



# Pet Behavior Counseling

*Helping you and your pet become best friends for life.*

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## UNDERSTANDING CANINE STRESS

It is a well established fact that the “wrong kind” of stress or chronic stress can have a detrimental effect on our behavior, health and overall well-being. Whether “good” or “bad”, physiologically, the manifestation of stress in dogs is similar as in humans, with the same negative and positive effects. Stress has the potential to make one ill, cause behaviors that damage relationships with others, and increase arousal, which frequently increases aggression. As a pet behavior counselor, I have observed that most behavior problems with pets, especially the more serious such as aggression and separation anxiety, are the result of stress. Therefore, as responsible guardians for our dogs, we have an obligation to understand stress and its impact so we can do what is necessary to minimize stress in the lives of our canine friends.

### Definition of Stress

*“Stress is the response of an organism to a demand placed upon it to change or adapt.”*

*Canine Neuropsychology*, third edition, by James O’Heare, Ph.D., DogPsych, 2005, page 3

### “Good” Stress versus “Bad” Stress

Certain levels of stress are normal and even necessary for survival and the increase of gray matter in the brain. Called eustress or stimulation, this “positive” stress allows an organism to utilize energy in a positive manner and assists in the development of new capabilities. This level of stress is essential to normal growth.

When stress is negative or becomes excessive, it is called distress. Stress of this manner can damage an organism, resulting in illness and behavioral problems such as anxiety and aggression. This may become a vicious cycle, with stress contributing to even more stress until an organism collapses in exhaustion or self-destructs.

The susceptibility to distress varies with each individual organism. How an individual responds to distress is often affected by a combination of inherited genes and events within the organism's environment.

## What Does Stress Feel Like?

Stress affects us both physiologically and emotionally, and the two are always interconnected. Whether eustress or distress, the physiology and the effects on the body are essentially the same. Therefore the biggest difference between the two is a matter of our perception of how we feel.

<b>Good Stress (eustress) Always Acute</b>	<b>Bad Stress (distress) Acute or Chronic</b>
Heightened Sense of Awareness	Increased Reactivity/Jumpy
Euphoria	Irritability
Learning a new task (confident)	Inability to learn (doubtful)

We have all experienced both eustress and distress at some point in our lives, but fortunately not all of us have experienced extreme distress. Some medications can cause the same physiological effect as distress so if you have ever been on prednisone, or known someone who has, you may have a better idea of how severe distress feels physiologically.

Prednisone is a man-made corticosteroid that is used to suppress the immune system. It is often used to treat autoimmune disease, asthma, lupus, colitis, Bell's palsy, rheumatoid arthritis and other inflammatory diseases. Prednisone mimics cortisol, a major stress hormone, so the side-effects of prednisone can be similar to those of an organism in extreme distress; insomnia, euphoria, depression, mania, mood swings, irritability and even psychotic behavior. (As an asthmatic I have been on prednisone numerous times and know how it makes me feel. While it eventually makes me physically healthier, the side effects are not pleasant for me, or those around me. I have also observed animals on prednisone and sometimes they can react negatively and experience significant behavioral changes, which do not always resolve long after the drug is no longer being used.)

## Physiological Effects of Stress

When something stressful happens (e.g. we are surprised by a snake, in a car accident, etc.) the body falls under control of the Sympathetic Autonomic Nervous System (SANS). The SANS is part of the body responsible for controlling the flight or fight response. Essentially the body goes on auto-pilot to protect us from the perceived threat.

The SANS is closely associated with the limbic system, which is the section of the brain that deals with the expression and experience of emotions, memory and aggression. It is the most primitive part of the brain and is very involved with instinctual survival mechanisms. It is separate from the cerebral cortex, which is thought to be the “thinking” part of the brain and the site of conscious thought and intelligence. Note that the brain is hard-wired to always remember negative emotional responses to help ensure our future safety.

When the limbic system (emotional auto-pilot) is activated, the cerebral cortex is suppressed. This is why one does not typically behave rationally when in a highly charged emotional state. This can also help us to understand why expecting our dogs to respond to a well trained cue when they are in distress is usually a futile effort. Conversely, when the cerebral cortex is highly active, the limbic system is suppressed.

The release of various neurotransmitters and stress hormones triggers a plethora of reactions within our body that basically shuts down all of our bodily systems not necessary for defense. Levels of adrenaline, a neurotransmitter, become elevated which in turn increase pulse rate, blood pressure, blood sugar levels and the dilation of bronchial tubes and pupils, preparing the body for the surge of energy necessary for a flight or fight response. Cortisol production is also increased which turns off the immune system and other unnecessary systems. The above is a gross oversimplification. For a more in-depth understanding, please refer to the books listed in the resources section of this article.

