Geographic Location Stratifier: Guidance on Measuring and Reporting Health Inequalities

Definition

Construct: Urban and rural/remote

The Canadian Institute for Health Information (CIHI) uses urban and rural/remote place of residence as the standard approach for measuring inequalities related to geographic location.

Measure: Statistical Area Classification type

CIHI uses Statistics Canada's Statistical Area Classification type (SACtype) to define urban (SACtypes 1 to 3) and rural/remote (SACtypes 4 to 8) geographic location (see the table below).

SACtype identifies the type of **Statistical Area Classification (SAC)** in which a **census subdivision (CSD)** is located, specifically whether the CSD is part of a **census metropolitan area (CMA)**, **census agglomeration (CA)** or census **metropolitan influenced zone (MIZ)**,[1] where the degree of influence for the MIZ is determined based on commuting flows. The MIZ categorizes all CSDs that are outside of CMAs and CAs as follows:[2]

- In the provinces, CSDs outside CMAs and CAs are assigned to 1 of 4 MIZ categories according to the degree of influence (strong, moderate, weak or none) that the CMAs or CAs have on them.

- In the territories, CSDs outside CAs are assigned to "Territories." This is because many CSDs in the territories are large and sparsely populated such that the commuting flow of the resident employed labour force is unstable.

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Equity Stratification

Table Total Canadian population by Statistics Canada's SAC

SAC	Total population	Percentage of total population	Corresponding SACtype	CIHI's standard
CMA	24,945,123	71.0%	1	Urban
CA	4,287,834	12.2%	2, 3	Urban
Strong MIZ	1,993,705	5.7%	4	Rural/remote
Moderate MIZ	2,312,603	6.6%	5	Rural/remote
Weak MIZ	1,307,851	3.7%	6	Rural/remote
No MIZ	238,802	0.7%	7	Rural/remote
Territories	65,810	0.2%	8*	Rural/remote

Note
* For the territories, all of Nunavut, including Iqaluit, is classified as SACtype 8. Whitehorse and Yellowknife are classified as SACtype 3.
Source
Statistics Canada. Population and dwelling counts, for Canada, provinces and territories by the Statistical Area Classification, 2016 Census – 100% data. Accessed January 10, 2022.

Key considerations

It can be helpful to include a measure of travel burden when measuring health inequalities related to geographic location. One way to do this is using Statistics Canada's Index of Remoteness for Canadian CSDs, which incorporates measures of travel cost along with population size.[3] This continuous measure ranges from 0 to 1 (with 1 being the most remote) and can be converted into categorical classifications of remoteness. By measuring proximity to population centres irrespective of commuting flows, and by considering the impact of smaller population centres outside of CAs and CMAs, the remoteness index captures a unique geographic dimension compared with geographic classifications such as the SAC.

How can I create urban and rural/remote categories?

Place of residence in administrative health data, including CIHI databases, is generally limited to postal code. You can use the Postal Code Conversion File (PCCF) or Postal Code Conversion File Plus (PCCF+)[4] to assign SACtype and then categorize this variable into urban (SACtype 1 to 3) and rural/remote (SACtype 4 to 8).

Statistics Canada disseminates the PCCF and PCCF+ to its share partners and Data Liberation Initiative participants.[5] Other organizations may contact the Canada Post Corporation for licensing and cost information.[6] To learn more about PCCF+, see Area-Level Equity Stratifiers Using PCCF and PCCF+.

See *Asthma Hospitalizations Among Children and Youth in Canada: Trends and Inequalities* for an example of how CIHI measured inequalities across the provinces and territories by urban and rural/remote geographic location defined using SACtype.

Equity Stratification

CIHI's *Measuring Health Inequalities: A Toolkit — Equity Stratifier Inventory* is periodically updated with a complete list of the stratifier information available in CIHI's databases, as well as in certain Statistics Canada databases.

Statistics Canada's standards

Statistical Area Classification (SAC) 2016

Related resources

Statistics Canada's Index of Remoteness

Visit the Equity stratifiers page for guidance on additional stratifiers.

Version history

June 2022	Updated text and format for information sheet. Updated population data in the table with 2016 data (previously 2011 data).
April 2018	Initial definition released as part of *In Pursuit of Health Equity: Defining Stratifiers for Measuring Health Inequality (PDF)*.

References

1. Statistics Canada. Dictionary, Census of Population, 2016: Statistical Area Classification (SAC). Accessed January 25, 2022.

2. Statistics Canada. Standard Geographical Classification (SGC) 2011. Accessed January 25, 2022.

3. Statistics Canada. Index of Remoteness. Accessed January 25, 2022

4. Statistics Canada. *Postal Code^OM Conversion File Plus (PCCF+) Version 7D. November 2020 Postal Codes*. 2021.

5. Statistics Canada. Postal Code^OM Conversion File Plus (PCCF+). Accessed January 25, 2022.

6. Canada Post. Request for Licensed Data Products. 2022.