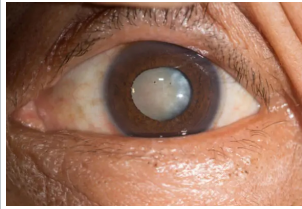


## WHAT IS A CATARACT?

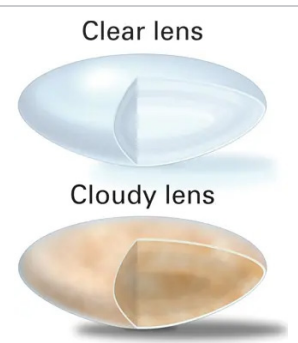


A cataract is a loss of transparency, or clouding, of the eye lens. The eye lens plays a vital role in focusing images on the retina. A cloudy lens interferes with light passing through to the retina, the

light-sensing layer of cells at the back of the eye. Compare a cataract to looking at the world through a foggy or blurry window. Light rays do not focus clearly if the lens loses its clarity, as it does when a cataract develops. Glasses or contact lenses may not adequately sharpen vision if a cataract is present.

## WHAT CAUSES A CATARACT?

The most common cause of a cataract is aging. As you get older, chemical changes in your lens make it less transparent. The loss of transparency may be so mild that vision is hardly affected or so severe that no shapes or movements are seen, only light and dark. You have a cataract when the lens gets cloudy enough to obstruct vision to any significant degree.



The top lens is a clear, natural lens.

The bottom lens shows clouding by cataract.

Other causes of cataracts include trauma, medications like steroids, systemic diseases such as diabetes, and prolonged exposure to ultraviolet light. Occasionally, babies are

born with a cataract. Glasses or contact lenses may not adequately sharpen your vision if a cataract is present.

Reducing the amount of ultraviolet light exposure by wearing a wide-brim hat and sunglasses may reduce your risk for developing a cataract, but once set, there is no cure except to have the cataract surgically removed. Outpatient surgical procedures remove the cataract either through a small incision (phacoemulsification) or a large incision (extracapsular extraction). The time to have the surgical procedure is when your vision is bad enough to interfere with your lifestyle.

## WHAT ARE THE SYMPTOMS?

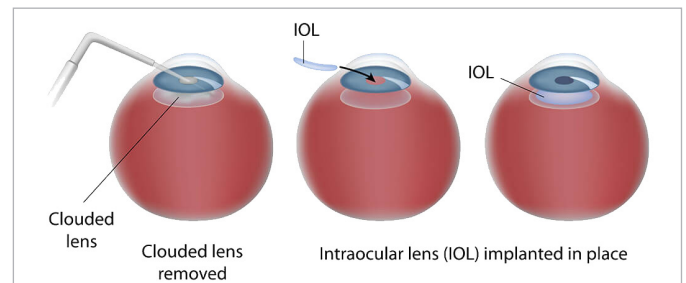
Cataract formation is a slow, progressive, and painless decrease in vision. Ironically as the lens gets harder, farsighted (hyperopic) people experience improved distance vision and are less dependent on glasses. However, nearsighted (myopic) people become more nearsighted, causing distance vision to worsen.

- Blurring of vision
- Glare, particularly at night
- Frequent glasses prescription changes
- Reduction in color intensity
- Yellowing of images
- Double vision in rare cases

A cataract is detected during our comprehensive eye exams. Your eyes will be dilated, so the pupils are wide open, enabling our medical team to look for signs of a cataract with a slit lamp, along with checking your retina and optic nerve. We will also do a refraction to test your visual acuity.

## WHAT ARE THE TREATMENTS?

The treatment for a cataract is to remove the lens and implant an Intraocular Lens (IOL). An IOL is a tiny, lightweight, clear plastic disk placed in the eye during cataract surgery. Intraocular lenses have many advantages. The IOL remains in the eye after surgery, unlike contact lenses, which must be removed, cleaned, and reinserted. An IOL replaces the focusing power of the eye's natural lens. The rapid evolution of IOL designs, materials, and implant techniques has made them a safe and practical way to restore normal vision after cataract surgery.

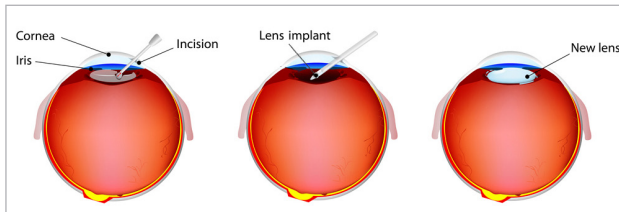


One and a half million people have a cataract procedure every year, and 95% achieve success. As with any surgery, complications may occur during or after, and some are severe enough to limit vision. In most cases, vision, as well as the quality of life, improves.

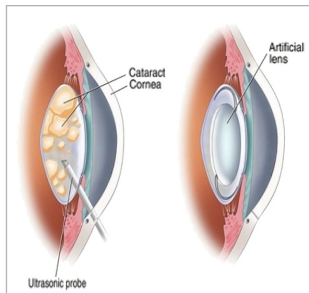
Laser-assisted cataract surgery is performed as an outpatient procedure, typically under a local anesthetic (using eye drops) or sometimes with general anesthesia. The patient feels no pain, but you may need to avoid bending over or lifting heavy objects during recovery. It can take up to six weeks to achieve the best-corrected vision.

### Extracapsular Cataract Extraction (ECCE)

Extracapsular cataract extraction is a traditional method for surgically removing a cataract. An incision is made in the side of the cornea at the point where the cornea and sclera (the white part of the eye) meet. Carefully entering the eye through the incision, the surgeon gently opens the front of the lens capsule and removes the lens's hard center (the nucleus). The soft lens cortex is suctioned out, leaving the back of the capsule in place.



### Phacoemulsification (Phaco)



Phacoemulsification is a surgical method in which an ultrasonic oscillating probe is inserted into the eye. The probe breaks up the center of the lens. The fragments are suctioned from the eye at the same time. A cataract

is removed in tiny pieces with a small incision is made that does not require sutures to close. Most of the lens capsule is left behind, and a foldable intraocular lens implant, or IOL, is placed permanently inside to help focus light onto the retina. Vision returns quickly, and one can resume normal activities within a short period.

### Posterior Capsulotomy

A posterior capsulotomy is a surgical laser procedure that is sometimes necessary after cataract surgery. It is painless and takes five minutes to perform.

During cataract surgery, part of the front (anterior) capsule that holds the lens is removed. The transparent back (posterior) capsule remains intact. As long as that capsule stays clear, one has good vision. But in 10 to 30% of people, the posterior capsule loses its clarity. When this happens, an opening can be made in the capsule with a laser (posterior capsulotomy) to restore normal vision.

Before the laser procedure, the ophthalmologist does a thorough ophthalmic examination to ensure there is no other reason for vision loss.