

Special Species

A Vision Problem You Can't Afford to Miss

Don't ignore the symptoms — It affects dogs, cats, and horses, leading to pain, swelling, and overall discomfort. If treated right away, the prognosis is usually good, but if not, it can lead to blindness.

Reviewed by <u>Dr. Arielle Walton</u>

STORY AT-A-GLANCE

- Uveitis is a serious eye condition that causes pain, redness, and cloudiness, and can lead to blindness if left untreated in horses, dogs, and cats
- In horses, uveitis often starts with eye trauma or infection, but can become recurrent, turning into a chronic condition called Equine Recurrent Uveitis (ERU), also known as "moon blindness"
- ERU is an autoimmune disease where the horse's immune system attacks its eye. Certain breeds, like Appaloosas, are at higher risk due to genetic factors
- Treatment includes anti-inflammatories, immune-modulating drugs, and sometimes antibiotics. Some horses may need eye medication delivered through a unique tube system called a sub-palpebral lavage
- Complementary therapies like acupuncture and herbs may support healing, and in severe cases, eye removal can relieve pain, without ending your horse's ability to live a full life

The uvea is a section of the eye composed of three parts. When any of these parts become inflamed, it's called uveitis. This painful eye condition occurs in different animals, including dogs, cats, and even horses, and if not addressed, it can progress into something far more serious — blindness. This article will help you understand uveitis and what you can do to prevent it from occurring.

What Is Uveitis?

Uveitis is the formal term that refers to inflammation inside the eye, specifically in the uveal tract. The uveal is the middle layer of your pet's eye, a delicate tissue layer between the cornea and the retina. The uveal is made up of three parts:¹

- **Iris** The colored part of the eye that you can see.
- **Ciliary body** It comprises muscles responsible for helping the eye focus. It's also where the aqueous humor, the clear fluid in the eye, is produced.
- **Choroid** This is the inner lining of the eyeball that extends from the ciliary muscles up to the optic nerve behind the eye. It also provides nutrients to the eye through the layers of blood vessels in it.

When this area becomes inflamed, it causes pain and vision problems in your pet. Blood vessels in the eye will start to leak, releasing cells and proteins that make the eye swell, cloud up, and become extra sensitive to light.²

What Are the Symptoms of Uveitis?

In horses, uveitis symptoms may first appear as squinting, blinking, and turning away from the sun. One eye can appear cloudy or swollen; to ease the discomfort, they can rub it against a post. Horses may also act unusually clumsy or refuse to move around.

In dogs, uveitis may appear as intense reddening, eye bleeding, excessive tearing, and cloudiness. The eye may also be kept shut. According to VCA Animal Hospitals:³

"The pupil can be constricted (very small), and the iris can show a bulging outward. Blood or pus may also be seen inside the eye. The sclera (white part of the eye) and conjunctiva may appear redder than normal. The cornea may have a cloudy or bluish appearance. In chronic cases, cataracts, blindness, or lens luxation (displacement) can also be seen."

Cats with uveitis may also manifest similar symptoms. Mucus, pus, or clear fluid may also be seen leaking from their eyes.⁴ Uveitis in pets can be acute, meaning it occurs suddenly, or it may develop slowly, meaning it's chronic. The pupil becomes constricted with acute uveitis, though with chronic uveitis, it may appear either normal or constricted.⁵

What Causes Uveitis in Horses?

In horses, uveitis usually happens because of eye injuries or infections. A poke in the eye or a corneal ulcer (a scratch on the eye's surface) can trigger this condition. When caught early, these often respond well to treatment.

However, for some horses, uveitis doesn't go away — it comes back repeatedly, and becomes a long-term condition. This is called Equine Recurrent Uveitis (ERU), known as "moon blindness." Farmers coined the name during the 1600s, believing the condition was linked to moon phases. Around 2% to 25% of horses are affected by this condition, and it's the top cause of blindness in horses worldwide.^{6,7}

ERU is an autoimmune condition, which means the horse's immune system attacks its eye. These attacks can be triggered by:

- Bacterial infections, especially leptospirosis
- Viruses, like equine influenza
- Parasites
- Dental abscesses or hoof infections
- Routine deworming treatments (dying parasites can trigger inflammation in the eye)

While ERU can affect any horse, some breeds — especially Appaloosas — are more likely to develop it. Appaloosas are up to eight times more likely to get ERU than other breeds. There's even a genetic test (called the LP test) that can help predict risk in this breed.⁸

What Causes Uveitis in Dogs and Cats?

In domestic animal companions, uveitis can be triggered by various factors. They can be so varied that the cause is sometimes never discovered. Here are some common triggers of uveitis in dogs:⁹

- Viral infections like rabies or distemper
- Bacterial infections like leptospirosis or Lyme disease
- Parasitic infections like ehrlichiosis or toxoplasmosis
- Fungal infections like blastomycosis or histoplasmosis
- Metabolic diseases like diabetes
- Chemical toxins or irritants
- Autoimmune conditions
- Eye tumors or trauma
- High blood pressure
- · Damage to the lens caused by protein leakage

As for cats, uveitis can be linked to these causes:10

- Viral infections like feline leukemia (FeLV), feline immunodeficiency virus (FIV), and feline infectious peritonitis (FIP)
- Bacterial infections
- Parasitic infections like toxoplasmosis or migrating larvae
- Fungal infections like cryptococcosis or blastomycosis
- Autoimmune conditions
- Eye trauma or tumors
- · Damage to the lens caused by protein leakage
- Chemical toxins
- High blood pressure

Consult your vet to confirm your pet has uveitis, as they will perform a full eye exam. They may also conduct blood tests, urinalysis, and X-rays to rule out other conditions.

How Is Uveitis Treated?

Treatment can take several weeks or even months, depending on the severity. The main goals are reducing inflammation, controlling pain, and supporting the immune system. Common medications prescribed for uveitis can include anti-inflammatories and eye drops that dilate the pupil. Antibiotics may be prescribed if an underlying bacterial condition, like leptospirosis, is causing the illness.

Administering eye drops in horses with uveitis can be challenging, so some vets use a sub-palpebral lavage system to deliver the medication into their eyes. This small tube is placed through the eyelid and uses a port near the mane to administer the medication straight to the eye.

Some pet parents also explore alternative treatments to support long-term health. In Traditional Chinese Veterinary Medicine (TCVM), it's believed that eye inflammation can be linked to imbalances in the liver. Natural remedies like artichokes, anti-inflammatory herbs (dandelion root, ginger, and turmeric), and acupuncture can help facilitate

recovery.

According to Dr. Judy Morgan, a certified veterinary acupuncturist, chiropractor, and food therapist:

"[T]he liver is the window to the eye. Your horse may not have liver disease, but ERU is caused when there is heat (inflammation) and stagnation in the liver. The goal of TCVM therapy is to clear the heat from the liver and eyes and remove the stagnation and pain."¹¹

In some severe or painful cases of uveitis in horses, especially when flare-ups are constant, your vet may recommend removing the eye. While this might sound extreme, it can relieve and improve the quality of life, especially if the other eye is perfectly healthy. Horses adapt surprisingly well to having one eye and can still live a happy and active life.

Sources and References

1,2,7,8,11 Dr. Judy Morgan's Naturally Healthy Pets, Treating Uveitis in Horses

^{3,9} VCA Animal Hospitals, Uveitis in Dogs

^{4,5,10} VCA Animal Hospitals, Uveitis in Cats

⁶ Merck Veterinary Manual, Disorders of the Anterior Uvea in Horses