

The Telltale Signs of a Serious Canine Eye Issue

If you notice this with one or both of your dog's eyes, don't delay having it checked out by your veterinarian. Left unchecked, it can be very painful for your pup and can lead to corneal ulcers and even vision loss. Know the eight things that can cause it, what to look for and tips for treatment.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Thick, yellow eye discharge is a sign of keratoconjunctivitis sicca (KCS), or dry eye, in dogs
- The most common cause of KCS in dogs is immune-mediated inflammation and tissue destruction in tear-producing glands
- The tear film, made of oil, water and mucus, is important to protect your dog's eyes from environmental pollutants and helps keep the tears from evaporating
- When the tear film is disrupted, the eyes may produce more mucus to make up for the lack of moisture, leading to crusting around the eyes
- It's essential to have dry eye treated, as left unchecked it can be very painful and can lead to corneal ulcers and vision loss

Vision changes in dogs can be difficult to spot in the early stages, since dogs rely so heavily on their sense of smell to navigate the world. However, it's important to keep a close eye out for issues, including thick, yellow discharge, which is a sign of keratoconjunctivitis sicca (KCS), or dry eye.

Similar to its name, dogs with dry eye are unable to produce enough tears to keep their eyes properly lubricated. The resulting dryness and inflammation of the cornea is not only uncomfortable but can lead to blindness if left untreated.

What Causes Dry Eye in Dogs?

The most common cause of KCS in dogs is immune-mediated inflammation and tissue destruction in tear-producing glands, a problem often seen in cocker spaniels, miniature schnauzers, and West Highland white terriers. **Brachycephalic breeds** — those with short muzzles and bulging eyes, such as the Cavalier King Charles spaniel, English bulldog, Lhasa Apso, pug and Shih Tzu — are also at an increased risk of KCS.

Further, Dr. Lucien Vallone, a clinical associate professor of ophthalmology at the Texas A&M School of Veterinary Medicine & Biomedical Sciences, explained in a news release, "Common inflammatory culprits like tear film evaporation, trauma, and hair that surrounds the eye rubbing on the eye's surface can influence tear-producing glands in a negative way, lessening the quantity and quality of the tear film."¹ Additional causes of dry eye include:²

- Congenital disease, such as small or absent lacrimal glands
- Radiation therapy near the eye

- Infectious disease, such as canine distemper virus
- Trauma to the head
- Neurologic deficiency, such as loss of nerve innervation to the eye
- Exposure to certain antibiotics and anesthesia, as well as sulfa derivative medications
- Endocrine disease, including hypothyroidism, Cushing's disease, and diabetes mellitus
- Prolapsed gland of the third eyelid ("**cherry eye**") and/or removal of the gland of the **third eyelid**

Signs and Symptoms of Dry Eye in Dogs

The tear film, made of oil, water and mucus, is important to protect your dog's eyes from environmental pollutants and helps keep the tears from evaporating. When it's disrupted, the eyes may produce more mucus to make up for the lack of moisture, leading to crusting around the eyes.

Discharge caused by dry eye may have a gummy texture and cause your dog's eyelids to stick together.³ This occurs because the tear mixture consists mostly of oil and mucus instead of water.

"Dogs with dry eye also display signs of inflammation, including pain and redness," Vallone said. "Pain is apparent when squinting or rubbing is observed, and a distinctive red-eye appearance is caused by reddened conjunctiva (normally the white part of the eye) and new blood vessel formation in the cornea."⁴

You may notice your dog blinking or squinting a lot and the eyelid may swell. The condition may be autoimmune in nature, when your dog's immune system attacks the lacrimal glands that help produce tears, or can be due to a problem with the nerve to the lacrimal gland.⁵ It's essential to have dry eye treated, as left unchecked it can be very painful and can lead to corneal ulcers and vision loss.

"Corneal ulcers are at an increased risk of infection due to the poor health of the eye's surface, and this combination of factors brings many dry eye patients into the emergency room for corneal ulcers that often need to be repaired surgically," Vallone said. "Sadly, some eyes are removed due to severe complications of dry eye."⁶

Tips for Dry Eye Treatment

If you suspect your dog has dry eye syndrome, see your veterinarian right away. "Treatment is most successful when started very early in the disease course, when symptoms begin," Vallone said. "Otherwise, untreated dry eye can have devastating effects on vision and eye comfort."

A Schirmer Tear Test can be used to determine the health of the eyes' tear film. If dry eye is diagnosed, conventional treatment involves topical medications to stimulate tears for the rest of your dog's life.

While most dogs respond well to this treatment, a surgical procedure called a parotid duct transposition may be recommended to redirect the parotid salivary duct from the mouth to the eye to provide salivary secretions to the cornea. Due to the complexity of this procedure, it should only be performed by a board-certified **veterinary ophthalmologist**.

Regular rechecking of tear glands using the Schirmer test is important in all cases of dry eye to determine whether the condition is improving or getting worse. In cases of very poor tear production, your dog may need his eyes lubricated multiple times each day to stay comfortable. Maqui berry is a supplement that can also be used to help improve tear production naturally, especially in the early stages of disease.

Integrative veterinarians have additional "tools" in their tool bag (including maqui berry and n-acetyl cysteine eye drops) to improve tear production in mild to moderate cases of dry eye, which can be combined with prescription eyedrops to slow the progression of the disease. In addition, because KCS is often immune-mediated, **insisting on titers** instead of unnecessary additional vaccines can help protect your dog's immune system from additional stress.

Sources and References

^{1,4,6,7} [Texas A&M School of Veterinary Medicine & Biomedical Sciences, Focusing in on Canine Dry Eye June 8, 2023](#)

² [American College of Veterinary Ophthalmologists](#)

³ [Whole Dog Journal July 20, 2022](#)

⁵ [American Veterinarian October 23, 2017](#)

⁸ [Journal of Functional Foods Volume 10, September 2014, Pages 346-354](#)
