Monitoring Health Inequalities: A Pan-Canadian Baseline Reporting Initiative

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PHAC activities to:

- Fortify the evidence base on factors and dynamics that drive health inequalities;
- Build capacity for the measurement and monitoring of health inequalities.
Monitoring Health Inequalities: A Pan-Canadian Baseline Reporting Initiative
Agency approach to advance health equity

**OUTCOMES:**
- Consideration of health equity in policies and programs
- Programs are enabled to address underlying causes
- Coordinated action on social determinants of health
- Systematic reporting of health inequalities

**BUILD AGENCY CAPACITY**

**ENGAGE AND LEVERAGE**

**USE AND STRENGTHEN THE EVIDENCE BASE**
Use and Strengthen the Evidence Base

Pan-Canadian reporting on health inequalities

Data infrastructure: enhancing availability of data on SDoH

Overview of the state of health inequalities in Canada and baseline against which progress and trends can be measured

e.g., Funding new data collection on discrimination as an one-time addition to the 2013 Canadian Community Health Survey
Building Consensus on Pan-Canadian Health Inequalities Reporting

2005 • F/P/T Task Group on Health Disparities
  ➢ *Role of the Health Sector in Reducing Health Disparities* report

2008 • PHAC/Pan-Canadian Public Health Network (PHN)
  ➢ *Health Disparities Indicators: Background Report for Developing Health Disparities Indicators in Canada*

2010 • Pan-Canadian Public Health Network
  ➢ *Indicators of Health Inequalities* report
Current State of Reporting on Health Inequalities in Canada: Pan-Canadian, Provincial/Territorial, Local/Regional

- **Some** recommended PHN indicators are published in national reports, e.g., PHAC, CIHI, Statistics Canada
  - *No pan-Canadian report dedicated to the systematic review of the status of health inequalities in Canada*

- **Some** PHN indicators are included in Provincial/Territorial health departmental reports:
  - *Wide variation of indicators and disaggregators across reports*

- Examples of health inequalities-specific reports at the local/ regional level:
  - Vancouver Coastal Health, Saskatoon Health Region, Peel Region Public Health, Agence de la santé et des services sociaux de Montréal, etc.
Process & Engagement

• National Advisory Committee
  ➢ 2012: Established to provide expert advice on report approach and scope
  ➢ Membership: academics, NGOs, P/T and municipal governments, Health Canada (FNIHB), PHN Healthy People and Communities-Steering Committee (HPC-SC), and Canadian Institute for Health Information (CIHI), Statistics Canada and PHAC

• Technical Working Group
  ➢ 2013: Established to provide advice on data availability, access, and analysis, and to review draft reporting
  ➢ Membership: academics, Health Canada (First Nations and Inuit Health Branch), provincial/territorial governments, local government
Operational definition:

*Indicators of health inequalities* are indicators of health status and health determinants, disaggregated by population groups

- **Indicators of Health Status**
  - E.g., mortality, self assessed physical and mental health, disease prevalence, etc.

- **Indicators of Determinants of Health (daily living conditions & structural drivers)**
  - E.g., health behaviours, physical and social environment, working conditions, health care, etc.

- **Disaggregators**
  - age, sex, income, education, employment, occupation, Aboriginal status, cultural/racial origin, immigrant status, rural/urban, disability, sexual orientation, Province/Territory
### Health status

<table>
<thead>
<tr>
<th>Mortality</th>
<th>Early Childhood Development</th>
<th>Mental illness</th>
<th>Morbidity &amp; Disability</th>
<th>Self-assessed physical &amp; mental health</th>
<th>Cause-specific outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy vs</td>
<td>Early Development Index McMaster</td>
<td>Intentional self-harm (suicide) vs</td>
<td>Low birth weight vs</td>
<td>Perceived health CCHS, RHS</td>
<td>Chronic conditions (diabetes, asthma, arthritis) CCHS, RHS</td>
</tr>
<tr>
<td>Infant mortality vs</td>
<td>CVD vs</td>
<td>Disability CCHS, RHS</td>
<td>Overweight/obesity BMI CCHS, RHS</td>
<td>Perceived mental health CCHS, RHS</td>
<td>Cancer incidence CCR</td>
</tr>
<tr>
<td>Lung cancer vs</td>
<td>Unintentional injury vs</td>
<td>Hospitalizations for mental health disorders CIHI</td>
<td>Positive mental health CCHS</td>
<td></td>
<td>Infectious diseases (incidence TB, HIV, Chlamydia) PHAC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Child immunization rates PHAC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Oral health CCHS</td>
</tr>
</tbody>
</table>
### Health determinants: Daily Living Conditions and Structural Drivers

