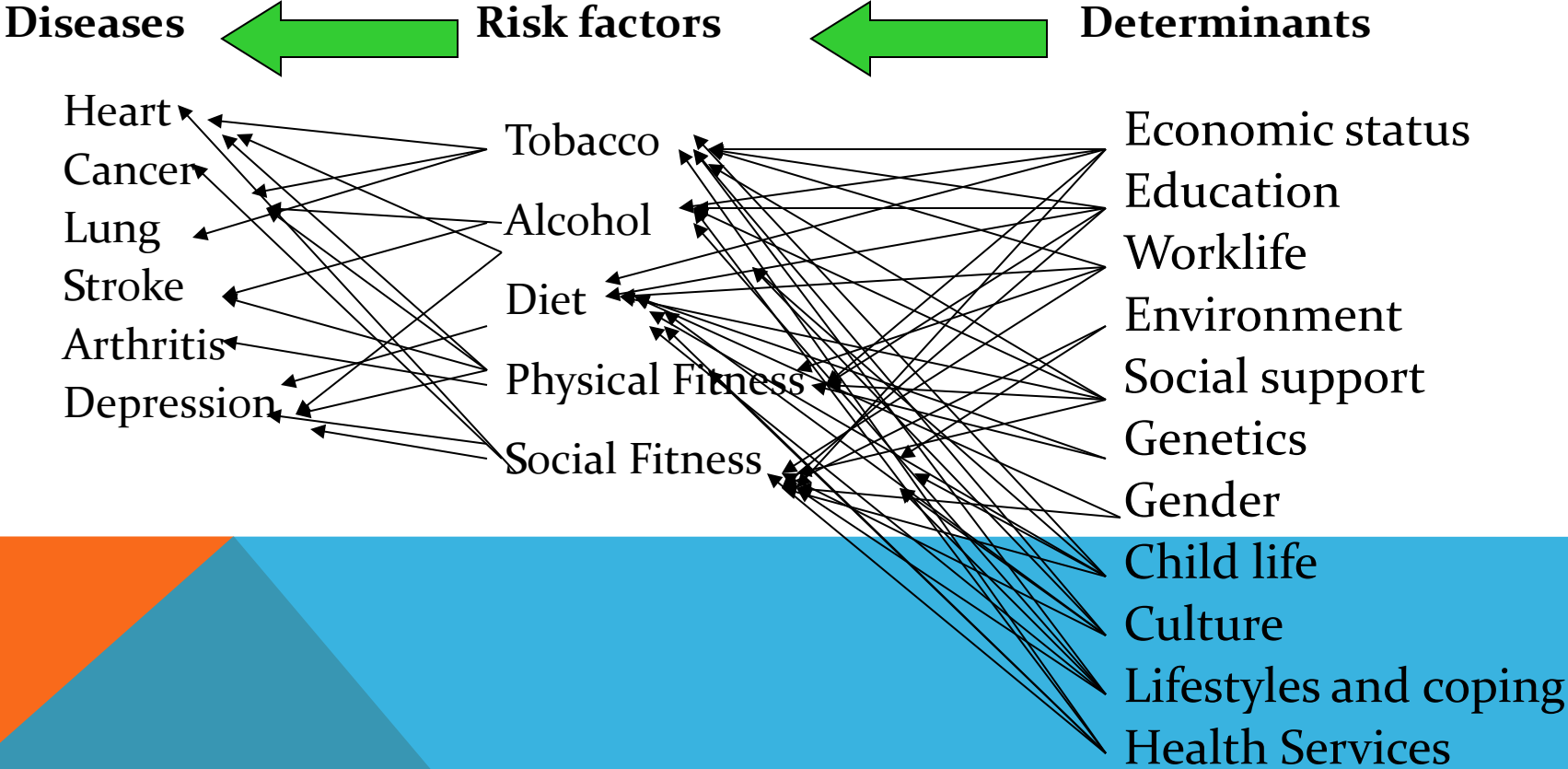


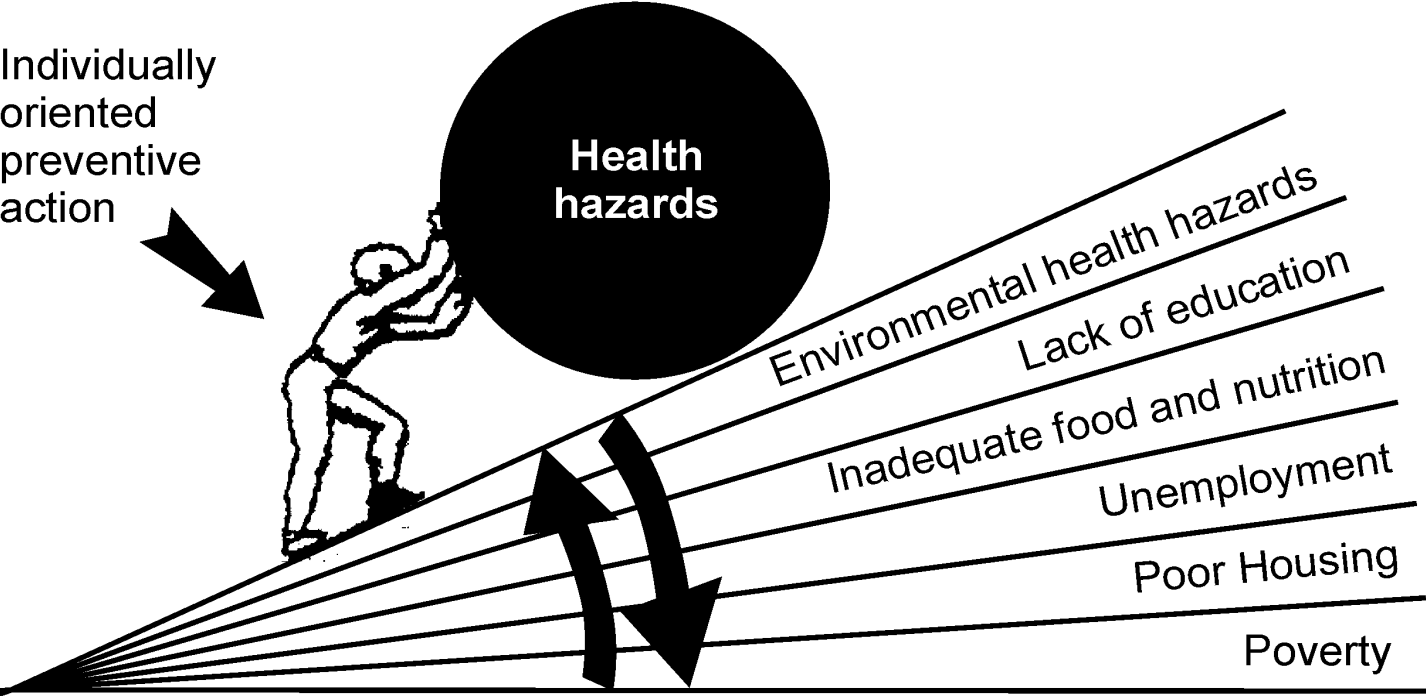
USING **BIG** DATA
TO DO **BIG** THINGS

COMING TOGETHER FORUM
MAY 6, 2015
PAUL HASSELBACK

DETERMINANTS OF HEALTH



The Health Gradient



Source: adapted from Making Partners: intersectoral action for health.

