Searching for Canadian Health Data and Statistics
HESA 5320

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Dalhousie Libraries
Publicly available statistics about hospitals and the health system. Microdata datasets restricted to graduate students are also available.

Publicly available statistics of interest:

- **Your Health System** for indicators about specific hospitals, or about cities, health regions, provinces, or territories.
- **Wait Times** for benchmarks for treatment and wait times trending across Canada.
- **Quick Stats** for interactive tables and/or Excel tables on a variety of topics.

Access microdata from CIHI by:

- **Submitting a request** (graduate students only).
- Exploring a subset of the **Discharge Abstract Database** (many variables about hospital discharges – including diagnosis and treatments) in **SDA**.
This site’s interactive tools will help you learn more about your health system and the health of Canadians. Choose one of the following:

**In Brief**
Explore 15 indicators representing 5 themes that Canadians told us were important.

**In Depth**
Take a look at an expanded suite of indicators: find comparable results for hospitals and regions.
Quick Stats

Quick Stats are a series of free, publicly available, reports that provide aggregate-level data about health care in Canada. Unless otherwise indicated, the original data is provided to CIHI by Canada’s provinces and territories.

You can view this data in two different ways:

- An interactive format lets you manipulate how you see the health system information. Choose from specific time frames, diagnosis groups, hospital types and so on.
- A static format has information in tables that are easy to print.

The Graduate Student Data Access Program (GSDAP)

What is the GSDAP?

CIHI provides data to qualifying graduate students at no cost through the Graduate Student Data Access Program (GSDAP). Graduate students conducting research can access data through various databases and clinical registries in the following areas:

- Health Services;
- Health Spending; and
- Health Human Resources
Discharge Abstract Database (DAD) Research Analytic Files
From the Canadian Institute for Health Information (CIHI)

These data are provided by Statistics Canada, Data Liberation Initiative (DLI) under the terms of the following [license](#). The system will ask you to acknowledge the conditions of use of the License Agreement for the Discharge Abstract Database (DAD) before accessing the files and documentation.

<table>
<thead>
<tr>
<th>Fiscal Period</th>
<th>Subfile</th>
<th>Data</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal 2014 to 2015</td>
<td>Geographic File</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinic File</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fiscal 2013 to 2014</td>
<td>Geographic File</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinic File</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fiscal 2011-2012 to 2012-2013</td>
<td>Geographic File</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinic File</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fiscal 2009-2010 to 2010-2011</td>
<td>Geographic File</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clinic File</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
CANSIM

Publicly accessible interactive data tables from Statistics Canada available for various topics.

Access these:

• From the "related products" page of a Stats Can survey.
• By searching Stats Can's CANSIM database.
• By clicking on the "Data" tab of a subject in Statistics by subject (also includes non-CANSIM tables).
• By searching in CANSIM@CHASS.

When looking at a CANSIM table on Stats Can's website, be sure to:

• Click on "Add/Remove data" to see more options.
• Keep track of the table numbers as the URL easily breaks.
• Download the ENTIRE dataset, not just the table as seen on the screen in Beyond 20/20 IVT format.
CANSIM Tables on Stats Can's website

Table 121-0003

Average satisfaction with life and with selected domains of life by age group and sex, Canada, provinces and regions
occasional (number)

Data table: Add/Remove data, Manipulate, Download

Selected items [Add/Remove data]

Geography = Canada
Age group = Total, 15 years and over
Sex = Both sexes

<table>
<thead>
<tr>
<th>Satisfaction with life and with selected domains of life</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life as a whole</td>
<td>7.9</td>
</tr>
<tr>
<td>Standard of living</td>
<td>7.7</td>
</tr>
<tr>
<td>Health</td>
<td>7.4</td>
</tr>
<tr>
<td>Achievement in life</td>
<td>7.4</td>
</tr>
<tr>
<td>Personal relationships</td>
<td>7.9</td>
</tr>
</tbody>
</table>

- Click on "Add/Remove" data to reveal additional fields.
- Keep track of the table numbers as the URL easily breaks.
- Click on "Download" to retrieve ALL data. Beyond 20/20 IVT format (windows only) will work better than Excel-compatible CSV format.
Find CANSIM tables from the "related products" page of a Stats Can survey: when you are aware of a relevant survey for your topic and wish to see the CANSIM tables generated for that survey, or would like to explore surveys related to your topic.

Browse CANSIM tables by topic: click on the "Data" tab of a topic of interest in Statistics by subject. This will also find non-CANSIM tables.

Search Stat Can's CANSIM database: when you want to do a keyword search.

