



Canadians with Sight Loss in 2017: Education, Employment and Accommodations

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Objective

- To understand the population profile of Canadians living with sight loss, using the nation-wide population survey, *Canadian Survey on Disability 2017*

Methodology/Data Collection

- The Canadian Survey on Disability (CSD) is a Nation-wide survey of Canadians aged 15 and over who experience limitations in everyday activities
- The sample for the CSD was derived from individuals who indicated they had difficulty with activities of daily living in the 2016 Census
- The survey was run by Statistics Canada from March 1st to August 31st, 2017.

Sample Size and Population Modeling

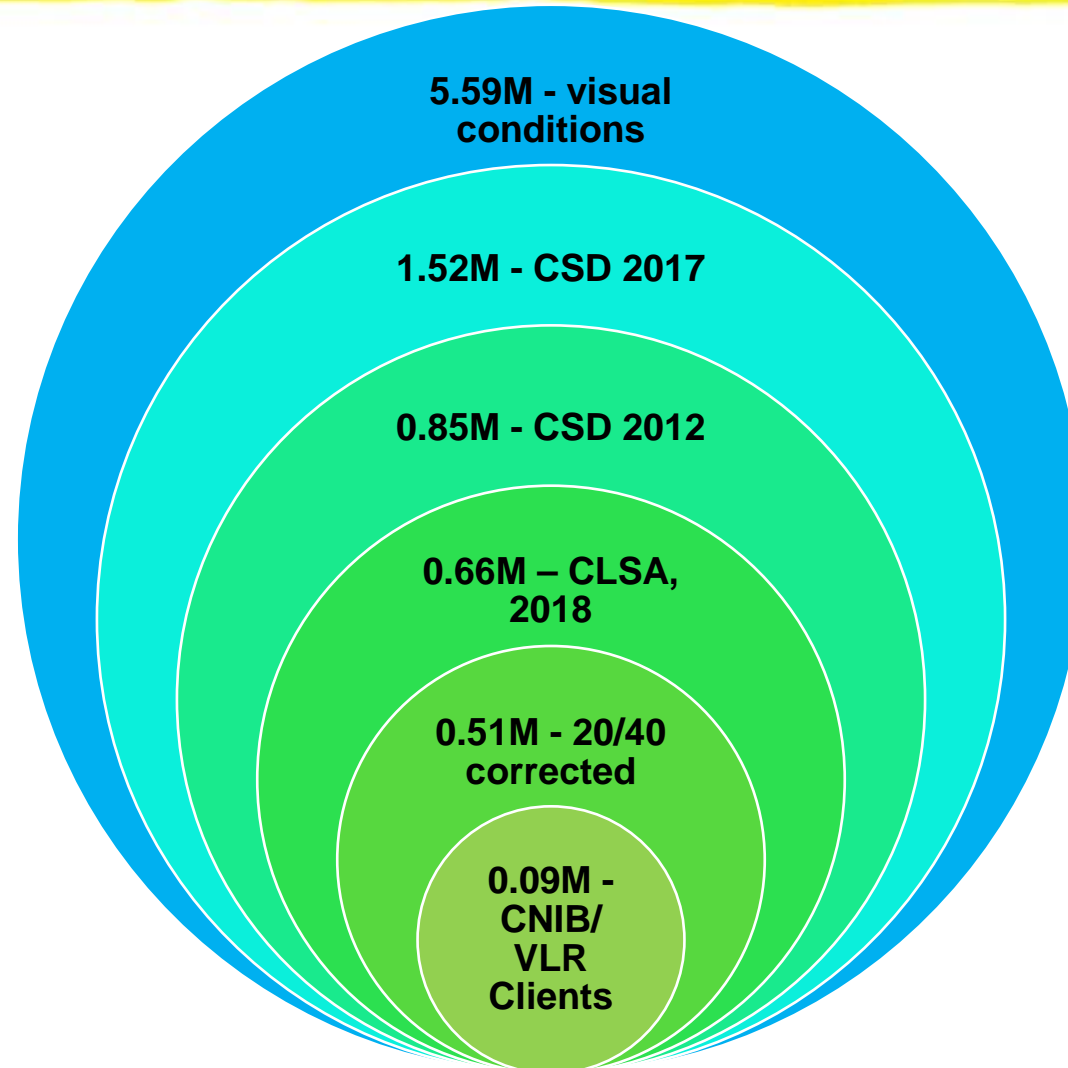
- ~30,000 Canadians with disabilities completed the survey
 - Modeled to 22.4% of the Canadian population over the age of 15
- ~5,100 Canadians with sight loss completed the CSD 2017
- Population data extrapolated from this representative sample

Our Starting Point

**There are 1,519,840 Canadians
(5.4% of the population) who live
with a seeing disability**

CNIB and VLRC serve approximately 6% of
this population

How Does This Number Compare?



How is "Seeing Disability" Defined?

- The CSD is based on the social model of disabilities
 - The premise of the social model is that disability is the result of the interaction between a person's functional limitations and barriers in the environment that make it harder to function day-to-day
- Use of the Washington Group set of questions
 - Scale of difficulty seeing, even with glasses or contacts
 - Scale of functional impact on daily life



