



Automated Refraction Toolkit

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All forms can be downloaded off the College website.

Questions? reception@cobc.ca or (604) 742-6472

Steps to become a certified automated refracting optician

The College has established high qualifications, professional standards and strict guidelines around independent automated refraction to safeguard public safety. Only certified opticians who are trained to safely and effectively perform automated refraction are legally permitted to assess visual acuity. Opticians who are not certified in automated refraction cannot perform this service. To become certified to conduct independent automated refractions, opticians must complete the following steps:

- 1) Approved certification program
- 2) Jurisprudence examination
- 3) Certification application form and fees

Approved certification program

The following programs are approved by the College, under terms and conditions established by the Board and with the terms ending on the dates indicated, as meeting the standards of academic or technical achievement required for certification to conduct independent automated refraction:

- Northern Alberta Institute of Technology - OPSC617 - Refraction
(*OPSC695 - Refraction Clinical is not required for certification in BC*)
- Northern Alberta Institute of Technology - Automated Refraction Theory
- Douglas College Dispensing Optician Program
- Stenberg College Optician Program

Jurisprudence examination

With an increased scope of practice comes greater responsibility. It is important that Opticians understand their expanded scope of practice and the legal limits and conditions to conduct independent automated refraction. As part of the automated refracting certification requirements of the College, registrants must achieve a passing mark of 75% on the jurisprudence examination. The approved certification programs examine students within the program. If you need to schedule a jurisprudence examination, contact the College office at (604) 742-6472 or reception@cobc.ca to arrange examination login.

Certification application form and fees

Registrants must apply for certification to conduct independent automated refractions by submitting an [application online](#). The certification fee for automated refraction is \$50, plus an annual renewal fee of an additional \$50. Once all the certification steps are completed, you will receive a paper certificate.

Frequently Asked Questions (Automated Refraction)

Q: What is an automated refraction system comprised of?

A: One or more computerized components, including an autorefractor, autophoropter, or a lensometer. It does not have to be an EyeLogic system.

Q: What is the result of an automated refraction called?

A: Assessment record (not a prescription). Only a certified automated refracting optician (“optician”) can produce an assessment record.

An assessment record must contain the following information:

- Client’s name
- Client’s date of birth
- Client’s interpupillary distance
- Client’s expected visual acuity
- Lens powers
- Place of practice where the automated refraction took place
- Date of the automated refraction
- Optician’s name and signature

Page 8 contains a template for assessment records. It is not considered professional for the required assessment record information to be written on the back of a business card.

Q: What must an optician do before conducting an automated refraction?

A: Provide written notice to the client explaining:

- 1) That the procedure to be conducted is an independent automated refraction and not an eye health examination;
- 2) The distinction between an independent automated refraction and an eye health examination, and that only a prescriber may perform an eye health examination;
- 3) Which ocular diseases or other conditions specified in section 5 of the *Opticians Regulation* preclude a client from being able to have an independent automated refraction; and
- 4) The desirability of periodic eye health examinations and recommending that the client have an eye health examination in addition to the independent automated refraction.

An optician must also ensure the client has signed a client notice form, attesting to the following:

- 1) That the client has read and understands the information contained in the notice;
- 2) That the client is between the ages of 19-64;

- 3) That the client has had at least one eye health examination since attaining the age of 19 years or one eye health examination since attaining the age of 40 years;
- 4) That to the best of the client's knowledge, the client is not subject to and does not have a history of any ocular disease or other condition specified in section 5 of the *Opticians Regulation*;
- 5) That the client's lens power is not higher than +/-6.00 dioptres in either eye.

Page 5-7 of this toolkit contains a template for the copy of the patient information and a template of the client notice that you can use to help you explain to clients what an automated refraction is and whether they are suitable for an automated refraction.

Q: When should an assessment record not be produced?