THINKING **BIG**

Values

Impact

Changes

Emotions

Numbers

Differences

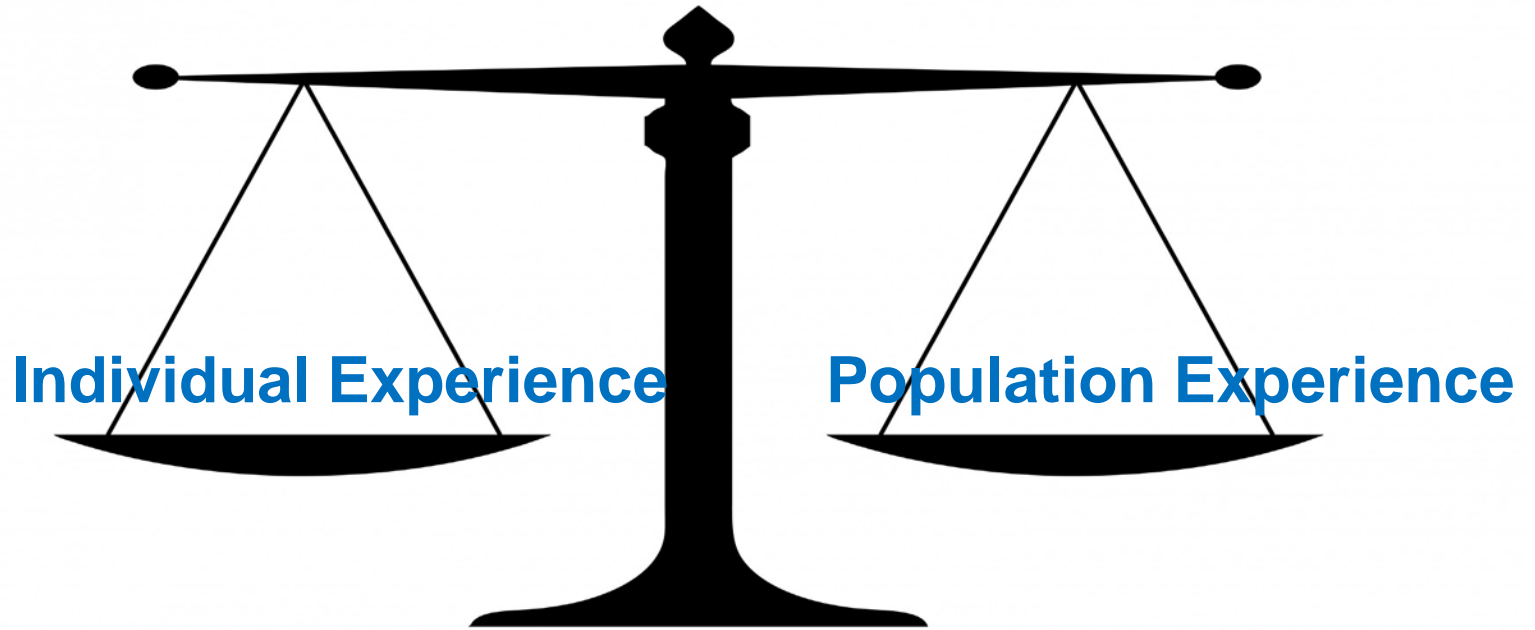


BIG VALUES

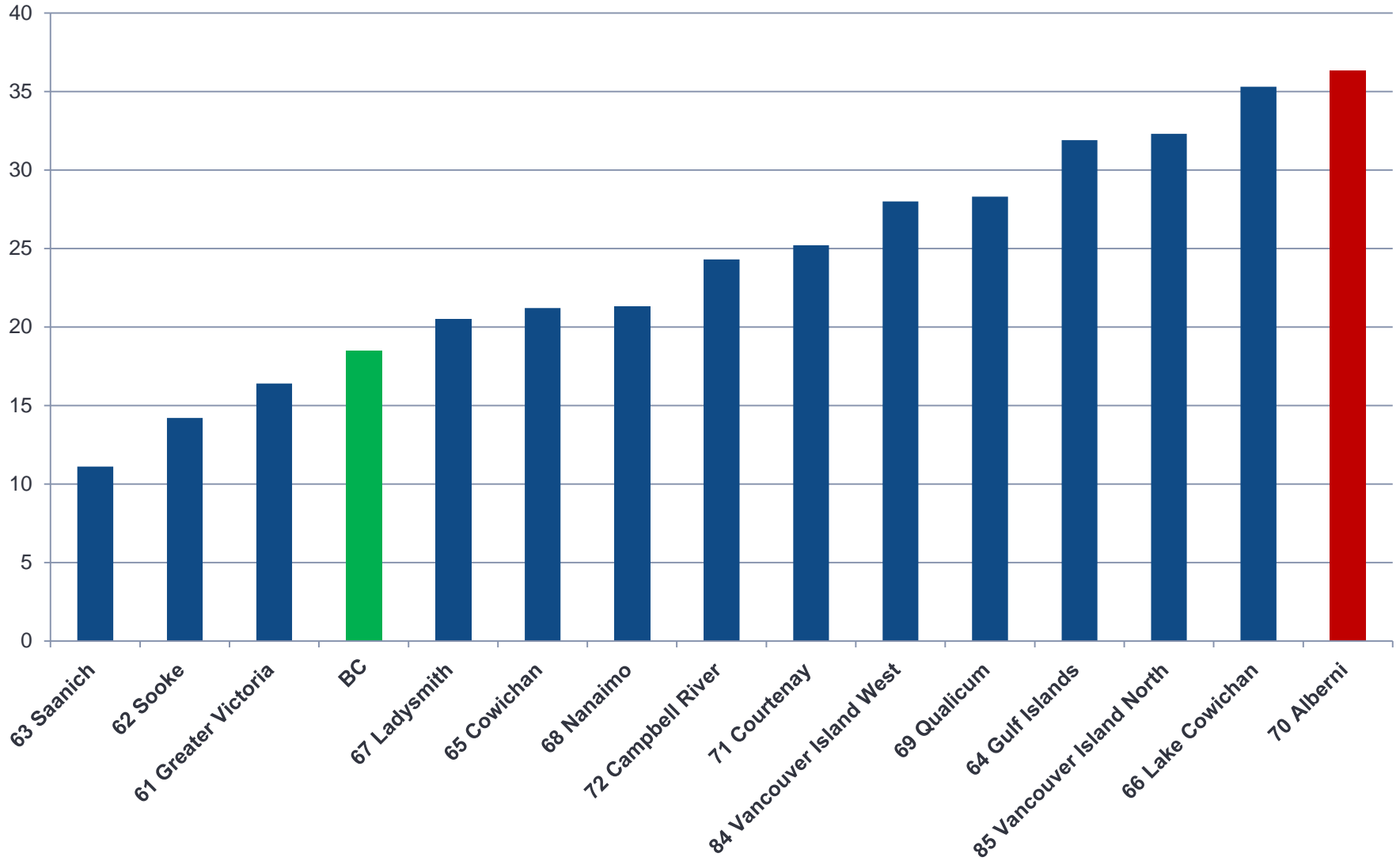
- **What does your community value the most?**
- **What do you value the most?**