Search CANSIM@CHASS: when you want to do a keyword search, or try some more sophisticated search techniques.
Finding CANSIM tables via Statistics by subject

Statistics by subject

Aboriginal peoples
Agriculture
Business performance and ownership
Business, consumer and property services
Children and youth
Construction
Crime and justice
Culture and leisure
Economic accounts

Income, pensions, spending and wealth
Information and communications technology
International trade
Labour
Languages
Manufacturing
Population and demography
Prices and price indexes
Reference

Pick a subject!
Finding CANSIM tables via Statistics by subject

Statistics by subject – Health

Filter results by

Keyword(s)
Enter title, description, etc.

Filter by

Filter results by

All (2,050) Data (910) Analysis (1,031) Reference (109)

Subject

Health (2050)
Disability
Diseases and health conditions
Environmental factors
Health care services
Life expectancy and deaths

Other available resources to support your research.

Sort by date
Apply

Might include some non-CANSIM tables.
Try entering the desired level of geography as a keyword.
Finding CANSIM tables via Statistics Canada Surveys

- Definitions, data sources and methods
- Questionnaires
- Surveys

Surveys and statistical programs

List by subject

- List of surveys and statistical programs by record number
  - Aboriginal peoples
  - Agriculture
  - Business, consumer and property services
  - Business performance and ownership
  - Children and youth
  - Construction
  - Crime and justice
Finding CANSIM tables via Statistics Canada Surveys

Explore « Links to Related products »

Canadian Community Health Survey - Annual Component (CCHS)

<table>
<thead>
<tr>
<th>Variable(s)</th>
<th>Summary of changes</th>
<th>Other reference periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Community Health Survey - Annual Component (CCHS)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Link to related products

- The Daily
- Summary tables
- Publications
- Analysts and researchers
- CANSIM

Related products
Finding CANSIM tables via Statistics Canada CANSIM database

Also allows you to search by Subject and by Survey.
Finding CANSIM tables via CANSIM@CHASS

Starting January 4th, 2010 the flagship Canadian database CANSIM hosted at CHASS will be updated daily via a direct data feed from Statistics Canada.

CANSIM Multidimensional View  CANSIM Multidimensionnel
CANSIM Time Series View      CANSIM Séries Chronologiques
Historical versions of CANSIM  Versions historiques de CANSIM

Learn more about CANSIM@CHASS by trying the exercise in this PDF (start on page 9) from Daniel Beaulieu, data librarian colleague.
Health Indicators

"Over 80 indicators measure the health of the Canadian population and the effectiveness of the health care system. Designed to provide comparable information at the **health region** and **provincial/territorial levels** (...)


Access the indicators:

- From the "**Data tables, maps and fact sheets**" page of the "**Health Indicators**" main page.

Quick groupings of indicators:

- [CIHI's Health Indicators Interactive Tool](https://cansim2.statcan.gc.ca/cansim/2?lang=en&id=1050509).
- [CANSIM table 105-0509](http://cansim2.statcan.gc.ca/cansim/2?lang=en&id=1050509) of health characteristics by health regions.
- [CANSIM table 109-5355](http://cansim2.statcan.gc.ca/cansim/2?lang=en&id=1095355) of population estimates by health regions.
A Citizen’s Guide to Health Indicators
A Reference Guide for Canadians
Most recent health indicators grouped by theme.

- The "newer" indicators are identified with a "1".
- When given options between different tables within a given indicator, be aware that data might be from different years.
- When looking at a CANSIM table, check the footnotes to make sure that you have the most recent version available.
If CIHI says that there is no data for your chosen indicator(s), try selecting more than one level of geography (i.e. Newfoundland and Labrador + associated health regions), grab all the years, and make sure to click on "Both" for Sex even if you want subcategories.
CANSIM Grouping of Health Indicators

**Table 105-0509 1, 2, 3, 46**

Canadian health characteristics, two year period estimates, by age group and sex, Canada, provinces, territories and health regions

occasional (number)

The data below is a part of CANSIM table 105-0509. Use the Add/Remove data tab to customize your table.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2015-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived health, very good or excellent 4</td>
<td>18,787,800</td>
</tr>
<tr>
<td>Perceived health, fair or poor 4</td>
<td>3,354,900</td>
</tr>
<tr>
<td>Perceived mental health, very good or excellent 5</td>
<td>21,243,500</td>
</tr>
<tr>
<td>Perceived mental health, fair or poor 5</td>
<td>1,900,200</td>
</tr>
</tbody>
</table>

- Review CANSIM slides: remember to look at "Add/Remove data" and consider downloading in Beyond 20/20 format.
- See [CANSIM table 105-0502](#) for 2007 to 2014.
### Population Estimates

**Table 109-5355**

Estimates of population (2011 Census and administrative data), by age group and sex for July 1st, Canada, provinces, territories, health regions (2015 boundaries) and peer groups annual (number)

The data below is a part of CANSIM table 109-5355. Use the Add/Remove data tab to customize your table.

