

## What is Glaucoma?

Glaucoma is the result of high fluid pressures inside your eyes. This happens when the liquid in the front part of your eye doesn't circulate the way it should. Typically, the fluid will circulate throughout the eye and pass through a mesh-like channel. If that channel gets blocked, the liquid builds up. This causes an increase in pressure, and eventually that will cause optic nerve damage. There are two types of glaucoma:

### Open-Angle

This is the most common type. This is when the meshwork looks normal, but fluid isn't flowing correctly. Common signs of open-angle glaucoma are:

- Patchy blind spots in your peripheral vision, frequently in both eyes.
- Tunnel vision in advanced stages.

### Acute Angle-Closure

Acute angle-closure is the more severe type. This occurs when the angle between the iris and the meshwork closes; the iris blocks the pathway to the meshwork and prevents the fluid from draining. This causes a sudden increase in the pressures in your eyes and can cause these symptoms:

- Severe headache
- Eye pain
- Nausea and vomiting
- Blurred vision
- Halos around lights
- Eye redness

In order to preserve vision, it is very important to be regularly checked for glaucoma by our eye doctors during your annual exam or if you experience any of the symptoms listed above. You are more at risk for glaucoma if you have poor vision, are over the age of 40, have a family history of glaucoma, or have other health issues that can affect your vision.

*During your initial visit to Nova Eye Care for Glaucoma testing, please expect the following tests:*

**Visual Field**  
**Optic Coherence Tomography (OCT)**  
**Pachymetry**  
**Non-Contact Tonometer (NCT)**  
**Optomap Retinal Photos**

If necessary, we will schedule a follow up visit for additional testing.

Please try to arrive to your appointment 10-15 minutes early to fill out new patient paperwork if you are new to our office!

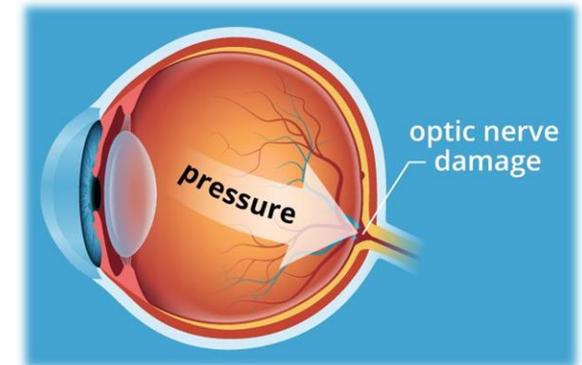
### Nova Eye Care

Dr. Nhan T. Tran  
Dr. Thomas Roselius

450 E Tudor Drive  
Anchorage, AK 99503  
T: (907)274-7825  
[novaeyecares.com](http://novaeyecares.com)



## Glaucoma



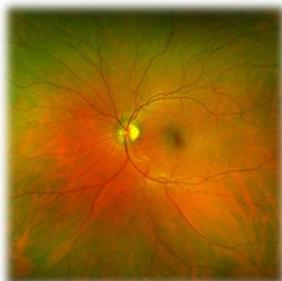
### Patient Information

Glaucoma is a progressive eye disease that results in damage to the optic nerve. It is the 2nd most common cause of blindness worldwide and the 2nd most common cause of blindness in the US. About 3 million Americans and 14 million people worldwide have glaucoma, but only half are aware of it.

# Glaucoma Tests We Perform at Nova Eye Care

## Your Routine Exam

The **Optomap retinal photo** is a unique test that captures more than 80% of your retina in one panoramic image. Traditional imaging methods and exams typically only show about 15% of the retina. The Optomap helps to show early signs of retinal diseases and vision problems associated with the optic nerve and macula, including glaucoma.



The **NCT, Non-Contact Tonometer**, is more commonly known as the air puff test. This test is used to measure the intraocular pressures of your eyes. A high eye pressure can be a sign of glaucoma. The alternative to this test is the **Goldmann Tonometer**. Your eyes will be numbed with eye drops, and device on the doctors slit lamp will gently touch the surface of the eye. It takes just a few seconds and provides even more accurate pressure results.



Test	CPT Code	Cost*
ERG	92275	\$220
VEP	95930	\$220
OCT	92133, 92134	\$120
VF	92083	\$220
Pachymetry	76514	\$ 55
Retinal Photo	92250	\$120

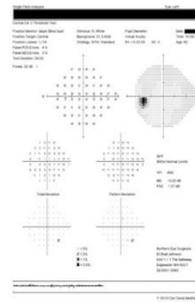
\*Before Insurance

## Your First Glaucoma Evaluation

The **Optical Coherence Tomography (OCT)** is a non-invasive imaging test. The test uses light waves to take cross-sectional pictures of your retina. This allows our doctors to see and measure each of the retina's distinct layers. This test will be done during your first glaucoma evaluation and is repeated every 6 to 12 months depending on your diagnosis and our doctors' recommendations.



The **Visual Field test** is used to evaluate the severity of vision loss, if any, due to glaucoma. In this test, the patient will have one eye covered and will be asked to click a button anytime they see a flash of light while looking into the instrument. This measures for any "blind spots" a patient might have. The visual field test is performed every 3 to 6 months depending on the results of the test and the diagnosis.

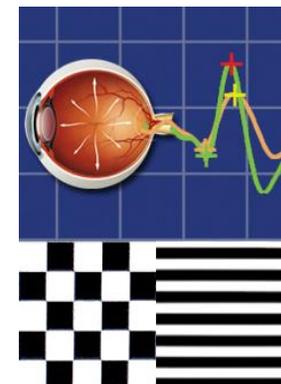


The **Pachymetry** instrument is designed to measure the thickness of the cornea, which is the outer surface of the eye. Corneal thickness is important because it can mask an accurate reading of the eye's pressure. Many patients with thin corneas will show a falsely low eye pressure, which is dangerous as an undetected high eye pressure can be a sign of glaucoma and cause vision loss. The pachymetry test will be done at your first glaucoma evaluation, but it shouldn't be necessary to repeat in the future.



## Follow Up Appointments

At the doctor's discretion, a second evaluation appointment may be necessary to rule out glaucoma or to see how far it has advanced. During this exam, our optician would perform an ERG, or **Electroretinography vision test**. This test measures the amount of energy and the timing of the responses of the retinal cells. The



doctor may also require a VEP, or **Visual Evoked Potential test**. It was developed to measure the responses of the entire visual pathway. It measures the strength and speed of the signals from your retina to your visual cortex of the brain.