

## *Retinal Detachment*

### *What is retinal detachment?*

The retina is the light-sensitive layer of tissue that lines the inside of the eye and sends visual messages through the optic nerve to the brain. When the retina detaches, it is lifted or pulled from its normal position. If not promptly treated, **retinal detachment** can cause permanent vision loss.

In some cases, there may be small areas of the retina that are torn. These areas, called retinal tears or retinal breaks, can lead to retinal detachment.

### *What are the different types of retinal detachment?*

There are three different types of retinal detachment:

**Rhegmatogenous** - A tear or break in the retina allows fluid to get under the retina and separate it from the retinal pigment epithelium (RPE), the pigmented cell layer that nourishes the retina. These types of retinal detachments are the most common.

**Tractional** - In this type of detachment, scar tissue on the retina's surface contracts and causes the retina to separate from the RPE. This type of detachment is less common.

**Exudative** - Frequently caused by retinal diseases, including inflammatory disorders and injury/trauma to the eye. In this type, fluid leaks into the area underneath the retina, but there are no tears or breaks in the retina.

## *Causes and Risk Factors*

### *Who is at risk for retinal detachment?*

A retinal detachment can occur at any age, but it is more common in people over age 40. It affects men more than women, and Whites more than African Americans.

A retinal detachment is also more likely to occur in people who:

- Are extremely nearsighted
- Have had a retinal detachment in the other eye
- Have a family history of retinal detachment
- Have had cataract surgery
- Have other eye diseases or disorders, such as retinoschisis, uveitis, degenerative myopia, or lattice degeneration
- Have had an eye injury

## *Symptoms and Detection*

### *What are the symptoms of retinal detachment?*

Symptoms include a sudden or gradual increase in either the number of floaters, which are little “cobwebs” or specks that float about in your field of vision, and/or light flashes in the eye. Another symptom is the appearance of a curtain over the field of vision. **A retinal detachment is a medical emergency.** Anyone experiencing the symptoms of a retinal detachment should see an eye care professional immediately.

## *Treatment*

### *How is retinal detachment treated?*

Small holes and tears are treated with laser surgery or a freeze treatment called cryopexy. These procedures are usually performed in the doctor’s office. During laser surgery tiny burns are made around the hole to “weld” the retina back into place. Cryopexy freezes the area around the hole and helps reattach the retina.

Retinal detachments are treated with surgery that may require the patient to stay in the hospital. In some cases, a scleral buckle, a tiny synthetic band, is attached to the outside of the eyeball to gently push the wall of the eye against the detached retina. If necessary, a vitrectomy may also be performed. During a vitrectomy, the doctor makes a tiny incision in the sclera (white of the eye). Next, a small instrument is placed into the eye to remove the vitreous, a gel-like substance that fills the center of the eye and helps the eye maintain a round shape. Gas is often injected to into the eye to replace the vitreous and reattach the retina; the gas pushes the retina back against the wall of the eye. During the healing process, the eye makes fluid that gradually replaces the gas and fills the eye. With all of these procedures, either laser or cryopexy is used to “weld” the retina back in place.

With modern therapy, over 90 percent of those with a retinal detachment can be successfully treated, although sometimes a second treatment is needed. However, the visual outcome is not always predictable. The final visual result may not be known for up to several months following surgery. Even under the best of circumstances, and even after multiple attempts at repair, treatment sometimes fails and vision may eventually be lost. Visual results are best if the retinal detachment is repaired before the macula (the center region of the retina responsible for fine, detailed vision) detaches. That is why it is important to contact an eye care professional immediately if you see a sudden or gradual increase in the number of floaters and/or light flashes, or a dark curtain over the field of vision.

