



## ASTIGMATISM

### Information about Astigmatism

#### **What Is Astigmatism?**

Astigmatism is a common vision condition resulting from a variation or irregularity of the front surface of the eye (cornea). This variation in the shape of the cornea can result in distorted or blurred vision at all distances.

#### **What Causes Astigmatism?**

Astigmatism is not a disease and it does not mean that you have “bad eyes.” It simply means that there is a variation in the shape of your cornea. In a perfect world, the cornea would be smooth, round, and equally curved in all directions. Just as every human being is different in size and shape, not every cornea is perfectly round. Corneas with astigmatism are often referred to as “football” shaped, instead of “baseball” shaped. Since the cornea has variations and unequal curves, light entering the eye becomes warped and out-of-focus. The degree of variation determines whether or not you will need vision correction.

#### **Who Gets Astigmatism?**

Most scientific evidence suggests that astigmatism is hereditary, like most of our other physical characteristics, and is often present at birth. Most experts agree that almost all individuals have some degree of astigmatism. Astigmatism is often accompanied by other refractive conditions like near or farsightedness. Although the amount of astigmatism often remains stable throughout life, occasional prescription adjustments may be needed to maintain clear and comfortable vision.

#### **How is Astigmatism Diagnosed?**

Individuals with astigmatism often have difficulty seeing distant objects like road signs (especially at night), movies, chalk boards, and score boards. Astigmatism will also tend to cause difficulty while reading or viewing the computer.

Since astigmatism is usually present in childhood, it is often first detected during a visit to the pediatrician or during a school vision screening. Routine vision screening tests, however, can miss astigmatism. Parents and teachers often notice a child squinting, complaining of headaches, or having more difficulty in the classroom. The American Optometric Association and The American Academy of Ophthalmology agree that children should have a comprehensive eye examination before the age of 5.



Adults with astigmatism may experience intermittent blurred vision, frustration when reading, eye discomfort, and/or non-specific headaches. Some individuals may have difficulty with concentration and reading comprehension.

A comprehensive dilated eye health and vision examination will help to detect astigmatism (a vision examination without dilation will not always find astigmatism). Regular follow-up examinations, as recommended by the doctor, will detect any changes that are required in the prescription.

#### **How Is Astigmatism Treated?**

Currently, there are no proven cures for astigmatism. As with other vision conditions, eyeglasses or contact lenses optically correct astigmatism by refocusing light rays onto the retina. A prescription to correct astigmatism has more than one power to properly refocus light at the back of the eye (retina). Depending on the degree of astigmatism and how much it impairs daily activities, eyeglasses and/or contact lenses may only be needed part-time.

Contact lenses are a good choice for individuals with an active lifestyle, however, they do require extra care and attention to avoid infections or damage to the surface of the eye. Contact lenses for astigmatism are generally more difficult to fit and require more adjustment time. Refractive surgery can provide a surgical correction of astigmatism. The most common procedure is known as LASIK (Laser in situ keratomileusis). LASIK uses a special type of laser to reshape the front surface of the eye to allow light to focus properly on the retina. Our office works with the area's leading laser surgeons to provide pre- and post-operative care for our patients that desire laser vision correction.

**For more information about astigmatism or other vision conditions, contact our office at (248) 427-9620**