NOISE AVERSION IN DOGS

Presented by Sara L. Bennett, DVM, MS, DACVB

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MEET DR. BENNETT
A VETERINARY BEHAVIORIST

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- Co-instructor for University of Florida College of Veterinary Medicine online learning course, Shelter Animal Behavior and Welfare
- Behavior consultant for multiple species, with special interest in shelter and rescue animals
THE BIG PICTURE
Noise aversion is a spectrum of anxiety and fear-based reactions to noise.
WHAT IS NOISE AVERSION?

KNOW THE LANGUAGE

**Fear** = response to actual presence of perceived unpleasant trigger; adaptive

**Anxiety** = response to anticipated exposure to perceived unpleasant trigger

**Phobia** = fear out of proportion to actual level of danger presented by trigger; maladaptive

**Aversion** = distress, avoidance, discomfort to unpleasant trigger
NOISE AVERSION DEFINED

- Maladaptive behaviour of distress, avoidance, or discomfort to an unpleasant noise trigger

Why aren’t more dogs being treated for this problem?

Let’s take a closer look at noise aversion from a clinical perspective.
PREVALENCE

HOW BIG IS THE PROBLEM?

_______% of dogs experience noise anxiety\(^1\)

- Less than 10% of dogs
- Less than 25% of dogs
- More than 33% of dogs
- More than 50% of dogs

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1. Based on an online survey conducted by Harris Poll on behalf of Zoetis in November 2013 among 784 dog owners.
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Common Triggers

What are the top 3 triggers of noise aversion?¹

83% of dogs showed a fearful response to fireworks.

65% THUNDERSTORMS
31% CONSTRUCTION NOISE

Behavioral signs can progress with repeated exposure. Dogs become “conditioned” to other triggers associated with the noise.

CONTEXTUAL TRIGGERS
WHAT IS THE ACTUAL FEAR FACTOR?

Apparent fear of snow storm
Actual fear of loud snowplow

Dr. Bennett discussing classical conditioning
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SIGNALMENT

What factors influence a dog’s risk of having noise aversion?\textsuperscript{1,2}

- Age
- Sex
- Breed
- Origin
- Number of dogs in the home

What factors influence a dog’s risk of having noise aversion?\(^1,2\)

- **Age**: Increased age gives more opportunity to sensitize to noise aversion
- **Sex**: Female and neutered dogs are more affected
- **Breed**: Gun breeds are less likely to be affected
- **Origin**: Early exposure (first six months) to noise stimuli can have a protective effect

NOISE AVERSION IS A REAL DISEASE

Noise aversion affects the welfare of the affected dog and the strength of the human-animal bond.

Noise aversion is a common and significant welfare concern.

Both the dog and the pet owners suffer.
Behavioral signs of noise aversion can severely damage the human-animal bond.

- Loss of sleep, property damage and excessive barking can break the bond
- Abondonment, relinquishment, or sometimes euthanasia, are possible outcomes

Veterinary teams play a crucial role in protecting this bond:

- To help the dog stay in its home
- To help the owner keep their pet
- To retain the patient in your practice
DIAGNOSIS
CHALLENGES
& OPPORTUNITIES
DIAGNOSIS
THE SUBTLE SIGNS TO LOOK FOR

Which of the following are commonly reported behavioral signs of noise aversion?

- Lip licking
- Yawning
- Owner seeking
- Hiding
DIAGNOSIS
THE SUBTLE SIGNS TO LOOK FOR

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- Yawning
- Owner seeking
- Hiding

ALL of these signs are commonly reported behavioral signs of noise aversion. Other signs, such as decreased activity or salivation, may go unnoticed by owners or perceived as normal behavior.
CHALLENGE
RECOGNIZING THE SIGNS

Signs range from mild to moderate to severe.

- Panting
- Trembling / Shaking
- Hiding
- Pacing / Restlessness
- Cowering
- Lip-licking
- Refuses to eat
- Excessive vigilance / Hypervigilance
- Vocalizing (whining or barking at the sounds)
- Brow furrowed and ears back
- Yawning
- Owner seeking behaviour / Abnormal clinging
Pet owners often do not seek veterinary treatment until signs are moderate to severe. Initiating the conversation can lead to earlier diagnosis and treatment of noise aversion.

