



Understanding Astigmatism

Just as the lens of a camera focuses entering light on a piece of film to produce a sharp image, the lens of your eye focuses light on the retina to form a picture.

As this information gets instantaneously forwarded onto the brain, it's also interpreted to define what you are seeing. Clear, crisp vision means that all the intricate parts that make up your eye function well.

When the eye cannot bend and focus light correctly, it often indicates a refractive error is present. One of the four most common refractive errors is astigmatism. If you've been diagnosed with astigmatism, you're not alone. According to statistics, one in three people across the United States has this refractive error. As seen in both adults and children, astigmatism frequently occurs in combination with nearsightedness or farsightedness.

What is astigmatism?

In a perfectly shaped eye, both the cornea and the lens exhibit a nice round curvature resembling the surface of a ball. This anatomical feature allows the eye to correctly refract incoming light and make a sharply focused image on the retina. If the shape of either the cornea or the lens one is not completely spherical, it causes a vision impairment known as astigmatism. In addition to experiencing blurry/distorted distance and near vision, astigmatism can contribute to feelings of eyestrain, eye fatigue, trouble with night vision, and headaches. You might also find yourself squinting to see more clearly.

Possible causes for this type of refractive error

If you're wondering why you've been diagnosed with astigmatism, it's typically due to one of the following contributing factors:

- Hereditary – A family history of astigmatism increases your risk for this type of refractive error
- Eye injuries that produce corneal scarring
- Complications following eye surgery
- Eyelid conditions that cause corneal distortion
- Keratoconus- a condition that causes the cornea to exhibit a cone-shaped bulge

Skilled care to restore clear, crisp vision

As part of a comprehensive eye exam, your optometrist will check for any refractive errors and measure the curvature of your cornea. Most people do exhibit a minor degree of astigmatism. Yet, for the most part, these slight imperfections do not require any correction.

However, if your astigmatism does require correction, your optometrist will discuss your best options in care. Depending upon the degree of vision impairment, your lifestyle, daily activities, and other factors, you may need prescription glasses, contact lenses, orthokeratology, or refractive surgery. In many cases, eyeglasses or appropriate contact lenses designed to compensate for an unevenly curved cornea or lens offer optimal correction.

Although it's not possible to prevent astigmatism, your optometrist can provide the skilled care required to restore optimal vision. Partnering with your optometrist is the best way to maintain the health of your eyes and the quality of your vision.

