



BC Centre for Disease Control
Provincial Health Services Authority

Indicators of Health Equity for B.C. Premature Mortality

What is health equity and why is it important?

- Health equity exists when all are able to reach their full health potential and are not prevented from doing so from unjust or unfair differences across race, culture, religion, sex, gender, age, socioeconomic status, or other socially determined circumstances.

Why monitor health equity in B.C.?

- Identify areas to focus upstream public health policies or programs
- Provide consistency and comparability across BC
- Form the basis for target setting

In 2014, the Population & Public Health team and project stakeholders developed a suite of priority health equity indicators in B.C. Among the 52 indicators, we looked at differences in premature mortality by **sex, geography** (health area) and socio-economic factors: **income, education, employment, and social and material deprivation**.

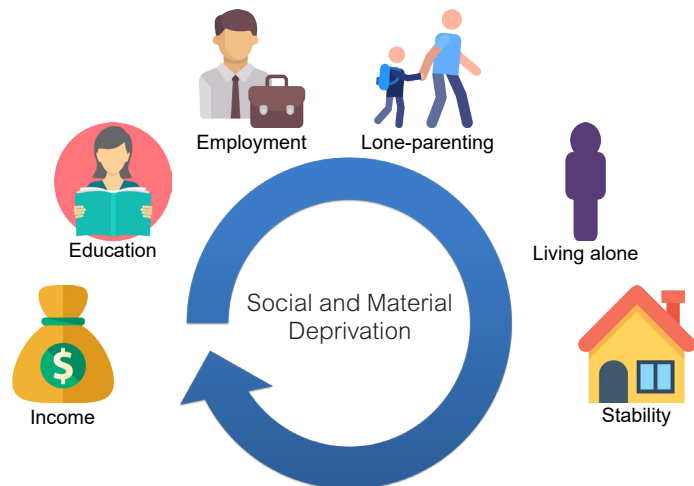
To what extent do people die prematurely from **preventable** and **treatable** causes when we look at sex, where they live, or factors related to their social and economic circumstances? ▶

What is premature mortality?

- Premature mortality:** number of deaths before age 75 from avoidable causes per 100,000 population. It is a measure of unfulfilled life expectancy that gives more weight to the death of younger people than to older people.
- Preventable premature mortality** refers to premature deaths from preventable causes. These could have been prevented through effective primary prevention strategies such as using seatbelts when driving, living a healthy lifestyle, and immunization (i.e., incidence-reducing causes).
- Treatable premature mortality** refers to premature deaths from treatable causes. These could be averted by effective secondary or tertiary-level prevention strategies, including screening and chronic disease management programs (i.e., fatality-reducing causes).

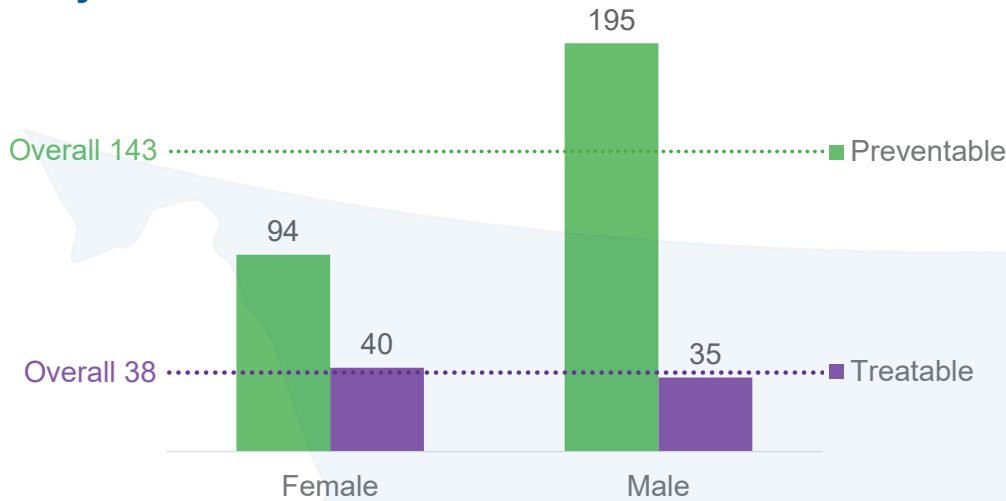
What is social and material deprivation?