A: In the following circumstances:

- 1) When there has been a change of +/- 1.00 dioptre in either eye in the past six months;
- 2) When there has been a change of +/- 2.00 dioptres since the last assessment record or prescription;
- 3) When the lens power produced by the automated refraction doesn't produce a minimum visual acuity of 20/25;
- 4) When there has been some sort of error in the course of performing the automated refraction.

Q: Does an optician need to provide the client a copy of the assessment record?

A: Yes. Whether or not requested by the client, an optician must provide a copy of the assessment record, free of charge, once the automated refraction is complete.

Q: Can an optician charge for performing an automated refraction?

A: Yes. An optician can set a service fee for performing an automated refraction. It is up to the optician whether to apply the fee to the client after the service is performed. However, an optician must provide a copy of the assessment, free of charge, once the automated refraction is complete. An optician can also charge for any repeat copies of the assessment record.

An optician cannot charge for performing an automated refraction if for some reason an error occurs during the automated refraction and a record cannot be produced.

Q: What can an assessment record be used to dispense?

A: Lenses for any visual appliance including contact lenses based on the assessment record.

Q: When can an optician allow a non-certified optician/non-registrant to conduct an automated refraction?

A: May not ever allow a non-certified optician/non-registrant to conduct an automated refraction.

Form 3a: Keeping Your Eyes Healthy (Patient Information on Automated Refraction)

Automated Refraction vs. Eye Health Examination

It is important for you to understand the difference between an automated refraction—also called an automated sight test—and an eye health examination.

Eye Health Examination	Automated Refraction
Checks how healthy your eyes are	Checks the ability of yours eyes to focus
Checks the health of your eyes and symptoms of some disorders that affect the eye	N/A
Performed by: A. Ophthalmologist B. Family Physician C. Optometrist	Performed by an Optician

You need to have regular eye health examinations because you might not know you have an eye health problem. Eye health examinations are an essential part of your overall health care throughout your life.

Eye Diseases

If undetected or untreated, eye diseases and disorders can lead to serious health problems and can greatly affect the normal activities of daily life. The symptoms listed below are potential indications of a serious health problem. If you have any of these symptoms, consult your family physician or another healthcare provider immediately.

Cataracts

A cataract is a painless, cloudy area in the lens of the eye. A cataract blocks light from reaching the retina and may cause vision problems. Symptoms:

- cloudy, fuzzy, or foggy vision and glare from lamps or the sun
- difficulty driving at night because of severe glare produced by headlights
- frequent changes to your eyeglasses prescription
- double vision in one eye
- second sight (a temporary improvement in near vision in farsighted people).

Diabetes (diabetic retinopathy)

Diabetes damages the small blood vessels in the retina. Diabetic retinopathy can lead to poor vision and even blindness. Symptoms:

- frequent urination
- extreme thirst
- increased hunger
- unusual weight loss
- blurred vision
- drowsiness
- extreme fatigue.

Glaucoma

Glaucoma damages the nerve located in the back of the eye and this results in loss of eyesight. If glaucoma is not treated, vision loss may continue, leading to total blindness over time. Symptoms:

- vision loss – side (peripheral) vision is usually lost before central vision
- sudden, severe blurring of vision
- severe pain in or around the eye
- colored halos around lights
- eye redness
- nausea and vomiting

Macular Degeneration

Macular degeneration is an eye disease that destroys central vision by damaging a part of the retina called the macula. Side (peripheral) vision is not affected, and many people function well in spite of losing their central vision, although walking, reading, and other activities that require central vision are more difficult. Symptoms:

- dim or more blurry central vision
- a blank or blind spot
- objects appearing distorted or smaller than they really are
- trouble with tasks like reading or driving.

Retinal Detachment

Retinal Detachment occurs when the two layers of the retina become separated from each other and from the wall of the eye. Retinal detachment may occur without warning. Symptoms:

- shadow or curtain effect across part of your visual field that does not go away
- new and sudden vision loss
- loss of side (peripheral) vision
- floaters in your field of vision
- flashes of light or sparks when you move your eyes or head.

