

# Facts About Cataract

Listen [https://app.readspeaker.com/cgi-bin/rsent?](https://app.readspeaker.com/cgi-bin/rsent?customerid=5823&lang=en&readid=contenido&url=https%3A%2F%2Fnei.nih.gov%2Fhealth%2Fcataract%2Fcataract)

This information was developed by the National Eye Institute to help patients and their families search for general information about cataracts. An eye care professional who has examined the patient's eyes and is familiar with his or her medical history is the best person to answer specific questions.

## Cataract Defined

### What is a cataract?

A cataract is a clouding of the lens in the eye that affects vision. Most cataracts are related to aging. Cataracts are very common in older people. By age 80, more than half of all Americans either have a cataract or have had cataract surgery.

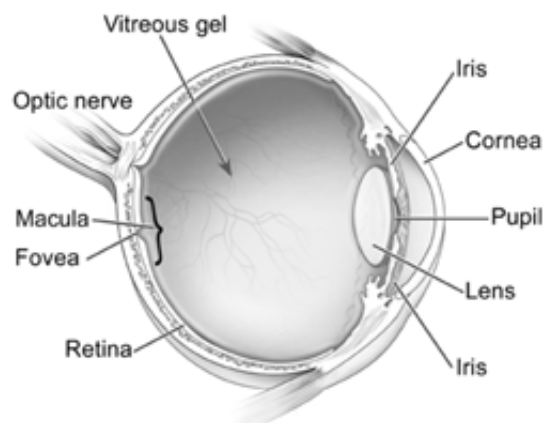
A cataract can occur in either or both eyes. It cannot spread from one eye to the other.

### What is the lens?

The lens is a clear part of the eye that helps to focus light, or an image, on the retina. The retina is the light-sensitive tissue at the back of the eye.

In a normal eye, light passes through the transparent lens to the retina. Once it reaches the retina, light is changed into nerve signals that are sent to the brain.

The lens must be clear for the retina to receive a sharp image. If the lens is cloudy from a cataract, the image you see will be blurred.



### Are there other types of cataract?

Yes. Although most cataracts are related to aging, there are other types of cataract:

1. **Secondary cataract.** Cataracts can form after surgery for other eye problems, such as glaucoma. Cataracts also can develop in people who have other health problems, such as diabetes. Cataracts are sometimes linked to steroid use.
2. **Traumatic cataract.** Cataracts can develop after an eye injury, sometimes years later.

3. **Congenital cataract.** Some babies are born with cataracts or develop them in childhood, often in both eyes. These cataracts may be so small that they do not affect vision. If they do, the lenses may need to be removed.
4. **Radiation cataract.** Cataracts can develop after exposure to some types of radiation.

## Causes and Risk Factors

### What causes cataracts?

The lens lies behind the iris and the pupil. It works much like a camera lens. It focuses light onto the retina at the back of the eye, where an image is recorded. The lens also adjusts the eye's focus, letting us see things clearly both up close and far away. The lens is made of mostly water and protein. The protein is arranged in a precise way that keeps the lens clear and lets light pass through it.

But as we age, some of the protein may clump together and start to cloud a small area of the lens. This is a cataract. Over time, the cataract may grow larger and cloud more of the lens, making it harder to see.

Researchers suspect that there are several causes of cataract, such as smoking and diabetes. Or, it may be that the protein in the lens just changes from the wear and tear it takes over the years.

### How can cataracts affect my vision?

Age-related cataracts can affect your vision in two ways:

1. Clumps of protein reduce the sharpness of the image reaching the retina.  
The lens consists mostly of water and protein. When the protein clumps up, it clouds the lens and reduces the light that reaches the retina. The clouding may become severe enough to cause blurred vision. Most age-related cataracts develop from protein clumpings.  
  
When a cataract is small, the cloudiness affects only a small part of the lens. You may not notice any changes in your vision. Cataracts tend to “grow” slowly, so vision gets worse gradually. Over time, the cloudy area in the lens may get larger, and the cataract may increase in size. Seeing may become more difficult. Your vision may get duller or blurrier.
2. The clear lens slowly changes to a yellowish/brownish color, adding a brownish tint to vision.  
As the clear lens slowly colors with age, your vision gradually may acquire a brownish shade. At first, the amount of tinting may be small and may not cause a vision problem. Over time, increased tinting may make it more difficult to read and perform other routine activities. This



Normal vision



The same scene as viewed by a person with cataract

gradual change in the amount of tinting does not affect the sharpness of the image transmitted to the retina.

If you have advanced lens discoloration, you may not be able to identify blues and purples. You may be wearing what you believe to be a pair of black socks, only to find out from friends that you are wearing purple socks.

## When are you most likely to have a cataract?

The term “age-related” is a little misleading. You don’t have to be a senior citizen to get this type of cataract. In fact, people can have an age-related cataract in their 40s and 50s. But during middle age, most cataracts are small and do not affect vision. It is after age 60 that most cataracts steal vision.

## Who is at risk for cataract?

The risk of cataract increases as you get older. Other risk factors for cataract include:

- Certain diseases such as diabetes.
- Personal behavior such as smoking and alcohol use.
- The environment such as prolonged exposure to sunlight.

