

The Surprising Reason Why Dogs Have Whiskers

Dogs are primarily known for using their nose a lot to interact with their environment. But as it turns out, they're reliant on their whiskers, too.

STORY AT-A-GLANCE

- Whiskers are specialized touch receptors located on the nose, above eyes and chin, which help dogs sense their environment and navigate their surroundings
- Whiskers serve multiple functions, including protecting the dog's face, improving spatial awareness, sensing air currents and helping dogs "see" better in limited-vision scenarios
- Dogs use whiskers to detect potential dangers, particularly when moving through environments like grassy fields or navigating spaces with limited visibility
- A dog's emotional state can be understood by other humans by observing their whisker positioning, with relaxed whiskers close to the face and curious whiskers extended forward
- While cutting whiskers doesn't cause pain, it can temporarily impair a dog's ability to interact with and understand their surrounding environment

Dogs are known for the amazing sense of smell that they use all the time. But did you know they also take advantage of their whiskers? That's right — dogs use their whiskers very much like their feline friends to help make their way around their surroundings.

What Are Dog Whiskers?

According to Dr. Brian Collins, a veterinarian at the Cornell Riney Canine Health Center, whiskers are specialized hairs that work as touch receptors.¹ However, it's commonly believed that dogs don't have much of a use for them. As noted in a 2020 study:²

"The importance of tactile hairs has not yet been scientifically proven for the domestic dog, however, it is evident that dogs react sensitively to the touch of their vibrissae and that these hairs fulfill protective functions including the protection of the eyes ...

Anatomically and physiologically, it is proven that tactile hairs are part of a sensory organ and clearly differ from the body fur. Without them, the sensory organ is not functional."

Whiskers come in different lengths and colors. In addition to the nose, where they're mostly found, whiskers appear on top of the eyes and on their chin. Interestingly, they can also curl if your dog has curly fur.³

Dr. Nancy Welborn, a veterinarian at the Louisiana State University School of Veterinary Medicine, adds that when a whisker moves, the movement is picked up by Merkel cells (responsible for sensing touch) and sent to the brain. From there, the dog responds and adjusts their reaction.⁴

Five Different Roles of Whiskers

Based on published research, it's clear that while dogs don't solely rely on whiskers to navigate their way around the world, they still have different uses. Here are five functions, according to Dr. Jennifer Coates, DVM:⁵

- **Protects their face faces** — Most of the time, the dog's face is the first thing that interacts with anything in their environment. For example, when they're running through a grassy field, the whiskers allow them to sense when there is danger close by so they can act accordingly.
- **Helps dogs "see" better** — Dogs usually have a limited range of vision. For example, they can't see everything below their muzzle, and therefore must rely on their whiskers under their chin to help them gain a better view of their surroundings. When they lower their head into the ground to inspect something, these whiskers will warn them of any potential dangers.
- **Boosts spatial awareness at night** — In relation to the point above, whiskers greatly help dogs see better at night, even though they have better night vision than humans. For example, they'll be able to find their water bowl at night but will need the help of their whiskers to find the center of the bowl. Newborn puppies that haven't opened their eyes yet also greatly rely on their whiskers for a couple of weeks to move around until they can see.
- **Senses air currents** — The interesting thing about whiskers is that they're incredibly sensitive; they don't have to touch nearby objects. In fact, they're able to sense the wind, which already provides plenty of information about their current surroundings to help them move or complete a task.
- **Conveys their emotional state** — Observing your dog's whiskers can reveal much about their current emotional state. For example, the whiskers will rest close to their face when they're completely relaxed. Happy or curious dogs will have their whiskers over their eyes and forward.

Be Careful with Your Dog's Whiskers

Since whiskers perform many roles that help your dog analyze their environment, it's important to be careful — never pull or twist your dog's whiskers and be mindful when petting them. If you see the occasional whisker around your home, don't worry, as it's normal for dogs to shed them.

Thankfully, dogs won't feel any pain when their whiskers are accidentally cut off during a grooming session. They will grow back, but at a slower rate compared to fur. However, the downside here is they may have difficulty sensing information around them. As noted by Welborn:

"For most dogs in a home environment, they're not really in danger," he says, "but it sort of takes away part of how they interact with their environment."

So, pay attention whenever you're grooming, playing with or petting your dog. While they can survive without whiskers, they'll have trouble making sense of things for some time until they can recover.

Sources and References

^{1,3,4} [Inverse, June 15, 2024](#)

² [Tierarztl Prax Ausg K Kleintiere Heimtiere, 2020 Jun;48\(3\):186-195, Abstract](#)

⁵ [Reader's Digest, "Why Do Dogs have Whiskers? 5 Reasons, According to a Vet" September 13, 2024](#)