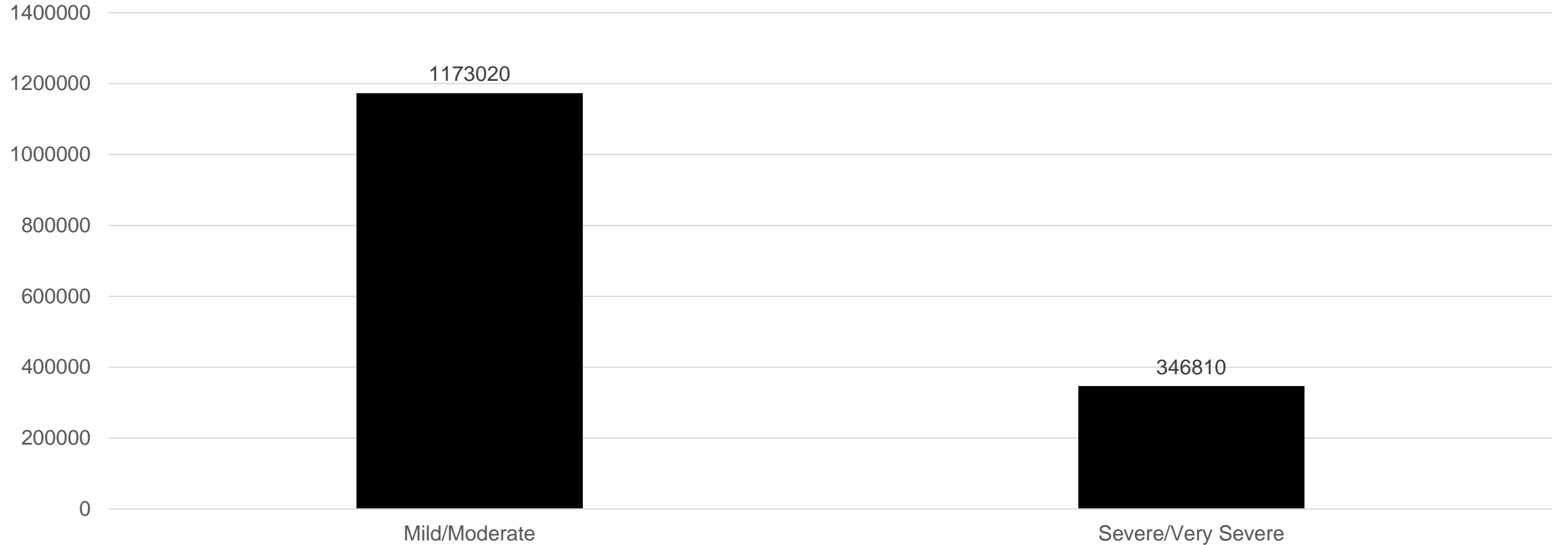
Some Basic Demographics



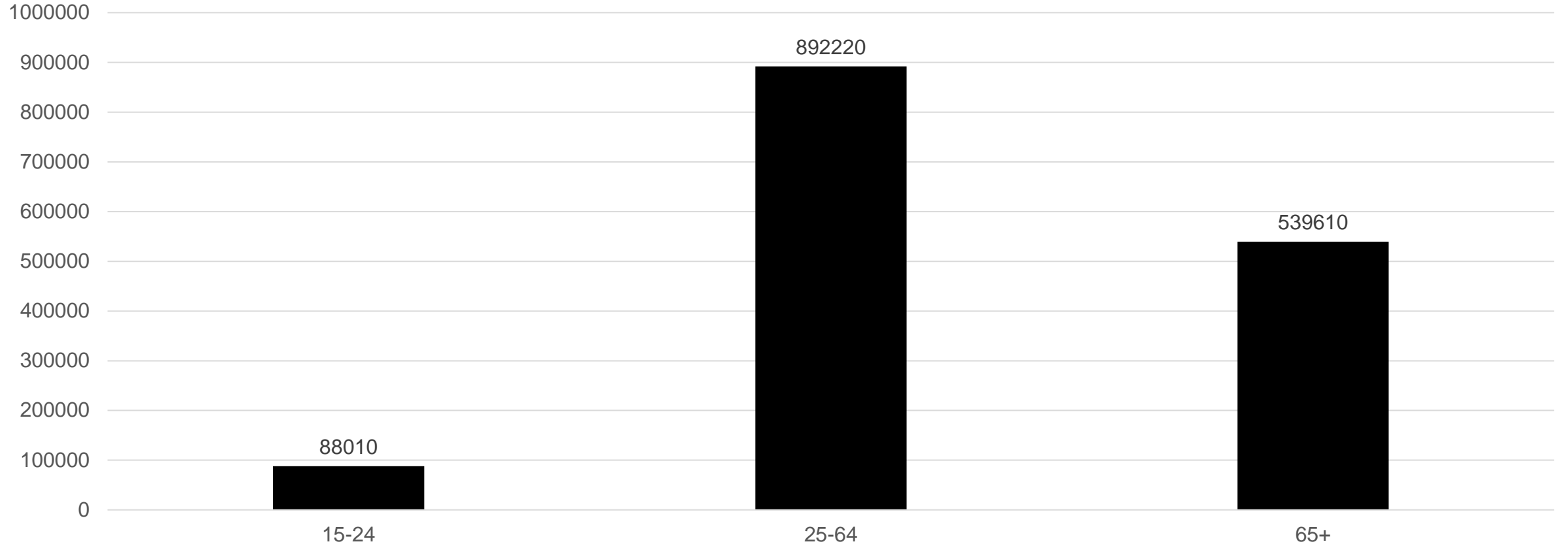
Severity Class

- To calculate the severity of a disability type the CSD used a scoring grid that takes into account both the intensity of the difficulties (no difficulty, some difficulty, a lot of difficulty, or cannot do) and the frequency of the activity limitations (never, rarely, sometimes, often, or always)