#### Selected items [Add/Remove data]

- **Age group** = Total, all ages
- **Sex** = Both sexes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada [0]</td>
<td>34,750,545</td>
<td>35,155,451</td>
<td>35,544,564</td>
<td>35,848,610</td>
<td>36,286,425</td>
</tr>
<tr>
<td>Newfoundland and Labrador [10]</td>
<td>526,450</td>
<td>527,409</td>
<td>528,333</td>
<td>528,676</td>
<td>530,128</td>
</tr>
<tr>
<td>Nova Scotia [12]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Brunswick [13]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Community and health system characteristics

#### Community

- Population estimates
- Population distribution by size of population centre
- Population density
- Dependency ratio
- Aboriginal population
- Immigrant population
- Internal migrant mobility
- Metropolitan influenced zones (MIZ)
- Lone—parent families
- Visible minority population
Census

The Canadian census happens every 5 years (on the '1s' and the '6s'). Data is available through publicly accessible tables and profiles, as well as through restricted to Dalhousie interfaces that also include special subsets of data not available on the open web.

Access 2016 data:
• Through Statistics Canada's Census Profile.
• Through Statistic Canada's Data Tables.
• Via CHASS's census analyser (Dalhousie only).

Access older data (try links above first):
• By consulting the print collections – see links in the Data for the Social Sciences research guide or internet archive's collection.

When looking at census data, be sure to:
• Be aware of random rounding.
• Learn census geography.
• Be prepared to take on some challenges if looking for data for smaller geographies, working with older censuses, or trying to compare numbers in time.
• **Country of origin:** Canada

• **Frequency of crimes committed:** operates every 5 years.

• **Start of operation:** the first census was in 1871.

**Note:** dangerous obsession with "1" and "6"
What data is available in the census?

Census Profile, 2016 Census

Release date: February 8, 2017 | Updated on: September 13, 2017

This profile presents information from the 2016 Census of Population for various levels of geography, including provinces and territories, census metropolitan areas, communities and census tracts. Using the search or browse options below, users can search for an area of interest by typing its place name, postal code or geographic code or by browsing a list. Data will be available according to the 2016 Census Program release schedule.

SEARCH

- Place name
- Aboriginal peoples
- Age and sex
- Education
- Families, households and marital status
- Housing
- Immigration and ethnocultural diversity
- Income

BROWSE

- Journey to work
- Labour
- Language
- Language of work
- Mobility and migration
- Population and dwelling counts
- Type of dwelling
Be aware of random rounding. Many numbers in the census end in '0' or '5'. Totals and subtotals are rounded from the correct value, so manually adding numbers might not add up to the total.
The Data Cubes are accessible interactive tables (and graphs) about diseases, injuries, morbidity, mortality.

Includes data from many sources including Statistics Canada. Some of the Stats Can data includes configurations not available publicly on Stats Can's website.

Access the Data Cubes:

• From the Public Health Agency of Canada's Data Cubes page.

Other interesting PHAC links:

• The Data Visualizations.
• Health Data.
**Data Cubes**

Data Cubes are interactive databases that quickly allow users to create tables and graphs using their web browser. These online analytical processing cubes, or OLAP cubes, produce output displayed in a table format with a corresponding graph. The row and column axes of this table contain the "dimensions" of the cube while the "measures" form the values within. Cubes are much like spreadsheets, but they are more dynamic. You can see many dimensions at once by nesting variables under one another. It's like having hundreds of summary cross tabulations at your fingertips.

Chronic Disease Infobase Data Cubes contain many different types of Chronic Disease health indicator information. The hope is to make available Data Cubes containing data such as mortality, morbidity and risk factor information for chronic diseases, as well as their associated demographic variables (such as age group, gender, and geography).

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**Self-Reported Mood Disorder by Geography, Age Group, Sex**

Note: This data cube displays pre-calculated statistics. Only one selection must be made for each level.

**Results**

<table>
<thead>
<tr>
<th>Percent</th>
<th>Both Sexes</th>
<th>Région de l’Abitibi-Témiscamingue</th>
<th>Région de l’Outaouais</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Percent</td>
<td>Percent</td>
</tr>
<tr>
<td>Self-Reported Mood Disorder. CCHS 2013/14 share file, question CCC_Q280, proportion of all survey participants age 12+, excludes non-response.</td>
<td>All Age Groups</td>
<td>6.3%</td>
<td>7.2%</td>
</tr>
</tbody>
</table>
Data Visualization
Looking for the story in the numbers? Browse our curated collection of public health infographics, infobytes, and other data visualizations.

