

**BC Vision Rehabilitation Clinic  
VGH/UBC Eye Care Centre  
Section M**

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If you are having difficulty with things such as reading, using your cell phone or reading on your computer, vision rehabilitation can help, with tips about lighting, contrast and magnification. There are many new technologies that are of great assistance to people with low vision. Cell phone cameras can magnify, you can send texts by voice and smartphone applications can help you identify objects and colors or read barcodes. Losing vision does not mean giving up your activities, but it may mean learning new ways to do them.

## **Patterns of Vision and Vision Loss**

**Central Vision** is the detailed vision we have when looking directly at an object. **Macular Degeneration (MD)** affects central vision.

**Peripheral Vision** is the less detailed vision we have for everything we are not looking directly at. **Glaucoma** and **retinitis pigmentosa** can affect peripheral vision first. A stroke can affect one side of peripheral vision.

**Contrast Sensitivity** is your ability to see shades of grey or items that are similar in color. **Reduced contrast sensitivity** can make it difficult to see steps or read newsprint.

## **The Experience of Vision Loss**

It is important to acknowledge the frustration or sadness you may feel upon learning that your vision loss is irreversible. You can live well with low vision, but you cannot live well with depression. Counseling or a support group can help you recognize that your value to yourself and others does not depend on your vision.

## **The Phantom Vision of Charles Bonnet Syndrome**

Up to 25% of those with vision loss see repeated life-like images that they know are not real. This is called Charles Bonnet Syndrome. It is just a part of vision loss, for some.

## **Make the Most of Remaining Vision**

When the center of your vision is obscured by a blind spot (scotoma), you can use the “next-best spot” (the Preferred Retinal Locus, or “PRL”). Adapting to using non-central vision can be challenging. Vision rehabilitation can assist you to use your remaining vision optimally.

### **Make Things Brighter**

**Improve lighting:** Use a gooseneck lamp or pocket flashlight.

**Reduce glare:** Cover shiny surfaces. Try amber, yellow or plum tinted glasses or clip-ons. Visors are useful.

**Increase contrast:** Use a black felt pen, not ballpoint. Use a white cup for dark coffee.

## **Make Things Bigger**

**Move closer:** Sit close to the TV or the stage.

**Enlarge:** Get large print books, playing cards, bingo cards, larger-format phones, TV remotes, and keyboards.

**Magnify:** Read enlarged digital text on an e-reader, an electronic tablet or computer. You can use a lighted handheld magnifier for reading prices or an electronic video magnifier for reading print. A cell phone camera can magnify.

**Organize:** Designate a spot for everything. Minimize clutter.

**Label:** Mark dials with tactile paint or adhesive raised dots. Label medications with markers or rubber bands.

**Safety:** Polycarbonate lenses are recommended for safety. They are available in a variety of tints and styles.

## **Substitute: Let's Hear it For Ears**

Get books and magazines in audio format. Get an audio glucometer, watch or labels. Audio screen readers allow you to listen to your computer or cell phone texts. (See Resources). The SeeingAI app or the headworn OrCam device can convert text to speech. Free audio medication labels (Scriptalk) are available at some BC pharmacies.

## **Participate**

**Don't isolate yourself. Keep active with your social group, volunteer job, or golf. You might need large print, a magnifier, a ride or someone to spot your ball, so ask for the help you need. Staying home to avoid asking for help is not independence. Friends are honored to be asked.**

## **Driving and Alternative Transportation**

**If you can drive, pick your times and routes carefully and use a GPS. If you need to use transportation alternatives consider using the money you are saving by not paying car insurance to take a taxi, buy gas for a friend who drives or to hire a part-time driver. Walk when you can.**

## **For Family and Friends**

**To keep up their spirits, your loved one needs to be empowered to do as much as possible independently. Recognize the challenge of vision loss and offer help, but do not take over their tasks. Instead help your family member make adaptations to accomplish tasks on their own.**

## Resources

### Audio books, magazines, newspapers and textbooks

- Audio books are available free of charge to listen to on a CD player, a cell phone or your tablet/computer. Libby is an app to borrow and play library books. Your local librarian can assist you to start to practice listening to books for a few minutes each day. It becomes more enjoyable the more that you practice!
- DAISY-formatted audio books are available from the CELA (Centre for Equitable Library Access) and Bookshare collections. EasyReader or VoiceDream are apps to play audio books. Players can be purchased (ShopCNIB, Canadian Assistive Technology). CNIB offices and some libraries have Daisy players that can be loaned
- Free public domain audio books are available online
- AMI: offers descriptive movies/TV [www.ami.ca](http://www.ami.ca)

