PROCEDURE

LASIK eye surgery

LASIK is laser surgery that reshapes the cornea to reduce dependence on glasses or contact lenses.

PURPOSE
Reduce dependence on glasses or contact lenses

PROCEDURE TYPE
Therapeutic surgical laser reshaping of the cornea

WHERE IT IS DONE
Outpatient clinic

ANAESTHESIA
Local numbing eye drops

HOW LONG IT TAKES
10 to 20 minutes for both eyes

PREPARATION
Pause contact lenses, avoid eye makeup, arrange transport

RECOVERY
Same day; no driving until your surgeon clears you

MAIN RISKS
Dry eye, glare, undercorrection, corneal complications

RESULTS
Improved vision often noticed within one day

Overview

LASIK is a type of refractive eye surgery. It changes how light is focused by reshaping the cornea, the clear front surface of your eye.

During LASIK, a surgeon makes a thin flap in the cornea. A computer-controlled excimer laser then removes tiny amounts of corneal tissue. The flap is placed back without stitches.

LASIK can reduce your need for glasses or contact lenses, but it does not guarantee perfect vision. You may still need glasses for some activities. The procedure also does not prevent later eye conditions, such as cataracts, glaucoma, or age-related difficulty focusing on near objects.

LASIK permanently changes the cornea. It is usually an elective procedure, meaning you can

take time to consider its benefits, limits, risks, and alternatives.

Why the procedure is performed

LASIK may correct common focusing problems called refractive errors:

The aim is usually to make everyday vision clear enough that you rely less on glasses or contact lenses.

LASIK does not stop presbyopia, the normal loss of near focusing ability with age. Most people eventually need reading glasses, even if their distance vision remains clear.

Some people consider monovision , where one eye is corrected mainly for distance and the other for near vision. This can reduce the need for reading glasses, but it may affect depth perception and night vision. A contact lens trial can help you decide whether monovision feels acceptable before surgery.

- Myopia: distant objects look blurred
- Hyperopia: nearby objects may look blurred
- Astigmatism: an uneven corneal shape causes blurred or distorted vision

Who should and should not have it

You may be considered for LASIK if you are an adult, your glasses prescription has been stable, and your corneas are healthy and thick enough for treatment. Your expectations also need to match what surgery can realistically achieve.

A detailed eye assessment is essential. It usually includes measuring your prescription, corneal thickness and shape, pupil size, tear film, and overall eye health.

LASIK may be avoided or delayed if you have:

Certain autoimmune conditions, medicines, previous eye operations, glaucoma, or retinal problems may also affect whether LASIK is appropriate. They do not always rule it out, but they require individual assessment.

LASIK is not approved for people younger than 18 in the United States. Even after age 18, surgery may be delayed until the prescription is stable.

- An unstable or changing glasses prescription
- Keratoconus or another condition that weakens the cornea

- A cornea that is too thin or irregular for safe treatment
- Significant dry eye that has not been controlled
- Active eye infection, inflammation, or injury
- Uncontrolled diabetes or another condition affecting healing
- Pregnancy or breastfeeding, which can temporarily change vision
- Cataracts or another eye condition that better explains poor vision

How to prepare

Your treating facility's own instructions take priority over general information.

Contact lenses can temporarily change the cornea's shape. You will usually need to stop wearing them before your measurements and surgery. The timing differs for soft, toric, rigid, and hard lenses, so follow the schedule your surgical team gives you.

Tell the team about all prescription medicines, non-prescription products, allergies, health conditions, and previous eye procedures. Do not stop a prescribed medicine unless the clinician responsible for it tells you to.

LASIK normally uses numbing drops rather than general anaesthesia, so fasting is not usually required. Follow your facility's instructions about food and drink.

On the day of surgery:

Ask whether you need to collect lubricating, antibiotic like amoxicillin or doxycycline , or anti-inflammatory eye drops beforehand.

- Avoid eye makeup, creams, lotions, and false eyelashes
- Do not wear perfume or strongly scented products
- Arrange for someone to take you home
- Bring your current glasses and any requested records

What happens during the procedure

You remain awake. The surgeon places numbing drops in your eyes and cleans the skin around them. A device gently holds your eyelids open so you do not need to worry about blinking.

A suction ring steadies the eye. You may feel pressure, and your vision may become dim or dark for a short time.

The surgeon creates a thin corneal flap, usually with a femtosecond laser. Some systems use a small surgical blade called a microkeratome. The flap is lifted, and you look toward a target light.

An excimer laser reshapes the exposed cornea according to your treatment plan. The laser tracks small eye movements. You may hear clicking sounds and notice an unusual smell as the laser operates.

The surgeon then replaces the flap and checks its position. It begins to seal naturally without stitches. Both eyes are often treated during the same visit.

Recovery and what to expect afterward

Mild burning, watering, itching, light sensitivity, or a gritty feeling is common for the first several hours. Your vision may be hazy. Severe or increasing pain is not an expected part of routine recovery.

You can usually eat normally after LASIK unless your facility says otherwise.

