

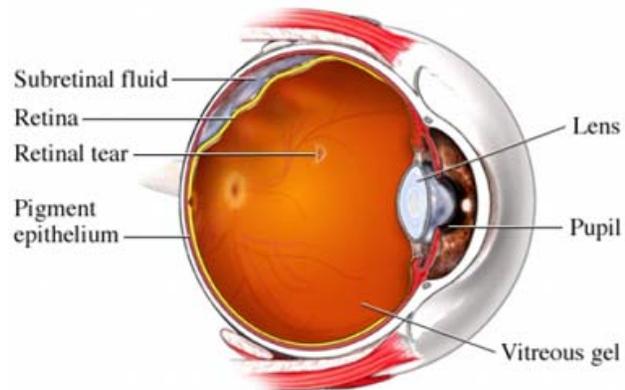
# Patient Focus

July 2012

## Detached or Torn Retina

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.

Symptoms include:

- A sudden or gradual increase in the number of floaters (“cobwebs” or specks) that float about in your field of vision.
- A sudden or gradual increase in the number of light flashes in your field of vision.
- The appearance of a curtain over your field of vision.

***If you develop any of these symptoms, call your eye doctor right away or go to the nearest emergency room.***

A retinal detachment can occur at any age but it is more common in people over the age of 40. It affects men more than women. It 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

Source: [www.nei.nih.gov](http://www.nei.nih.gov)

## **3-D** Movies and your eyes

Three-D movies like *Spiderman* and *Brave* are very popular these days with children and adults. Are these special effects detrimental to your vision or that of your children in any way? Although there have been no long-term studies done, ophthalmologists say there is no reason to be concerned that 3-D movies, TV, or video games will damage the eyes or visual system. However, complaints of headaches or motion sickness when viewing 3-D may indicate the viewer has a problem with focusing or depth perception. Schedule a comprehensive eye exam if you or your children encounter these problems. Conditions such as amblyopia (an imbalance in visual strength between the two eyes) and strabismus (misaligned eyes) would make it difficult to view digital 3-D images.

Source: [www.geteyesmart.org](http://www.geteyesmart.org)

## Did you know . . .

Study of the horseshoe crab's eyes led to the 1967 Nobel Prize in Physiology or Medicine for Dr. H. Keffer Hartline when he and two other scientists discovered how the optic nerve network functions. Dr. Hartline selected the horseshoe crab for experiments because of its 2 large compound eyes with long and easy-to-isolate optic nerves and large individual photoreceptor cells. In 1932, he and his colleagues at the University of Pennsylvania were the first to record nerve impulses from single optic nerve fibers, by placing electrodes on the fibers and stimulating them with light. Results validated their hypothesis that visual information is relayed to the brain through nerve impulses. The crab has 8 additional eyes which are non-compound and function as light sensors that help with navigation and detecting food sources.



Sources: [www.rockefeller.edu](http://www.rockefeller.edu) and [www.dnr.state.md.us/education/horseshoecrab/anatomy.html](http://www.dnr.state.md.us/education/horseshoecrab/anatomy.html)

## What's happening in Eye Care Research?

The Penn State Hershey Eye Center is conducting several clinical trials. If you'd like to volunteer to participate, read more about them at:

<http://www.pennstatehershey.org/web/cto/home/current/ophthalmology>



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