Featured Data Visualization

Big Picture Mortality in Canada Interactive
Every year more than 250,000 Canadians die of various causes. Each death becomes part of a vital statistics mortality dataset. Death data in Canada is categorized using a classification system entitled International Statistical Classification of Diseases and Related Health Problems 10th Revision, commonly known as ICD-10. The ICD-10 classification system categorizes cause of death data into 22 groups referred to as chapters. Each chapter contains numerous sub-groups.

Health data
Resources on the state of Canadians’ health, including statistics, facts, reports and data.

Services and information
Health in Canada
Health-related topics like life expectancy, prescriptions, and medical trends and statistics.

Canada Communicable Disease Report
Information on infectious diseases for clinicians, public-health professionals and policymakers.

Contributors
- Canadian Institutes of Health Research
- Health Canada
- Public Health Agency of Canada
Google

You can add standard Stats Can geography to your search terms.

Google search tips:

- Try adding the following to your search expression: (data OR dataset OR stat OR statistic)
- Try using the "Country" filter.
- Try limiting to federal, provincial, or municipal governments with the site operator - site:.gc.ca
- Try finding spreadsheets by using the filetype operator – (filetype:csv OR filetype:xls OR filetype:xlsx)
Searching Google

- **Site:** adresse of website or domain to search in a specific web site or domain.
- **Filetype:** extension to search for specific types of files
- **-word** to search pages that don’t have a specific word in their results.
- **OR** to find synonyms.

Don’t forget to check the sources of your findings!
Check your Health Administration databases for statistics, incidence, prevalence, etc.

Data search tips:

- Try these PubMed data search tips.
- Try these CINAHL data search tips.
Search results

Items: 1 to 20 of 271

Filters activated: Review. Clear all to show 1627 items.

1. [THE ROLE OF β-AMYLOID AND MITOCHONDRIAL DYSFUNCTION IN THE PATHOGENESIS OF ALZHEIMER'S DISEASE].
   Szarka A.
   PMID: 26380416
   Similar articles

2. The prevalence of depression in Alzheimer's disease: a systematic review and meta-analysis.
   PMID: 25654505
   Similar articles

3. In-house heart-brain clinics to reduce Alzheimer's disease incidence.
   de la Torre JC.
   PMID: 25114089
   Similar articles

   Rizzi L, Rosset I, Roriz-Cruz M.
   PMID: 25089278 Free PMC Article
   Similar articles
Research Guides

Don't forget to visit your research guides for more links and help

Health Admin Research Guide:
• [http://dal.ca.libguides.com/healthadmin](http://dal.ca.libguides.com/healthadmin)

Health Statistics Research Guide:
• [http://dal.ca.libguides.com/healthstats](http://dal.ca.libguides.com/healthstats)
  • Includes links to many sources of health data.
  • Includes page about health indicators.
  • Includes help with microdata.

Data for the Social Sciences:
• [http://dal.ca.libguides.com/data/tutorials](http://dal.ca.libguides.com/data/tutorials)
  • Includes help with working with the census.
  • Includes tutorials about Excel.
Health Statistics

A source for research and instructions for finding and using health statistics.
Interfaces for accessing or viewing Stats Can data

Beyond 20/20

When downloading data from Statistics Canada's website, "ivl" or Beyond 20/20 files are a better alternative to "csv" or Excel files because you can easily format your table before exporting data back to Excel-compatible formats. Windows only.

- Beyond 20/20 (Office Mix)
  Short demonstration of the capabilities of Beyond 20/20 (with no audio).

- Beyond 20/20 (PDF Presentation)
  How to use the free Beyond 20/20 browser to explore Statistics Canada data.

- Beyond 20/20 Exercise
  Find Canadians that are 100+ years old by province by rearranging a table in Beyond 20/20 (Windows only).

CANSIM
Need Help?
Finding Health Data

- **WHO**: Ask your friendly data librarian: Julie.Marcoux@dal.ca or 902-494-3189.
- **WHERE**: room 3621 of the Killam Library.

- **WHO**: Ask your friendly health librarian: Melissa.Helwig@dal.ca or 902-494-1338.
- **WHERE**: 2nd floor of the Collaborative Health Education Building.
WHO: Contact your friendly GIS Centre: GIS@dal.ca or 5th floor of the Killam Library.

WHERE: GISciences Centre website.

WHAT: Help with ArcGIS, help with extracting and analyzing a variety of data sources, help producing customized maps, help with GIS software.

WHAT: One-on-one, group or class training.
NOT SURE WHO TO ASK?

Data Librarian
Julie.Marcoux@dal.ca
902-494-3189