- These are measures of socio-economic status that takes into account income, education, employment, lone-parenting, living alone, and living/housing stability
- Based on where an individual lives (area-based)
- Used when data on an individual's socio-economic status is unavailable



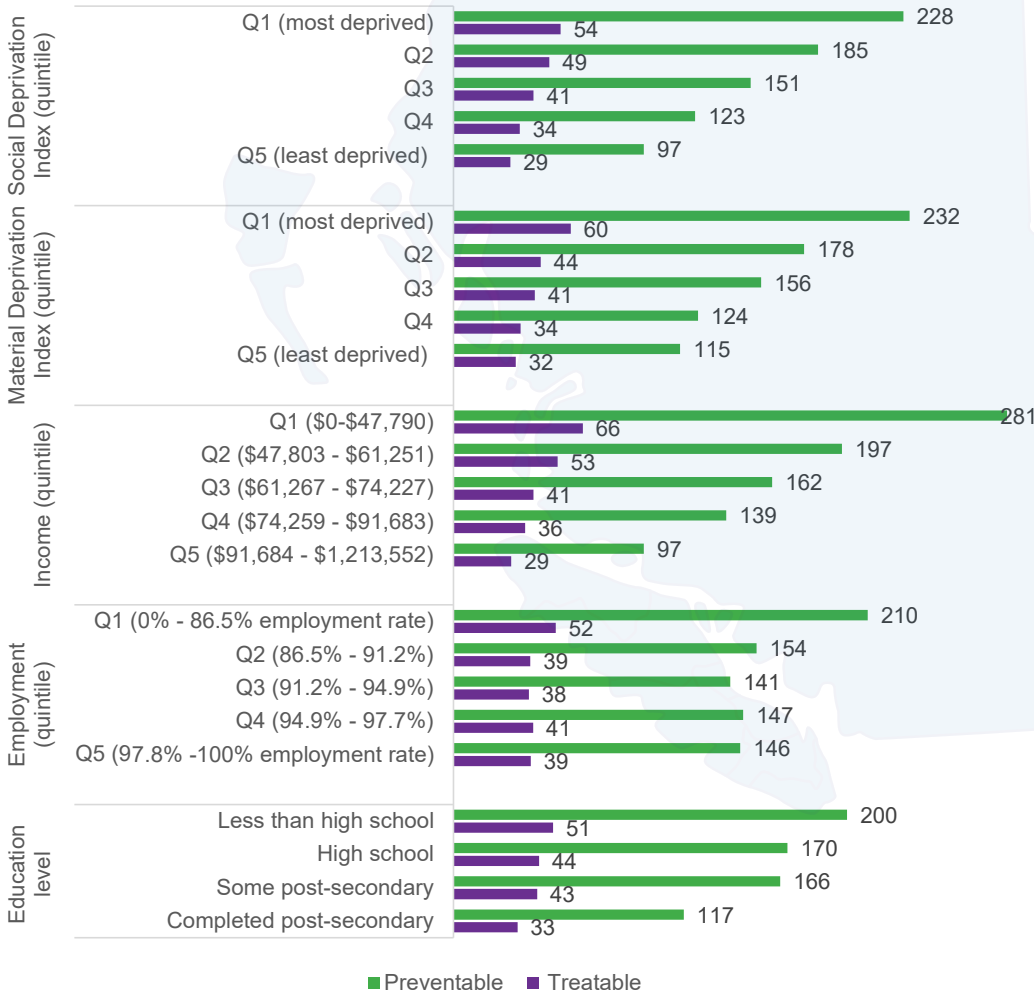
Premature mortality rates per 100,000 population, BC, 2009-2013

...by Sex



Males were **twice as likely to die prematurely** from preventable causes. However, females were somewhat more likely to die prematurely from treatable causes.