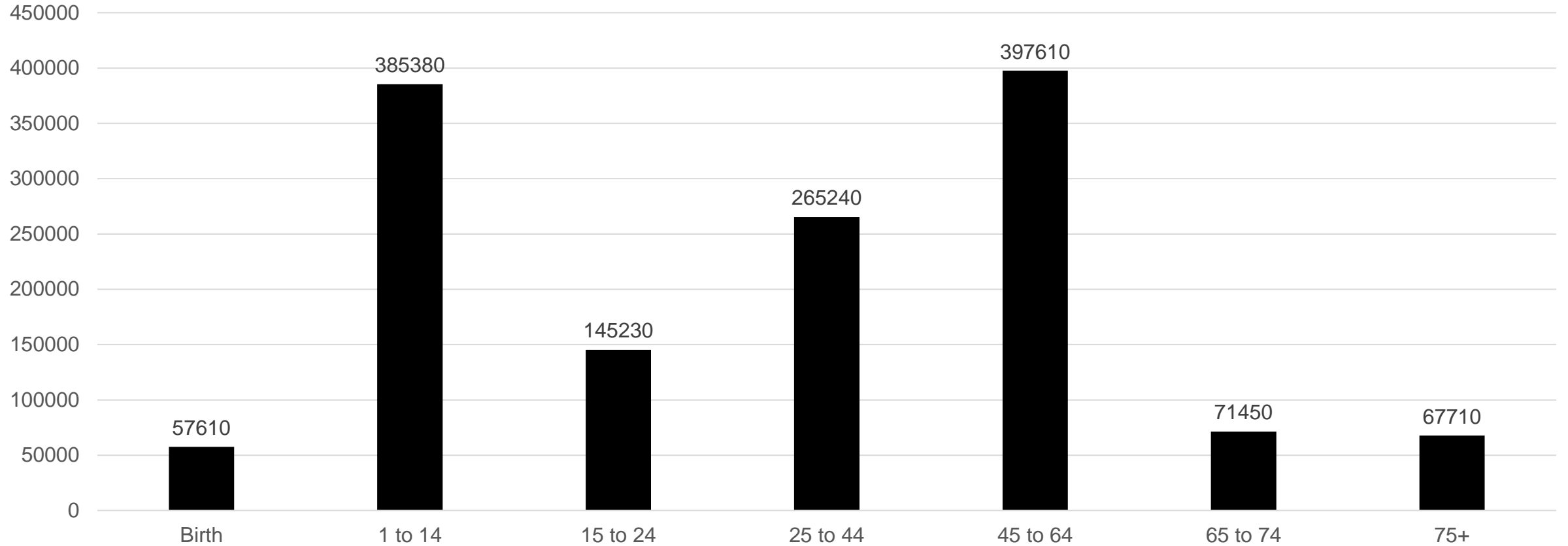
Seeing Disabilities by Severity



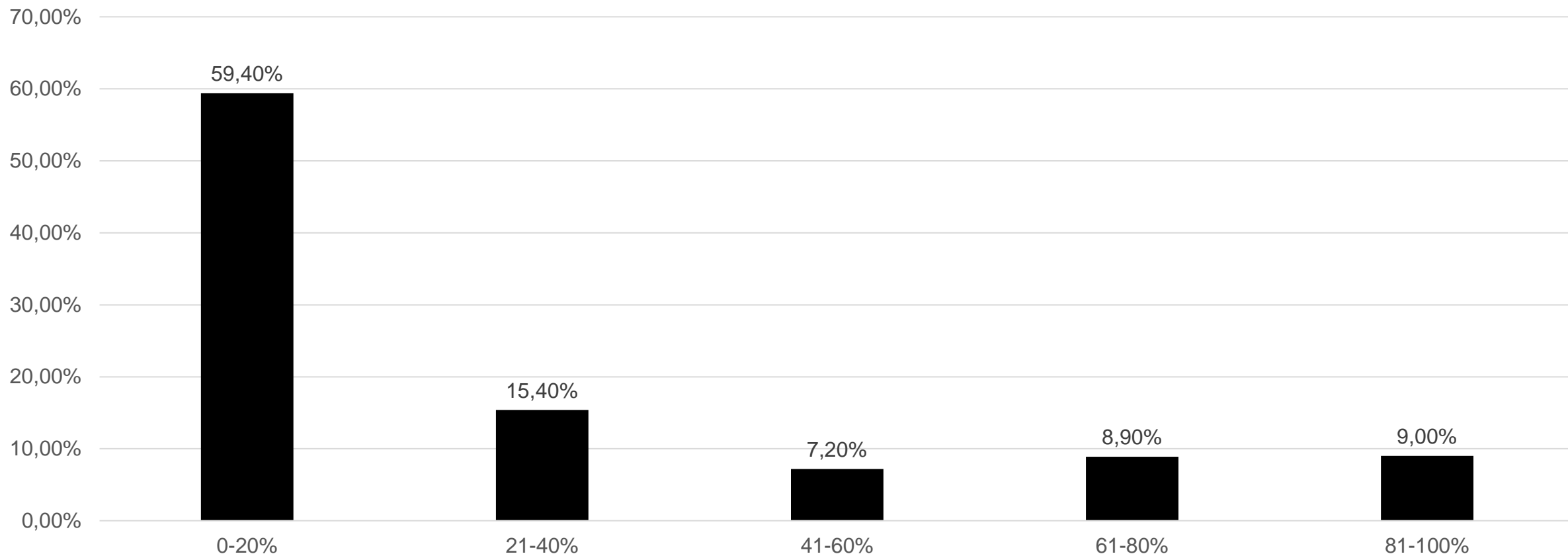
Seeing Disabilities by Age



Seeing Disabilities by Age of Onset



Seeing Disabilities by % Life Lived since Onset



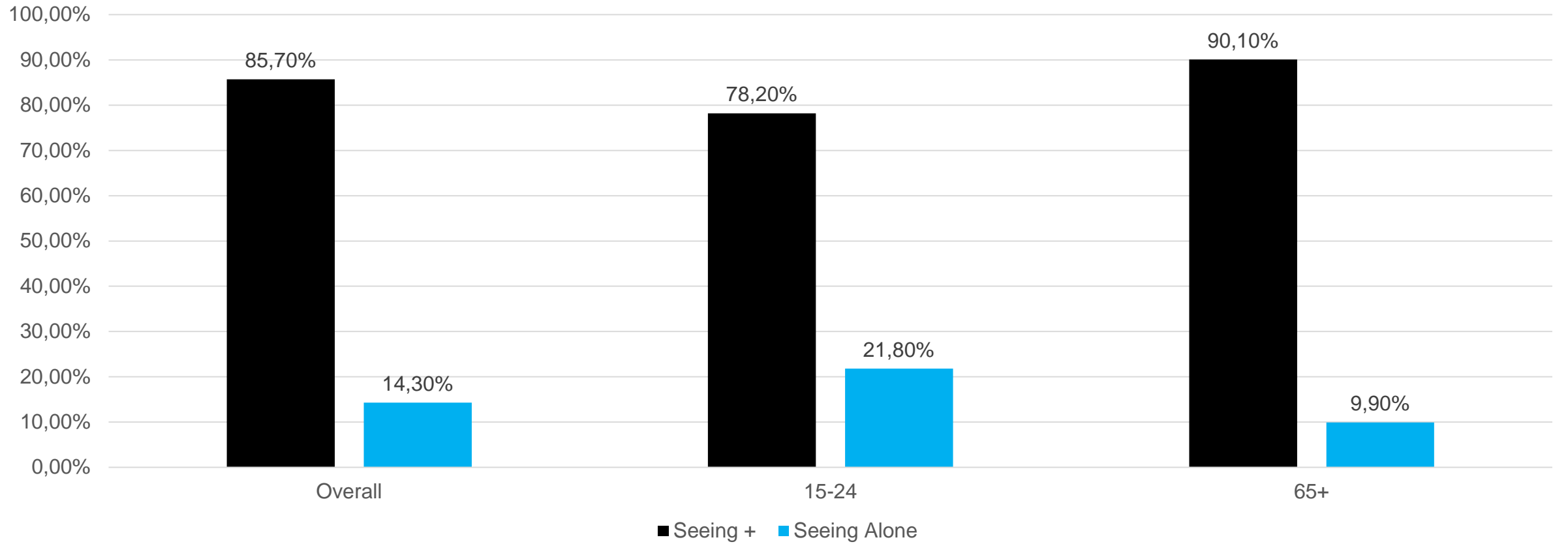
Summary

- % Lifespan introduced as a variable to account for generational differences in the age variable and experiential differences in the age of onset variable
- Distribution of the sight loss population is distinct, particularly in age and age of onset profiles



Lived Experience with Multiple Disabilities

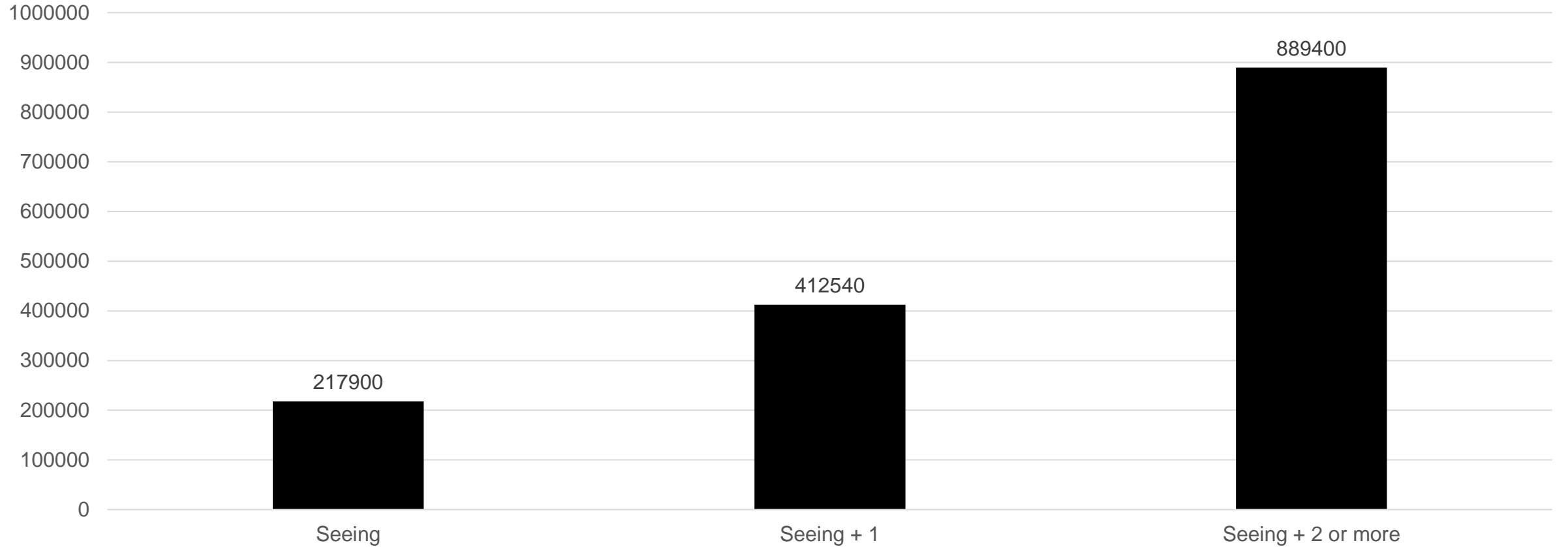
Proportion Living with Multiple Disabilities



