

## Canadian Community Health Survey

These data notes provide you with information on the Canadian Community Health Survey (CCHS), as well as methods and limitations associated with CCHS health indicator reports produced by the Halton Region Health Department (HRHD). Health indicator reports can be found on the [Halton Health Statistics website](#).<sup>1</sup>

### About CCHS

The Canadian Community Health Survey is a voluntary, cross-sectional survey that collects information related to health status, healthcare utilization and health determinants across Canada. The CCHS is conducted by Statistics Canada.<sup>2</sup>

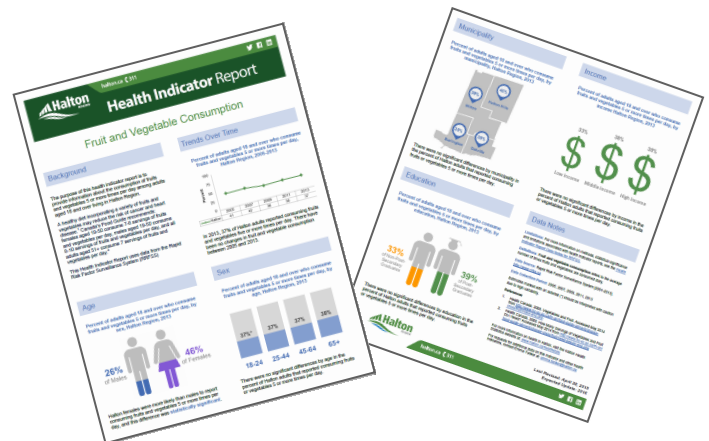
Each year, the CCHS surveys 65,000 people aged 12 and over from 110 health regions across Canada.<sup>2</sup> The survey provides health information at the provincial and regional levels. The information collected in these surveys is used by the HRHD to produce health indicator reports which support program planning and evaluation, policy development and help to improve awareness of health issues in the community.

### Making Comparisons

When multiple years of data are available, comparisons in health indicator reports are made over time. Comparisons are also made by sex, age, municipality, income and education for questions related to individuals, and by municipality and income for questions related to households.

### Weighting

Analysis of CCHS data uses weights to adjust for sampling design and the population.<sup>3</sup>



Bootstrapping techniques are used to produce the coefficient of variation and the 95% confidence intervals.

### Calculating Income Groups

Income groups are determined by first determining adjusted household income for each respondent (household income variable “INC\_3” divided by the square root of their household size variable “dhhhdhsez”). Adjusted household income reflects the fact that a household’s needs increase as the number of members increase. The adjusted household income for all Halton respondents are then organized into 10 equal deciles and placed into low (decile 1-3), middle (decile 4-7) and high (decile 8-10) income groups.

## Statistical Significance and Variation

Overlapping **95% confidence intervals (CIs)** are used to determine statistical significance in health indicator reports. A 95% confidence interval refers to a range of values that have a 95% chance of including the true estimate. When CIs do not overlap between 2 or more groups (e.g. when comparing males and females) it means that the differences between the groups are **statistically significant** and unlikely to be due to chance alone. Since overlapping confidence intervals are used to determine statistical significance, p-values are not calculated. This is a conservative approach which is more appropriate when multiple comparisons are being made, such as in health indicator reports. CIs are used to determine statistical significance, however CIs are not always presented in health indicator reports.

When six or more years of data are available, trends over time are tested for statistical significance using linear regression and adjusting for auto-correlation.

**Coefficient of variation (CV)** refers to the precision of an estimate. When the CV is between 16.6 and 33.3, the estimate should be interpreted with caution because of high variability, and has been marked with an asterisk (\*). Estimates with a CV of greater than 33.3 are not reportable and have been marked with double asterisks (\*\*) in the figures and tables.

## Limitations

CCHS results are self-reported and may not be recalled accurately. Individuals living on Indian Reserves and Crown lands; residents of institutions; full-time members of the Canadian Armed Forces; and residents of certain remote areas were excluded.

## Additional Resources

For more information on the **Canadian Community Health Survey**, visit the Statistics Canada website at:

[www.statcan.gc.ca/cchs](http://www.statcan.gc.ca/cchs)

For more Halton **health indicator and health status reports**, visit the Halton Health Statistics website at:

[www.halton.ca/healthstats](http://www.halton.ca/healthstats)

The yearly sample sizes for data collected from 2007 and beyond are smaller and thus pooled to ensure sufficient sample sizes for analysis.

Rounded estimates are used for the presentation of data, therefore estimates may not total 100 percent.

Don't know and refused responses are typically excluded from the analysis. When "don't know" is considered a valid response, or when over 5% of respondents answer "don't know", the response is included in the analysis.

## References

1. Halton Region Health Department. Halton Health Statistics. <http://halton.ca/healthstats>
2. Statistics Canada. 2015. Canadian Community Health Survey. Accessed June 2014 from <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3226>
3. Thomas, S., Sarafin, C., & Simard, M. 2007. Review of the Weighting Methodology for the Canadian Community Health Survey. Accessed May 2013 from <http://www.fcs.mcgill.ca/07papers/Thomas.II-A.pdf>.