



## Backgrounder and Fact Sheet

# Sight Tests and Eye Exams: Understanding the Difference

A number of optical stores offer what are called “sight tests,” using automated machinery. But make no mistake – a sight test is not a proper eye exam, which only optometrists and ophthalmologists are trained and licensed to perform. The eye health care of British Columbians depends on consumers knowing the difference.

### What is a sight test?

A sight test, more accurately described as a type of *refraction*, determines a lens power by relying on a combination of computerized tests using automated equipment.

The comprehensiveness and accuracy of these automated sight tests is limited. Eye muscle coordination is completely ignored, and the test results can be influenced by eye fixation and alignment, pupil size, corneal or lens irregularities, and something called instrument myopia. This last problem is created by the eye’s tendency to over-focus when looking through a machine such as this. This can lead to an inaccurate measurement of refraction.

Furthermore, ***these tests will completely overlook many serious problems and diseases*** that do not blur a person’s vision at all or until the disease is more advanced. Some of these include:

- glaucoma, a serious eye disease caused by fluid-build up within the eye and increased pressure on the optic nerve that carries visual information to the brain. If not diagnosed and treated at an early stage, it will result in blindness.
- Type 2 diabetes, which can cause diabetic retinopathy – vision blurriness and distortion caused by changes in the small blood vessels that nourish the eye’s light sensitive retina – which can lead to blindness.
- brain tumours – cancerous or benign (non cancerous)
- cancer of the eye
- high blood pressure, which can lead to stroke or heart attack and other health problems
- retinal detachment – a condition where the delicate retina separates from the inner layers of the eye surface. In later stages of retinal detachment, blind spots or unusual flashes of light become evident. If detected early, a partially detached retina can be repaired with laser surgery.

In addition, some diseases can affect vision by causing changes in the prescription that a person needs. A sight test may give them a pair of glasses that work fine for awhile, but without an eye health evaluation, the underlying disease may be missed. Two common causes are diabetes, which affects the very age group that is approved for sight testing, and tumours behind the eye.

Early detection of any of these conditions is important to be able to protect not only the health of the eyes and the clearness of vision, but also the patient’s overall health and maybe even their life.

**Having a refraction (a “sight test”) done without an eye health examination presents a serious risk.**



Although regulations are proposed to ensure that people are told they are not having an eye exam when they have a sight test, experience has shown that many people do not understand the difference or know about all the conditions that may be missed. In addition, even if someone does understand this and goes ahead with a sight test, they may then delay having their full eye exam, thereby risking ocular and systemic diseases going undetected. This is why the College of Physicians and Surgeons of British Columbia has condemned signing a prescription for visual correction without a complete ocular health examination as “unacceptable medical practice.” The government proposes to get around this by removing the need for a signature, which does not protect the public.

Under the existing regulations, only ophthalmologists (medical doctors who have specialized in the eye) and optometrists (doctors of optometry specializing in eye care) are allowed to perform refractions and issue prescriptions. Opticians are technicians who are qualified and licensed only to fit and supply glasses and contact lenses based on a prescription from an eye doctor (i.e. ophthalmologist or optometrist). Some opticians had been conducting sight tests and faxing the results to a doctor who issues and faxes back a prescription without having examined the patients’ eyes.

The College of Physicians and Surgeons of British Columbia concluded that:

- *In signing a prescription based on a refraction, a physician is practising medicine and acknowledging a physician-patient relationship with all of the ethical and legal encumbrances of that.*
- *Ocular health can only be certified by a complete ocular examination.*
- *The signing of a prescription for visual correction, based on an autorefraction, without taking a history from the patient and without conducting an ocular examination of that patient to ensure that no concurrent ocular pathology exists, is unacceptable medical practice.*

Other provincial professional colleges and health ministries are on record as objecting to the practice of “sight testing,” together with agencies involved with preventing blindness.

### **What is an eye exam?**

The eye exam performed by an optometrist or ophthalmologist looks at the entire eye and vision system and is an important part of preventative health care. Think of it as a physical for your eyes. Eye exams can detect eye diseases and disorders such as glaucoma, cataracts or retinal degeneration, and other health problems such as diabetes, high blood pressure and brain tumors. Sight tests cannot.

Optometrists and ophthalmologists may also use computerized instruments ; however they utilize their extensive training and experience, together with professional judgement, to direct the testing and interpret the results. Only on this basis can an accurate prescription be determined, customized to the patient’s visual needs.



An eye exam includes:

- A summary of past and present vision and medical problems, including those that may be inherited.
- An analysis of the patient's vision needs at home, work, school and play. In some instances, this may necessitate questions about the patient's school/work environment and recreational activities, to determine what the visual demands are.
- Measurement of visual acuity of each eye, both with and without correction by lenses.
- Binocular vision assessment (ability to see from both eyes), as it relates to eye coordination, depth perception, or in some cases, eye-hand coordination.
- Colour vision evaluation as required.
- Assessment of the health of the eye both inside and outside, including a neurological review of the pupils and other muscle reflexes and functions, and an assessment of peripheral vision. This could uncover anything from a minor deficiency of the tears, to a major retinal problem, or even a serious condition elsewhere in the body.
- Screening for glaucoma including testing fluid pressure inside the eye, assessing the eye health history, internal eye exam and visual field tests.
- Diagnosis of the refractive status (focusing power of the eye) based on a combination of objective (measurements) and subjective (patient responses to questions) techniques.
- All of these tests are used in the final analysis to determine the appropriate prescription lenses to treat refractive and visual problems, to develop a program of eye training exercises, or to recommend medical or surgical treatment.
- Recommendations for future eye care can be made based on the history of eye health and the results of the examination.
- The final analysis of the eye exam includes optometrists' professional knowledge, experience and judgment.

In summary, a sight test is not an eye exam, and the practice of sight testing puts the public at risk of late diagnosis of eye disease, as well as potentially inaccurate eyeglass prescriptions. Most jurisdictions in North America forbid this practice, and the BCAA strongly encourages the government of British Columbia to follow suit, for the protection of the public.

For more information, visit [www.whatcouldbemoreimportant.com](http://www.whatcouldbemoreimportant.com)

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Other materials available related to this topic include:

- Common eye diseases, disorders and vision conditions
- Who's who in eye health care: Optometrists, Ophthalmologists and Opticians
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