Additional Disabilities

Disability Type	Count	Percentage of Canadians living with Seeing Disabilities +
Pain-related	888,305	68.2%
Flexibility	682,510	52.4%
Mobility	651,250	50.0%
Hearing	466,420	30.7%
Mental Health	445,470	30.0%
Dexterity	358,190	27.6%
Memory	333,440	25.6%
Learning	290,760	22.4%
Developmental	69,030	5.3%

Number of Disability Types



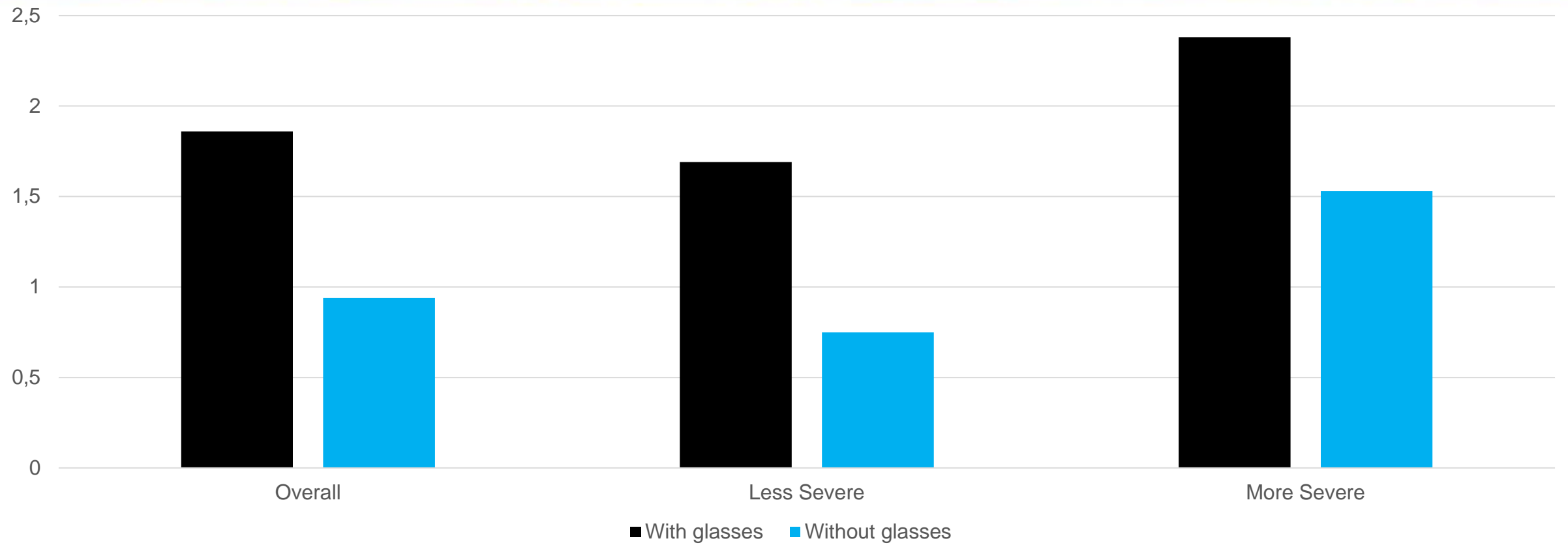
Summary

- 85.7% of Canadians with sight loss experience multiple disabilities
 - Proportion increases with age
- Proportion much higher than that which is self-reported in our internal surveys



Assistive Devices Used

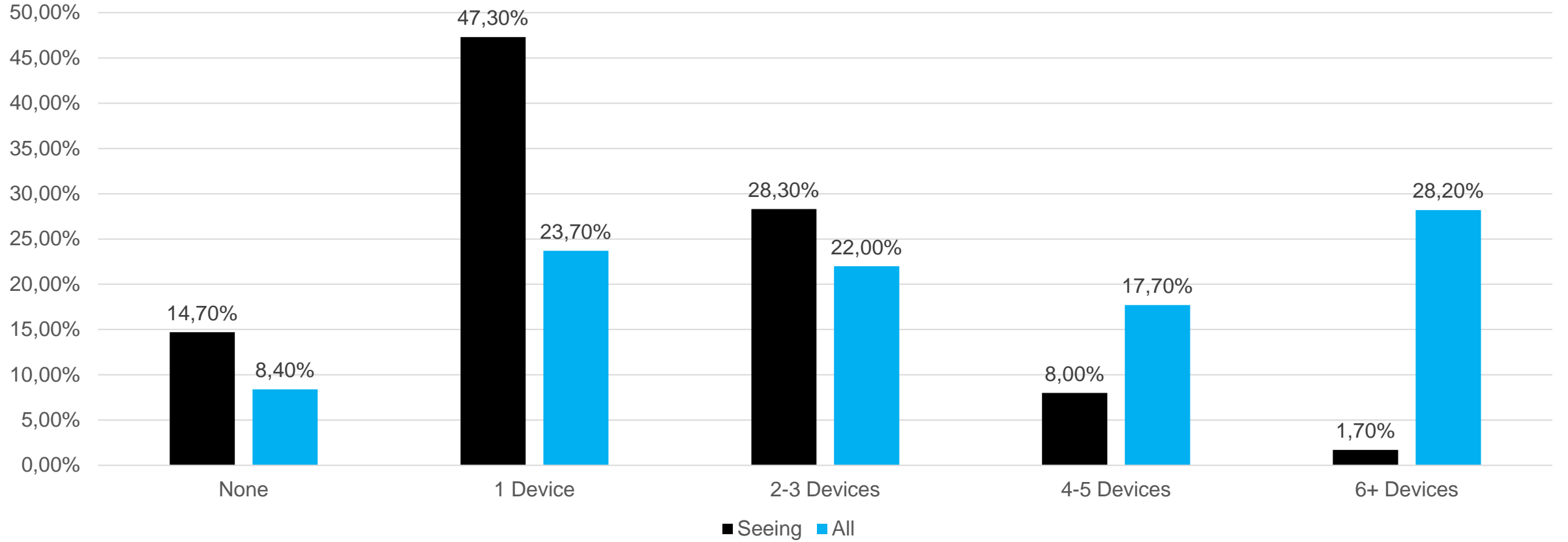
Devices Used



Vision-Related Assistive Devices Used

Device	Overall	Less Severe	More Severe
Eye glasses or contact lenses	78.40%	78.90%	77.00%
White cane or identification cane	4.20%	2.10%	11.40%
Recording or note-taking equipment	2.70%	1.80%	5.70%
Magnifiers	25.90%	22.70%	36.50%
Large print reading materials	17.80%	14.50%	28.90%
Dark lined paper or dark ink pens	10.40%	8.00%	18.50%
Braille reading materials or manual Braille	0.50%	N/A	N/A
Device with oversized buttons	6.20%	3.70%	14.60%
Audio or described video for television programs	3.50%	2.20%	7.90%
Closed-circuit devices	1.40%	0.80%	3.60%
Another aid or assistive device	7.80%	6.60%	11.80%
None of the above	14.70%	16.30%	9.20%