After the stressful situation has passed, the body’s stress response is supposed to turn-off and levels of neurotransmitters and stress hormones should return to normal levels. However, sometimes when an individual is subjected to chronic stress, the mechanisms that are supposed to turn off stress no longer work and levels continue to build and can reach 4x normal levels. Normal now becomes a much higher level.

## **Causes of Stress in Dogs**

### **Brambell’s Five Freedoms**

A significant cause of stress for an animal occurs when its most basic needs are not being met. One of the first and most comprehensive efforts to define an animal’s most basic welfare needs started in Great Britain in 1965 with the establishment of the Brambell Commission. This commission, created by Parliament, was charged with reviewing the treatment of farm animals and developing a minimum standard for meeting their needs. They created what is known as “The Five Freedoms,” which is an excellent starting point for evaluating the welfare of any animal, including companion dogs. The five freedoms are:

- 1. Ensure your pet is free from hunger, thirst and malnutrition.**

This sounds relatively simple — provide your dog with food and water and the need is met. However, I encourage you to give this more thought. Is

the food you feed your dog wholesome and a type that would be in their natural diet? Are they allowed to consume this food in a manner that is natural for their species? We also must consider that too much food is equally bad, as evidenced by the significant number of obese dogs we see today.

2. **Ensure your pet is free from discomfort.**

Again this freedom seems relatively straight forward — make sure your pet always has adequate shelter from temperature and weather extremes. However, there is much more to comfort than hot versus cold and dry versus damp. Your dog also needs a quiet, comfortable resting place where they can be undisturbed and where they will feel safe. You need to make sure that their environment is free from things that may cause them harm. Your dog's breed also affects what they need to be comfortable. If they have a long coat they may be unable to adequately groom themselves, in which case you must groom them on a regular basis, so that their hair does not become tangled and matted, causing them discomfort. Lastly, dogs, like humans, are social animals and depend on interactions with others to be comfortable.

3. **Ensure your pet is free from pain, injury and disease.**

One of the easiest ways to meet this freedom is to make sure your dog gets an initial series of vaccinations to ensure that they are protected against diseases, followed up by annual and as-needed visits to your veterinarian. At home, a weekly body check can alert you to any changes in your pet's physical condition. Being free from pain is very similar to being free from discomfort so the dog's grooming needs must also be considered. Remember, dogs are designed by nature to not show pain and thus weakness, so often times they will attempt to hide their pain.

4. **Ensure your pet is free to express normal behaviors.**

This freedom is the one that is most often overlooked, as many dog guardians are either unaware of the huge repertoire of normal dog behaviors or because they do not approve of some of these normal behaviors such as "butt sniffing." In order to express normal behaviors your dog needs adequate space in which to run and an enriched environment to stimulate their minds and bodies. Toys enrich your pet's environment by giving them something to play with; however they also need interaction with living things as well. While our dogs hopefully enjoy our companionship they also need adequate opportunities to interrelate with others of their own kind in a positive situation. That does not mean you need to have more than one dog, but it does mean your dog needs to have some suitable doggie friends in the neighborhood or at daycare. However, these friends must be of a similar temperament, age, size and

play-style and the interactions must be enjoyable for all. Not all dogs get along, just as many people do not get along with one another.

**5. Ensure your pet is free from fear and distress.**

I truly believe that no psychologically healthy human would ever intentionally cause their dog fear or distress. However, lack of knowledge, or incorrect knowledge about canine behavior, certainly causes a great deal of fear and distress in our canine companions. As a behavior consultant I see a great number of dogs for “aggression” which is almost always based in stress related fear.

Far too many people are still not aware of how critical a well thought socialization plan is for a puppy when they are between 8 and 16 weeks of age. During this time most puppies are very accepting of new environments, people and situations — as long as they are setup to ensure it is a positive experience. Socialization does not end after the critical socialization period, rather it should continue throughout a pet’s life.

A lack of adequate physical and mental stimulation can also cause a dog to become anxious and fearful. A dog needs a moderate amount of both physical and mental exercise on a daily basis. A pet that does not get adequate exercise may become bored and frustrated, and start exhibiting behaviors which you will find undesirable. On the other hand, too much stimulation and exercise can also be detrimental, causing a state of chronic stress. Activities need to be well balanced with rest.

