

Age-related vision loss (ARVL): What do I need to know?

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Today's Agenda

By the end of the session I will.....

- 1) Be able to define ARVL
- 2) Understand the presence of ARVL in Canada
- 3) Appreciate the impact of ARVL on physical activity
- 4) Appreciate the types of modifications that can be made to enhance the exercise experience
- 5) Understand some basic communication strategies when working with this population

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WHAT IS AGE-RELATED VISION LOSS?



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- A permanent loss of vision that cannot be corrected by eyeglasses, contact lenses, medication or surgical intervention and interferes “with the performance of common age-appropriate seeing tasks” (VREBR, 2005, p. 10)
- Includes: macular degeneration, glaucoma and diabetic retinopathy

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Macular Degeneration

- Central vision affected (distinguish fine detail)
- Leading cause of blindness or partial sight in Canada (among 65+)
- Impacts tasks such as reading, watching tv, etc.




Courtesy: National Eye Institute, National Institutes of Health (NEI/NIH)

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Glaucoma

- Causes permanent loss of peripheral vision that can lead to a complete loss of vision over time
- Second most common cause of blindness or partial sight in Canada (among 65+)



Courtesy: National Eye Institute, National Institutes of Health (NEI/NIH)

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Diabetic Retinopathy

- Some areas of the retina are deprived of blood while other areas experience hemorrhages causing spots which blurs vision
- People with type I/II diabetes @ increased risk



Courtesy: National Eye Institute, National Institutes of Health (NEI/NIH)

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ARVL in Canada

- Vision loss = leading cause of age-related disability in Canada
- Every 12 minutes someone in Canada is affected by vision loss (CNIB, 2009; CNIB, 2009b)
- Only expected to increase given current and projected demographic changes (International Federation on Ageing, 2013)
- ARVL continues to be under-treated

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IMPLICATIONS OF AGE-RELATED VISION LOSS?



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- A lot of research focused on the challenges older adults with ARVL experience in relation to self-care, leisure, and productivity
- The impact of ARVL on activity engagement has been associated with a variety of negative outcomes including:
 - an increased risk of falls
 - greater likelihood of medication errors
 - social isolation
 - depression
 - compromised health-related quality of life
 - premature admission to nursing homes

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IMPACT OF ARVL ON PHYSICAL ACTIVITY



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- Older adults with lower visual acuity have reduced levels of leisure-time physical activity (Swanson et al., 2010)
- High risk for falls
 - Falls in seniors with vision loss = 1.7 times higher
 - Hip fractures = 1.3 to 1.9 times higher (Legood 2002)
- Opportunities for exercise may be limited by:
 - the built environment
 - inaccessible programs, equipment, and services
 - misunderstandings of staff (Rimmer et al., 2006)

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Enhancing Accessibility



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Outdoor Environments

- Well lit walking paths
- High color contrast curb cuts
- Urban Braille
- Travel paths should be free of obstructions
- Audible signals at crosswalks with sufficient crossing time
- Benches to support frequent rests
- Adequate signage

(Rimmer et al., 2006)

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Inside the recreation facility

- Adequate signage
- Keep travel paths clear of obstacles
- Try to minimize the re-arrangement of equipment
- Large print, raised lettering, audio, or Braille instructions (printed on non-gloss paper)
- Trainers on hand to help out (at no additional charge)
- Any suspended items (signs, televisions, etc.....) should be placed at a high enough level to avoid unintentional contact

(Rimmer et al., 2006)

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Fitness classes

- Consider using physical guidance
- Consider pairing the person with vision loss with another member of the class, so that assistance is available when necessary in performing certain exercise routines
- Make sure that equipment stays in a fixed position

(Rimmer et al., 2006)

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Improving Communication Interactions



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SNOWFLAKE ACTIVITY



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Communication Courtesies

- Announce yourself when you enter/leave a room
- Describe your surroundings in detail (be specific)
- Be specific and explicit when providing directions
 - Provide clear instructions
 - Minimize extraneous verbalizations, and
 - Reduce background noise
- Describe what you plan to do **BEFORE** you do it

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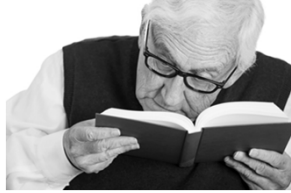
- If in doubt, ask!
- Request permission to touch the person
- Never decide yourself to re-arrange someone's space
- Avoid safety hazards (be sure to: keep all doors fully open or closed, push chairs in when vacating them, keep cupboard doors closed)
- Call the person by name and use a calm, even tone

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**Thank You.
Questions or
Comments?**



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