...by Socio-economic determinants of health



The social deprivation and material deprivation index scores of a geographic area were grouped into 5 equal parts in increasing order (quintiles) from most to least deprived.

People who lived in the most deprived areas are over **twice as likely to die prematurely** from preventable causes than those of the least deprived areas. A similar pattern was seen for treatable causes.

Both preventable and treatable premature mortality rates declined consistently from most deprived to least deprived quintiles.

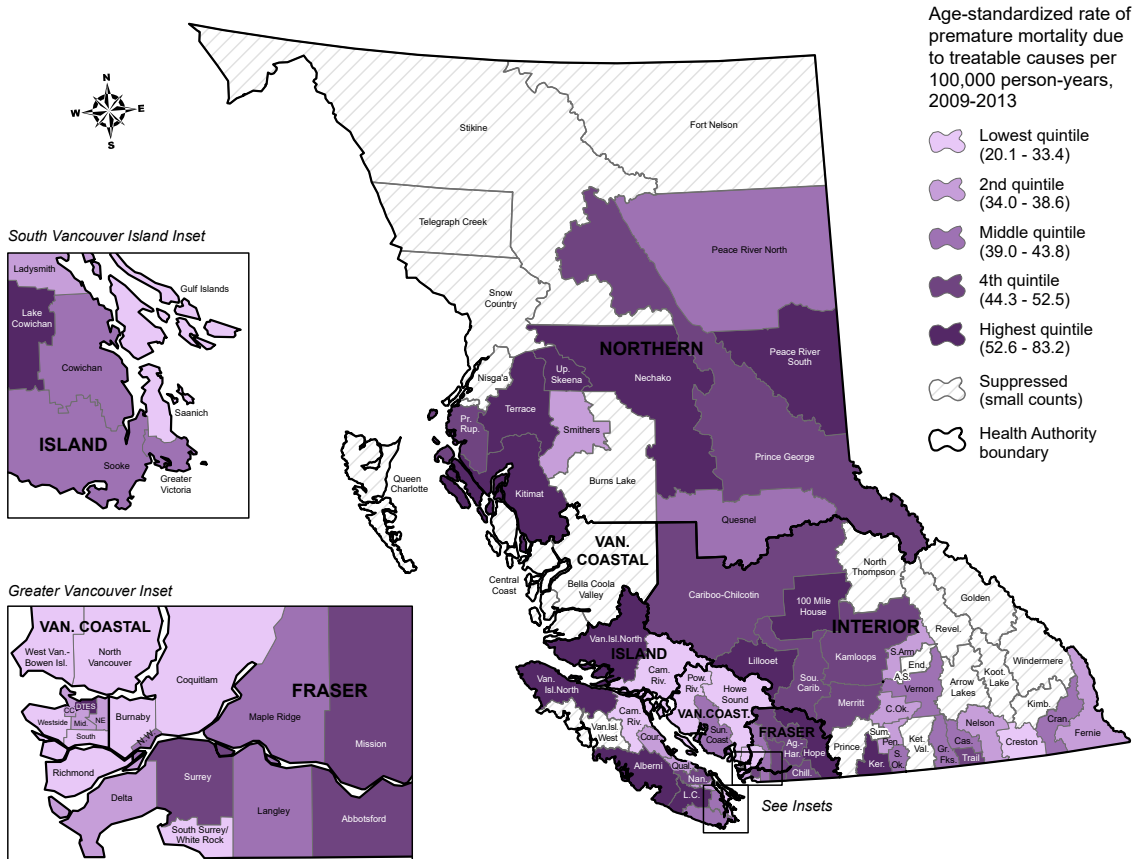
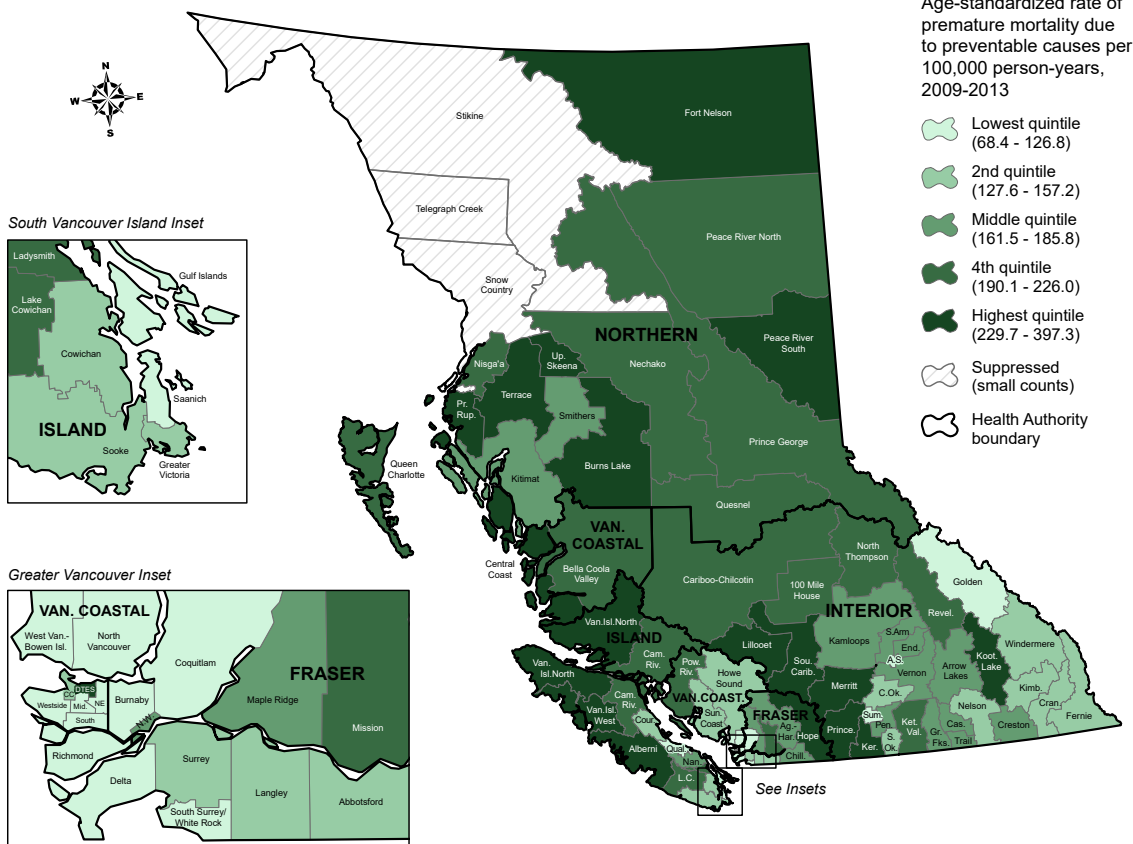
Income and employment rate were also grouped into 5 equal parts in increasing order (quintiles) from lowest to highest. Those living in areas with lower income and employment rates were **more likely to die prematurely**. Those with higher level of education were less likely to die prematurely.

...by Geography

■ There were notable differences in preventable (upper map) and treatable (lower map) premature mortality between LHAs indicating geographic disparities across B.C.

■ Vancouver-Westside (68.4 deaths per 100,000 population) had the lowest preventable premature mortality rate, whereas the Vancouver-Downtown Eastside (397.3 deaths per 100,000 population) had the highest.

■ Golden (13.1 deaths per 100,000 population) had the lowest treatable premature mortality rate, whereas Central Coast (98.5 deaths per 100,000 population) had the highest.



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