When we add a dog to our family we are bringing them into a very foreign environment and culture with very different rules. On top of that we are expecting them to understand a foreign language while we often make no effort to learn their language. We need to educate our dog to live in our world and educate ourselves about the dog world if we are to keep them free from fear and distress.

We also need to actively protect our dog by avoiding stressful situations until they have had adequate socialization and training. You are their guardian and as such must take responsibility for managing their interactions with the environment and other living things.

**Common Causes of Stress in Dogs**

- Grief due to loss of a companion (human or animal)
- Arguments among family
- Excessive stimulation (too much play, dog sports, etc.)
- Insufficient stimulation
- Too many dogs per available space
- Any change in environment (schedule, people, animals, increased noise)

- Punitive training
- Combination training (rewards and punishment)
- Inappropriate play partners
- Unreasonable expectations (expected to like all people and all other animals in all situations, expected to be 100% on all the time)
- Insufficient social time/family time
- Scary events
- Humans ignorant of needs and ways of communicating
- Frustration
- Uncertainty
- Excessive play that becomes borderline “obsessive/compulsive”
- Not being taught to be alone

## **Identifying Stress in Canines**

Dogs express themselves and communicate with body language, vocalizations and behavior. By getting familiar with our dogs' bodies, we can tell when they start to feel stressed. It is imperative to look at the entire body and not just isolated parts to get the best understanding of what your dog is feeling. Some key indications of stress, by body part, are noted below.

### **Eyes**

- U Dilated pupils
- U Tightness around eyes
- U Whale eye/ Half moon eye

### **Mouth**

- U Yawning
- U Lip/Nose licking
- U Panting
- U Excess salivation
- U Smiling
- U Teeth chattering
- U Cheek puffing
- U Showing teeth
- U Wrinkled muzzle

### **Ears**

- U Pinned back
- U Upright and alert

### **Body**

- U Tense all over
- U Stretching

- U Excessive shedding
- U Freezing – little or no movement
- U Urogenital “check-out”
- U Low body posture, weight shifted back
- U Trembling/shaking
- U Penis crowning
- U Sweaty paws
- U Tight brow
- U Shake off

### **Vocalizations**

Dogs may also indicate they are stressed through vocalizations. Some of the more common stress related vocalizations are:

- U Barking – low pitch = threatening, high pitch = fear/stress
- U Growling
- U Howling
- U Whining

### **Behavior**

When stressed a dogs behavior will often change. Common behaviors that are often stress induced are:

- U Restless, inability to relax
- U Poor sleeping habits, less than 17 hours sleep per day
- U Excessive sleeping, often due to exhaustion
- U Jumpy/Hypervigilant
- U Irritable
- U Destructive
- U Excessive self-grooming
- U Loss of appetite
- U Obsessive/Compulsive behaviors – (e.g. shadow chasing)
- U Inability to focus
- U Hyperactivity
- U Increased urination and defecation
- U Vomiting and diarrhea

## **Reducing Stress in Dogs**

In order to reduce our dogs’ stress we first need to understand it. Once we have identified the cause there are many approaches to eliminating the stress.

The easiest way to deal with a dog under stress is usually management — removing the dog from the situation/context where the stress occurs. While this does not solve the problem, it is a temporary fix which will make the dog feel better. If this is a context/situation the dog will need to be exposed to in the future, it is advisable to work with a qualified behavior consultant to help get the dog over this fear. Few dog guardians are successful resolving this type of issue by reading books or watching programs on TV. In our experience they usually make the problem worse.

A behavior consultant will consider a number of methods to help your dog deal with their stress. They will almost always recommend a behavior modification protocol, which is a specialized training program for your dog's situation. A dog training class is seldom recommended for a dog with stress-based issues such as anxiety and aggression, as it often puts a dog in a situation where they will be stressed and learning cannot occur. Additionally a behavior consultant may also recommend changes in diets, treatment with complementary therapies (Bach Flower Remedies, Herbs, Homeopathy) if they are so qualified, and if they are a veterinary behaviorist they may recommend the use of certain drugs. A behavior consultant should always be working with your veterinarian.

## **RECOMMENDED RESOURCES**

***Stress in Dogs***, Martina Scholz and Clarissa von Reinhardt, Dogwise Publishing, 2007

***Canine Neuropsychology***, 3<sup>rd</sup> edition, James O'Heare, Ph.D., DogPsych, 2005

***The dog's brain — a simple guide***, Val Strong, Alpha Publishing, 1999