

REFRACTIVE ERRORS

Refractive errors are disorders, not diseases. A refractive error means that the shape of your eye does not bend light correctly, resulting in a blurred image. Light has to be refracted or bent by the cornea and the lens to the retina in order for us to see. The common refractive disorders are described below.

MYOPIA (Distant objects are blurry)

Also known as nearsightedness, is inherited and is often discovered in childhood. Myopia often progresses throughout the teenage years, when the body is growing rapidly. People with high degrees of myopia have a higher risk of detached retina which can be repaired with surgery.

HYPEROPIA (Close objects are blurry)

Also known as farsightedness is usually inherited. Children are often hyperopic which may lessen as an adult.

PRESBYOPIA (Aging of the lens)

After age 40, the lens of the eye becomes more rigid and does not flex as easily. The result is that it is more difficult to read at close range. This normal aging process of the lens can also be combined with myopia, hyperopia or astigmatism.

ASTIGMATISM (Blurred vision at all distances)

Astigmatism usually occurs when the front surface of the eye, the cornea, has an irregular curvature. Normally the cornea is smooth and equally curved in all directions and light entering the cornea is focused equally on all planes, or in all directions. In astigmatism, the front surface of the cornea is curved more in one direction than in the other. This abnormality may result in vision that is much like looking into a distorted, wavy mirror. Usually, astigmatism causes blurred vision at all distances.

SYMPTOMS

- Blurred vision
- Difficulty reading or seeing up close
- Crossing of the eyes in children (esotropia)

The symptoms described above may not necessarily mean that you have a refractive disorder. However, if you experience one or more of these symptoms, contact your eye doctor for a complete exam.

TREATMENT

Refractive disorders are commonly treated using corrective lenses, such as eyeglasses or contact lenses. Refractive surgery can also be used to correct some refractive disorders.