

# Canadian Health Measures Survey, 2018-2019

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Visual health tends to decline with age. This can negatively impact quality of life, particularly in older adults, by decreasing their ability to maintain employment, independence, mobility; it can also affect educational attainment and mental health. The World Health Organization estimates that 80% of visual impairment is either preventable or curable with treatment.

New data from the Canadian Health Measures Survey (CHMS) released today, includes visual acuity, intraocular pressure, visual field and retinal photography results. Results showed that just over 7 in 10 Canadian youth (6 to 19 year-olds) are considered as having a normal vision (without glasses or contact lenses), compared with just under half of adults aged 40 to 64 and one-third of those aged 65 to 79.

Normal vision is known as "20/20". This means that a person being tested has very good vision and is able to see an object clearly at 20 feet. Individuals with a visual acuity score equal to or higher than 20/40 are considered to have visual impairment; they see at 20 feet what a person with normal vision sees at 40 feet. Visual impairment refers to a decreased ability to see that cannot be fixed by a corrective device such as glasses or contact lenses.

Preventing lifelong visual impairment begins with detecting problems in childhood. The Canadian Pediatric Society notes that vision screening is important for children and youth. Self-reported data from the CHMS showed that from 2016 to 2019, 58.2% of children and youth aged 6 to 19 years had visited an eye care professional in the past year. Results of visual acuity tests administered as part of the CHMS showed that 71.5% achieved a visual acuity score better than 20/40 without glasses or contact lenses, while 25.9% required corrective lenses to obtain a similar score. The remaining 2.6% were unable to achieve a score better than 20/40, indicating a visual impairment that cannot be improved even when using corrective lenses. More girls (27.2%) than boys (19.4%) required glasses or contacts to achieve a score of 20/40 or better.

As people get older, it is normal for their vision to change. Routine eye examinations at regular intervals can help detect vision problems. The Canadian Association of Optometrists' guidelines suggest that adults aged 40 to 64 should have an eye exam every two years; annual eye exams are recommended for adults aged 65 and older. According to CHMS results, from 2016 to 2019, 50.4% of adults aged 40 to 64 indicated they had visited an eye care professional in the past year, compared with 71.6% of seniors aged 65 to 79. Meanwhile, 45.2% of adults aged 40 to 64 and 32.5% of those aged 65 to 79 achieved a score of better than 20/40 without glasses or contact lenses—while 53.9% and 64.5%, respectively, achieved a similar visual acuity score when using glasses or contact lenses. This leaves 1.4% of adults aged 40 to 79 with an impairment that could not be corrected with contacts or glasses (see note to readers). More women (59.2%) than men (53.8%) aged 40 to 79 required glasses or contacts to achieve a score of 20/40 or better.

Although most visual impairment can be corrected with glasses or contacts, a person can still experience limitations in their daily activities, even when wearing corrective lenses. While the CHMS results show that 2.6% of children aged 6 to 19 and 1.4% of adults aged 40 to 79 have a visual impairment that cannot be corrected to 20/40 or better, findings from the 2017 Canadian Survey on Disability indicate that 5.4% of Canadians aged 15 years and older report having a visual disability. Although the two surveys represent different age groups, this finding might suggest individuals may still struggle with daily activities despite having some form of visual correction.

## Note to readers

*The Canadian Health Measures Survey (CHMS) is currently the only ongoing nationally-representative data source for measured physical fitness in Canada and thus represents an important mechanism to track changes in fitness levels.*

*The 2016-2019 reference period refers to combined results from cycle 5 (2016 and 2017) and cycle 6 (2018 and 2019) of the CHMS.*



The target population for the CHMS consists of persons 3 to 79 years of age living in the 10 provinces. The observed population excludes: persons living in the three territories; persons living on reserves and other Aboriginal settlements in the provinces; full-time members of the Canadian Forces; the institutionalized population and residents of certain remote regions. Altogether these exclusions represent approximately 3% of the target population.

Survey weight and bootstrap weight files and instructions are available for combining cycle 6 CHMS data (where possible) with equivalent data from cycles 1 to 5.

Canadians aged 20 to 39 years old did not take part in vision testing. The focus was on children, since the prevalence of vision problems in children is relatively high, and on older adults, since vision changes as people age.

Participants who wore glasses or contact lenses for distance viewing, but did not bring them to the test, and participants who were unable to achieve 20/40 or better were evaluated using a pinhole occluder. A test with a pinhole occluder helps distinguish whether the diminished visual acuity is due to refractive error, or a non-optical problem (i.e. due to a possible disease within the eye).

**Additional data**

Release of the cycle 5 pooled serum data is now available, as well as the cycle 6 relationship file and cycle 6 postal code file.

Health Canada's first [Report on Human Biomonitoring of Environmental Chemicals in Pooled Samples](#), with data from cycles 1 (2007-2009), 3 (2012-2013), 4 (2014-2015) and 5 (2016-2017) of the CHMS, is now available.

**Definitions, data sources and methods: survey number [5071](#).**

**Available tables: table [13-10-0754-01](#).**

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; [STATCAN.infostats-infostats.STATCAN@canada.ca](mailto:STATCAN.infostats-infostats.STATCAN@canada.ca)) or Media Relations (613-951-4636; [STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca](mailto:STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca)).