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.

**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

<table>
<thead>
<tr>
<th>Index and source</th>
<th>What it measures</th>
<th>Data source(s)</th>
<th>Jurisdictional coverage*</th>
</tr>
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</table>
| **Canadian Marginalization Index (CAN-Marg)**  
Centre for Urban Health Solutions at St. Michael’s Hospital | Marginalization: Based on dimensions of residential instability, material deprivation, ethnic concentration and dependency | Canadian Community Health Survey and census | Canada  
Data available at dissemination area (DA) and census tract levels, as well as larger areas (e.g., census metropolitan area) |
| **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 | Canadian Community Health Survey 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) |
| **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 | Canada  
Data available at national and provincial/territorial levels |
| **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 | Canada  
Data available at the DA level and has been applied at small-area levels provincially and nationally |
| **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 |
| **Vancouver Area Neighbourhood Deprivation Index (VANDIX)**  
University of British Columbia | Material and social deprivation: Based on material wealth, housing, single-parent households, education and unemployment | Census data | British Columbia  
Intended for the analysis of urban populations in British Columbia |

### Notes
* For definitions of census geographies such as dissemination areas, please see Measuring Health Inequalities: A Toolkit — Area-Level Equity Stratifiers Using PCCF and PCCF+.  

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

![Figure](image)

**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.

**Talk to us**
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