Devices Used



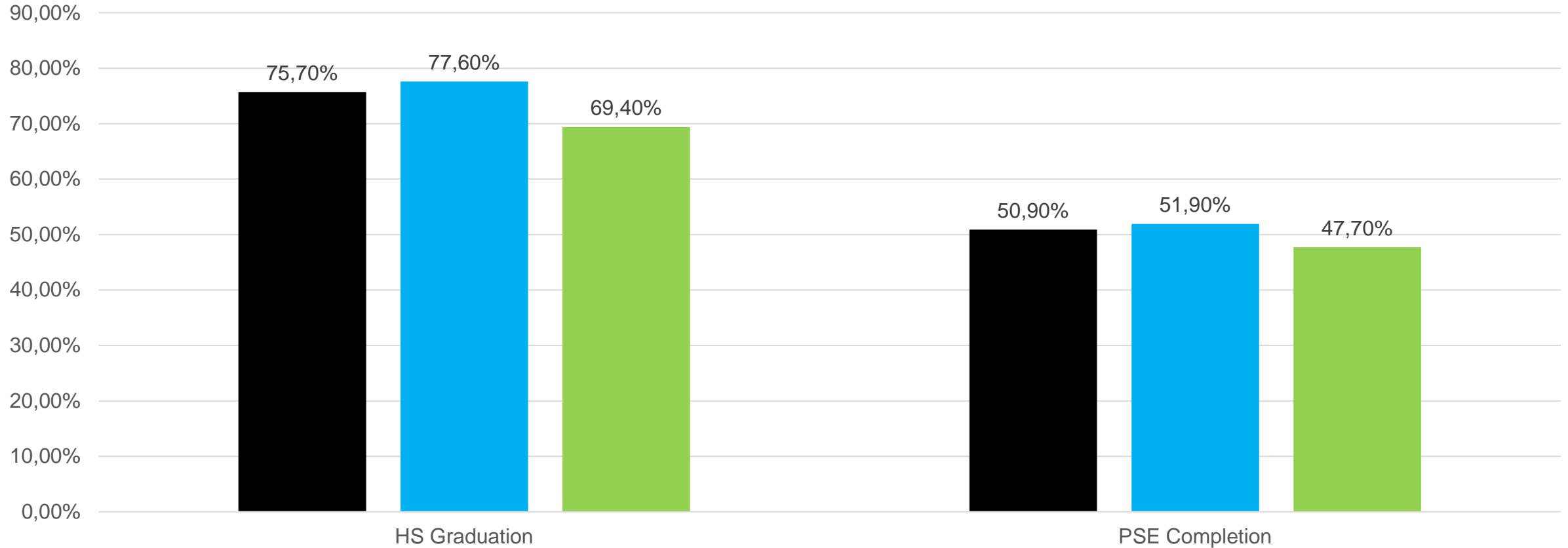
Summary

- Corrective lenses predominate assistive devices used, and for many are their only specialized assistive device
- Numerous mainstream devices (wireless handheld devices, computers, audiobook players) are used frequently
 - Not considered specialized devices
- 4.2% of the population uses a white cane, compared to 1.1% who use a service animal

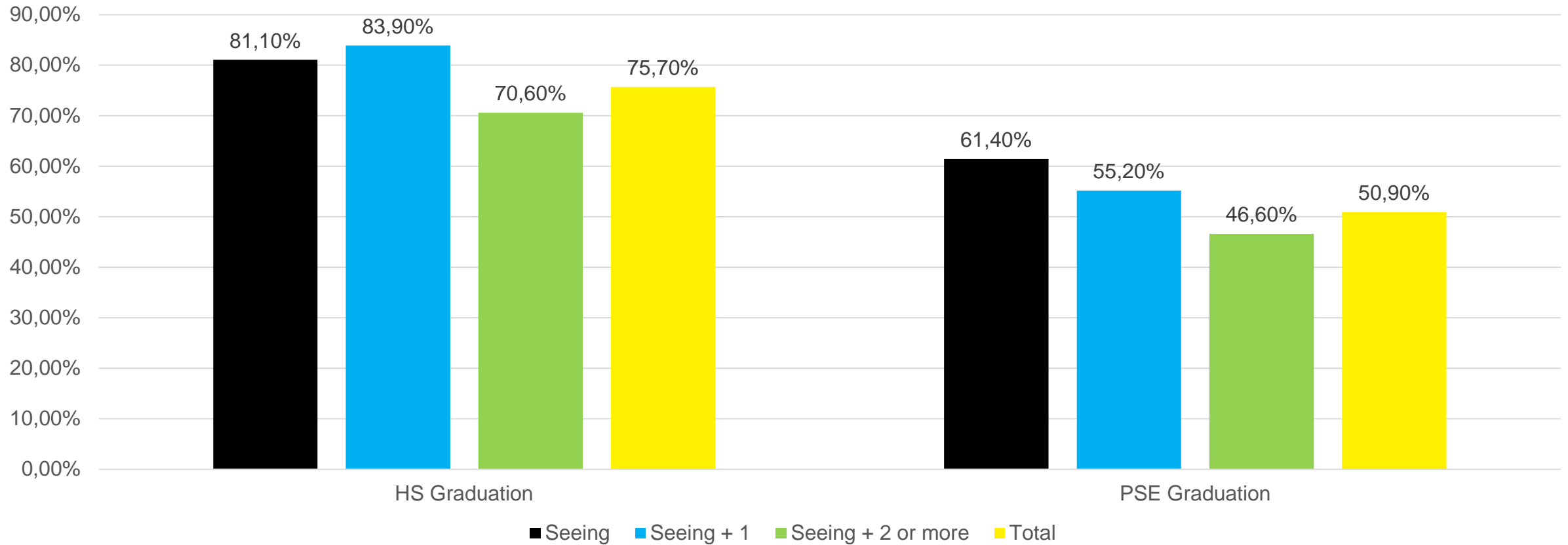


Educational Outcomes and Experiences

Better HS Graduation Rates are Associated with Less Severe Sight Loss



Worse Educational Outcomes are Associated with Increasing # Disabilities



Differences in Educational Outcomes by % Lifespan

% Lifespan	HS Graduation Rate	PSE Graduation Rate
0-20%	74.1%	51.2%
21-40%	76.1%	45.5%
41-60%	85.2%	60.6%
61-80%	86.1%	61.9%
81-100%	79.5%	54.3%

