



Measuring Health Inequalities: A Toolkit — Glossary of Terms

absolute inequality: The magnitude of difference observed between population subgroups.

area-level analysis: Analysis using socio-economic or socio-demographic information aggregated by geographic areas such as neighbourhoods.

complex measure of inequality: A measure of inequality that incorporates data from all population subgroups (e.g., inequality across all income groups); it is a single number indicating the level of inequality. Examples include potential rate reduction (PRR) and population impact number (PIN).

composite index: An area- or individual-level measure consisting of a number of socio-demographic variables that can be used to identify population subgroups with similar characteristics. Variables commonly used in composite indices include income, education and unemployment (see the table). Composite indices can be used as equity stratifiers to measure health inequalities.

deprivation index: A composite index that can identify population subgroups based on the level of deprivation using a number of variables (see *composite index*).

equity stratifier: A demographic, social, economic or geographic characteristic that can identify population subgroups for the purpose of measuring differences in health and health care that may be considered unfair and avoidable.

health equity: Absence of unfair and avoidable differences in health and health care access, quality or outcomes across the population. It is the ideal state in which all people are able to reach their full health potential and receive high-quality care that is fair and appropriate to them and their needs, no matter where they live, who they are or what they have.

health indicator: A measure designed to summarize information about a given priority topic in population health or health system performance. Health indicators provide comparable and actionable information across different geographic, organizational or administrative boundaries and/or can track progress over time.

health inequality: Any difference in health and health care access, quality or health outcomes between population subgroups. Health inequalities may be due to unavoidable biological and natural factors.





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health inequity: A difference in health and health care access, quality or outcomes between population subgroups that is unfair and avoidable.

intersectionality: A concept recognizing that people occupy multiple social domains and identities (e.g., income, gender and racial group), which contribute to their unique experiences of advantage and disadvantage.

population impact number (PIN): A complex measure of *absolute* inequality that captures the potential reduction in the number of cases or events for a health indicator that would occur in the hypothetical scenario that each population subgroup experienced the same rate as the subgroup with the most desirable rate. It captures the gradient of inequality across multiple categories, such as income quintiles (see the figure).

potential rate improvement (PRI): A complex measure of *relative* inequality that is analogous to the potential rate reduction (PRR), but used in scenarios where higher indicator rates are desirable. It is also commonly known as the prevented fraction.

potential rate reduction (PRR): A complex measure of *relative* inequality that captures the potential reduction in a health indicator rate that would occur in the hypothetical scenario that each population subgroup experienced the same low rate as the subgroup with the most desirable rate. It is also commonly known as the population-attributable fraction or population-attributable risk (see the figure).

rate difference (RD): A simple measure of the *absolute* inequality between subgroups that is calculated by subtracting the rate of the reference group from the rate of the comparison group.

rate ratio (RR): A simple measure of the *relative* inequality between subgroups that is calculated by dividing the rate of the comparison group by the rate of the reference group.

reference group: The subgroup selected as the point of reference for comparing inequality between subgroups; the reference group can be the subgroup with the most desirable rate or the majority subgroup (i.e., the group with the largest proportion of the population). Having a designated reference group facilitates standard comparisons.

relative inequality: The proportional or ratio-based difference observed between population subgroups.

simple measures of inequality: Measures of inequality that involve pairwise comparisons between 2 subgroups. Examples include rate ratio (RR) and rate difference (RD).

stratification: The process of disaggregating data by another variable to create (population) subgroups. Equity stratification is used to measure health inequalities.



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Table Examples of indices used in Canada for health inequality measurement and reporting

Index and source	What it measures	Data source(s)	Jurisdictional coverage*
Canadian Deprivation Index (CDI) Alberta Health Interactive Health Data Team, Government of Alberta	Material deprivation: Based on home ownership, education and food security	Canadian Community Health Survey (CCHS)	Canada Data available at national and provincial/territorial levels
Canadian Index of Multiple Deprivation Statistics Canada	Material and social deprivation: A cross-sectional index based on dimensions of residential instability, economic dependency, ethno-cultural composition and situational vulnerability	2016 Census data	Canada; 3 provincial (Quebec, Ontario, British Columbia) and 2 regional (Atlantic, Prairie) indices Data available at dissemination area (DA) level
Canadian Index of Wellbeing University of Waterloo	Quality of life: Based on 8 domains representing wellness: community vitality, democratic engagement, education, environment, healthy populations, leisure and culture, living standards and time use	Statistics Canada data sources (General Social Survey; CCHS; Labour Force Survey; Canadian Survey of Giving, Volunteering and Participating; Canadian Election Surveys), Environment and Climate Change Canada's Environmental indicators, the World Wildlife Fund's Living Planet Index and the Canadian Centre for Economic Analysis's Shelter Consumption Affordability Ratio Index	Canada Data available at provincial and regional levels with some limitations
Canadian Marginalization Index (CAN-Marg) Centre for Urban Health Solutions at St. Michael's Hospital	Marginalization: Longitudinal in nature and based on dimensions of residential instability, material deprivation, ethnic concentration and dependency	CCHS and census data	Canada Data available at DA and census tract levels, as well as larger areas (e.g., census metropolitan area)
Deprivation Index Institut national de santé publique du Québec (INSPQ)	Material and social deprivation: Based on education, unemployment, income, living alone, individuals who are separated, divorced or widowed, and single-parent families	National Household Survey and census data	Canada Data available at the DA level and has been applied at small-area levels provincially and nationally

