
Teeth Brushing at Least Twice a day

Description

- Proportion of the population aged 12 and over that reported that they brushed their teeth at least twice a day.

Specific Indicators and Method of Calculation

- Proportion of the population aged 12 and over who reported that they brushed their teeth at least twice a day

$$\frac{\text{Weighted population aged 12+ who reported that they brushed their teeth at least twice a day}}{\text{Weighted total population aged 12+}} * 100$$

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

- The frequency of teeth brushing is measured on a scale from less than once a week to more than twice a day. The scale is often dichotomized into two groups ('at least twice a day' and 'less than twice a day'). However, other categories can also be used based on Health Units' needs and preferences.
- Age categories may change as a result of data suppression issues based on the health unit.
- 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, 3.0% 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 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: CCHS

Module	Survey questions	Response Categories	Year	Variable
Oral Health 2	How often do you brush your teeth?	<ul style="list-style-type: none"> • More than twice a day • Twice a day • Once a day • Less than once a day but more than once a week • Once a week • Less than once a week • DK, Refusal, Not stated 	2003*	OH2C_30
			2005	OH2E_30
			2009/10	OH2_30
			2013/14	OH2_30

*: This module was selected for 24 of the 36 Ontario public health units in 2003.

Indicator Comments

- In addition to a healthy diet and regular dental visits, a good oral hygiene is also important to maintain good oral health. Brushing teeth is an important part of dental care routine. Brushing removes the bacteria that promote tooth decay and the plaque that can cause gum disease.
- The Canadian Dental Association¹ recommends brushing teeth at least twice a day. In the CHMS Survey, 73% of Canadians followed this recommendation².

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

A similar question is asked by the Rapid Risk Factor Surveillance System (RRFSS)³. However, this question is only asked for children 6 years old and under. As a result, it is not comparable to CCHS.

Data Source	Module	Survey questions	Response Categories	Notes
RRFSS	Early Childhood Teeth and Gum Cleaning (child 6 and under)	How many times a day does an adult usually clean or help clean your child's gums or teeth?	0 None 1 Once 2 Twice or more 8 Don't know 9 Refused	Only asks this question for children 6 and under

Reference

1. Canadian Dental Association. How Not to See Your Dentist. https://www.cda-adc.ca/en/oral_health/talk/dentist.asp
2. Health Canada. (2010). *Summary Report on The Findings of the Oral Health Component of the Canadian Health Measures Survey 2007-2009*. Retrieved from: <http://www.fptdwc.ca/assets/PDF/CHMS/CHMS-E-summ.pdf>
3. Rapid Risk Factor Surveillance System. www.rrfss.ca

Acknowledgements

Lead Author(s)	Fangli Xie, Durham Region Health Department
Contributing Author(s)	Erica Clark, Huron County Health Unit Sandy Dupuis, Niagara Region Public Health Department Natalie Greenidge , Public Health Ontario Suzanne De Haney, Eastern Ontario Health Unit
CIWG Reviewers	Adam Stevens, Brant County Health Unit
External Reviewers	Brian Convey, Durham Region Health Department

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