Access to Educational Accommodations – Current and Recent Students

Device/support service/modification	% needed	% available
Computer/tablet with specialized software/adaptation	54.6%	42.0%
Teacher's aide or tutor	48.3%	31.8%
Modified or adapted course curriculum	34.2%	19.3%
Recording equipment/portable note-taking device	42.6%	19.4%
Textbooks in e-format	24.2%	13.4%
Device for playing audio/e-books	21.7%	9.7%
Cell/smart phone with specialized features	20.3%	N/A
Special education classes	18.6%	11.9%
Large print reading materials	17.8%	9.7%

Access to Educational Accommodations – Current and Recent Students

Device/support service/modification	% needed	% available
Speech therapist	10.5%	6.3%
Another aid or service	10.3%	13.8%
Braille reading materials or manual Braille	2.0%	N/A
Individual Education Plan	N/A	27.6%
Magnifiers	N/A	5.2%
Attendant Care	N/A	4.6%
None of the above	1.7%	11.5%
Average # of Accommodations	3.05	2.15

Adverse Situations Encountered During Education

Educational Experience	% of Students
Felt left out	40.0%
Experienced bullying	37.4%
Choice of courses/careers influenced	35.8%
Longer to achieve present level	35.0%
Changed course of studies	29.0%
Returned to school for retraining	29.0%
Avoided at school	25.9%
Took courses correspondence / online / home study	25.8%
Changed schools	25.2%
Additional expenses for schooling	24.0%
Began school later than people your age	18.2%
Had to leave community to attend school	18.2%
Attended special education school / classes	17.6%
Average # Situations Experienced	3.61

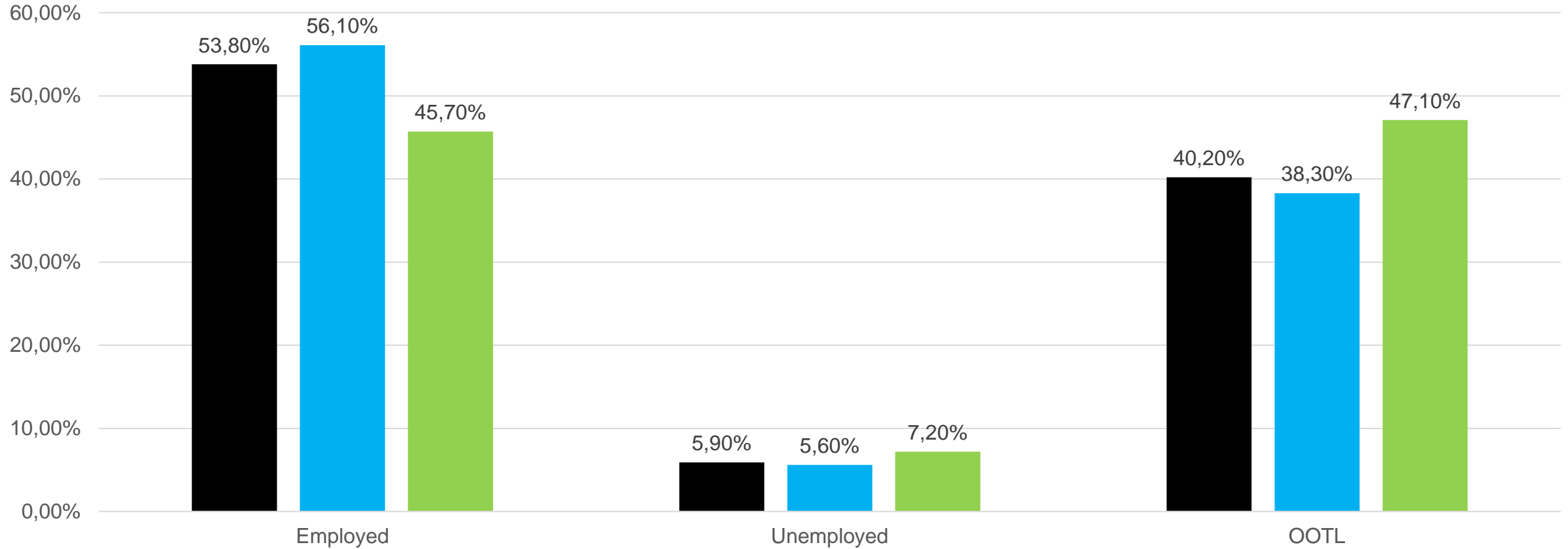
Summary

- Education outcomes are not uniform across the population of working-age Canadians with sight loss
- Most likely to have completed PSE:
 - VI only
 - Mild/moderate sight loss
 - Congenital or experienced sight loss in childhood
- Accommodation need outstrips what is made available in the learning environment
- Negative educational experiences are common in the population of current and recent students with sight loss

