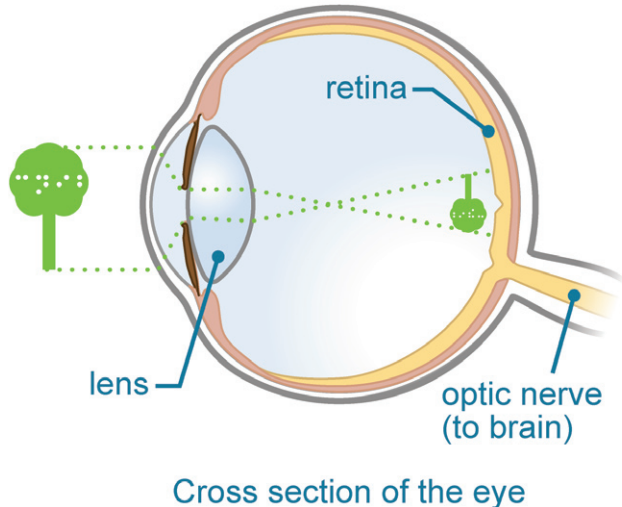


Challenge yourself to learn about glaucoma and reduce your risk

Glaucoma affects 250,000 Canadians and is the second most common cause of vision loss in people over 65. It can be devastating, but with proper support someone with glaucoma can live a satisfying and independent life.

Anatomy of glaucoma

There are several different types of glaucoma, all characterized by damage to the eye's **optic nerve**, which connects the **retina** to the brain.



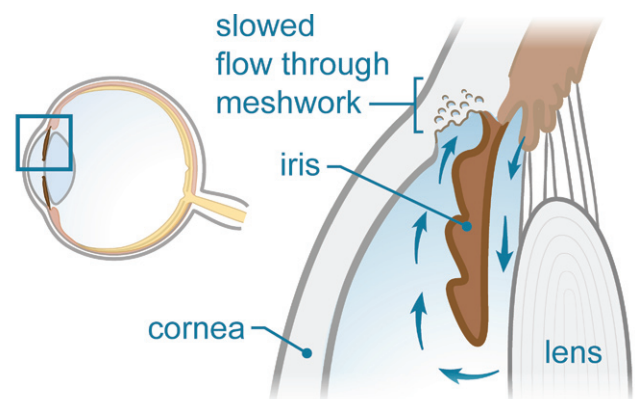
If the optic nerve is damaged, it cannot send electrical impulses to the brain to produce a proper image.



Most of the time in glaucoma, damage occurs when the optic nerve, or certain parts of the retina, get compressed as a result of high pressure inside the eye.

Open-angle glaucoma

Open-angle glaucoma is by far the most common form of the disease. It occurs when fluid in the eye passes too slowly through a spongy meshwork connecting the cornea and the iris. This causes a buildup of pressure that damages the optic nerve.

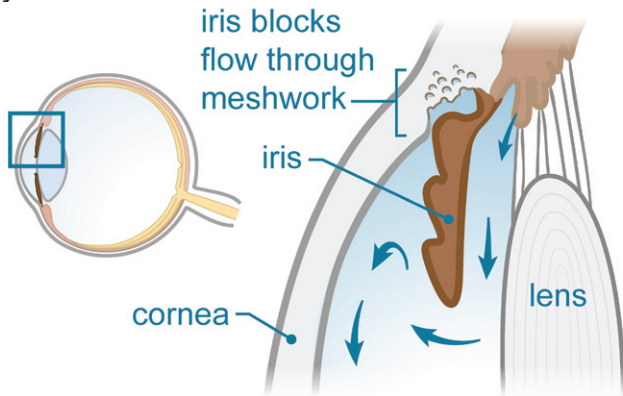


In **normal tension glaucoma**, damage to the optic nerve may occur even without a buildup of pressure in the eye.



Closed-angle glaucoma

In **closed-angle glaucoma**, the distance between the cornea and the iris closes completely, stopping fluid from draining from the eye.



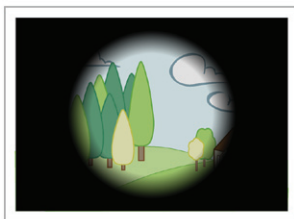
In the **acute** form of **closed-angle glaucoma**, this happens suddenly, often in a matter of hours. In **chronic closed-angle glaucoma**, this can take weeks or even years.

Glaucoma symptoms

Open-angle glaucoma and **chronic closed-angle glaucoma** begin without any symptoms. There is no pain, and vision loss isn't noticeable at first. If left untreated, glaucoma causes a growing area of vision loss on the periphery of vision.



normal vision



vision with glaucoma

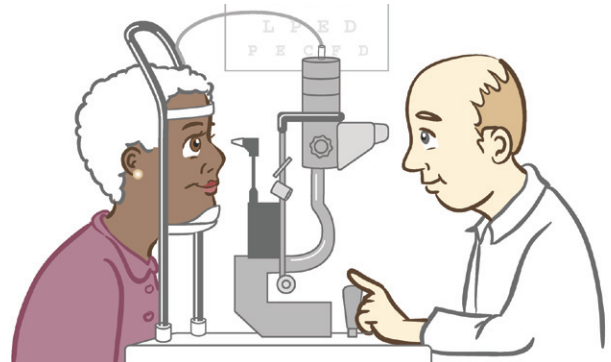
Over time this can expand to "tunnel" vision or even complete vision loss.

Acute closed-angle glaucoma is a medical emergency and has a sudden onset of symptoms:

- Severe eye pain
- Headaches (especially in dim light)
- Blurred vision
- Nausea
- Redness in the eye
- Haloes around lights

If you have these symptoms, **see your eye doctor or go to an emergency room immediately** – it could save your sight.

Detecting Glaucoma



Most eye doctors use a variety of tests to check for glaucoma. These include a tonometry test, which measures pressure inside the eye (called "intraocular pressure," or IOP).

Since glaucoma often has no symptoms, having **regular eye exams** is the single most important thing you can do to prevent it.



Risk factors

Non-modifiable risk factors are things you *can't* change:

- Increased age
- Female gender
- Naturally high levels of pressure in the eye
- Family history of glaucoma
- Nearsightedness
- Ethnicity: People of African or Hispanic descent have a greater risk of open-angle glaucoma. Those of Asian or Inuit descent have an increased risk for other types of glaucoma.

You *can* change **modifiable risk factors**:

- Manage diabetes and high blood pressure.
- Protect your eyes from injuries and infections.
- If you have other risk factors, talk to your eye doctor before using antihistamines, antidepressants, dilating eye drops or steroids, or beginning a weight training program

And don't forget your regular eye exams!

Cure and treatment

There is no cure for glaucoma. It can be treated if detected early, preventing further damage. Treatment usually involves eye drops to lower the pressure in your eye. In some cases, your doctor may recommend laser or conventional surgery if eye drops are not effective.



To prevent vision loss, **it is important to take your eye drops exactly as prescribed** even if you have no symptoms.

More information

- **CNIB**
<http://www.cnib.ca/glaucoma>
- **Glaucoma Canada**
www.glaucomacanada.com
- **Canadian Ophthalmological Society/ The Canadian Glaucoma Society**
<http://www.eyesite.ca/cgs/info>
- **The Canadian Association of Optometrists**
www.opto.ca/en/public/04_eye_info/04_02_01_eye_diseases.asp#15
- **National Eye Institute, U.S. National Institutes of Health**
www.nei.nih.gov/nehep/glaucoma.asp

