
Self-rated Oral Health

Description

- Proportion of the population aged 12 and over that rated their oral health (health of teeth and mouth) as excellent, very good, good, fair or poor.

Specific Indicators and Method of Calculation

- Proportion of the population aged 12 and over who rated their oral health as "good", "very good" or "excellent"
- Proportion of the population aged 12 and over who rated their oral health as "very good" or "excellent"
- Proportion of the population aged 12 and over who rated their oral health as "good"
- Proportion of the population aged 12 and over who rated their oral health as "fair" or "poor"

Prevalence of self-rated health as "good", "very good" or "excellent":

$$\frac{\text{Weighted population aged 12+ who reported their health as "good" or "very good" or "excellent"}}{\text{Weighted total population aged 12+}} * 100$$

Prevalence of self-rated health as "very good" or "excellent":

$$\frac{\text{Weighted population aged 12+ who reported their health as "very good" or "excellent"}}{\text{Weighted total population aged 12+}}$$

Prevalence of self-rated health as "good":

$$\frac{\text{Weighted population aged 12+ who reported their health as "good"}}{\text{Weighted total population aged 12+}}$$

Prevalence of self-rated health as "fair" or "poor":

$$\frac{\text{Weighted population aged 12+ who reported their health as "fair" or "poor"}}{\text{Weighted total population aged 12+}}$$

Basic Categories

- Age groups: 12-17, 18-24, 25-44, 45-64, 65+
- Sex: male, female
- Geographic areas: CCHS - all 36 Public Health Units in Ontario

Data Sources

Numerator & Denominator: Canadian Community Health Survey (CCHS)

Original source: Statistics Canada

Distributed by:

1. Ontario Ministry of Health and Long-Term Care
2. Statistics Canada

Suggested citation (see [Data Citation Notes](#)):

1. Canadian Community Health Survey [year], Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.
2. Canadian Community Health Survey [year], Statistics Canada, Public Use Microdata File, Statistics Canada.

Analysis Check List

- Self-rated oral health is measured on a scale from excellent to poor. The scale is often either categorized into three groups ('excellent or very good', 'good', and 'fair or poor'), or dichotomized into two groups ('good or better' and 'fair or poor').
- Based on 2013/2014 CCHS, all the three categories ("excellent/very good, good, fair/poor) are reportable for all the 36 Public Health Units with coefficient of variation (CV) range from 23% to 2.6%.
- Age categories may change as a result of data suppression issues based on the health unit. Based on 2013/2014 CCHS, when breaking down by age groups, the rates of self-rated oral health as "fair" or "poor" are not reportable for most of the public health units; while the rates of self-rated oral health as "excellent " or "very good" and the rates of self-rated oral health as "good" are reportable for most of the health units.
- Seventeen is the cut-off age for Healthy Smiles Ontario Program. Healthy Smiles Ontario is a government-funded dental program that provides free preventive, routine, and emergency dental services for children and youth 17 years old and under from low-income households.
- Users need to consider whether or not to exclude the 'Refusal, 'Don't Know' and 'Not Stated' response categories in the denominator. Rates published in most reports, including Statistics Canada's publication Health Reports generally exclude these response categories. In removing not stated responses from the denominator, the assumption is that the missing values are random, and this is not always the case. This is particularly important when the proportion in these response categories is high. In Ontario, 2.4% of respondents were "don't know", "refusal" and "not stated" for this indicator in CCHS 2013/2014.
- Estimates must be appropriately weighted (generally the share weight for the CCHS) and rounded.
- It is recommended that public health units use the Share File provided by the Ministry of Health and Long-Term Care rather than public use file (PUMF) provided by Statistics Canada. The Share File has a slightly smaller sample size because respondents must agree to share their information with the province to be included; however, the share file has more variables and fewer grouped categories within variables. The Share File is a cleaner dataset for Ontario analysis because all variables that were not common content, theme content or optional content for Ontario have been removed.
- Users of the CCHS Ontario Share File must adhere to Statistics Canada's release guidelines for the CCHS data when publishing or releasing data derived from the file in any form. Refer to the appropriate user guide for guidelines for tabulation, analysis and release of data from the CCHS.

- In general, when calculating the coefficient of variation (CV) from the share file using the bootstrap weights, users should not use or release weighted estimates when the unweighted cell count is below 10. For ratios or proportions, this rule should be applied to the numerator of the ratio. Statistics Canada uses this approach for the tabular data on their website. When using only the Approximate Sampling Variability (CV) lookup tables for the share file, data may not be released when the unweighted cell count is below 30. This rule should be applied to the numerator for ratios or proportions. This provides a margin of safety in terms of data quality, given the CV being utilized is only approximate.
- Before releasing and/or publishing data, users should determine the CV of the rounded weighted estimate and follow the guidelines below:
 - Acceptable (CV of 0.0 - 16.5) Estimates can be considered for general unrestricted release. Requires no special notation.
 - Marginal (CV of 16.6 - 33.3) Estimates can be considered for general unrestricted release but should be accompanied by a warning cautioning subsequent users of the high sampling variability associated with the estimates. Such estimates should be identified by the letter E (or in some other similar fashion).
 - Unacceptable (CV greater than 33.3) Statistics Canada recommends not to release estimates of unacceptable quality. However, if the user chooses to do so then estimates should be flagged with the letter F (or in some other fashion) and the following warning should accompany the estimates: "The user is advised that...(specify the data)...do not meet Statistics Canada's quality standards for this statistical program. Conclusions based on these data will be unreliable and most likely invalid". These data and any consequent findings should not be published. If the user chooses to publish these data or findings, then this disclaimer must be published with the data.
- Since its first cycle in 2000/01, a few major changes have been made to CCHS. Some of these changes include:
- Until 2005, the CCHS data were collected every two years over a one year period and released every two years, about six months after the end of the collection period. Since 2007, the data are collected on an ongoing basis with annual releases, rather than every two years as was the case prior to 2007.
- Caution should be taken when comparing data from previous cycles to data released for the 2015 cycle onwards due to a major redesign starting in 2015. As a result of the redesign, the 2015 CCHS has a new collection strategy, is drawing the sample from two different frames and has undergone major content revisions. For a summary of changes, please refer to <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getMainChange&Id=238854>

