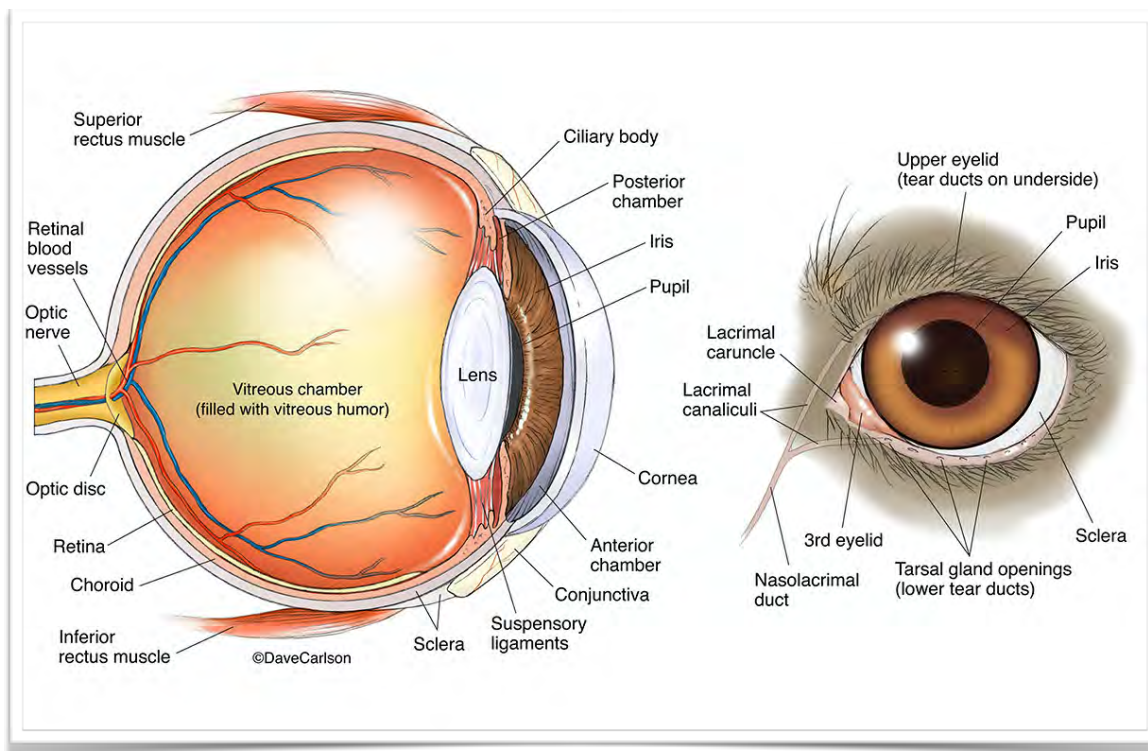


# CATARACTS

## Cataracts and Cataract Surgery



## What is a cataract?

The term cataract refers to any opacity of the lens. The lens is a normally transparent structure that lies behind the iris (colored part of your eye) within the pupil (the opening in the iris through which we see). The function of the lens is to concentrate and focus light onto the retina. The retina then converts the light energy into an electrical impulse which is interpreted in the brain as vision. An opacity (cloudy spot) in the lens decreases the amount of light reaching the retina resulting in loss of vision. Cataracts can either be very small (a cloudy spot) having minimal impact on vision or they can involve the entire lens resulting in blindness. Cataracts are a leading cause of blindness in dogs.

