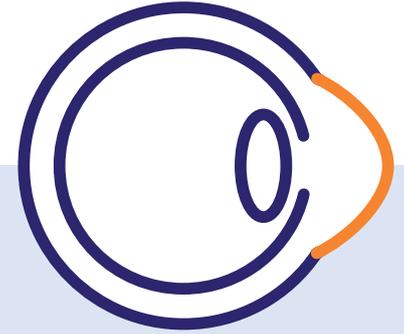


What is keratoconus?



Keratoconus is a condition that causes the cornea (the clear surface on the front of the eye) to gradually thin and bulge into a cone shape.

The cone shaped cornea usually causes myopia and astigmatism, resulting in blurry and distorted vision. It generally starts in the teens and can gradually worsen during the teens and 20s, although this may be different for each individual.



What causes keratoconus?

We do not know what causes keratoconus, but it is likely genetic and environment factors are involved.

Around one in 10 people with keratoconus will also have a parent with keratoconus. Keratoconus can be associated with certain risk factors:

- Family history
- Vigorous eye rubbing
- Conditions such as allergies, hayfever, eczema, Down syndrome and Ehlers-Danlos syndrome.

What are the symptoms of keratoconus?

Symptoms of keratoconus may change as the disease progresses and include:

- Blurry or distorted vision
- Increased sensitivity to light and glare
- Problems with night driving, with streaks or haloes around bright lights
- Frequent changes in glasses prescription.

How is keratoconus diagnosed?

Your ophthalmologist can diagnose the condition with a comprehensive eye exam.

An advanced diagnostic machine (topographer) measures the shape and thickness of your cornea. This measurement is repeated at each visit and helps your ophthalmologist monitor the condition.

How is keratoconus treated?

In the early stages of the diseases, the vision may be corrected with **glasses or soft contact lenses**. As the disease progresses **special hard contact lenses** (rigid gas permeable contact lenses) may be required. In advanced keratoconus, when glasses or contact lenses no longer can improve the vision, a **corneal transplant** may be necessary. Corneal transplantation involves removing the diseased area of cornea and replacing it with a healthy, donor cornea. The results with transplantation are usually excellent for keratoconus.

Collagen cross-linking is a newer treatment that slows or stops the progression of keratoconus. It involves using riboflavin (vitamin B12) drops and ultraviolet radiation on the cornea, to strengthen the collagen fibres in the cornea. Although cross-linking cannot restore lost vision due to keratoconus, it **prevents future vision loss**.

Need to know more?

Please contact the Lions Eye Institute to make an appointment with one of our ophthalmologists. Phone: (08) 9381 0777; email: carecentre@lei.org.au; or see our website: lei.org.au