Survey Questions

| Data Source | Module | Survey questions | Response Categories | Year | Variable |
|-------------|---------------|--|---|---------|----------|
| CCHS | Oral Health 1 | In general, would you say the health of your teeth and mouth is? | 1. Excellent 2 Very good 3 Good 4 Fair 5 Poor, DK, Refusal, Not stated | 2003 | OH1C_20 |
| | | | | 2007/08 | OH1_20 |
| | | | | 2013/14 | OH1_20 |

Indicator Comments

- In CCHS, oral health refers to health of teeth and mouth.
- Self-rated oral health is a valid and useful summary measure of people's oral health.
- Oral health is not only important to people's appearance and sense of well-being, but also to their overall health. Cavities and gum disease can lead to serious infections and may contribute to many serious conditions, such as diabetes, respiratory and cardiovascular diseases¹⁻³.
- Self-rated oral health was shown as an independent predictor of self-rated general health, self-esteem and life satisfaction⁴.
- Healthy Smiles Ontario applies to children 17 years old and under. It may be helpful from a program perspective to include the 12–17 age group.

Ontario Public Health Standards (OPHS)

The Ontario Public Health Standards (OPHS) establish requirements for the fundamental public health programs and services carried out by boards of health, which include assessment and surveillance, health promotion and policy development, disease and injury prevention, and health protection. The OPHS outline the expectations for boards of health, which are responsible for providing public health programs and services that contribute to the physical, mental, and emotional health and well-being of all Ontarians. Boards of health are responsible for the assessment, planning, delivery, management, and evaluation of a variety of public health programs and services that address multiple health needs, as well as the contexts in which these needs occur.

Program Outcomes Related to this Indicator

- The board of health achieves timely and effective detection and identification of children and youth at risk of poor oral health outcomes, their associated risk factors, and emerging trends.
- Children and youth from low-income families have improved access to oral healthcare.
- The oral health of children and youth is improved.

http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/

Requirements

- The board of health shall offer support to school boards and schools, in accordance with the School Health Guideline, 2018 (or as current), to assist with the implementation of health-related curricula and health needs in schools, based on need and considering in the areas of Oral health.
- The board of health shall conduct surveillance, oral screening, and report data and information in accordance with the Oral Health Protocol, 2018 (or as current) and the Population Health Assessment and Surveillance Protocol, 2018 (or as current).
- The board of health shall provide the Healthy Smiles Ontario (HSO) Program in accordance with the Oral Health Protocol, 2018 (or as current).

Corresponding Health Indicator(s) from Statistics Canada and CIHI

- N/A

Corresponding Indicator(s) from Other Sources

Similar questions are asked in Rapid Risk Factor Surveillance System (RRFSS) ⁵.

| Data Source | Module | Survey questions | Response Categories |
|-------------|----------|--|---|
| RRFSS | Dental | In general, would you say the health of your mouth including your teeth and gums is excellent, very good, good, fair or poor? | 1. Excellent 2 Very good 3 Good 4 Fair 5 Poor, d don't know r refused |
| | Dental 2 | Compared to other people of your age, would you say the health of your mouth including your teeth and gums is excellent, very good, good, fair, or poor? | 1. Excellent 2 Very good 3 Good 4 Fair 5 Poor, d don't know r refused |

- Note that the RRFSS sample includes adults aged 18 years and older.

Reference

- Bharateesh J1, Ahmed M, Kokila G. Diabetes and Oral Health: A Case-control Study. *Int J Prev Med.* 2012 Nov;3(11):806-9.
- Hamid N. ect. Association of Oral Health and Cardiovascular Disease Risk Factors “Results from a Community Based Study on 5900 Adult Subjects”. *ISRN Cardiol.* 2013; 2013: 782126.
- Azarpazhooh A1, Leake JL. Systematic review of the association between respiratory diseases and oral health. *J Periodontol.* 2006 Sep;77(9):1465-82.
- Benyamini Y1, Leventhal H, Leventhal EA . Self-rated oral health as an independent predictor of self-rated general health, self-esteem and life satisfaction. *Soc Sci Med.* 2004 Sep; 59(5):1109-16.
- Rapid Risk Factor Surveillance System. www.rffss.ca

Acknowledgements

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Changes made

| Date | Type of Review- Formal Review or Ad Hoc? | Changes made by | Changes |
|---------------|---|--|----------------|
| February 2018 | Formal Review | Oral Health Task Group of the Child and Adolescent Health Indicators Subgroup | New indicator |