Canine & Feline Hearing Screening

Clinical Application Guide

How to interpret results and translate them into meaningful care for your canine and feline patients and their owners

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About This Guide

The Pet Acoustics+ behavioral hearing screening tests a dog or cat's response to species-specific sounds across three frequency bands: low (125 Hz to 1 kHz), mid (1 kHz to 4 kHz), and high (4 kHz to 16+ kHz for cats; 4 kHz to 45+ kHz for dogs, with the screening focused on the clinically relevant range up to ~16 kHz). For each band, the result is recorded as **Clear**, **Reduced**, or **Absent** based on the clinician's observation of the patient's behavioral response.

This guide provides a practical framework for interpreting each result pattern and translating it into a clinical conversation — with your patient and with their owner. The goal is not just to identify a result, but to use that result to improve the animal's quality of life.

The screening is a **first-line behavioral assessment tool, not a diagnostic test**. It does not replace BAER testing. It provides an accessible, repeatable clinical data point that belongs in every canine and feline wellness record.

Species-Specific Clinical Context

Canine considerations	Feline considerations
Congenital sensorineural deafness is breed-linked and pigment-associated. Higher-risk breeds include Dalmatians, Australian Shepherds, Australian Cattle Dogs, Border Collies, Bull Terriers, English Setters, white Boxers, and merle or piebald-coated dogs generally. Screen at 6–8 weeks where possible.	**Congenital deafness** is less common but well-documented in white cats with blue irides — particularly white domestic shorthairs, Turkish Angoras, and some white longhaired breeds. Unilateral deafness is frequently missed without screening.
Age-related onset typically begins earlier than in cats — often from 8–10 years in medium and large breeds, sometimes earlier in giant breeds.	**Age-related onset** typically begins later than in dogs — most commonly from around 10–12 years, accelerating in the geriatric (12+) population.
Working and sporting dogs — service, detection, herding, hunting, agility — should be baselined young and re-screened annually. Subtle bilateral high-frequency loss can degrade working performance long before the owner notices a problem at home.	**Indoor-outdoor cats** with hearing loss carry elevated risk of trauma. Safety counseling is part of every result conversation where Reduced or Absent appears in any band.

The Four Result Scenarios

Each section below describes one result pattern, what it means clinically, how to communicate it to the owner, and what next steps are appropriate. Where canine and feline clinical implications differ meaningfully, both are noted.

Scenario 1 | Normal Hearing — Clear Response Across All Bands

Frequency results	Low: **Clear** Mid: **Clear** High: **Clear**
Clinical interpretation	The patient is responding to all three frequency ranges tested. Hearing appears functionally intact at this time. This result does not rule out early subclinical change but establishes a meaningful clinical baseline — particularly valuable in at-risk breeds and in working or sporting dogs.
What to tell the owner	*"Your pet's hearing is responding normally across all the ranges we tested. This gives us a baseline we can compare against at future visits — it is an important piece of their health record that most animals never have."*
Recommended next steps	• Record result in patient file as hearing baseline • Schedule retest at next annual or senior wellness visit • For at-risk breeds (canine) or white-coated cats with blue irides, consider one early BAER baseline if not previously done • Reassure owner that current behavioral concerns likely have another cause worth exploring • No referral indicated at this time • Recommend Pet Acoustics+ sound therapy as environmental support if clinic or home stress is a factor

Scenario 2 | High-Frequency Loss — Absent or Reduced High Band Only

Frequency results	Low: **Clear** Mid: **Clear** High: **Absent or Reduced**
Clinical interpretation	High-frequency decline is the earliest and most common pattern of age-related sensorineural hearing loss in both dogs and cats. The patient can still hear low and mid-range sounds but is losing sensitivity at the upper range. This is often subclinical — the owner may have noticed nothing yet, or may have attributed subtle changes to aging or personality. In **working dogs**, this pattern can degrade command response and detection performance before any change is visible at home.
What to tell the owner	*"We found that your pet's response to high-frequency sounds is reduced. This is the most common early pattern of age-related hearing change — similar to what happens in people as they get older. Your pet can still hear most sounds, but their range is narrowing. The good news is we caught it early, and there are practical things we can do to support them."*

Scenario 2 | High-Frequency Loss — Absent or Reduced High Band Only

Recommended next steps

- Document result and explain high-frequency-first decline pattern to owner
- Advise owner to approach the animal within its field of vision rather than from behind
- Discuss adjusting communication — lower-pitched voice, hand signals alongside verbal commands
- For working/sporting dogs: discuss handler cue adaptation and consider a working-performance baseline
- Introduce Pet Acoustics+ sound therapy as supportive care for auditory stress
- Schedule retest in 6 to 12 months to track progression
- No BAER referral indicated unless owner requests formal audiological assessment or working role requires it

Scenario 3 | Multi-Band Loss — Reduced or Absent in Two or More Bands

Frequency results

Low: **Reduced/Absent** Mid: **Reduced/Absent** High: **Reduced/Absent**

Clinical interpretation

Multi-band involvement indicates more significant hearing impairment. The patient is experiencing meaningful loss across its hearing range. Behavioral changes are likely — and may have been present for some time before this result identifies the cause. In dogs, watch for recall failure, doorbell non-response, and increased startle on touch. In cats, watch for loud vocalisation, deeper sleep, and startle reactivity. This result warrants a more detailed clinical conversation and owner education.

