



Stress in our Dogs: Common Triggers & Signs

By Jacqueline Neilson, DVM, DACVB

It can be hard to believe that our pampered pooches may be stressed. After all, they don't have 40-hour-plus workweeks, project deadlines, commutes in heavy traffic, teenagers, mortgage payments, or credit card bills! However, although their stressors aren't necessarily the same as ours, research has established that dogs can and often do experience stress, and that stress may compromise their overall health and welfare.^{1,2} For example, research has now elucidated details of the brain-gut connection: the release of norepinephrine (the "fight or flight" hormone) affects gastrointestinal physiology resulting in detrimental changes in gut bacteria, motility, pain sensitivity, and other parameters.³ This digestive upset often presents as diarrhoea in our patients, creating yet another stressful experience for the dog and the owner: house-soiling! Some dogs may experience short-lived or acute stressors but other dogs may live with chronic stress. An enhanced awareness and understanding of stress triggers, stress-related behaviours, and physiological stress consequences can help us identify and reduce canine stress and its negative health consequences.



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10 COMMON STRESS TRIGGERS FOR DOGS⁴:

1. Novelty — exposure to new items, new people, new animals, etc.
2. Loud noises — fireworks, thunderstorms, etc.
3. Changes in housing — moving to a new home, boarding, etc.
4. Changes in household members — new baby, new pet, loss of pet or human, houseguests, etc.
5. Changes in household routine — new job schedule, kids returning to school, holidays, etc.
6. Punitive training methods — shock collars, yelling, hitting, etc.
7. Invasion of personal space — disruption when resting, hugging, kissing, forcibly restraining, etc.
8. Lack of outlets for normal breed behaviours — herding, running, retrieving, etc.
9. Separation from human family members — separation anxiety, etc.
10. Poor (strained) relationships with other household members (pets or humans).

TOP 10 SIGNS OF STRESS IN DOGS⁴:

While there are individual variations in the expression of stress and there can be other causes for these behavioral signs, below are the Top 10 Signs of Stress in Dogs:

1. Nose/lip licking
2. Yawning
3. Panting
4. Reduced or absent appetite
5. Diarrhoea
6. Tail lowered or tucked
7. Ears pulled or pinned back
8. Cowering/crouched body posture and/or hiding
9. Trembling/shaking
10. Increased vocalizations – whining, howling, barking

If a dog exhibits these signs of stress, try to identify and remove or reduce the stress triggers.

Additionally, for dogs under 14 kg with stress-related GI upset, recommend Hill's™ Prescription Diet™ i/d™ Stress. i/d Stress is a highly digestible clinical nutrition formulated with milk protein hydrolysate, prebiotic fibre, and ginger to help alleviate stress-related digestive upset. For optimal results, feed well in advance of the stressful trigger. This food is formulated for maintenance in adult dogs and is therefore suitable for long-term use for those dogs that may experience chronic stress.

¹Bamberger M, Houpt KA. Signalment factors, comorbidity, and trends in behavior diagnoses in dogs: 1,644 cases (1991-2001). *J Am Vet Med Assoc.* 2006;229(10):1591-1601.

²Dreschel, NA. The effects of fear and anxiety on health and lifespan in pet dogs. *Applied Animal Behavior Science.* 2010;125:157-162.

³Konturek PC, Brzozowski T, and Konturek SJ. Stress and the gut: pathophysiology, clinical consequences, diagnostic approach and treatment options. *J Physiology and Pharmacology.* 2011;62(6):591-599.

⁴Notari L. Stress in veterinary behavioural medicine. In Horwitz DF and Mills DS, editors. *BSAVA Manual of Canine and Feline Behavioural Medicine.* Gloucester, England: BSAVA, 2009:136-145.





Stress in our Dogs: Strategies for Stress Management

By Jacqueline Neilson, DVM, DACVB

While many of our dogs enjoy a “spoiled” lifestyle replete with comfy beds, regular tasty meals, and human affection, they also often experience stress (see *Stress in Our Dogs: Common Triggers & Signs*). These stressful events can result in compromised welfare and disease, including significant digestive upset commonly known as “stress diarrhoea” or “stress colitis”.¹

SIX STRATEGIES FOR STRESS MANAGEMENT IN DOGS²:

1. Safety first: Take steps to ensure the safety of all involved.

- a. This may include secure enclosures, segregation, supervision, etc.
 - i. A dog that tries to run away or escape during a stress trigger should be in a secure location and, ideally, supervised.
 - ii. A dog that exhibits an aggressive stress response should be physically segregated from the target of the aggression.

2. Advise against punishment to any dog showing signs of stress.

- a. Not only is punishing a stressed or anxious animal inhumane, it likely will increase the dog's stress.

3. Identify and avoid — remove or minimize the stress trigger.

- a. While full avoidance of stress triggers is ideal, it is often not feasible. For example, one cannot avoid thunderstorms.
- b. When avoidance is impossible, minimize the stressful trigger via environmental modification.
 - i. If a dog is stressed by thunderstorms, the dog can be moved to an internal room in the home and white background noise can be played.
 - ii. If children stress a dog, avoid taking the dog to locations where children are likely to be encountered, such as playgrounds or schools. If a child is unexpectedly encountered, one can remove the dog from the situation or increase the distance from the child to minimize the dog's stress.



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4. Initiate a Behavioural Modification Program.

- a. The two most common strategies for behavioural modification are Systematic Desensitization and Counterconditioning.
 - i. Systematic Desensitization: This is the process of reducing the dog's reactivity to a trigger stimulus (i.e., a stress trigger) via a gradual escalation of exposure to the trigger stimulus. By starting the exposure at a very low level and gradually increasing the intensity, the dog can acclimate to the trigger.
 - ii. Counterconditioning: This is a process of conditioning the dog to feel the opposite emotional state in the presence of the trigger stimulus (i.e., if they currently feel stress then the opposite emotional state is feeling relaxed). This is often accomplished by pairing exposure to the trigger stimulus with something fabulous, like food or toys, and is often done in conjunction with systematic desensitization.

5. Recommend Hill's™ Prescription Diet™ i/d™ Stress in dogs up to 14 kg with stress-related GI upset.

- a. i/d Stress is a highly digestible nutritional solution formulated with milk protein hydrolysate, prebiotic fibre, and ginger to help manage stress and reduce the risk of stress-related digestive upset. For optimal results, feed well in advance of the stressful trigger. This food is formulated for maintenance in adult dogs and is therefore suitable for long-term use for those dogs that may experience chronic stress.

6. Recommend ancillary activities, products, and services to reduce stress.

- a. Examples of products on the market to reduce stress include pheromones, gentle pressure body wraps, and drug therapies.
- b. Certain therapeutic modalities, such as acupuncture or touch therapy, may help reduce stress in certain pets.
- c. Regular exercise may contribute to overall stress reduction.

¹ Notari L. Stress in veterinary behavioural medicine. In Horwitz DF and Mills DS, editors. *BSAVA Manual of Canine and Feline Behavioural Medicine*. Gloucester, England: BSAVA, 2009:136-145.

² Palestrini C. Situational Sensitivities. In Horwitz DF and Mills DS Editors. *BSAVA Manual of Canine and Feline Behavioural Medicine*. Gloucester, England: BSAVA. 2009:169-181.