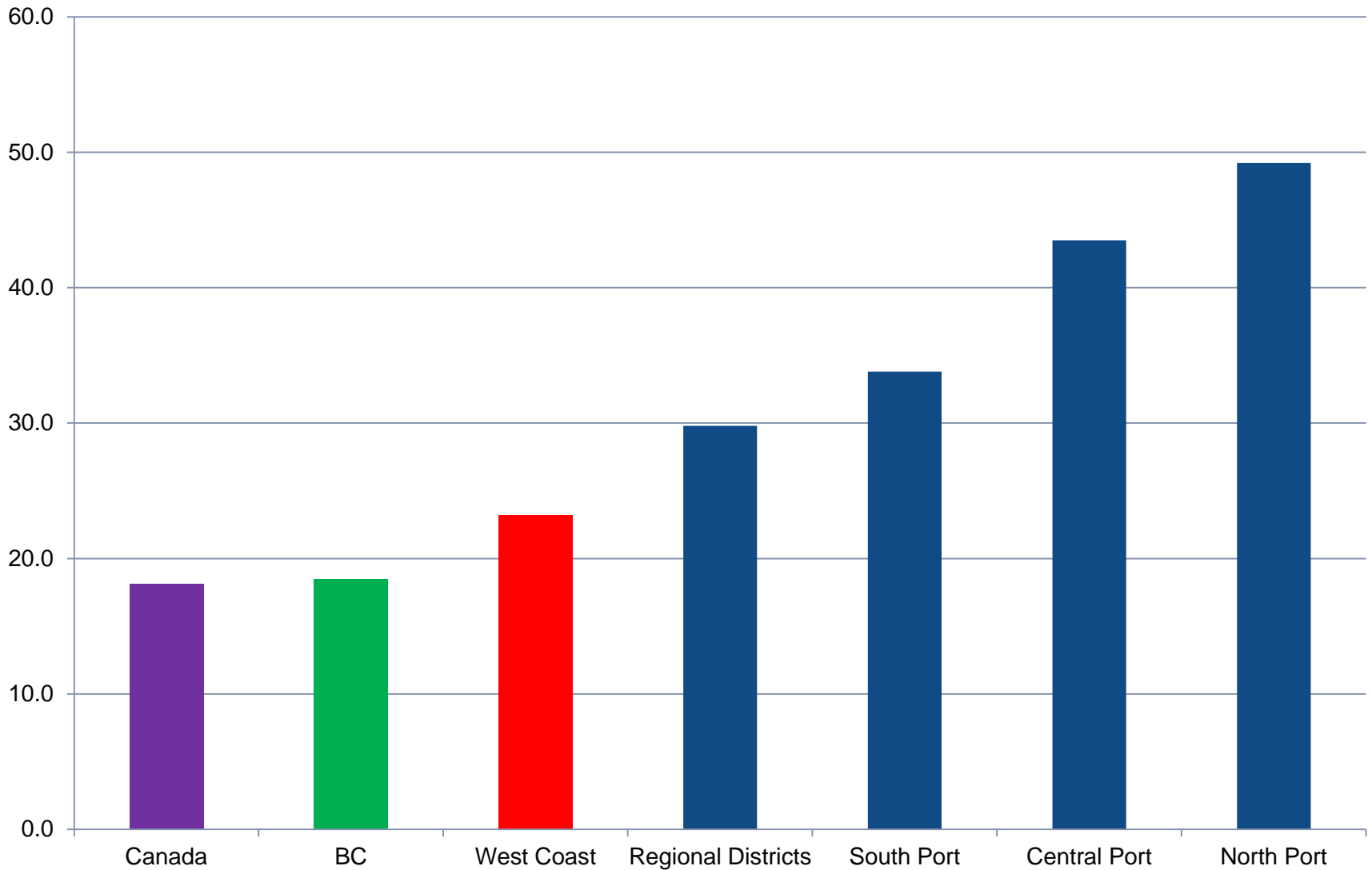
WEIGHING THE BENEFITS



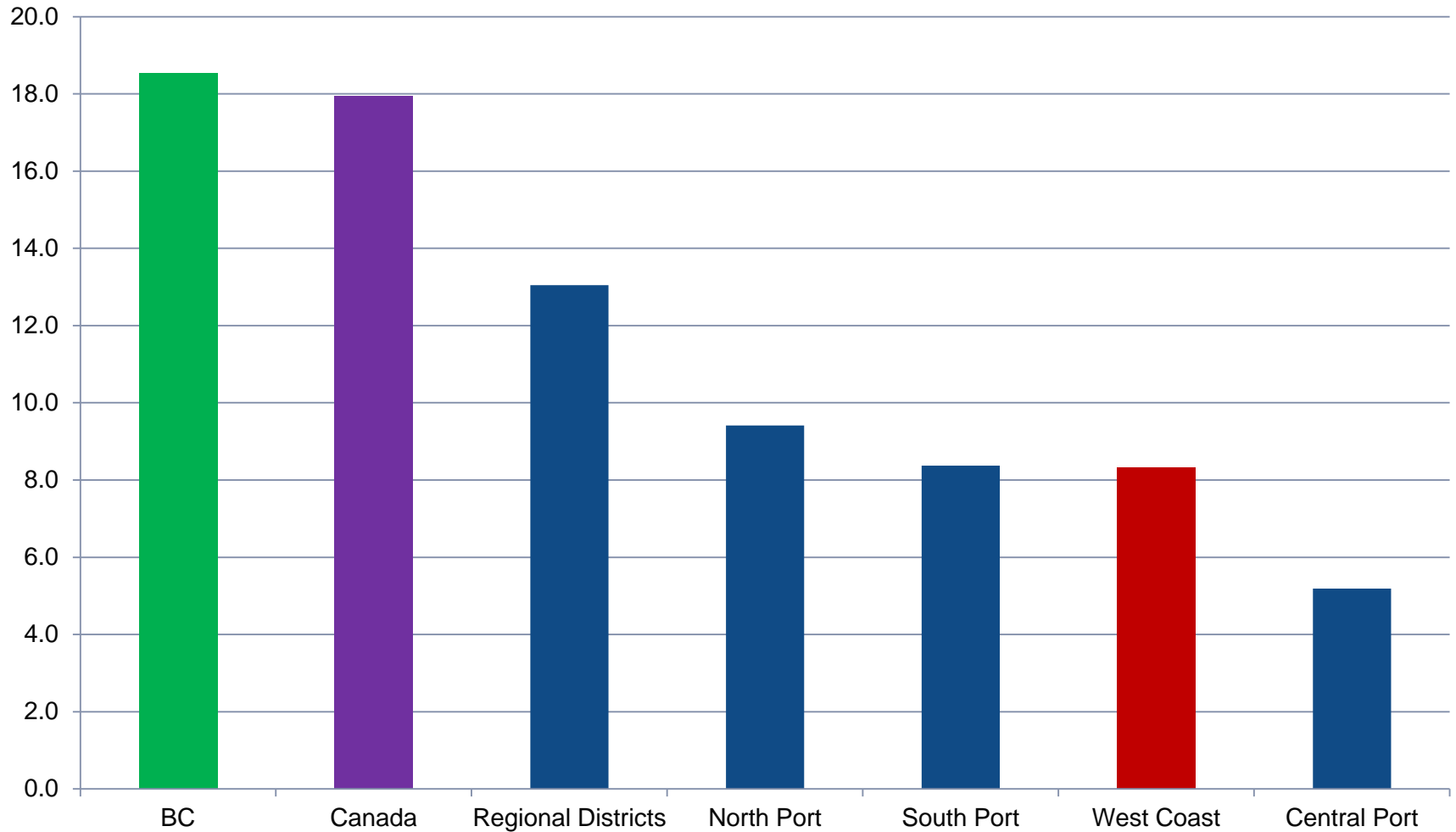
Percentage of Children less than 6 years Living in Low-Income, 2011 Census