Managing noise aversion presents a great opportunity for general practitioners.

CLICK TO WATCH
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Dr. Mathias discussing how to start the conversation
OPPORTUNITIES
GUIDING THE CONVERSATION

Ask the right questions to get the answers needed for an informed diagnosis.

- Always include questions about behavior in a regular visit or annual check-up
- Use open-ended questions to encourage more detailed responses
- Ask owner to elaborate where issues have been identified

When a pet owner mentions a behavior problem it means, at the very least, the dog is moderately affected.
Benefits of having in-house vet techs who specialize in noise aversion or behavioral management:

- Specialist vet tech becomes clinic resource for noise aversion
- Allows vet to focus on other medical issues during time-limited appointments
- Build client trust and retention by providing behavior support
- Increase revenue for the clinic
TREATMENT
Despite the fact that noise aversion is common and compromises canine welfare, its treatment is frequently inadequate or ineffective.

Furthermore, treatment is often delayed until the signs of the dog’s distress are more profound or if the behavioral responses become problematic to the owner.
True or False? Early exposure to a range of noise stimuli at six months of age or younger can have a protective effect against the development of noise aversion in dogs.
Early experiences are an important factor in the development of fear responses.

True or False? Early exposure to a range of noise stimuli at six months of age or younger can have a protective effect against the development of noise aversion in dogs.

✓ True

False
TREATMENT
A MULTIMODAL APPROACH

Environmental management
• Long-term management
• Minimize sensory effects of noise aversion event

Behavior modification
• Long-term management
• Classical or operant conditioning

Pharmacotherapy
• Immediate and long-term management
• Pharmacological management
ENVIRONMENTAL MODIFICATION

Avoiding the stimulus is ideal. However, if that’s not feasible, minimizing its intensity is the next best option.

Create a SAFE SPOT
• Create a “safe spot” that the dog can rely on for comfort and safety during a noise aversion event
Systematic desensitization
• Exposure in a controlled setting below the dog’s trigger threshold, gradually increase volume

Classical counter-conditioning
• Create a new, positive association with the noise aversion trigger

Operant counter-conditioning
• Pair with, and reward alternate behavior that is incompatible with the unwanted fear-related behavior

Don’t punish the dog when scared; it only reinforces the fear.
**Benzodiazepines**
- Alprazolam, Clonazepam
- *Note:* behavioral side effects (aggression)

**SARI**
- Trazodone

**α-2 agonist**
- Sileo® (dexmedetomidine oromucosal gel)
- Clonidine

**Phenothiazine**
- Acepromazine
- *Notes:*
  - Tranquilizer, little to no anxiolytic effect
  - Can increase sensitivity to noise
  - Inappropriate as primary treatment

**Other**
- L-Theanine
- Pheromones

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**PHARMACOTHERAPY**

**KNOW YOUR TOOLS**

**Baseline**
- Chronic anxiolytics for frequent trigger exposure
- **Dose:** regularly on daily basis
- **Duration:** Ongoing

**SSRIs**
- Fluoxetine, sertraline

**TCAs**
- Clomipramine

**Others**
- Alpha-casozepine
- L-theanine
- Pheromones

Situational and baseline medications can be used together

TREATMENT

PROGNOSIS

Prognosis is directly impacted by:

Select all that apply

- Severity of symptoms
- Number of symptoms
- Duration
- Compliance
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PROGNOSIS INDICATORS

Prognosis is directly impacted by COMPLIANCE
- **Worse if** owner relies only on medication
- **Better if** owner is consistent with multimodal treatment

Prognosis is **NOT** impacted by:
- Severity, duration, and number of signs shown

Treatment can improve both the mildly and profoundly affected patient
- **Less likely** to develop more severe signs
- **More likely** to improve the welfare of the pet

Earlier treatment is better, but it is never too late to offer treatment.
KEY TAKEAWAYS
NOISE AVERSION

THE KEY TAKEAWAYS

1. Noise aversion is prevalent but under-recognized by owners, underdiagnosed by vets

2. Pet owners do not associate noise aversion behaviors as fear

3. It is a welfare issue for both human and dog

4. Failure to treat can lead to progression of signs and weaken the human-animal bond

5. It is never too late, or too severe a case to start treatment

6. A multimodal treatment approach is most effective
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1. **Click here** to begin the quiz
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