What is fungal keratitis?

Fungal keratitis is an infection of the cornea. The cornea is the clear, dome-shaped window of the front of your eye and focuses light into your eye. Fungal keratitis can develop quickly from an eye injury or contact lens use. It can cause blindness if it is not treated. In some cases, treatment cannot restore vision. In these cases, permanent vision impairment or blindness may occur.

There are many different fungi that can infect the cornea such as *Fusarium*, *Aspergillus* or *Candida*.

**Keratitis.** Keratitis is an infection or inflammation of the cornea.

**Superficial keratitis** involves the outer layers of the cornea. After this form of keratitis heals, there is usually no scar on the cornea.

**Deep keratitis** affects deeper layers of the cornea. There can be a scar on the cornea after it heals, which may or may not affect your vision. This will depend on the location of the scar.

Besides fungal keratitis, other types of keratitis include:

- amoebic keratitis, which is an infection with amoeba. It is often caused by *Acanthamoeba* and usually affects contact lens wearers.
- bacterial keratitis, which is an infection with bacteria
- herpes keratitis, which is an infection with herpes simplex or herpes zoster viruses
- photokeratitis, due to intense ultraviolet (UV) radiation exposure. Examples include snow blindness or welder’s arc eye.

What causes fungal keratitis?

Fusaria are common fungi found in soil, water, and plants throughout the world. They are particularly common in warmer climates. Fungal keratitis can happen after an injury to the cornea involving plant material. One example is getting hit in the eye with a palm branch.

Proper use and care of contact lenses can reduce your risk of getting a fungal infection if you wear contacts.
People who have a low immune response can also get fungal keratitis if they come in contact with the fungus. There is also a risk of developing fungal keratitis with contact lens use. Proper use and care of contact lenses can reduce your risk of getting a fungal infection if you wear contacts. Ask your ophthalmologist about proper contact lens care.

What are the symptoms of fungal keratitis?
Symptoms of fungal keratitis may include:

- reduced vision
- pain in the eye (often sudden)
- increased light sensitivity
- tearing
- excessive tearing or discharge from your eye

Call your ophthalmologist right away if you experience any of these symptoms. This is especially important if these symptoms come on suddenly. You must start treatment right away to prevent possible blindness.

How is a fungal keratitis treated?
Your ophthalmologist may gently scrape the eye to take a small sample of material. They will test the sample for infection. This test will help diagnose whether your infection is fungal keratitis or bacterial keratitis.

Treatment of fungal keratitis usually includes antifungal eye drops and oral medications. If these medicines are not effective, you may need surgery, including corneal transplantation. In some cases, even corneal surgery will not restore vision. In these cases, permanent vision impairment or blindness may occur. That is why it is so important to see your ophthalmologist at the first sign of any ocular infection.

Summary
Fungal keratitis is an infection of the cornea. It can develop quickly from an eye injury or contact lens use. It can cause blindness if it is not treated. Proper use and care of contact lenses can reduce your risk of getting a fungal infection if you wear contacts. Treatment of fungal keratitis usually includes antifungal eye drops and oral medications. If these medicines are not effective, you may need surgery, including corneal transplantation. In some cases, even corneal surgery will not restore vision.

Get more information about fungal keratitis from EyeSmart—provided by the American Academy of Ophthalmology—at aao.org/fungal-keratitis-link.