SYMPTOM

Cloudy cornea

A cloudy cornea is a loss of clarity in the eye's normally clear front surface.

WHAT IT FEELS LIKE
Hazy vision, glare, or sometimes no discomfort

WHERE IT IS FELT
Clear front window of the eye

MOST COMMON CAUSES
Corneal swelling, old scars, contact lens irritation

WHEN IT IS URGENT
Sudden clouding with pain, redness, light sensitivity, or vision loss

USUALLY LASTS
Depends on whether irritation, swelling, or scarring caused it

SEE A DOCTOR IF
Clouding is new, persistent, or gradually worsening

Overview

The cornea is the clear, curved layer covering the colored part of your eye and your pupil. It helps focus light so you can see clearly.

A cloudy cornea has lost some of its usual transparency. It may look white, gray, bluish, or hazy. You might notice blurred vision, glare, or halos around lights. Sometimes another person notices the change before you do.

Cloudiness can develop from swelling, inflammation, infection, scar tissue, or deposits within the cornea. Some causes are mild and temporary. Others need prompt treatment to protect vision.

A cloudy cornea is not the same as a cataract. A cataract affects the lens inside the eye, behind the pupil. It can still appear as though the center of the eye is cloudy, so an eye examination may be needed to tell the difference.

What it may feel or look like

Corneal clouding may affect a small spot, the edge of the cornea, or most of its surface. It can

occur in one or both eyes.

You may notice:

Some painless changes develop slowly. In contrast, pain, redness, light sensitivity, or a sudden drop in vision can point to active inflammation, infection, injury, or a rapid rise in eye pressure.

- Hazy, blurred, or reduced vision
- Glare or halos around lights
- A white, gray, or blue-looking area on the eye
- Eye discomfort or a gritty feeling
- Redness, watering, or discharge
- Sensitivity to light
- Trouble wearing contact lenses

Common causes

Corneal swelling happens when excess fluid builds up in the cornea. It can cause misty vision and halos, sometimes worse after waking. Temporary swelling may follow irritation, contact lens overwear, eye surgery, or reduced oxygen reaching the cornea.

Contact lens irritation can make the cornea swollen or inflamed. Sleeping in lenses, wearing them longer than intended, or exposing them to water can increase the chance of a serious corneal infection.

Old injuries or infections may leave scar tissue. A scar can look like a fixed white or gray spot. Its effect on vision depends on its size and whether it lies in front of the pupil.

Deposits near the corneal edge can create a pale or gray ring. One example is corneal arcus, which becomes more common with age and usually does not affect vision. A new ring in a younger person may lead a clinician to consider checking cholesterol levels.

Less common causes include inherited corneal conditions, such as Fuchs' dystrophy. These conditions can affect how the cornea handles fluid and may cause gradually increasing swelling. Certain inflammatory diseases, vitamin deficiencies, and complications from previous eye surgery can also affect corneal clarity.

Urgent causes include a corneal ulcer, which is an open sore often caused by infection; a chemical or penetrating injury; and acute angle-closure glaucoma, where eye pressure rises suddenly. These conditions usually cause other symptoms, not cloudiness alone.

When to seek medical care

Seek same-day urgent eye care for new clouding accompanied by:

Go to an emergency department now after a chemical splash, penetrating injury, or high-speed impact to the eye. Start rinsing a chemical-exposed eye immediately with clean, lukewarm water and do not delay rinsing while arranging help.

Emergency assessment is also needed for sudden major vision loss or a painful red eye with severe headache, nausea, or vomiting.

If the change is painless and gradual, book a routine eye appointment rather than waiting indefinitely. New or persistent clouding should be examined even when your vision seems normal.

- Eye pain, marked redness, or strong light sensitivity
- New or worsening blurred vision
- Pus-like discharge
- A visible white spot, especially over the pupil
- Symptoms while wearing contact lenses or soon after removing them
- Cloudiness in a baby or young child

How the cause is found

An eye care professional will ask when the cloudiness began and whether it has changed. Mention pain, discharge, light sensitivity, previous eye surgery or injury, and any contact lens use. Bring your lenses, case, or eye drops if infection or irritation may be involved.

Your vision will usually be checked in each eye. A slit lamp, which is a microscope with a bright light, allows close examination of the cornea. Fluorescein dye may be placed on the eye to reveal scratches, ulcers, or damaged surface cells.

Eye pressure may be measured when it is safe to do so. If an infection is suspected, a sample from the cornea may be taken for laboratory testing. Specialized measurements can assess corneal thickness or the cells that control fluid balance.

Treatment and self-care

Treatment depends on what caused the cloudiness. Infection may require prescription

antimicrobial drops. Inflammation or swelling may need other prescription eye medicines. Persistent swelling from a corneal disorder sometimes requires surgery, including a corneal transplant.

Do not use leftover antibiotic or steroid eye drops. Steroids like prednisone or hydrocortisone can worsen some infections, and numbing drops can damage the cornea when repeatedly used outside an examination.

Until you are assessed:

These steps may reduce irritation, but they do not treat infection, significant swelling, or raised eye pressure.

- Remove contact lenses and do not put them back in
- Avoid rubbing or pressing on the eye
- Do not patch an injured or painful eye
- Wear sunglasses if light is uncomfortable
- Use only simple lubricating drops if symptoms are mild and no injury occurred

What to expect

Temporary surface irritation or mild swelling may clear once the trigger is removed. Active infections and injuries often need close follow-up to confirm that the cornea is healing and vision is stable.

Corneal scars may remain after the original problem has settled. A small scar away from the center may have little effect on sight. A central or deep scar can cause lasting blur.

Inherited or surgery-related swelling may come and go or gradually worsen. Regular eye examinations can track changes and help determine whether glasses, medicines, or a procedure would improve vision.

Common questions

Can a cloudy cornea clear on its own?

Some temporary swelling or irritation can improve, but cloudiness from infection, scar tissue, or a corneal disorder may persist. Because appearance alone cannot show the cause, new clouding should be checked.

Is a cloudy cornea always painful?

No. Scars, deposits, and some inherited conditions can be painless. Infection, injury, and sudden pressure changes are more likely to cause pain, redness, or light sensitivity.

Can contact lenses cause corneal clouding?

Yes. Poor lens fit, overwear, sleeping in lenses, or infection can cause swelling and loss of clarity. Remove the lenses and seek same-day care if you also have pain, redness, discharge, or reduced vision.

Is it a cataract?

Not necessarily. A corneal problem affects the clear outer surface. A cataract clouds the lens inside the eye. An eye examination can identify which structure is affected.

Sources

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