



# Understanding LASIK



## How does LASIK work?

**LASIK** (shorthand for laser-assisted in situ keratomileusis) is the most common laser vision correction procedure. During the procedure, the surgeon makes a small, hinged flap in the cornea and folds it back. Then a laser reshapes the cornea—the clear, round dome at the front of your eye—and the flap is folded back.

It is used to correct several kinds of **refractive errors**, including nearsightedness, farsightedness, and astigmatism.

However, standard LASIK does not treat **presbyopia**—the blurry close-up vision that starts after age 40. Blended or monovision techniques with LASIK and PRK are options for presbyopia.

## What's Inside:

- Understanding LASIK
- Risks and complications
- What to expect before, during, and after surgery
- Alternatives to LASIK

## Key takeaways

Millions of people have had successful LASIK surgery, but it's not for everyone.

As with any surgery, there are risks and possible complications.

LASIK cannot be reversed, and it may not give you perfect vision.

Even with LASIK to correct your distance vision, you are likely to need reading glasses in your mid-40s.

Most insurance plans don't cover the surgery.

## Benefits of LASIK

LASIK is a quick and relatively painless procedure. Recovery is fast and there is minimal or no post-treatment discomfort.

## High success rate

LASIK has a high success rate, especially for nearsightedness. Some patients experience improved vision immediately after surgery, while it may take 6-8 hours for others, depending on your prescription.

Follow-up studies suggest:

- 94-100% of low-to-moderate nearsighted patients achieve 20/40 vision or better
- 70% of patients achieve 20/25 or better
- 3-10% of all patients need a “touch up” surgery

## You may still need glasses

You may still need glasses for reading and driving at night. If you have a strong prescription, there's a chance you'll still need glasses most of the time after surgery.

## Are you a good candidate for LASIK?

It might work for you if:

- You are 21 years or older
- Your prescription hasn't changed for at least one year
- Your job allows laser eye surgery
- Your eyes and overall health are good
- You have realistic expectations

## LASIK after age 40

While there is no upper-age limit for LASIK, aging eyes can present unique challenges that may make surgery more difficult. If you are 40+ years old, consult a qualified refractive surgeon to screen for any potential conditions that may make you ineligible for LASIK. You may be better suited for a different type of corrective surgery.



## Risks and complications

Laser eye surgery is generally very safe, but there are risks involved.

### Side effects

Many common side effects, such as dry eye or other discomforts, clear up within a few days to months. But some can require further surgery or cause permanent damage

#### Common risks include:

- Permanent dry eye
- Halos, glare, or double vision—making night driving difficult
- Over- or under-correction of vision

In very rare cases, blindness and irreversible eye damage can occur.

## Corneal flap complications

These include irregular or incomplete flaps, ingrowth of cells under the flap that may need to be surgically removed, and irregular corneal healing, which can only be corrected with a corneal transplant. Corneal infection and inflammation can also occur but are extremely rare.



## What to expect before, during, and after surgery

### Finding a Surgeon

Choose your surgeon carefully, as not all surgeons have the same success rates. To find a qualified, experienced surgeon, ask your regular eye doctor or friend for a referral. Avoid offers that sound too good to be true.

#### Is he/she qualified?

- Check the surgeon's credentials. Look for a doctor with fellowship training in refractive surgery and board certification.

#### Is he/she experienced?

- Look for a surgeon who has performed at least 200 surgeries and who tracks patients carefully afterward.

#### Does the practice use current technology and equipment?

- Make sure the practice uses up-to-date equipment (less than 10 years old).

### Before surgery

Your personal goals and medical and vision history play an important role in determining which refractive surgical option is right for you. During a thorough eye exam, your doctor should:

- Set goals and expectations
- Discuss your medical and eye history
- Test your visual acuity and refraction
- Dilate your pupils and re-test your eyes
- Examine your eyes to make sure they're healthy. This includes screening for glaucoma, retinal disorders, and dry eye
- Measure the shape of your eyes

If your doctor doesn't think LASIK is right for you, you might consider getting a second opinion to confirm.

Once you've decided on laser eye surgery, your doctor may recommend self-treating for dry eye or inflammation before the surgery. He/she may also advise you to:

- Stop wearing contacts 3-7 days before surgery
- Avoid creams, lotions, makeup, or perfume one day before surgery (and the day of surgery)
- Gently scrub your eyelids to remove debris on the day of surgery

## During surgery

LASIK is performed as an in-office procedure. The actual surgery only takes about 10 minutes per eye, but you should expect to be at the laser center for about three hours for the total process.

**Your experience:** You'll be awake, but your eye will be numb. **You may feel pressure but should not be in pain.** Your vision will dim during the procedure, and you may notice a burning smell as the laser works on your cornea. Afterward, you'll wear an eye shield or bandage and use preservative-free eye drops for a few days or weeks.

**The surgical procedure:** The eye is moistened. A suction ring is positioned to keep the eye from moving and the cornea in the correct position. A hinged flap of thin corneal tissue is cut off and the flap is lifted. The laser reshapes the underlying corneal tissue, and the flap is folded back. There are no stitches. A shield is placed over the eye to protect the flap.

## After surgery

Healing is relatively fast, but you may want to take a few days off from work after the surgery. You'll see your doctor 1-2 days after surgery, and most people will be able to drive to the clinic. Avoid rubbing your eyes during recovery.

### When can I...



**Return to work:** Next day, though it may be difficult to perform prolonged reading or computer tasks right away.



**Bathe or take a shower:** Next day, but avoid getting soap or water in your eyes.



**Drive:** Next day, as long as you feel able to drive safely. Night driving can be challenging for a few days.



**Wear eye makeup:** After 1 week. Purchasing new makeup, especially mascara, is strongly recommended.



**Exercise:** After 1 week. Avoid getting sweat in your eyes for at least 4 days. Otherwise, non-contact sports can be resumed as soon as you feel comfortable.



**Swim, sauna, or hot tub:** After 2 weeks (minimum)



**Travel on an airplane:** It is advised to stay locally for at least 1 week after your surgery. Air travel is not recommended the first week, unless it is an emergency. If you need to travel by plane, you should frequently use artificial tears to keep your eyes lubricated (1 drop for every hour on the plane before and after landing and take-off).



## Alternatives to LASIK

If you are not a good candidate for LASIK, you may be eligible for one of these alternatives.

### Photorefractive keratectomy (PRK)

If you have thin corneas or dry eyes, a type of advanced surface ablation, called PRK, may be an option. PRK works best for low-to-moderate nearsightedness. Compared to LASIK, there is a lower risk of certain complications and recovery time is longer and less comfortable. Patients usually wear protective contact lenses for 3-5 days after surgery.

Follow-up studies suggest:

- 70% of PRK patients achieve 20/20 vision
- 92% of PRK patients achieve 20/40 vision or better

### Implantable lenses

If you are extremely nearsighted or have vision problems caused by cataracts, artificial lenses—called phakic intraocular lenses (PIOLs)—may be an option. The lenses are surgically placed in front of the eye's natural lens. Certain types of IOLs, such as multifocal or accommodative lenses, may improve both distance and reading vision. Possible risks include loss of vision; night vision problems; and additional surgery to adjust, remove, or replace lenses.

### Corneal inlays

If you are 40-60 years old with presbyopia, you might be a candidate for corneal inlays. Corneal inlays can be used with LASIK in some cases to treat presbyopia along with nearsightedness, farsightedness, and astigmatism.

### Refractive clear lens exchange

If you have early cataracts, you may be a viable candidate for refractive clear lens exchange, also known as pre-cataract surgery.



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