

# Texas Veterinary Behavior Services

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## THUNDERSTORM AND NOISE FEAR/PHOBIA

Fear of thunderstorms is a common problem among dogs and manifests in varying degrees of severity. Some dogs exhibit only mild signs of agitation, whereas others display severe signs of anxiety, panic, and escape behaviors. In severe cases, the dog may cause significant destruction to property and injury to itself while trying to get into, or out of, the house or other areas of confinement.

Treating fear of storms can be challenging, as there are many aspects of the storm that may be triggering anxiety in your dog. These include rain, thunder, lightening, and changes in barometric pressure. The significance of each of these, and others, can vary greatly from one dog to another.

It is tempting to try to console a fearful or anxious dog. Fearful/anxious emotions cannot be *rewarded* in the sense that petting the dog or giving it a treat while fearful will make the dog more *fearful*. However it is possible to *enable* a dog's fear by responding to the dog in a concerned way that deviates from your normal interactions with the dog, i.e. if you act concerned, the dog is likely to believe that there really *is* something to be worried about. Additionally, you *can* reward behaviors associated with escape and avoidance (e.g. whining, pacing, pawing, jumping up, etc.) Therefore, when your dog becomes nervous, you should remain calm and interact with the dog in as normal a manner as possible.

For some dogs, especially those with more mild symptoms, steps to modify the environment may be sufficient to manage the symptoms or lower the intensity to a tolerable level. Providing the dog with access to a "safe" area, such as a bed, closet, or crate, may help. This should be an area where the dog already shows some inclination to go. In addition, limiting the animal's exposure to outside stimuli can be helpful. Keeping the dog in a room with no windows, or covering any windows present, may reduce the reaction to lightening and other light changes. Radio, television, or other noise-producing devices can be used to mask the sound of thunder, wind and rain.

Some products are also available that may mitigate the dog's reaction to storms or noises. For example, the Thunder Cap (<http://www.thundershirt.com>) is a mesh fabric that covers the dog's eyes. While originally designed to reduce visual stimulation, the product has been found to reduce anxiety overall in many dogs. The Thunder Shirt ([www.thundershirt.com](http://www.thundershirt.com)) and the Anxiety Wrap ([www.anxietywrap.com](http://www.anxietywrap.com)) use calming pressure over the dog's body that can reduce anxiety in a matter presumably similar to a swaddling effect for babies. ADAPTIL is a synthetic imitation of a calming pheromone

mother dogs secrete when nursing their puppies. ADAPTIL is available in both plug-in, spray and collar form. There also is a music CD specially mixed for relaxing properties – [www.throughadogsear.com](http://www.throughadogsear.com). While these products may not work on every dog or be sufficient to appease the dog's anxiety, they can be a helpful tool when used in conjunction with behavior modification.

When environmental control is not sufficient, successful treatment depends upon the ability to recreate those factors that cause fear so that a desensitization program can lessen the dog's anxiety regarding them. Not all stimuli can be effectively recreated, and some dogs do not respond to mock set-ups. Most dogs cannot be completely cured of this problem, but in most the anxiety can be reduced enough to allow the dog to cope in an effective manner.

Identify the stimuli that trigger the first and most severe signs of anxiety in your dog. These will be the ones that you attempt to duplicate. Sounds of rain and thunder usually can be recreated by audio or videotape. Taping a real storm is frequently more effective than buying a commercial version of a thunderstorm, as evidence suggests there can be significant differences in the qualities of storms in various regions. Some storm CD's are adapted specifically to be used in behavior modification programs. Lightening can be simulated with strobe lights or other flashing devices. Test these simulations on your dog to determine if it will show anxiety in response to them. Even if the dog does not react with the same intensity as to a real storm, behavior modification may still lessen the anxiety enough to result in improvement in the problem.

### **Desensitization/Counterconditioning**

Desensitization involves exposing your dog to gradually increasing levels of the stimulus in a manner that does not trigger apprehension or distress. Counterconditioning involves rewarding the dog for remaining calm or engaging in some other behavior that is incompatible with anxiety. It is best to desensitize the dog to only one stimulus at a time, usually beginning with the sound of thunder or the stimulus which can be most easily simulated.

During the time the dog is undergoing this modification process, any exposure to a real storm will cause the dog to relapse. (Management steps can be implemented at any time.) Exposure to uncontrolled stimuli will almost invariably set back your training progress. Ideally it is better to wait until storm season is over before beginning the desensitization steps. However, this is not always feasible. You can reduce the impact of real storms on your training by providing the dog with a safety signal in your controlled training sessions. A safety signal is a stimulus that the dog associates with a relaxed *training session*. For example you can have the dog lie on a special rug or play a specific type of music for the dog (e.g. see the Through A Dog's Ear cd link above) or use a certain type of odor or aromatherapy. The safety signals must only be available during training sessions –the dog should not be exposed to this stimulus in the course of a typical day -- until the dog makes enough progress with training to be at a level similar or higher than a real storm. You will eventually be able to use the safety signals in real storms to help the dog cope.

In the initial step, the recording should be played at a volume low enough that the dog does not show signs of anxiety. These signs can include pacing, panting, whining, shaking, trembling or tucked tail, but they can also be very subtle such as small changes in facial expression, tightened lips, or ears rolled back. If any of these are present, the dog is not truly comfortable. Reward the dog with a food treat or a favorite game during this time. Gradually increase the volume of the recording a small amount and reward the dog again if it remains calm. This process can be repeated three or four times during each training session. Over many sessions, the volume is increased until the dog can tolerate it at a very loud level (a level that previously triggered signs of anxiety). It is important to proceed slowly with this process, so that the dog truly learns to accept the noise at each volume before proceeding to the next.

The volume should be raised in small enough increments that the dog does not show anxiety. If the dog does react with anxiety, reduce the volume and continue for a while longer at a lower, non-stressful level. After several repetitions at this accepted volume, you can attempt to gradually raise the volume again.

Appropriate use of anti-anxiety medications is useful, and in some cases, crucial, for long term success of the behavior modification program. This is particularly true for dogs that have severe, and often injurious, reactions to storms. Panic responses can lead to serious injuries to the animal as well as cause other physiologic changes detrimental to the animal's health and well-being.