## What can I do to protect my vision?

Wearing sunglasses and a hat with a brim to block ultraviolet sunlight may help to delay cataract. If you smoke, stop. Researchers also believe good nutrition can help reduce the risk of age-related cataract. They recommend eating green leafy vegetables, fruit, and other foods with antioxidants.

If you are age 60 or older, you should have a comprehensive dilated eye exam at least once every two years. In addition to cataract, your eye care professional can check for signs of age-related macular degeneration, glaucoma, and other vision disorders. Early treatment for many eye diseases may save your sight.

## Symptoms and Detection

### What are the symptoms of a cataract?

The most common symptoms of a cataract are:

- Cloudy or blurry vision.
- Colors seem faded.
- Glare. Headlights, lamps, or sunlight may appear too bright. A halo may appear around lights.
- Poor night vision.
- Double vision or multiple images in one eye. (This symptom may clear as the cataract gets larger.)

- Frequent prescription changes in your eyeglasses or contact lenses.
- These symptoms also can be a sign of other eye problems. If you have any of these symptoms, check with your eye care professional.

## How is a cataract detected?

Cataract is detected through a comprehensive eye exam that includes:

1. **Visual acuity test.** This eye chart test measures how well you see at various distances.
2. **Dilated eye exam.** Drops are placed in your eyes to widen, or dilate, the pupils. Your eye care professional uses a special magnifying lens to examine your retina and optic nerve for signs of damage and other eye problems. After the exam, your close-up vision may remain blurred for several hours.
3. **Tonometry.** An instrument measures the pressure inside the eye. Numbing drops may be applied to your eye for this test.

Your eye care professional also may do other tests to learn more about the structure and health of your eye.

## Treatment

### How is a cataract treated?

The symptoms of early cataract may be improved with new eyeglasses, brighter lighting, anti-glare sunglasses, or magnifying lenses. If these measures do not help, surgery is the only effective treatment. Surgery involves removing the cloudy lens and replacing it with an artificial lens.

A cataract needs to be removed only when vision loss interferes with your everyday activities, such as driving, reading, or watching TV. You and your eye care professional can make this decision together. Once you understand the benefits and risks of surgery, you can make an informed decision about whether cataract surgery is right for you. In most cases, delaying cataract surgery will not cause long-term damage to your eye or make the surgery more difficult. You do not have to rush into surgery.

Sometimes a cataract should be removed even if it does not cause problems with your vision. For example, a cataract should be removed if it prevents examination or treatment of another eye problem, such as age-related macular degeneration or diabetic retinopathy. If your eye care professional finds a cataract, you may not need cataract surgery for several years. In fact, you might never need cataract surgery. By having your vision tested regularly, you and your eye care professional can discuss if and when you might need treatment.

If you choose surgery, your eye care professional may refer you to a specialist to remove the cataract.

If you have cataracts in both eyes that require surgery, the surgery will be performed on each eye at separate times, usually four to eight weeks apart.

Many people who need cataract surgery also have other eye conditions, such as age-related macular degeneration or glaucoma. If you have other eye conditions in addition to cataract, talk with your doctor. Learn about the risks, benefits, alternatives, and expected results of cataract surgery.

## What are the different types of cataract surgery?

There are two types of cataract surgery. Your doctor can explain the differences and help determine which is better for you:

1. **Phacoemulsification**, or **phaco**. A small incision is made on the side of the cornea, the clear, dome-shaped surface that covers the front of the eye. Your doctor inserts a tiny probe into the eye. This device emits ultrasound waves that soften and break up the lens so that it can be removed by suction. Most cataract surgery today is done by phacoemulsification, also called “small incision cataract surgery.”
2. **Extracapsular surgery**. Your doctor makes a longer incision on the side of the cornea and removes the cloudy core of the lens in one piece. The rest of the lens is removed by suction.

After the natural lens has been removed, it often is replaced by an artificial lens, called an intraocular lens (IOL). An IOL is a clear, plastic lens that requires no care and becomes a permanent part of your eye. Light is focused clearly by the IOL onto the retina, improving your vision. You will not feel or see the new lens.

Some people cannot have an IOL. They may have another eye disease or have problems during surgery. For these patients, a soft contact lens, or glasses that provide high magnification, may be suggested.

## What are the risks of cataract surgery?

As with any surgery, cataract surgery poses risks, such as infection and bleeding. Before cataract surgery, your doctor may ask you to temporarily stop taking certain medications that increase the risk of bleeding during surgery. After surgery, you must keep your eye clean, wash your hands before touching your eye, and use the prescribed medications to help minimize the risk of infection. Serious infection can result in loss of vision.

Cataract surgery slightly increases your risk of retinal detachment. Other eye disorders, such as high myopia (nearsightedness), can further increase your risk of retinal detachment after cataract surgery. One sign of a retinal detachment is a sudden increase in flashes or floaters. Floaters are little “cobwebs” or specks that seem to float about in your field of vision. If you notice a sudden increase in floaters or flashes, see an eye care professional immediately. A retinal detachment is a medical emergency. If necessary, go to an emergency service or hospital. Your eye must be examined by an eye surgeon as soon as possible. A retinal detachment causes no pain. Early treatment for retinal detachment often can prevent permanent loss of vision. The sooner you get treatment, the more likely you will regain good vision. Even if you are treated promptly, some vision may be lost.

Talk to your eye care professional about these risks. Make sure cataract surgery is right for you.

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.