Protect Your Vision

Being able to see is one of the most valuable aspects of life. Protect your vision with eye testing:

Automated Refraction (Optician)

Purpose: measures how well your eyes focus

Eye Health Examination (Ophthalmologist/Family Physician/Optomtrist)

Purpose: help you correct/adapt to vision changes, and detect eye problems at their earliest stages—when they are most treatable (many eye health diseases and disorders can be present without you noticing any symptoms, and some can start and develop quickly)

How often should I get my eyes tested?

The desired frequency of eye health examinations VARIES from person to person. Your family doctor can advise you on how often you need to have an eye health examination. If you require specialist care, your family doctor will refer you to a medical doctor specializing in eye health physician (ophthalmologist). Your optician or your family doctor can arrange for you to have an eye health examination by a physician or optometrist.

Opticians: Your eye care professionals

Opticians are highly skilled eye care professionals who undergo rigorous and extensive training. They design and dispense eyeglasses, contact lenses, low vision aids and prosthetic ocular devices for customers.

Automated refracting opticians receive advanced training and are trained in providing automated refraction services and care. Opticians also educate and advise consumers about product choices that will provide maximum visual acuity.

Looking out for you

The College of Opticians of BC (COBC) is the health regulatory college for all Opticians in British Columbia. The College establishes qualifications for Opticians and works to ensure Opticians are providing competent and effective care. If you have any questions or comments about the sight testing procedure, please contact us at:

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Vancouver, BC, V6C 1S4
Tel: (604) 742-6472
Email: reception@cobc.ca
Website: www.cobc.ca

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**Form 3b: Client Notice – Information on Limitations of Sight Testing
(Automated Refraction)**

Date: _____
MM/DD/YYYY

Name: _____
Last First

Address: _____
Street City Province Postal Code

Phone:
Home: (_____) _____ Work: (_____) _____

Do you presently wear eyeglasses or contact lenses? Yes No

Date of last eye examination: _____
MM/DD/YYYY

Date of birth: _____
MM/DD/YYYY

Please note:

- A sight test (automated refraction) is performed by an optician to determine your visual acuity
- If corrective lenses are needed, the sight test will provide the information required to dispense your eyewear.
- A sight test is not a medical examination and will not determine the presence of eye disease. Your optician can advise you on the recommended frequency of eye exams for healthy adults.

If you check 'yes' to any of the conditions below, the optician may refer you to a physician or optometrist for an eye health exam – *(please check those that apply)*...

- | | |
|--|--|
| <input type="checkbox"/> Recent head or eye injury | <input type="checkbox"/> High blood pressure |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Macular Degeneration |
| <input type="checkbox"/> Glaucoma including immediate family history | <input type="checkbox"/> Retinal detachment |
| <input type="checkbox"/> Double Vision | <input type="checkbox"/> Sudden increase in 'floaters' |
| <input type="checkbox"/> Corrective lenses containing prism | <input type="checkbox"/> Blind Spots |
| <input type="checkbox"/> Flashes of light | <input type="checkbox"/> Other eye disease _____ |

OPTICIAN:

I have reviewed the information recorded on this Notice.

Optician's Signature: _____ Date: _____
MM/DD/YYYY



Company

Assessment Record Template **Vision Testing Assessment Record for Eyeglass**

Name		Date of Birth	
Address			
City	Province	Postal Code	
Date of Vision Test		Ref. #	

Vision Test		Sph.	Cyl.	Axis	Base
D.V.	O.D.				
	O.S.				
N.V.	O.D.				
	O.S.				
Interpupillary Distance =					

Other information: _____

I have conducted a vision test on the above-named, in accordance with the *Opticians Regulation*, with the following result:

- Assessment record as above.
- No assessment record was produced.
- No change from present assessment record is necessary.
- Referred to a prescriber.

Date of next vision test: _____

Certified automated refracting optician's name: _____

Signature: _____ Registration No.: _____