

Glaucoma information and referral.



Learn more about glaucoma and how to get support.

1800 500 880
glaucoma.org.au



Glaucoma Australia
Saving sight

Did you know?

- Glaucoma is one of the leading causes of irreversible blindness in Australia.
- It is estimated that over 300,000 Australians have glaucoma, but 50% are undiagnosed.
- Known as the 'sneak thief of sight' glaucoma develops slowly and often without symptoms.
- Early detection and adherence to treatment are vital to slow glaucoma progression.
- Glaucoma is hereditary - you are 10X more likely to develop glaucoma if you have a direct family member with glaucoma.

While more than 300,000 Australians have glaucoma, 50% remain undiagnosed. Increased awareness, early detection and treatment adherence will save preventable sight loss.

What is glaucoma?

Glaucoma is the name given to a group of eye diseases where vision is lost due to damage to the optic nerve. The loss of sight is usually gradual and a considerable amount of peripheral (side) vision may be lost before there is an awareness of any problem.

Unfortunately there is no cure for glaucoma, and vision loss is irreversible.



What causes glaucoma?

Glaucoma is usually caused by an increase in intraocular pressure (IOP) which can damage the optic nerve. The level of elevated eye pressure which causes progressive damage to the optic nerve varies between people. There are also two groups of individuals who have either high eye pressure without glaucoma (known as ocular hypertension) or normal eye pressure with glaucoma (known as normal pressure glaucoma).

The eye is constantly producing a clear liquid called aqueous humor which it secretes into itself. This fluid nourishes the eye and holds the eye in shape. The fluid is then drained out through an area called the anterior chamber angle or drainage angle. If there is damage to the drainage angle, the rate at which the eye produces the aqueous humor then becomes greater than the rate the eye can drain it – causing high IOP in the eye.

This increased pressure begins to damage the optic nerve which lies at the back of the eye. The optic nerve is made up of approximately one million nerve fibres which connect the back of the eye to the brain. Damage to the cells of the optic nerve results in irreversible damage to your eyesight.

Damage to the optic nerve can occur even when a person's IOP is within the normal range between 10 to 21 mm Hg. This is called low or normal tension glaucoma.

Who is at risk?

Although anyone may develop glaucoma, some people are at a higher risk.

Risk factors include:

- A family history of glaucoma (first-degree relatives)
- High eye pressure
- Age over 50
- African or Asian ethnicity
- Diabetes
- Short or long sightedness
- A previous history of eye injury
- Past or present prolonged use of cortisone drugs (steroids)
- Migraine
- High or low blood pressure
- Obstructive sleep apnoea

People with a first-degree relative who has glaucoma have a 1 in 4 chance of developing glaucoma in their lifetime. The risk increases to 56% if the relative has advanced glaucoma.

Most common types of glaucoma

Primary Open Angle Glaucoma (POAG)

This is the most common form of glaucoma in Australia. It involves a wide or open drainage angle which is not able to adequately drain the fluid out of the eye. As a result, increased eye pressure causes gradual damage to the optic nerve resulting in a loss of peripheral vision and eventually blindness. There are no obvious symptoms to alert you until the disease is very advanced.

Normal Pressure Glaucoma is another type of glaucoma similar to POAG except the eye pressure remains normal. It is also treated in the same way.

Angle-Closure Glaucoma

Glaucoma of this type is the second most common and involves a narrow drainage angle. In this case, the iris (coloured part of the eye) is usually too close to the drainage angle and can block the passage for the fluid to pass through. If angle closure occurs suddenly, the IOP may rise abruptly causing an ACUTE angle-closure glaucoma attack. Acute angle-closure is a medical emergency requiring urgent treatment.

What are the symptoms?

Primary Open Angle Glaucoma (POAG)

- There are no early stage symptoms for POAG.
- Early detection with an eye test is the only way to detect visual field changes and damage to the optic nerve.

Acute Angle-Closure Glaucoma

- Severe eye pain associated with nausea and vomiting.
- Headache.
- Sudden onset of blurred vision or seeing halos around light.
- Watery eyes.

