Tranxene)
- Diazepam (Valium)
- Fluoxetine (Prozac)
- Trazadone
- Inderal
- Paroxetine (Paxil)
- Tranxene-SD

Alternative therapies have also been used with some success. These include melatonin and flower essences such as Rescue Remedy. These two therapies take effect within an hour of administration, and should be given prior to the storm or other fear-producing event. Pheromones, such as dog appeasing pheromone (DAP), found in Comfort Zone® products, and cat facial pheromones found in Feliway® products may help some pets.

Change environment: By changing the environment of the animal during the storm or noise, the anxiety level can be reduced. Changing the environment may reduce the volume level of the sound or help make the pet less aware of it.

Increase vigorous exercise: The pet should receive vigorous exercise daily, and more so on a day when the fear-producing noise is likely to occur. The exercise will help to tire the animal, both mentally and physically, and may make her less responsive to the noise. In addition, exercise has the effect of increasing natural serotonin levels, which can act as a sedative.

Reduce or block the noise level: "White noise," such as running a fan or air conditioner may aid in blocking out some of the fear-producing noise. Playing a TV or radio can have a similar effect. Allowing the pet access to the basement or a room without outside walls or windows may decrease the noise level. Closing the windows and curtains can also help reduce the noise. Some owners have placed foam earplugs or cotton balls in their pets' ears.

Create a safe haven: Some pets feel more comfortable in a small space such as a crate or a small room like a bathroom (run the fan and leave the lights on). Some pets seek out the safety of the bathtub or shower during a storm. (Some have hypothesized that a pet may feel less static electricity if on tile or porcelain.) If the pet is comfortable in a crate, the crate can be covered with a blanket to add to the feeling of security. The door to the crate should be left open and the pet should not be confined to the crate, which could dramatically increase the stress level. Some pets, especially cats, may find that a closet or area under the bed makes a good retreat.

Project a calm attitude: Pets are very aware of the mental state of their owners. If you are worried or nervous, this will add to the pet's fear. Your pet will look to you for direction, so keep an "upbeat" and "in charge" attitude.

Maintain good health and nutrition: Health problems may increase the stress level of pets, and increase their anxiety. For instance, a dog in pain because of hip dysplasia may be more irritable and prone to other behavior changes. Diets too high in protein have been linked to some behavioral problems. Consult your veterinarian if you would like advice about changing your pet's diet.

Behavior modification: Special techniques can be used to help change the animal's response to the noise.

Counterconditioning: Using counterconditioning, the animal is taught to display an acceptable behavior rather than an

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unacceptable one as a response to a certain stimulus. In this way, a negative stimulus can become associated with a positive event. For instance, the only time the pet gets his absolutely most favorite treat, game, or toy, is just prior to and during a thunderstorm. Dogs who enjoy traveling may be taken for a car ride, or cats who love catnip, may be given their favorite catnip mouse. (Dogs who enjoy swimming will need to wait inside until the storm is over!) After a time, the pet will start associating an oncoming storm with getting to have his favorite thing.

Desensitization: Using desensitization, the animal's response is decreased while he is exposed to increasing levels of the fear-producing stimulus. For noise phobias, the animal is taught to be calm when the noise level is low, and then the noise level is gradually increased. This process is generally more successful in dogs than cats. It works best during the 'off' season for thunderstorms. To desensitize a pet to thunderstorms:

1. Teach your pet the command 'relax' in the absence of any noise. When your pet is lying quietly, gently pet him and say the command 'relax' or 'settle'. If the pet would get up or become more active, wait until your pet relaxes again. When your pet is relaxed, provide a very tasty treat every 10 seconds or so. Continue saying the command and giving treats several times provided the pet does stay relaxed. Repeat this several times a day and gradually extend the time your pet needs to be relaxed before he gets his treat. Once your pet can relax on command, you are ready to proceed.
2. Obtain a commercial tape or CD of a storm, or tape record one yourself (commercial products generally work better). Play the recording at normal volume to determine if it will induce the fear response. If it does, continue with the desensitization; if not, you will need to obtain a different recording. For some animals, a recording alone may not work, since there may be a combination of occurrences that provokes fear, e.g.; thunder plus lightning or changes in barometric pressure. For these animals, darkening the room and adding strobe lights may more closely mimic the storm, and may need to be included in the desensitization process.
3. Play the recording at a volume low enough that the pet is aware of the sound, but it does not induce a fear response. For instance, the ears may be cocked towards the source of the sound, but you still have the pet's attention. In some instances, that may mean the pet needs to be in a different room from where the recording is playing. While the recording is playing at the low level, either have him relax or engage the pet in an activity in which you give the commands, such as obedience training or performing tricks. Give food or other rewards during the activity when the pet accomplishes what he is supposed to. If the animal shows signs of fear, stop and try again the next day, playing the recording at an even lower level. It is important that the pet not be rewarded while he is fearful or anxious. Sessions should last about 5-10 minutes.
4. If the animal does not respond fearfully, during the next session, increase the volume slightly. Again, involve the pet in an activity or have the dog 'relax' and reward him for obeying commands. Continue increasing the volume gradually for each session. If the pet starts to show fear, decrease the volume. Repeat the sessions in various rooms of the house and with various family members present.
5. When the pet does not show fear when the recording is played at a loud volume, you may want to try playing the recording for a short time while you are absent. Gradually increase the time you are gone while the recording is playing.
6. When the pet appears to have lost his fear, the sessions can be reduced to one per week. In most instances, these sessions will need to be repeated weekly for the life of the pet.
7. During an actual storm, use the same activities and rewards you used in the training sessions.

To increase the chances of successful desensitization, the training process should take place during a time of the year when the actual noise will not be encountered: if the pet is afraid of thunder or fireworks, try desensitization during the winter; if afraid of gunshots, the training should take place outside of the hunting season. In most instances, it is best to discontinue any behavior-modifying medications during the desensitization process. Consult with your veterinarian before discontinuing any medications.

Conclusion

Fear of thunderstorms, fireworks, and other forms of noise phobia are common problems in dogs, and some cats. Administering medications along with changing the pet's environment, and using behavior modification techniques can help ease the fear.

NOTE: Sources of audiotapes and CD's for noise desensitization include:

- http://www.scarednomore.com/
- http://calmaudio.com/thunderstorms.html
- http://www.f7sound.com/dog.htm

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