

# Publicly Accessible Health Indicators Data: Statistics Canada & CIHI



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## Summary:

This snapshot report provides an overview of the Health Indicators project including background information, links to data tables and health profiles, and an introduction to common table formats. Data tables are organized by indicator, while health profiles are organized by health region.

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## Purpose

The purpose of this snapshot is to introduce data users who need immediate health information without the need for rigorous data analysis to publicly accessible online health data. These online health data come from two major national sources: Statistics

Canada and the Canadian Institute for Health Information (CIHI) and provide readily useable data for comparable statistics at health region, provincial/territorial and national levels for more than 80 health measures.

## Health Indicators Overview

### Background and Data Sources

Health indicators are measures that indicate the state of health of persons in a defined population or the health system performance in a given time. Statistics Canada and CIHI have a large number of health indicators on the health of Canadians, the health care system and the determinants of health available since 1998. The Canadian Health Indicators Framework was developed for this purpose through ongoing consultations with Provinces and regional health authorities to ensure data quality and standardized measures. The health indicators are grouped according to a Health Indicator Framework as follows:

1. Health Status – measures how healthy we are in a number of ways, including well-being, health conditions, disability, or death;

2. Non-medical Determinants of Health – factors that affect our health such as health behaviours, living and working conditions, and environmental factors;

3. Health System Performance – measures various aspects of the quality of health care; and

4. Community and Health System characteristics – these measures provide useful contextual information, but are not direct measures of health status or the quality of health care.

Health Indicators are derived from multiple sources housed at either Statistics Canada or CIHI. Statistics Canada data sources include census of population, vital statistics, cancer registry, and population health surveys. CIHI data sources are related to hospitalization.

## Data Tables

Main access to a list of health indicators is through a Data Tables site that is structured according to the Health Indicators Framework. In addition to links to data tables for each indicator, this site also provides access to RHA reference maps for each Province, thematic maps, and summary fact sheets for some selected indicators. These data tables, maps and facts sheets are accessible from either Statistics Canada or CIHI websites, by clicking on one of the following links:

**Statistics Canada:** <http://www.statcan.gc.ca/pub/82-221-x/2013001/tbl-eng.htm>

**CIHI:** [http://www.cihiconferences.ca/indicators/2013/tables13\\_e.html](http://www.cihiconferences.ca/indicators/2013/tables13_e.html)

Each of these pages is scrollable for indicator selection. For each indicator a data table in HTML, PDF, or IVT format and CANSIM or CIHI Interactive Tool queries are available. A more detailed description of these data table formats is provided below. As alternative to the default Health Indicators Framework structure, the list of indicators can also be sorted alphabetically.

## Recent Health Profiles

Data sources from **Statistics Canada** used for 2012 Health Indicators report are as follows:

- Canadian Vital Statistics (birth, death, and stillbirth databases)
- 2006 Census of Population
- Canadian Cancer Registry (CCR)
- Canadian Community Health Survey
- National Population Health Survey
- Canadian Health Measures Survey
- Canadian Labour Force Survey
- Uniform Crime Reporting (UCR) Survey
- Residential Care Facilities Survey
- Demography Division (population estimates)

**Hospitalization** data and rates are provided by CIHI based on the following specific sources:

- Discharge Abstract Database (DAD)
- National Trauma Registry (NTR)
- National Ambulatory Care Reporting System (NACRS)
- Scott's Medical Database (SMDB).
- Ontario Mental Health Reporting System (OMHRS)
- Alberta Health and Wellness, Alberta Ambulatory Care Database
- Fichier des hospitalisations MED-ÉCHO, ministère de la Santé et des Services sociaux du Québec

The Health Profile application is designed to give quick access to the latest health-related data available for a selected health region, and provides the corresponding provincial data by default. Users can also easily select any other province, peer group, or Canadian health region for comparison. This contrasts with Health Indicator data tables that allow comparison of regions for any one selected indicator.

The application can be found easily by searching for "Statistics Canada Health Profile", a direct link to January 2013 Saskatchewan health region data is: <http://www12.statcan.gc.ca/health-sante/82-228/search-recherche/1st/page.cfm?Lang=E&GeoLevel=PR&GeoCode=47>

Health profiles are interactive and provide many options such as:

- custom tables by geography, health indicator topic, and sex for download in Excel (csv or tab) compatible format,
- map and list of communities for each health region,
- previously released complete data sets (June 2009, 2010, 2011, 2012, and February 2011) for download, and
- links to other community related data resources.

# Health Indicators Table Formats

In general, most data tables, Health Profiles, and results of CANSIM and CIHI tool queries are displayed in HTML (web browser) format that can be copied and pasted into office applications. IVT format requires installation of the Beyond 20/20 browser (available free at Statistics Canada) and offers many and complex

formatting and query options. Use of online CANSIM (Statistics Canada data) or CIHI query tools may be more appealing to most health data users and are outlined in more detail in sections 3.1 and 3.2. A summary table of Health indicator is as follows:

	viewing application	Excel export	custom queries
HTML (default)	web browser	copy/paste	no
PDF	Adobe Acrobat	copy/paste	no
IVT	Beyond 20/20 browser	copy/paste	yes
CANSIM query	web browser	CSV download	yes
CIHI Interactive Tool	web browser	XLS download	yes

## CANSIM Tables

CANSIM (Canadian Socio-economic Information Management System) is Statistics Canada's computerized database and retrieval service. It is updated daily and contains over 50 million series covering socio-economic, demographic, health, education and justice statistics. Retrospective coverage begins as far back as 1914, but most data start from around the 1950s - 1970s. Data are clustered by subject into tables which are assigned a number comprising seven digits. Most CANSIM tables that are related to Health Indicators data are at <http://cansim2.statcan.gc.ca/cgi-win/cnsmcgi.exe?Lang=E&ResultTemplate=OLC&CORTyp=2&CIITpl=CI&CORCMD=GetTREL&CORId=82-221-X&CORRel=4>

Default tables can be modified in various ways:

- add/remove data facilitates selection of geography, sex, age group, indicator, characteristics, years, etc. depending on table
- table manipulation to show raw data, averages, or percentage changes over time, and
- downloading options.