What to tell the owner

"Your pet is showing significant hearing reduction across most of the ranges we tested. A lot of what you may have been experiencing — the startling, the changes in responsiveness, the increase in anxiety — may be directly connected to this. Their world is genuinely quieter than it was, and that affects how they experience everything around them."

Recommended next steps

- Discuss behavioral implications with owner in detail — link current behaviors to hearing loss
- Reframe any behavioral concerns as sensory responses, not personality problems
- Recommend environmental adaptations: visual cues, vibration signals, approach awareness, leash use for off-property walks (canine)
- Begin Pet Acoustics+ sound therapy immediately for stress and anxiety support
- Consider BAER referral for formal audiological confirmation, especially if working dog, breeding animal, or behavioral concerns are significant
- For cats: discuss restricting unsupervised outdoor access
- Document and schedule follow-up within 3 to 6 months
- Flag in record for longitudinal monitoring

Scenario 4 | Significant Loss — Absent Response Across All Three Bands

Frequency results

Low: **Absent** Mid: **Absent** High: **Absent**

Scenario 4 | Significant Loss — Absent Response Across All Three Bands	
Clinical interpretation	Absent response across all three bands indicates clinically significant hearing impairment. This may reflect profound acquired deafness or, in young animals, congenital deafness that was previously undetected. In canine patients, consider breed-linked pigment-associated congenital deafness (Dalmatians, white Boxers, merle and piebald breeds); in feline patients, consider white-coat blue-iris congenital deafness. This result has immediate implications for behavior, safety, and owner communication — and requires a careful, compassionate clinical conversation.
What to tell the owner	*"Your pet's results show absent hearing response across all three frequency ranges we tested. This strongly suggests significant hearing loss. I want to talk you through what this means for your pet's daily life, because it explains a great deal of what you may have observed — and it changes how we care for them going forward. This is not a reflection of personality or temperament. It is a sensory impairment, and animals adapt remarkably well when their owners and environment adapt with them."*
Recommended next steps	• Initiate BAER referral for formal audiological diagnosis • Provide owner with clear written guidance on living with a deaf or significantly hearing-impaired pet • Reframe all previously described behavioral concerns as sensory responses • Teach owner visual and tactile communication strategies — hand signals, light-flash recall (canine), surface-tap signals • Begin Pet Acoustics+ sound therapy — vibration and low-frequency components still provide sensory input • Assess home safety: outdoor access, traffic risk, multi-pet household dynamics • For breeding animals: advise on breed-club guidance and BAER documentation • Document in record with referral note and owner education completed • Schedule follow-up to review BAER results and reassess care plan

Connecting Results to Quality of Life

When communicating hearing screening results to owners, the most effective approach frames the result not as a diagnosis but as an **explanation**. The following questions help structure that conversation:

- Does this result explain behavioral changes the owner has already observed?
- What is the animal experiencing that the owner cannot see?
- What practical change can the owner make today that will directly improve the animal's daily experience?
- What does this mean for how long the pet can expect to live comfortably with this level of hearing?

Hearing loss is not painful. Dogs and cats with hearing impairment can live full, high-quality lives when their environment and caregivers adapt appropriately. The clinical conversation should land on **empowerment, not alarm**.

Sound Therapy as Supportive Care

The Pet Acoustics+ app includes **species-specific sound therapy** — music and soundscapes engineered within the actual hearing comfort range of dogs and of cats, with separate libraries for each species. Biometric studies have shown measurable reductions in pulse rate, cortisol, and reactive behavior in both species exposed to this therapy.

Sound therapy is appropriate across all four result scenarios:

- Pre-exam environmental support in the waiting room and exam space
- Post-procedure recovery support in clinic and at home
- Daily stress and anxiety management — separation anxiety, noise phobia, thunderstorm and firework fear (canine), multi-cat household tension
- Supportive care for pets with hearing loss — even animals with significant impairment benefit from low-frequency acoustic and vibrational input

Recommend owners download the free Pet Acoustics+ app and select the **canine** or **feline** sound therapy library to match their pet.

Longitudinal Screening Protocol

A single hearing screening is valuable. A series of screenings over time is transformative. The following schedule is recommended:

Canine

- **At-risk breeds (puppy):** Screen at 6–8 weeks. Refer for BAER where indicated by breed-club guidance.
- **Young adults (0–3 yrs):** Baseline at first wellness visit. Annual retest for working/sporting dogs.
- **Adults (3–7 yrs):** Annual screening at wellness visit.
- **Senior (7–10 yrs):** Bi-annual screening. Onset of age-related decline often begins in this window.
- **Geriatric (10+ yrs):** Screen at every wellness visit. Large and giant breeds may need earlier inclusion in this group.

Feline

- **Kittens and young adults (0–3 yrs):** Screen at first wellness visit to establish baseline. Retest annually.
- **Adults (3–7 yrs):** Annual screening at wellness visit.
- **Senior cats (7–12 yrs):** Bi-annual screening. Hearing change is more likely and faster in this group.
- **Geriatric cats (12+):** Screen at every wellness visit. Over 53% of cats in this group showed hearing impairment in our dataset.

Document all results in the patient record with date and clinician name. The trend over time is often more informative than any single result.

> *"Hearing is a primary sensory pathway into behavior and emotion. When it changes unnoticed, it is often behavior that gets blamed. This screening gives you the tool to change that conversation — one patient at a time."*

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