Glaucoma is a group of eye diseases that gradually steals sight without warning and often without symptoms. Vision loss is caused by damage to the optic nerve. This nerve acts like an electric cable with over a million wires and is responsible for carrying the images we see to the brain. A healthy optic nerve is necessary for good vision.

It was once thought that high intraocular pressure (IOP) was the main cause of this optic nerve damage. Although IOP is clearly a risk factor, we now know that other factors must also be involved because even people with "normal" IOP can experience vision loss from glaucoma. The two main types of glaucoma are primary open angle glaucoma and angle closure glaucoma. People at higher risk include African-Americans, diabetics, people over 60 years old, people who are or were severely nearsighted, and people taking high doses of steroids such as asthma inhalers. Three million people in the U.S. have glaucoma but it is estimated that only half are now aware of it.

Glaucoma is a chronic disease that must be treated for life. Nowadays, early detection, through regular and complete eye exams, is the key to protecting your vision from the irreversible damage caused by glaucoma. Glaucoma usually has no signs or symptoms until serious loss of vision occurs. Regular checkups are essential to glaucoma control. Your doctor will advise how often, but everyone should have a glaucoma checkup by age 35. Most cases of glaucoma are controlled with eye drop medication, laser treatment or surgery. Currently, there is no cure for glaucoma although there is exciting research that may one day yield one.

Glaucoma checkups include measurement of the inner pressure of the eye and examination of the inside of the eye especially the shape and color of the optic nerve. Interestingly, the thickness of the cornea of the eye can affect pressure measurements and is a factor in glaucoma diagnosis. Especially helpful are the new scanning laser devices that create a three dimensional profile of the optic nerve for future comparison.

If the pressure in the eye is not in the normal range, or if the optic nerve looks unusual, then one or two special glaucoma tests may be done. In one, called perimetry or visual fields, you will be asked to look straight ahead and then indicate when you notice lights in your peripheral (or side) vision. This helps draw a map of your vision. In another, the doctor applies numbing drops, a thickened version of artificial tears and a special lens and examines an area of the eye called the angle where the iris meets the cornea.

Many medicines carry warnings to people who have glaucoma. Almost exclusively it is only to the people who have narrow angles that these warnings apply. People with a narrow angle can have sudden painful attack of high pressure glaucoma brought on by anything that dilates the pupil and blindness may be the result. Luckily, narrow angle glaucoma is usually completely curable by a brief office laser procedure.

You cannot control a disease you do not know you have. If you think you are at high risk for glaucoma and have not been checked, you may be eligible for a free glaucoma screening exam at our office.

Epstein specializes in diseases and surgery of the eye in McHenry Illinois. His internship and residency were at the University of Illinois. He introduced LASIK, no-stitch cataract surgery, and
procedures to reverse middle-age focusing loss to Chicagoland, he has two recent lasik-related laser patents and he has written two books.