For an example (see side bar), the figure below shows a modified CANSIM table for the "Youth body mass index" indicator showing Saskatchewan prevalence of overweight/obesity by year. A detailed tutorial for the CANSIM interface is provided at <http://www.youtube.com/watch?v=4ietcHPZCBk>

### Example – Percentage of Annual Child and Youth Overweight and Obesity in Saskatchewan

1. Go to Data Tables Site
2. Select Youth Body Mass Index
3. Select CANSIM under Annual Estimates
4. Select Add/Remove Data tab and scroll down for each step
5. Step 1:
  - Uncheck Canada
  - Scroll down and check Saskatchewan
6. Step 2: keep total 12 years and over
7. Step 3: keep both sexes
8. Step 4:
  - Uncheck "All"
  - Scroll down and check "Body mass index, self-reported, youth (12 to 17 years old), overweight or obese"
9. Step 5:
  - Uncheck "Number of Persons"
  - Check "Percent"
  - Check "Low 95% confidence interval, percent"
  - Check "High 95% confidence interval, percent"
  - Steps 6 and 7: keep years and output format
  - Step 8: press "Apply"
10. Select "Download" tab for exporting to Excel options

The screenshot shows the CANSIM web interface. The main content area displays a table with the following data:

Characteristics <sup>50,51,52,53,54,71,84,87</sup>	2008	2009	2010	2011	2012
Percent	21.8	17.1	22.9	18.1 <sup>E</sup>	27.8
Low 95% confidence interval, percent (percent)	15.6	12.2	16.3	11.9 <sup>E</sup>	20.5
High 95% confidence interval, percent (percent)	28.0	22.0	29.4	24.4 <sup>E</sup>	35.1

Selected items: [Add/Remove data]  
 Geography<sup>2,3</sup>=Saskatchewan [47]<sup>1,0</sup>  
 Age group=Total, 12 years and over  
 Sex=Both sexes  
 Indicators=Body mass index, self-reported, youth (12 to 17 years old), overweight or obese<sup>40,41,64</sup>

## CIHI Interactive Tool

All data supplied by CIHI to the Health Indicators project is accessed through the CIHI interactive query tool which is located at <http://www.cihi.ca/hirpt/?language=en>.

Selection options include any combination of health regions or provinces, choices reflecting changing health region boundaries over time, data years from 1997 to 2010, and stratifica-

tion by sex. Indicators can also be grouped according to dimension of the Health Indicator Framework. The example below shows selection of Premature Mortality indicator for Saskatchewan using all available years and the most current region boundaries. Query results may be grouped by geography or indicator, graphed by indicator and year, or downloaded in MS Excel format.

Health Indicators Interactive Tool - Microsoft Internet Explorer provided by Saskatchewan Ministry of Health

http://www.cihi.ca/hirpt/?language=en

Canadian Institute for Health Information  
Institut canadien d'information sur la santé

Health Indicators Interactive Tool

Note: You must select at least one item from each of the lists below marked with (\*). Hold down the "Ctrl" key for multiple selections in a list.

**Geography (\*)**

[4640] Regional Health Authority - Central Manitoba Inc.  
[4645] Assiniboine, Manitoba  
[4660] Parkland, Manitoba  
[4670] NOR-MAN Regional Health Authority, Manitoba  
[4680] Burntwood, Manitoba  
[47] Saskatchewan  
[4701] Sun Country, Saskatchewan  
[4702] Five Hills, Saskatchewan  
[4703] Cypress, Saskatchewan

Regions  
 Provinces  
 All

Change vintage: 2012-05 Health regions are listed according to a geography vintage. The vintage label (YYYY-MM) refers to the effective date of the boundaries. (What is a health region?)

**Data Year (\*)**

2003  
2002  
2001  
2000  
1999  
1998  
1997

All Years

**Characteristics**

Indicator (\*)

Pneumonia and Influenza Hospitalization  
Pneumonia Readmission  
Potentially Avoidable Mortality  
Potentially Avoidable Mortality PYLL  
Premature Mortality  
Premature Mortality PYLL  
Prostatectomy Readmission  
Self-injury Hospitalization  
Specialist Physicians  
Vaginal Birth After Caesarean

Health Dimension

Health Status  
 Health System Performance  
 Community and Health System Characteristics  
 All

Sex

Both  
 Male  
 Female

Equity (Disparity)

Income

Note: Only available data will be shown in the report.

Submit Reset Close

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## Further Reading

- Background, development history, and future directions of Health Indicators: <http://www.statcan.gc.ca/pub/82-230-x/82-230-x2009001-eng.htm>
- More detailed information about indicator data sources and definitions: <http://www.statcan.gc.ca/pub/82-221-x/2012002/def/defl-eng.htm>
- Health Council of Canada: *A Citizen's Guide to Health Indicators* ([http://www.healthcouncilcanada.ca/rpt\\_det.php?id=130](http://www.healthcouncilcanada.ca/rpt_det.php?id=130))
- Health Canada: *Healthy Canadians-A Federal Report on Comparable Health Indicators 2010* (<http://www.hc-sc.gc.ca/hcs-sss/pubs/system-regime/2010-fed-comp-indicat/index-eng.php>)
- CIHI: *Health Indicators annual reports* (<https://secure.cihi.ca/estore/productSeries.htm?pc=PCC140>)