

# MYOPIA

(828) 665-1577

## What is Myopia ?

Myopia is the visual condition described as when you can see objects that are near to you, but distant objects are blurry. Myopia is also called Near-Sighted.

## What causes Myopia ?

There are strong genetic factors which can cause myopia. This is why you will see entire families that are near-sighted. The development of myopia is influenced by environmental factors as well. Many people who do a lot of reading and close work gradually become near-sighted. However, most myopia is just the result of normal variations in the growth and shape of your eyes.

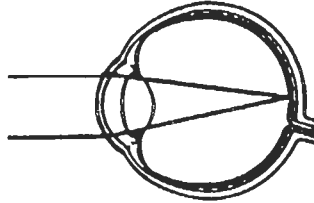
## How does Myopia cause blurry vision ?

For a normal eye to see a distant object, light must be focused directly on the retina, which is located in the back of the eye. This will happen when the parallel light rays from the object are "bent" by the cornea, and the lens of your eye, and are brought to a sharp, focus point directly on the retina.

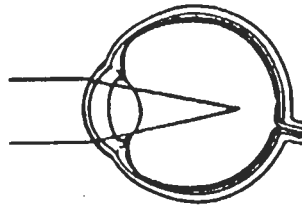
In myopia, the light rays from distant objects are "bent too much". The point where images would be in focus lies in front of the retina

One reason for light rays to be "bent" to much occurs when the cornea, which is the clear front surface of the eye, is curved too steeply. Another reason may be because the overall length of the eye, from front to back, is too long.

Some experts believe that prolonged near work can also cause myopia. As the eyes continually focus on close objects, they may gradually lose the ability to relax the focusing muscles. The muscles of a normal eye must be in a relaxed position to see clearly at a distance.



*The light rays from distant objects are focused to a point on the retina of a normal eye.*



*In the myopic eye, the light rays from distant objects are focused in front of the retina. The light rays continue to the retina where they will form a blurred image.*

## When does Myopia develop ?

Myopia is seldom present in very young children, unless there are strong genetic factors. When myopia begins, it usually will develop around the age of 8 or 9. The amount of myopia tends to increase during the teenage years. It is common to have a prescription change at each yearly exam during this period. Normally, myopia stabilizes around the ages of 20 to 25, although environmental factors such as increased reading or computer work can cause myopia to continue. Myopia may even lessen around the ages of 35 to 45.

## What are the symptoms of Myopia ?

The most common symptom of myopia is blurry vision while looking at distant objects. Other symptoms include difficulty with night driving, squinting to see better, and sometimes muscle tension headaches from constant squinting.

## What is the treatment for Myopia ?

The blurred vision caused by myopia is corrected with the use of glasses and/or contact lenses. Depending on the degree of myopia, the glasses or contact lenses will be worn full time, or just for certain tasks, such as driving, or while in school.

Because myopia begins gradually, many young children are unaware that their vision is blurry. Or they think that it is normal not to see distant objects clearly. So young children rarely complain of blurry vision. This is why it is important for every child to have a thorough vision examination every year, even before they are of school age.

- About 25% of the world's population is near sighted.
- People have been wearing glasses for more than 700 years
- There are new surgical procedures that can reshape the cornea to "cure" myopia.