Glaucoma is known as the 'sneak thief of sight' as there are often no obvious visual symptoms in its early stages.

How is glaucoma detected?

Glaucoma cannot be self-detected. Only an optometrist or an ophthalmologist can determine whether you have glaucoma or not.

During a glaucoma exam your eye health practitioner will:

- Measure your eye pressure, also known as intraocular pressure (IOP).
- Inspect your eye's drainage angle.
- Examine your optic nerve for damage.
- Test your central and peripheral (side) vision.
- Take a picture or computer measurement of your optic nerve.
- Measure the thickness of your cornea.

It is important to remember that the combined results of the above tests will determine the diagnosis of glaucoma, and that no single test can lead to a diagnosis.

How is glaucoma treated?

Although there is no cure for glaucoma it can usually be controlled so that further loss of sight can be prevented or slowed.

Treatment for glaucoma consists of eyedrops, laser treatment, surgery or a combination of the three.

Eyedrops

Eyedrops work in two ways:

- They reduce the amount of aqueous fluid secreted into the eye, and
- Help the aqueous fluid flow better from the drainage angle.

Laser Treatment

- **Selective Laser Trabeculoplasty (SLT):** Generally used to lower IOP for Primary Open Angle Glaucoma. SLT uses short pulses of low energy light on the drainage angle to assist with better outflow of aqueous fluid.
- **Peripheral Iridotomy (PI):** Generally used to lower IOP for Angle-Closure Glaucoma. A laser is used to create a small hole in the peripheral iris which assists in the flow of the aqueous fluid to the drainage angle.

How is glaucoma treated? (continued)

Surgery

- **Trabeculectomy:**
A tiny flap is created in the white part of the eye and a filtration bleb (like a pocket) is formed under the conjunctiva. Both are hidden under the top eyelid. The aqueous humour is able to drain out of the eye through the flap and then into the bleb where it is absorbed - lowering the IOP in the eye.
- **Minimally Invasive Glaucoma Surgery (MIGS):** MIGS procedures work by bypassing the blockage in the drainage angle and helping the fluid inside the eye drain out via different routes. Some types of MIGS include:
 - iStent Inject
 - Hydrus
 - Xen Gel Glaucoma Implant

Treatment can prevent further vision loss but it does not improve eye sight or repair vision already lost due to optic nerve damage.

Glaucoma and your family

In many cases, glaucoma is an inherited (genetic) disease that is passed on within families, and there is an increased risk with direct relatives.

First degree relatives (parents, siblings and children) are at a greater risk – having an almost 1 in 4 chance of developing glaucoma in their own lifetime.

That risk doubles if their relative has advanced glaucoma.

The best way to protect your eye sight from glaucoma is to have a comprehensive eye exam, which includes an optic nerve check.

If you have a family history of glaucoma it is recommended that you have your eyes tested for glaucoma every 2 years from the age of 40 years.

If someone in your family has glaucoma get your eyes tested – it's easy and it just might save your eyesight.

How can we help?

Glaucoma Australia offers **FREE education and support to people living with glaucoma.**

If you or someone you care for has been diagnosed with glaucoma we recommend you join our community to access free resources, guidance and support.

[Join our community online](#)

www.glaucoma.org.au/registration

[Call our free support line](#)

1800 500 880

Or fill in the attached form and return it using the reply paid envelop provided.

Get support

Glaucoma Australia offers FREE education and support to people living with glaucoma.

Title

First Name

Last Name

DOB

Phone

Address

Suburb

State Postcode

Email

Do you have glaucoma?

I am a new glaucoma suspect - waiting
confirmation by an ophthalmologist

I am having ongoing monitoring for
suspected glaucoma

I have confirmed glaucoma

I do not have glaucoma

Family History

I am related to a person with glaucoma:

Yes No

If yes, family members with glaucoma:

Parent Sibling

Child Other

Referring Health Professional

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Glaucoma Australia offers FREE education and support to people living with glaucoma.

Our mission is to eliminate glaucoma blindness by promoting early detection and treatment adherence.

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