<table>
<thead>
<tr>
<th>Health behaviours</th>
<th>Physical and social environment</th>
<th>Working conditions</th>
<th>Health care</th>
<th>Social protection</th>
<th>Social inequities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking CCHS, RHS</td>
<td>Core housing need Census</td>
<td>Workplace stress CCHS</td>
<td>Contact with medical doctor CCHS, RHS</td>
<td>Eligibility for EI LFS?</td>
<td>Children in low income families Census</td>
</tr>
<tr>
<td>Fruit/vegetable consumption</td>
<td>Water quality TBD</td>
<td></td>
<td>Visits with dental professional &lt;12mth CCHS, RHS</td>
<td>Access to subsidized child care spaces per child &lt;6 CRRU</td>
<td>Homelessness TBD</td>
</tr>
<tr>
<td>Leisure time physical activity CCHS, RHS</td>
<td>Walk/bike to work Census</td>
<td></td>
<td>Colorectal / Mammography/ Pap screening CCHS, RHS</td>
<td></td>
<td>Working poor LFS</td>
</tr>
<tr>
<td>Alcohol use (heavy drinking) CCHS, RHS</td>
<td>Exposure to second-hand smoke at home/In vehicles and public places CCHS, RHS</td>
<td></td>
<td></td>
<td></td>
<td>Household food insecurity CCHS, RHS</td>
</tr>
<tr>
<td>Breastfeeding CCHS, RHS</td>
<td>Sense of community belonging CCHS, RHS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Summary Measures of Health Inequalities: An example

Preliminary Results: Age-standardized smoking prevalence among Canadian men

<table>
<thead>
<tr>
<th>Income quintile</th>
<th>Rate</th>
<th>Rate Diff</th>
<th>Pop. Attributable Rate (%)</th>
<th>Pop. Impact Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>23.2</td>
<td>1.5</td>
<td>35.1</td>
<td>1.8</td>
</tr>
<tr>
<td>1st quintile</td>
<td>28.8</td>
<td>1.3</td>
<td>23.7</td>
<td>1.1</td>
</tr>
<tr>
<td>2nd quintile</td>
<td>24.5</td>
<td>1.2</td>
<td>19.0</td>
<td>0.9</td>
</tr>
<tr>
<td>3rd quintile</td>
<td>23.1</td>
<td>1.2</td>
<td>15.0</td>
<td>0.7</td>
</tr>
<tr>
<td>4th quintile</td>
<td>22.0</td>
<td>Ref.</td>
<td>Ref.</td>
<td>Ref.</td>
</tr>
<tr>
<td>5th quintile</td>
<td>18.7</td>
<td>Ref.</td>
<td>Ref.</td>
<td>Ref.</td>
</tr>
</tbody>
</table>

Percent
## Matrix of preliminary results

### Negative health outcome (e.g. prevalence of chronic disease, smoking prevalence)

- Possible reversed causality
  - RR 1.0 - 1.29
  - RR 1.3 - 1.49
  - RR 1.5 - 1.99
  - RR 2.0+
  - RR < 1 and appears protective
  - RR not significant

### Positive health outcome (e.g. cancer screening prevalence, moderate or active physical activity level prevalence)

- Possible reversed causality
  - RR 0.8-0.9
  - RR 0.7
  - RR 0.6
  - RR <= 0.5
  - RR > 1 and appears protective
  - RR not significant
Next Steps

• Consultations with key stakeholders and potential users of the report
  » useful visual presentation of the findings
  » knowledge translation plans

• Developing criteria to identify 10-15 indicators of the most pronounced inequalities for baseline reporting & future national monitoring

• Posting data tables for all indicators online (tbd)

• Identifying best practices for effective interventions on key inequalities
THANK YOU!

Questions? Comments?

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