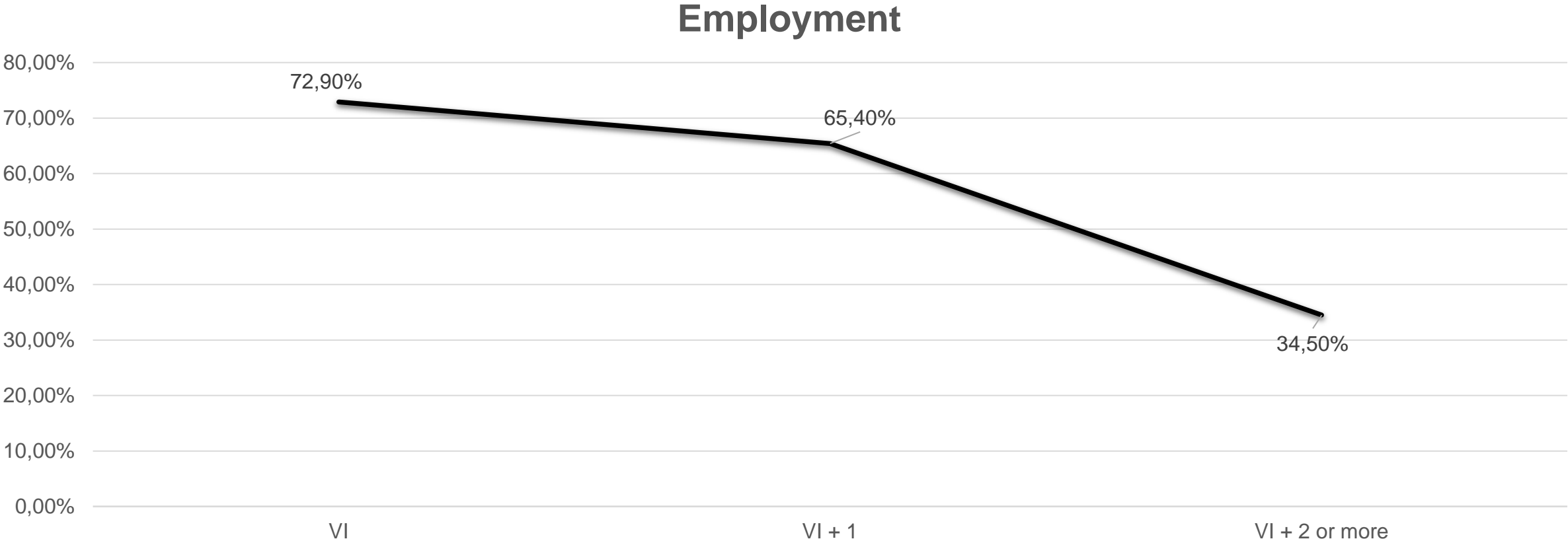


Employment Outcomes

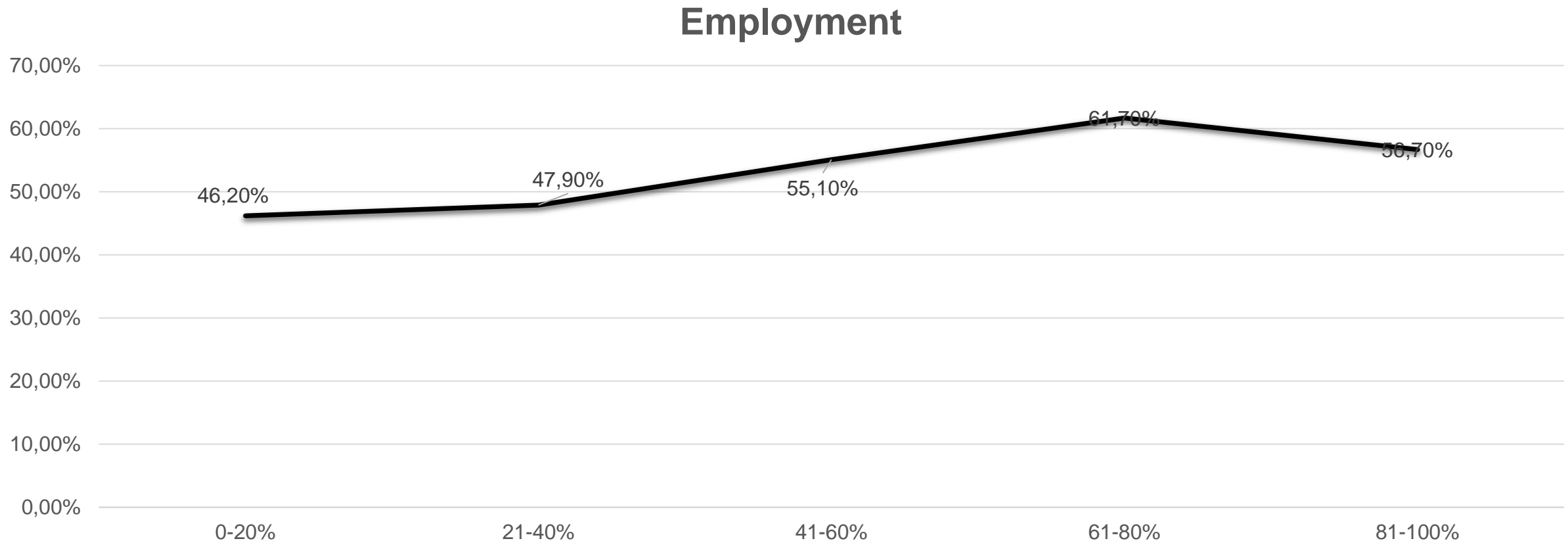
Better Employment Outcomes are Associated with Less Severe Sight Loss



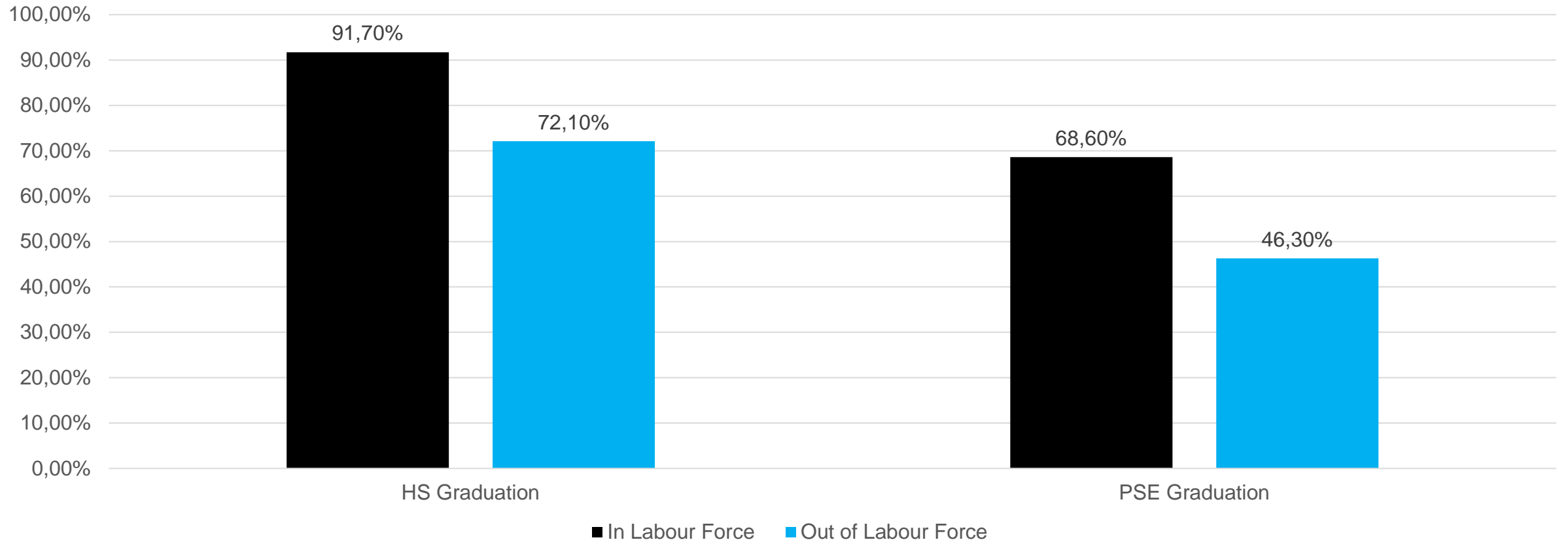
Worse Employment Outcomes are Associated with Increasing # Disabilities



Better Employment Outcomes are Associated with Increasing % Lifespan



Positive Correlation Between Employment and Education



Impact of Condition on Employment Experience

Impact	Percentage
Condition limits work	37.4%
Leave of 1 mo. Or more	27.9%
Changed amount of work	27.2%
Began working from home	9.3%
No impact	43.8%

Impact on Career Mobility

Job Change Difficult Because of...	Percentage
Condition limits hours	37.4%
Difficulty adapting to a new environment	36.4%
Discrimination	26.2%
Difficulty obtaining supports	24.2%
Condition limits job search	21.5%
Other reason	35.7%

Disclosure on the Job

- YES: 65.2%
- NO: 34.8%

Accommodation Needs vs. Available

Accommodation	# Needed	# Available	Fraction
Modified or different duties	134690	45170	33.5%
Work from home	102420	39430	38.5%
Modified work hours	171510	77270	45.0%
Human support	32410	9450	29.2%
Technical aids	24170	3320	13.7%
Computer with specialized software/adaptation	56710	15520	27.3%
Communication aids	21390	4740	22.2%
Modified/ergonomic workstation	96280	35730	37.1%

