Glaucoma is a condition caused by damage to the optic nerve. This nerve is the part of the eye that carries the images we see to the brain. Damage to it is usually associated with elevated pressure inside the eye (called intraocular pressure). However, other factors can be involved and can lead to vision loss. There are usually no symptoms at first, but as the disease progresses, a person with glaucoma may notice his or her vision gradually failing with:

- Blurred vision
- Loss of peripheral vision
- Difficulty focusing on objects
- Presence of halos around lights

This is how a street scene looks with normal vision. Example of Glaucoma.
Glaucoma Awareness (cont.)

Anyone can develop glaucoma. Those who are at higher risk and should have an eye exam at least every one to two years include:

- African Americans over age 40
- Everyone over age 60
- People with a family history of glaucoma
- Individuals that have experienced a serious eye injury
- People with other health conditions, such as diabetes (exam every year)

Although glaucoma cannot be cured, early detection and treatments can usually preserve vision. Your eye care provider can help control the disease by lowering intraocular pressure with eye drops, laser treatments, or surgery. Vision loss due to glaucoma can not be restored and, if left untreated, glaucoma can lead to blindness.


Glaucoma specialists at Penn State Hershey Eye Center:

Dr. Ali Aminlari
Dr. Joseph Sassani
Hemianopia

Hemianopia is blindness or reduction in vision in one half of the visual field due to damage of the optic pathways in the brain. This damage can result from acquired brain injuries caused by stroke, tumor, or trauma.

The most common type of hemianopia occurs in corresponding halves of the right field of vision; however, it can also occur in the left, upper, lower, or outer halves of vision. In any type of hemianopia, half of the field of vision is blanked out on both eyes. In addition, the patient will have decreased night vision capability and experience a need for more light.

Whoever may be at risk for stroke is also at risk for hemianopia. People with high blood pressure or those with an abnormal heart rhythm, associated with blood clots in the heart, may be at risk for stroke. The majority of people who experience stroke are over the age of 55.

Reducing the risk of stroke will reduce the risk of hemianopia. Though there is no specific medical or surgical treatment for this condition, one’s effective use of vision may improve over time. In addition, there are optical devices that may be helpful in increasing the field of vision such as field-expanding prism lenses and magnifiers.
Hemianopia

Following a diagnosis of hemianopia, it is important to be evaluated by a low vision specialist who can prescribe optical devices and recommend vision rehabilitation services.

Source: http://lighthouse.org/medical/eye-disorders/hemianopia/

Marianne Boltz, OD, FAAO is the low vision specialist at Penn State Hershey Eye Center.

Eye Care Research

Clinical trials currently underway at the Penn State Hershey Eye Center are listed on the web site of the Clinical Trials Office, along with contact information for each study at:

http://www.pennstatehershey.org/web/eyecenter/research/clinicaltrials/