

# Canine House Soiling

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Clients are often intolerant of house soiling (ie, indoor urination, defecation, or marking) in adult dogs. Puppy owners may arbitrarily impose a deadline for house training without seeking veterinary advice and may relinquish the puppy if expectations are not satisfied.

Canine house soiling has many potential causes, including medical conditions and behavior problems. Accurate assessment is critical, as the prognosis for control or resolution is typically good once the underlying cause is identified.<sup>1</sup>

## **Prevention: Puppies & Newly Adopted Dogs**

Every wellness examination should include a screening for common behavior problems, including house soiling. Clients frequently do not communicate behavior concerns with the

veterinary team, yet behavior problems are a major cause of pet relinquishment to shelters.<sup>2</sup>

House-training recommendations should be provided during every initial visit, and clients should be advised that a newly adopted dog, regardless of age, should be supervised until an outdoor elimination preference is established. Accompanying the pet outdoors helps clients confirm that elimination has occurred. Dogs associate the relief of urinating (the reward) with the location where it occurred. Adding a treat as a second reward may speed the training process, but the treat must be given immediately after elimination rather than when the dog returns indoors.

When supervision is not possible, puppies and newly adopted dogs should be

confined in a safe area where elimination is accepted. Most dogs tolerate confinement in a crate, but some exhibit profound anxiety during confinement. For these dogs, using a leash may be the best way for clients to supervise them until anxiety is successfully treated.

Clients often underestimate how frequently puppies need to eliminate. Until a puppy's innate elimination schedule can be determined, prevention of mistakes should be the goal. Clients should take the puppy to an appropriate elimination area immediately after waking and return to that location as frequently as every 30 minutes when actively playing. A puppy typically defecates 15 to 20 minutes after eating. When outdoor access is not available, the puppy can be trained to use an acceptable indoor elimination area

(eg, absorbent house-training pad, artificial grass). Newly adopted adult dogs should be taken outdoors frequently until an elimination pattern is determined.

**Diagnosis & Treatment**

**Medically Based House Soiling**

When a previously house-trained dog suddenly starts house soiling, particularly in the absence of an environmental change, an underlying medical condition should be considered. House soiling may occur in conjunction with any condition that increases the frequency of urination or defecation. Urgency, discomfort, or dysfunction during elimination should be evaluated. A urinalysis is indicated for every dog presented for undesirable indoor urination, and a fecal examination may be needed if stool is abnormal. Additional diagnostic testing may be performed based on patient age and history and physical examination results.

In patients with medically based house soiling, the primary disease must be treated. Retraining, including supervision and increased access to an appropriate elimination area, may be needed. Concurrent unrelated diagnoses also should be considered, as both a primary medical condition and primary behavior condition may contribute to house soiling.

Urinary and fecal incontinence should be ruled out based on absence of posturing during elimination.

**Cognitive Dysfunction Syndrome**

Cognitive dysfunction syndrome is a consideration when house soiling occurs in previously house-trained dogs ≥8 years of age. Cognitively impaired dogs may house soil despite having access to an appropriate elimination

**TABLE**

**TREATMENT AT A GLANCE**

Differential Diagnosis	Treatment
Medical condition Cognitive dysfunction syndrome	Identify and treat primary disease Supervise and provide cognitive enrichment
Incomplete house training House-training lapse	Supervise and reward appropriately Re-establish location or substrate preference
Anxiety	Identify triggers for anxiety Remove triggers when possible Reduce emotional response to triggers (ie, desensitization)
Submissive or excitement-related urination	Downplay greeting Offer a toy instead of petting Train dog to retrieve a toy (ie, response substitution)
Urine and fecal marking	Identify triggers Assess social interactions Supervise and humanely interrupt

area. Other clinical signs include disorientation, nighttime restlessness, a change in the nature of interactions with humans, a recent escalation in anxiety, and failure to respond to previously learned cues. (See *Suggested Reading*, next page.)

Management of cognitive dysfunction syndrome includes supervision to confirm that appropriate elimination has occurred. Cognitive enrichment, including puzzle toys and training new cues, can be beneficial. Diets, medications, and supplements are available to reduce progression of brain aging, although no treatment modality is curative. (See *Suggested Reading*, next page.)

