

Four of the most common eye conditions.

Myopia - (nearsightedness)

People with Myopic vision usually have eyeballs that are too large for their lens and cornea to focus light properly on their retina. Eyeglasses and contact lenses can usually correct this problem.

Hyperopia - (farsightedness)

Hyperopia vision is caused by the eyeball being too small for the lens and cornea to focus light properly on the retina. Eyeglasses and contact lenses can usually correct this problem.

Presbyopia - (aging eyes)

As people age, they often begin to have difficulty focusing their eyes for reading or close work. It is usually corrected with reading glasses. Some people may need bifocal or trifocal lenses.

Astigmatism - (distorted vision)

People with Astigmatism have irregularly shaped corneas. It is usually corrected with eyeglasses or contact lenses.

Most Common Causes of Vision Loss

Cataracts

There are over 1 million Cataract operations performed annually in the USA. Cataract surgery is an outpatient procedure with a very high success rate. Due to the lack of modern medical technology in the developing world, it is also the world's leading cause of blindness. Over 16 million people are blind from cataracts.

Age-Related Macular Degeneration - (AMD)

This is a degenerative disease of the macula; the macula is the part of the retina responsible for central vision. There is no way yet of repairing the vision that has been lost, but if detected early laser surgery can help slow the progression of the disease. (AMD) is the leading cause of vision loss in people over age 65. Eight million people are legally blind from macular degeneration worldwide and as the population ages this number is expected to grow.

Glaucoma

This disease increases the fluid pressure inside the eye, leading to loss of side vision and eventually total blindness. The increased pressure destroys the optic nerve. With early detection, it can be kept under control with pressure reducing eye drops and surgery. Chances of developing it increase with age. There are over five million people blind from glaucoma worldwide.

Diabetic Retinopathy

This complication of diabetes is a leading cause of blindness among middle-aged Americans. The longer a person has had diabetes the more apt they are to develop diabetic retinopathy. Laser surgery can slow the progression of this disease along with management of blood glucose levels. There are 2.4 million people blind from retinopathy worldwide.

Retinitis Pigmentosa - (RP)

This rare inherited degenerative disease slowly destroys the retina. Signs of (RP) first show up in early childhood. The side vision is lost first. The Disease progresses over many years leaving the person with only a small portion of their central vision. There is no cure for (RP) yet. There are 1.6 million people blind from (RP) worldwide.

Eye Injuries

Over 1 million people are blind worldwide from eye injuries. 90% of injuries can be avoided by using proper eye protection. If you are reading this page now because you or a loved one has an eye injury, turn your computer off and get medical attention. Any eye injury is a medical emergency.

Optic Nerve Hypoplasia

With this birth defect the optic nerve that connects the eye to the brain has not developed properly, it is underdeveloped. This happens before birth leaving the child with mild to severe vision loss. In most cases, there is no known cause.

Retinopathy of Prematurity - (ROP)

This is an eye disease of premature babies. Soon after birth, abnormal blood vessels start to grow on the retina eventually destroying it. No one is quite sure what causes this disease, but premature birth and low birth weight are thought to be the main causes. With modern medical procedures, only 400 babies a year go blind from this condition. In the 1950's the number of babies blind from (ROP) reached epidemic proportions.

Neurological Visual Impairment (NVI)

Children with (NVI) have normal eyes, but a part of the brain responsible for seeing is damaged. It can be caused from a lack of oxygen before, during, and after birth. Diseases like meningitis or traumatic brain injury can also cause it. Many of the children with (NVI) are multihandicapped. Vision loss can be temporary or last a lifetime.

Ocular Albinism

With this inherited birth defect, people have no pigment or reduced pigment in their eyes, skin and hair. This pigment called melanin is needed for the full development of the retina. Children with this condition have mild to severe vision loss and are very light sensitive.

Coloboma

Coloboma is a Greek word, which means mutilation. People with Coloboma are missing a portion of the structure of the eye. The human eye develops between the fourth and fifteenth week of pregnancy. As the eye starts to develop, a gap opens on the underside of each eye bud. This gap provides a way for the developing eye to be nourished. This gap, called the optic fissure, has to close before the eye is fully developed. Coloboma is the incomplete closer of the optic fissure. Gaps can occur in the eyelid, iris, ciliary body, lens, retina, macula, choroid and optic disc. It can cause from mild to severe vision loss. Coloboma occurs in about 1 in 10,000 births.

Preventable Vision Loss

Over 90% of the world's blind people live in developing countries. Many diseases can be prevented with education in basic hygiene, proper nutrition and medical care. Conditions unheard of in the modern world like: Trachoma, Onchocerciasis (river blindness) and nutritional blindness (vitamin A deficiency), are the leading causes of vision loss in these countries.