Dr. Mike Paul, DVM

Mike has more than 35 years of experience in companion animal veterinary practice and is a valued member of IDEXX's Pet Health Network team since 2013.

As the Deaf Dog Education Act Fund says so well,

"Outside of an obvious physical defect, deaf dogs are just your normal, everyday dogs. They do have a better excuse for not listening than most dogs...they share our lives, and are our companions and friends."

Loss of hearing or deafness in dogs, much as in humans, can result in isolation and loneliness as well as problems with interactions. However, when you recognize, acknowledge and address hearing loss, it doesn't have to get in the way. Furthermore, not all deafness is the same:

- Deafness may be an inability to hear certain frequencies but still allow others to be heard.
- Deafness may be somewhat resolvable and temporary if an underlying cause can be treated. (For instance, some hearing losses [conduction defects] are at least in part due to mechanical blockages of the ear canal by wax, hair, infection or damage to the ear drum.)
- Deafness may be permanent damage to the inner and middle ear where the nerve impulses are. It can even be caused by extreme noise.
- Deafness may be a result of a congenital defect and, in this case, must be lived with. Nearly 90 dog breeds have been identified with congenital deafness. In most of these dogs the deafness is heredity and for nearly all it is associated with piebald or merle coat patterns. So almost any dog with white in its fur or any "blue" dog is at least more likely to be deaf. Specific tests (BEAR) should be performed in potentially affected breeds to know for sure. Individual affected animals should not be bred.

The important thing is to recognize the condition and treat the treatable.

How to detect hearing loss in your dog

Preliminary hearing evaluations need not be sophisticated or difficult. However, it is important to remember that many auditory cues may be accompanied by a visual stimulus so be sure the dog cannot see what you are doing. Ideally, your dog should be disinterested so the only stimulus is the sound you will create:

- Jingle your keys in your pocket or rattle a can of coins.
- When your dog is distracted call her name softly, but get progressively louder. Watch her eyes for a reaction. This can be done from another room while someone else watches her reactions.
- Clap your hands or whistle from behind her, but do not be so close she can hear air move.
- Thump on a barrel or drum from another room and see if she reacts.
- Some cases of hearing loss can involve only one ear (unilateral) and so it might be necessary to create the sound depending on the position of the dog.
- Sometimes all you are looking for is a change in facial expression or ear position that says your dog heard you.

How your veterinarian will confirm hearing loss

The only way hearing loss can be confirmed is the BAER (brainstem auditory evoked response) test that detects electrical activity in the inner ear (cochlea) and hearing nerves (auditory pathways) in the brain. The BEAR test works in much the same way that an EKG detects electrical activity of the heart. This is a specialized test, not performed by most <u>veterinarians</u>, but available at a number of specialty facilities around the country. The most common use of the BAER test is in evaluating congenital deafness among affected breeds.

Living with a deaf dog

There is no doubt that deaf and blind individual dogs can make excellent companions. (Learn more about living with blind dogs.) However, they do present some unique challenges since training and behavioral modification often relies on external visual and auditory cues. Living and working with a deaf dog requires a shift from verbal to visual commands and rewards. A "thumbs up" can come to mean as much as a "Good









boy!" While a head shake and frown can mean the same as "NO!" Not unlike verbal commands, the key is consistency, so once you develop a signal that you think will work for "Come" or "Down" or "Don't bark," ALWAYS use the same sign and the same praise or acknowledgement.

The challenge in training a deaf dog lies not in training the dog but the person involved.

Protecting a deaf dog

First, make sure your non-hearing dog is not allowed to roam. Remember he can't hear that oncoming truck or unwelcoming dog. (Click here for some of the most common reasons that dogs are hit by cars.) If your dog is totally deaf, do not allow him out of a fenced area unless on a leash. Some otherwise deaf dogs can hear certain frequencies such as a shrill dog whistle. If your dog is lucky enough to have this degree of hearing make sure you use this whistle and reward his response. You never know when it will come in handy.

Lastly is the issue of identification. Make sure all of your pets are permanently implanted with microchip identification and that they have a tag on their collar that identifies them as deaf. (Learn how a microchip reunited Corbin the dog with his family 1100 miles away!)

Living with a deaf dog may be confusing for owners who do not have the right tools and knowledge. Fortunately, once you do, most deaf dogs can live long, happy lives.

Questions to ask your veterinarian:

- Why doesn't my dog seem to hear me when I call her?
- I have a Dalmatian that seems unable to hear me whistle and call. Is there a chance he could be deaf?
- I have adopted a deaf dog, is there any way I can help her adapt?

Resources:

1. "Dog Coat Colour Genetics." Doggenetics.co.uk. Web.

17 Oct. 2014.

2. Coren, Stanley, Ph.D. "Hearing in Colors: Your Dog's Coat Color Predicts His Hearing Ability." Psychology Today: Health, Help, Happiness + Find a Therapist. Psychology Today: Here to Help, 12 July 2012. Web. 17 Oct. 2014.

If you have any questions or concerns, you should always visit or call your veterinarian -- they are your best resource to ensure the health and well-being of your pets.