#### House-Training Issues

When incomplete house training is the cause of house soiling, the dog's daily elimination frequency does not change. Urine and/or feces may be deposited, typically in rarely frequented rooms. A house-training lapse can occur secondary to increased urgency or reduced access to an appropriate elimination area. For example, altering the water or fiber content of a dog's diet can change its elimination frequency. Clients should be asked about their pet's daily routine to identify any reductions in the opportunity for supervised outings or walks. Dogs that are simply "let outside" may fail to eliminate if distracted or anxious or if the weather is inclement.

Treatment for house-training lapse involves increasing the dog's access to appropriate elimination areas. Supervision is critical to prevent house soiling during this conditioning period.

#### Anxiety-Based House Soiling

Urination or defecation can occur

because of sympathetic nervous system arousal during an anxiety-provoking event. A thorough behavior diagnostic examination should be performed, as many patients have multiple anxiety-related conditions.

Dogs that experience separation-related anxiety typically soil only in the absence of their owner. Dogs with noise-related anxiety exhibit signs even in their owner's presence.

## **A house-training lapse can occur secondary to increased urgency or reduced access to an appropriate elimination area.**

Treatment for elimination secondary to anxiety involves treating the primary behavior condition. Behavior modification and pharmacologic intervention may be needed. Anxiolytic medication is generally recommended when anxiety is severe enough to trigger elimination. Selective serotonin reuptake inhibitors (eg, fluoxetine 0.5-2 mg/kg PO q24h) and tricyclic antidepressants (eg, clomipramine 1-3 mg/kg PO q12h) are appropriate and effective for long-term use. Chronic medication is often recommended for dogs that exhibit anxiety in response to unidentified or unpredictable triggers, as it can be more difficult to implement a systematic behavior-modification protocol without control of the triggers.

If triggers are predictable and occasional, medication may be prescribed as needed.

Benzodiazepines (eg, alprazolam 0.01-0.1 mg/kg PO) and the serotonin antagonist/reuptake inhibitor trazodone (1-10 mg/kg PO) are fast-acting; these drugs are most effective when administered 1 hour before anticipated events.

Clients should be advised that using medication to treat canine anxiety is extra-label. Informed consent should be obtained before prescribing. In addition, several nutraceuticals are available for treating canine anxiety, but critical assessment of efficacy data is needed before making any recommendations.

#### Submissive & Excitement-Related Urination

Young dogs may urinate in social interactions (eg, greetings), when they are anxious or excited, or to communicate submission. This behavior does not reflect inadequate house training, and clients should avoid punishment.

#### Urine & Fecal Marking

Marking is a normal communicative behavior; however, it may occur in response to stressful situations, including interactions with other household animals or humans or when nonhousehold animals trespass in the dog's terri-

tory. Stress-related marking may occur in response to an ill human or pet in the household.

The index of suspicion for marking behavior is increased when prominent surfaces (eg, entryways) or personal items (eg, clothing, pet beds) are targeted. Urine marking typically occurs in addition to—not instead of—normal or outdoor elimination.

Treatment for marking is most successful if a trigger can be identified and controlled. Supervision is important. Clients should be advised to distract the dog to interrupt marking at the first sign of posturing to urinate or defecate. Castration can reduce urine marking in some male dogs.<sup>3</sup>

#### Conclusion

House soiling in dogs can have medical or behavior causes. Identifying the underlying medical condition or behavior issue is key to effective management. Client education about canine elimination preferences and schedules is important for successful treatment. In most dogs, house soiling can be managed with a good prognosis for control or resolution. ■

#### References

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2. Kwan JY, Bain MJ. Owner attachment and problem behaviors related to relinquishment and training techniques of dogs. *J Appl Anim Welf Sci*. 2013;16(2):168-183.
3. Neilson JC, Eckstein RA, Hart BL. Effects of castration on problem behaviors in male dogs with reference to age and duration of behavior. *J Am Vet Med Assoc*. 1997;211(2):180-182.

#### Suggested Reading

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