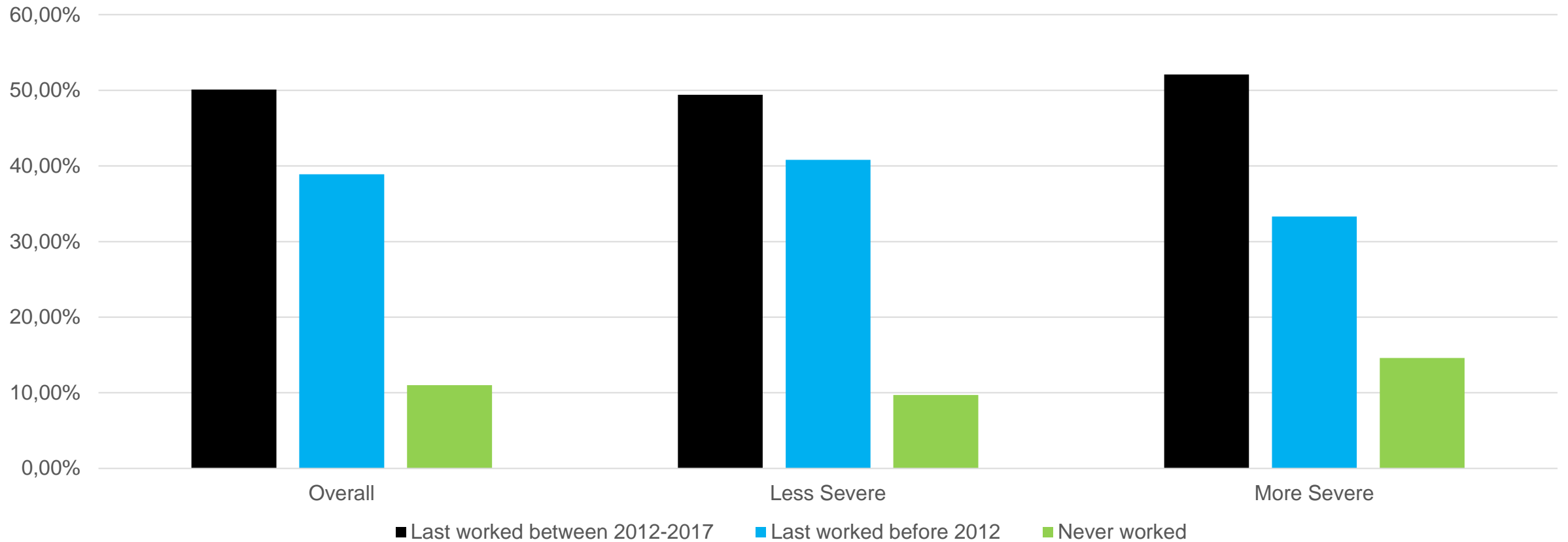
Summary

- Employment outcomes are not uniform across the population of working-age Canadians with sight loss
- Most likely to be employed:
 - VI only
 - Mild/moderate sight loss
 - Congenital or experienced sight loss in childhood
- Accommodation need outstrips what is made available in the working environment

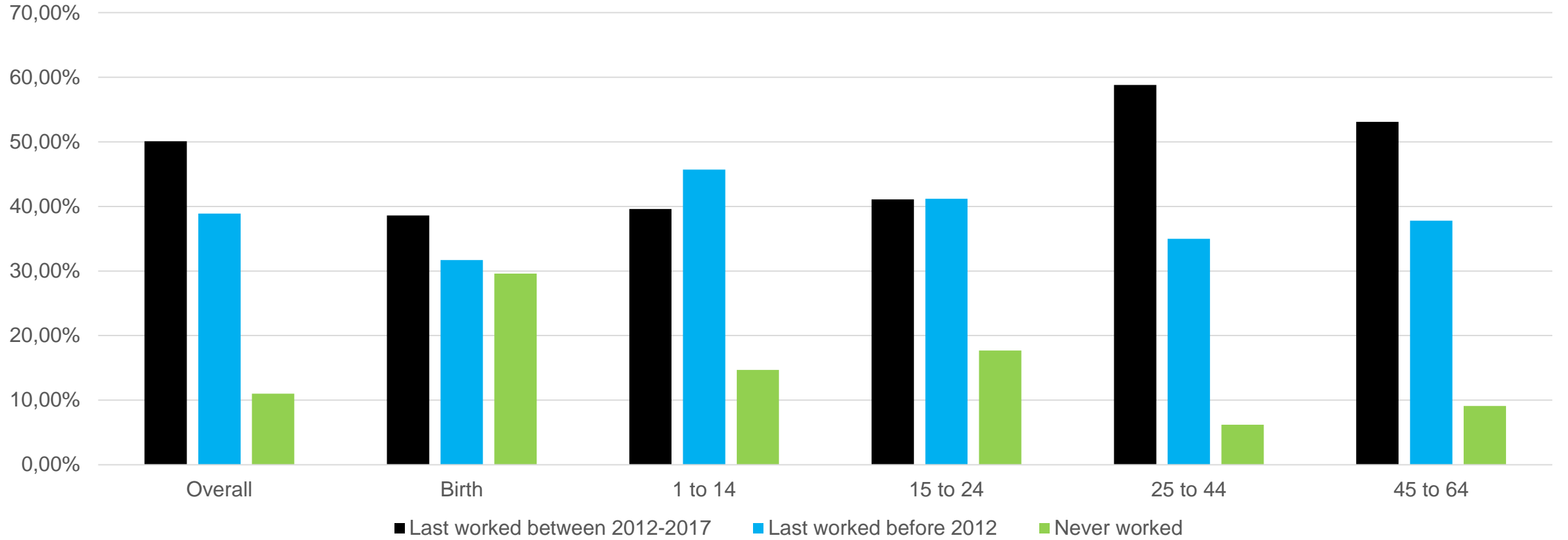


Out of the Labour Force Outcomes

Out of the Labour Force, by Severity



Out of the Labour Force, by Age of Onset



Out of the Labour Force, Reasons

Reasons for Being OOTL	Percentage
Condition completely prevents work	74.5%
Condition limits amount or kind of work	50.6%
Condition affects ability to look for work	32.4%
Workplace arrangement unable to work	16.4%

Out of the Labour Force, Barriers to (Re-)Joining the Labour Force

Barrier	Percentage
Health Condition	30.0%
Few jobs available locally	19.8%
Training or experience not adequate	18.9%
Past attempts unsuccessful	18.9%
Lose additional supports	15.6%
Experienced discrimination	14.5%
Family responsibilities	11.8%
Expected income less than current	11.5%
Lack specialized transportation	9.6%
Experienced accessibility issues	8.6%
Family and friends discourage	5.2%
Age	1.5%
Other barrier	5.4%
None	30.6%



Synthesis

Key Findings

- Substantive differences in the population of Canadians with sight loss exist, based on a variety of demographic variables
 - Severity of sight loss, co-morbidities, age of onset/% lifespan, etc.
- Canadians with sight loss use a variety of specialized and mainstream devices as assistive technology
- Educational and employment outcomes are poor for Canadians with sight loss
- Education drives employment
- Meeting accommodation needs in education and employment settings is a challenge

Key Messages

- There are 1,519,840 sight loss journeys in Canada – and every one may be unique
 - Our own application of targeted interventions
 - “The end of average”
- Perceived functional impact and medical diagnoses are not the same thing

Limitations of the CSD

- Technology aids listed are outdated
- Question wording/choices
- Cannot compare to previous iterations of this survey



Discussion

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