### Shopping for Accessibility Devices

- CNIB: CNIB offices and [shopcnib.ca](http://shopcnib.ca)
- ILA: 1-800-537-2118, [www.independentliving.com](http://www.independentliving.com)
- LS&S: 1-800-468-4789, [www.lssgroup.com](http://www.lssgroup.com)
- Braille Superstore: <http://www.braillebookstore.com>
- AbleTech: local vendor selling electronic magnification 110-46167 Yale Road Chilliwack, 604-532-8030, [www.abletech.ca](http://www.abletech.ca)
- Canadian Assistive Tech: local vendor selling electronic magnifiers, 1-844-795-8324, [www.canasstech.com](http://www.canasstech.com)

## Technology

- **AppleAccessibility:** [www.apple.com/accessibility](http://www.apple.com/accessibility)  
Telephone support: 1-877-204-3930 [www.applevis.com](http://www.applevis.com)
- **Online instructional videos:** [www.hadley.edu](http://www.hadley.edu)
- **Microsoft Accessibility:** 1-800-936-5900,  
[www.microsoft.com/enable/default.asp](http://www.microsoft.com/enable/default.asp)
- [afb.org](http://afb.org); [youtube.com](http://youtube.com) “The BlindLife”
- Try dictation to enter text on phones/iPads

## Cell phones

Both Android and iPhones have many accessibility features including magnification, voice dialing and audio texting. Your cell phone or iPad camera can be used to photograph and enlarge images, such as menus in restaurants or prices.

**Smartphone applications:** SEEING AI text-to-speech, Soundscape navigation, VoiceDream for audio books, Color ID, BeMyEyes identifies objects, AIRA remote live assistance.

## Video magnifiers

Electronic magnification (video magnifiers) are available in portable formats or in devices that are larger and sit on a desk.

- **Video magnifiers:** <https://www.afb.org/blindness-and-low-vision/using-technology>
- **Used video magnifiers and repairs:** <https://canasstech.com>
- **Head-worn devices for magnification** eg. IRIS, eSight, Jordy

## Information and Research Updates

- American Diabetes Association: [www.diabetes.org](http://www.diabetes.org)
- American Foundation for the Blind: [www.afb.org](http://www.afb.org)
- American Macular Degeneration Foundation: [www.macular.org](http://www.macular.org)
- Canadian Council of the Blind: [ccbnational.net](http://ccbnational.net)
- Clinical trials, search: <http://clinicaltrials.gov>
- Foundation Fighting Blindness: [ffb.ca](http://ffb.ca), [www.blindness.org](http://www.blindness.org)
- Glaucoma Research Foundation: 1-800-826-6693, [www.glaucoma.org](http://www.glaucoma.org)
- Hadley School courses: 1-800-323-4238, [www.hadley.edu](http://www.hadley.edu)
- MD Support: support group list and video: Learning to Live with Low Vision, 1-816-761-7080 (toll call), [www.mdsupport.org](http://www.mdsupport.org)
- National Eye Health Education Program: English and Spanish, [www.nei.nih.gov/nehep](http://www.nei.nih.gov/nehep)
- Prevent Falls: Public Health Agency of Canada <http://www.phac-aspc.gc.ca/seniors-aines/publications/public/injury-blessure/prevent-eviter/index-eng.php>
- Vision Aware: [www.visionaware.org](http://www.visionaware.org)

## Pediatric and Youth Resources

- Provincial Resource Centre: <https://www.prcvi.org>
- Blind Beginnings: [www.bindbeginnings.ca](http://www.bindbeginnings.ca)
- AFB FamilyConnect: [www.familyconnect.org](http://www.familyconnect.org)

## **British Columbia Resources**

### **CNIB**

Support groups, tech programs, recreational activities, devices  
604-431-2121, [www.cnib.ca/en?region=bc](http://www.cnib.ca/en?region=bc)

### **Vision Loss Rehabilitation**

Rehabilitation to enhance independence, safety, and mobility  
1-844-887-8572, [www.bc.visionlossrehab.ca/en](http://www.bc.visionlossrehab.ca/en)

### **BC Blind Sports**

604-325-8638, [www.bcblindports.bc.ca](http://www.bcblindports.bc.ca)

### **Get Together with Technology Groups**

Local users' groups

<http://ccbnational.net/shaggy/get-together-with-technology/>

### **VocalEye Descriptive Arts**

Audio description for theatre

604-364-5949, [www.vocaleye.ca](http://www.vocaleye.ca)

### **WorkBC Assistive Technology**

Device funding and technology support to gain employment

1-844-453-5506, [info-ats@workbc.ca](mailto:info-ats@workbc.ca), [www.workbc-ats.ca](http://www.workbc-ats.ca)





Making better  
decisions together  
with patients  
and families

Modified from AAO Smartsight January 2017

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