## Why did my pet develop cataracts?

The most common cause of cataracts in dogs is the result of an inherited defect affecting the lens. Many breeds of dogs and even mixed breed dogs can develop inherited cataracts. These cataracts can develop at any age and can be variably progressive. Some inherited cataracts remain small throughout life while others can progress to complete opacity and vision loss relatively quickly. Dogs with inherited cataracts should not be

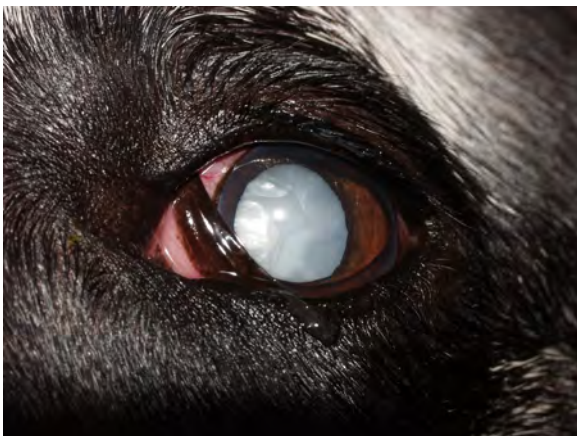
### Diabetic (Sugar) Cataracts

Another leading cause of cataracts in dogs is diabetes mellitus (“sugar cataracts”). Diabetes mellitus is a disease of the pancreas that affects the body’s ability to regulate the level of glucose (sugar) in the bloodstream. The resulting elevated blood glucose causes a build up of glucose within the lens itself. The high glucose levels within the lens draws water into the lens causing the lens fibers to swell, break and become opaque. Sometimes this swelling can happen rapidly resulting in severe inflammation and permanent loss of vision. This swelling can even happen in well controlled diabetic pets.



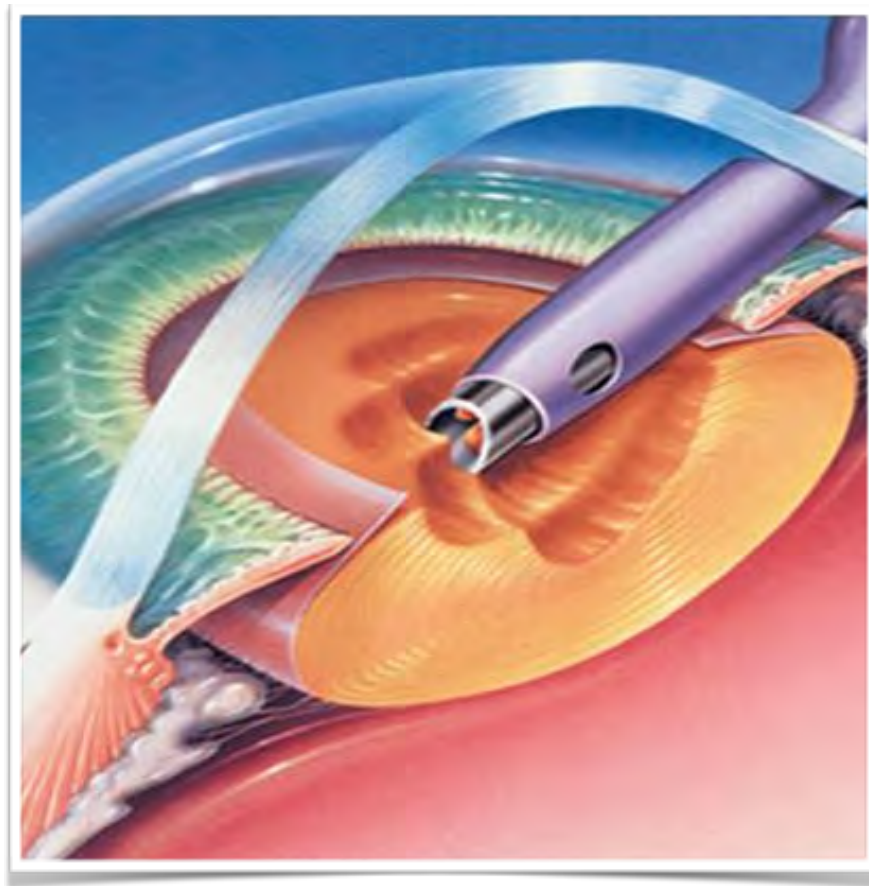
used in breeding programs.

Less common causes of cataracts include advanced age, uveitis (inflammation inside of the eye), trauma, and nutritional deficiencies.