Rest your eyes on the day of surgery. Do not rub or squeeze them. You may be given clear shields to wear while sleeping. Use prescribed and lubricating drops exactly as directed. Avoid swimming, hot tubs, eye makeup, dusty environments, and contact sports for the period set by your surgeon.

Do not drive yourself home. Resume driving only when your vision meets legal driving requirements and your surgeon says it is safe. Night glare can remain troublesome even when daytime vision seems clear.

Many people return to desk work within a day or two, although glare, dryness, or fluctuating vision may make screens uncomfortable. Jobs involving dust, water, chemicals, or eye injury may require a longer break.

Risks and possible complications

All eye surgery has risks. Possible problems after LASIK include:

Some people need another procedure, called an enhancement. An enhancement is not always possible if the cornea is too thin or another problem is present.

Dry eye and night-vision symptoms often improve during healing, but they can persist. Discuss your work, night driving, hobbies, and tolerance for visual side effects before deciding.

- Dryness, burning, or fluctuating vision
- Glare, halos, starbursts, ghost images, or reduced night vision
- Undercorrection, overcorrection, or a return of some prescription
- Infection or inflammation
- Wrinkles, movement, inflammation, or abnormal healing of the flap
- Irregular corneal shape or reduced quality of vision
- Corneal ectasia, a progressive weakening and bulging of the cornea
- Loss of vision that glasses or contact lenses cannot fully correct

Results and follow up

Vision often improves by the day after surgery, but it may be blurry or change from day to day at first. Healing and visual stability can take several weeks or months.

You will usually have an examination soon after surgery, often the next day, followed by further routine visits. These appointments check vision, flap position, corneal healing, eye pressure, and dryness.

Keep a copy of your preoperative measurements and LASIK treatment record. These details may help with calculations if you later need cataract surgery.

LASIK does not prevent normal changes in vision. Reading glasses may become necessary with age, and distance vision can change over time. If an enhancement is considered, the surgeon will first confirm that your prescription is stable and enough healthy corneal tissue remains.

Alternatives

You do not have to have LASIK. Alternatives include:

The best balance depends on your prescription, corneal health, age, lifestyle, and comfort with each option's trade-offs.

- Glasses: The least invasive option and easy to update, but they can limit some activities or feel inconvenient
- Contact lenses: Avoid surgery and can give excellent vision, but require ongoing care and carry risks such as infection

- PRK: Laser reshaping without a corneal flap; useful for some thinner corneas, but recovery is slower and early discomfort is greater
- SMILE: Removes corneal tissue through a small incision; avoids a LASIK-style flap, but treats a narrower range of prescriptions and may offer fewer enhancement options
- Phakic intraocular lens: A lens is implanted inside the eye without removing the natural lens; it can treat higher prescriptions but involves surgery inside the eye
- Refractive lens exchange: Replaces the natural lens with an artificial one; it prevents future cataracts but removes natural focusing ability and has intraocular surgical risks
- No procedure: Continuing your current glasses or contact lenses avoids surgical risk

When to call your healthcare team

Contact your surgical team promptly if routine symptoms are getting worse rather than better, or if you have increasing redness, discharge, swelling, pain, light sensitivity, or worsening blurred vision.

Seek urgent eye care the same day for severe pain, a sudden drop in vision, or an eye injury after surgery.

Sudden flashes, many new floaters, or a dark curtain across your vision require emergency eye assessment. These symptoms are not a normal part of LASIK recovery and may indicate a retinal problem.

For routine questions about dryness, drop use, work, exercise, or expected visual changes, contact the clinic during normal hours or discuss them at your scheduled follow-up.

Common questions

Will I be asleep?

No. You are normally awake, with numbing drops used to prevent pain. You may receive medicine to help you relax, but general anaesthesia is not usually used.

Can I drive home after LASIK?

No. Arrange for someone to take you home. Drive again only after your surgeon confirms that your vision is safe and meets local legal standards.

How painful is LASIK?

The procedure should not be painful, although you may feel pressure. Burning, watering, or a

gritty feeling can occur for several hours afterward. Severe pain needs prompt assessment.

When will I know if it worked?

Many people notice clearer vision within one day. Vision can fluctuate during healing, so the final result may not be clear for several weeks or months.

Will I still need glasses?

Possibly. Glasses may still be needed for reading, night driving, detailed tasks, or remaining prescription. LASIK cannot prevent age-related near-vision changes.

Can LASIK wear off?

The removed corneal tissue does not grow back, but your eyes can continue to change with age. This may cause some prescription to return.

Sources

- U.S. Food and Drug Administration. LASIK: Benefits and Risks and When Is LASIK Not for Me?
- American Academy of Ophthalmology. Refractive Errors Preferred Practice Pattern
- National Institute for Health and Care Excellence. Photorefractive (laser) surgery for the correction of refractive errors , Interventional Procedures Guidance IPG164
- The Royal College of Ophthalmologists. Professional Standards for Refractive Surgery
- Shortt AJ, Allan BDS, Evans JR. Laser-assisted in-situ keratomileusis (LASIK) versus photorefractive keratectomy (PRK) for myopia . Cochrane Database of Systematic Reviews, 2013