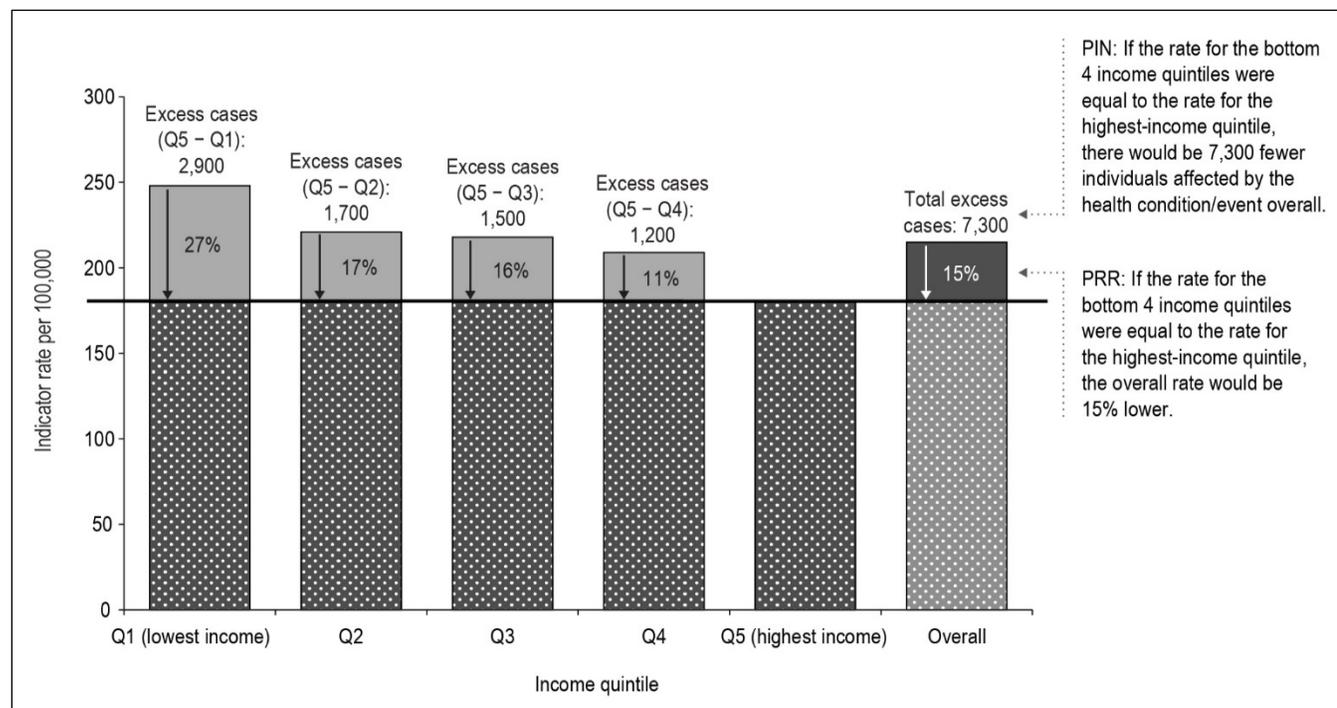


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Ontario Marginalization Index (ON-Marg) Centre for Urban Health Solutions at St. Michael's Hospital Public Health Ontario (2011 and 2016 Updates)	Marginalization: Based on dimensions of residential instability, material deprivation, ethnic concentration and dependency	CCHS and census; combined with Statistics Canada Taxfiler data, Municipal Property Assessment Corporation data, the Registered Persons Database, and the Immigration, Refugees, Citizenship Canada Permanent Resident database	Ontario Data available at small (e.g., DA) and larger areas (e.g., local health integration network)
Socioeconomic Factor Index — Version 2 (SEFI-2) Manitoba Centre for Health Policy, University of Manitoba	Socio-economic status: Based on unemployment, household income, single-parent households and education	Census data	Manitoba Data available at the DA and census subdivision (CSD) levels

Note
 * For definitions of census geographies such as DAs, please see [Measuring Health Inequalities: A Toolkit — Area-Level Equity Stratifiers Using PCCF and PCCF+](#).

Figure Illustration of the PRR and the PIN calculation for a given health indicator stratified by income quintile



Note
 "Excess cases" refers to the number of cases that could have been avoided in the hypothetical scenario had the rate for that income quintile been the same as the rate for the highest income quintile.



Document history

March 2020	Added a definition of intersectionality and new composite indices
February 2019	Updated definitions related to calculating summary measures of inequality
October 2018	Initial document release

Talk to us

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