## How are cataracts treated?

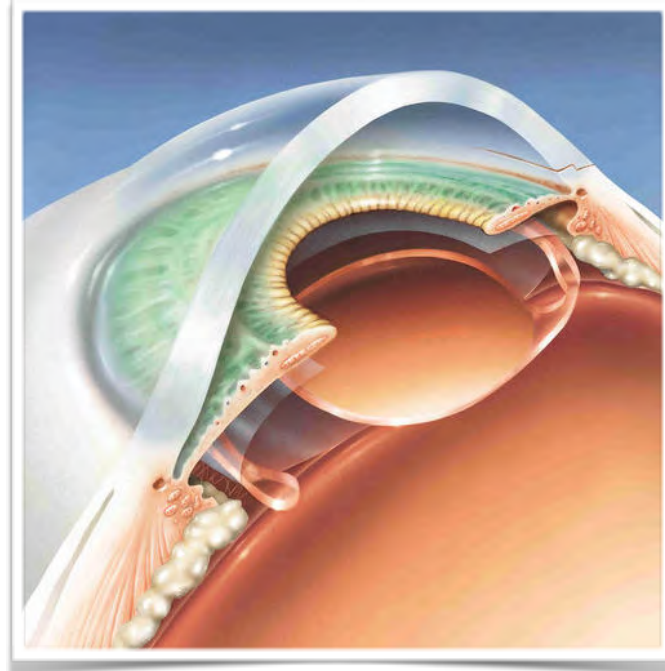
Currently, the only effective treatment for visually significant cataracts is through surgical removal of the affected lens. Cataract surgery is performed with the patient under general anesthesia using an operating microscope. A small incision is made into the eye and the cloudy material broken up and removed through a process called phacoemulsification. We use the same technique and equipment used for human cataract surgery. Once the cloudy lens has been removed, an artificial lens is placed inside of the eye within the lens capsule. The artificial lens helps to refocus light onto the retina restoring vision.



## What is the success rate for cataract surgery?

The success rate for cataract surgery can vary greatly depending on the health of the affected eye. For an “ideal” cataract surgery candidate the success is approximately 90-94%. Some pre-surgical testing (i.e. ocular ultrasound and electroretinogram) may be recommended to determine if your pet is a good candidate for surgery. Even for an ideal candidate, one out of every ten eyes does not regain or maintain functional vision after surgery. Complications following surgery that can result in permanent blindness include

glaucoma, retinal detachment, and intraocular infection. Some of these complications may require long term medical treatment or additional surgery up to eye removal for comfort. It is important to remember that although these complications can occur following surgery, some of these complications are more likely to occur without surgery. After your pet's initial cataract evaluation, your veterinary ophthalmologist will discuss your pet's chances of success based on his/her individual eye examination.



## What should I expect after surgery?

Your pet will be admitted to the hospital the same day as surgery and will be discharged late that afternoon. For the first few weeks after surgery, your pet's exercise will be restricted and they will have to wear an Elizabethan collar to protect the eyes from irritation. Medical treatment by the owner after surgery is imperative for a successful outcome. Several different eye drops will be needed 3-4 times daily for the first few weeks. This usually decreases to one drop once daily long term, if all goes well. Oral medications may also be prescribed. Recheck appointments with the veterinary ophthalmologist are required one day, two weeks, and 6 weeks after surgery. If any complications develop after surgery, more frequent rechecks may be necessary.

### What if I decide not to pursue surgery?

As cataracts progress they can lead to inflammation inside of the eye (lens-induced uveitis). Although this inflammation is not painful to your pet, it can lead to painful complications like glaucoma over time. Daily eye medication to control this inflammation will significantly reduce the risk of the eye becoming painful in the future. Blind dogs can live very happy, healthy lives with a few minor alterations to their home lives. Dogs learn quickly to adapt to their environment and navigate through their world. Sometimes this transition can initially be difficult, especially if vision loss was sudden in onset. Blindness alone is not a reason to euthanize a dog.