Prevalence of Low-income based on LIM (after tax) for Population under 6 living in Private Households

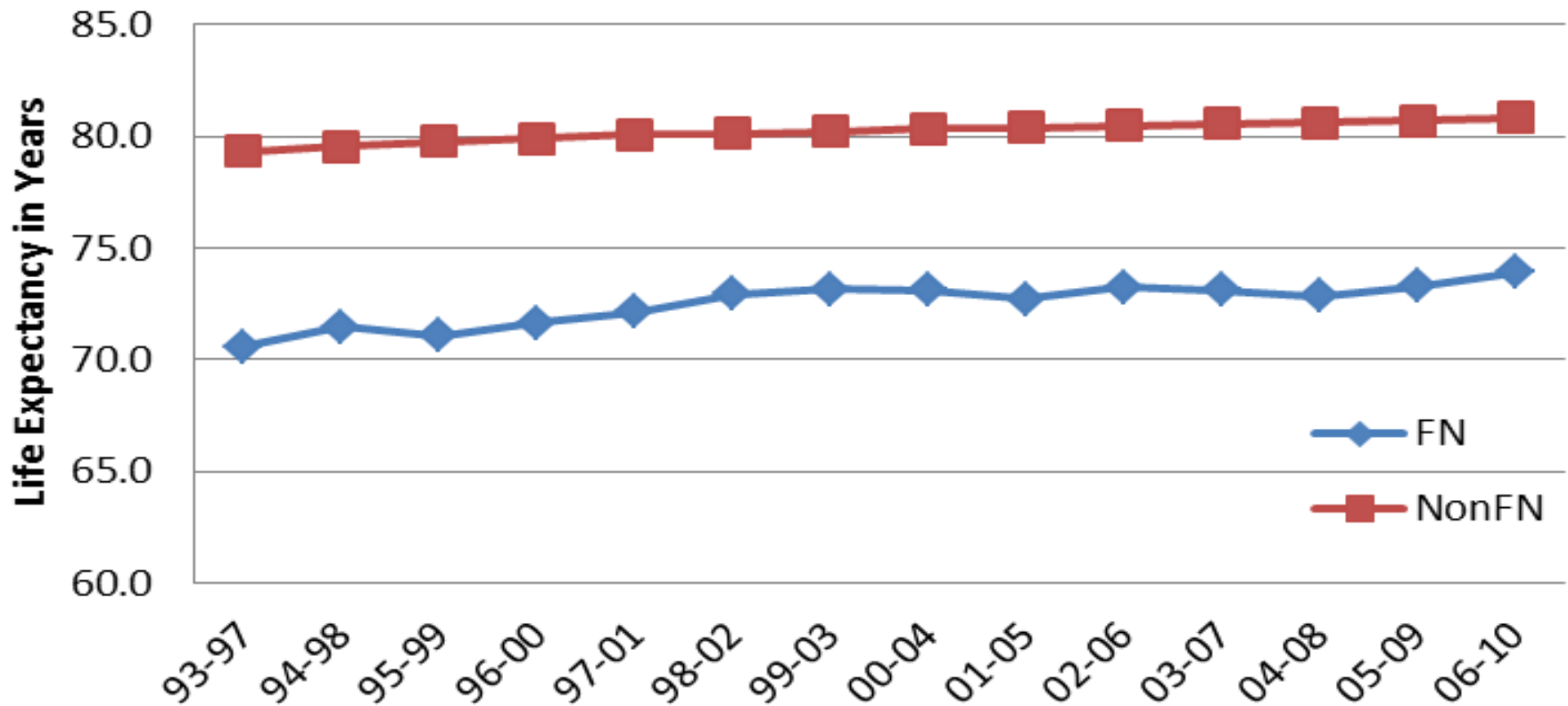


% HIGH INCOME FAMILIES



VALUE - EQUITY

Vancouver Island Region Life Expectancy in Years, FN vs NonFN, 1993-2010



Source: BC Vital Statistics Agency, data as of April 17, 2012 (First Nations individuals identified through linkage to the First Nations Client File)

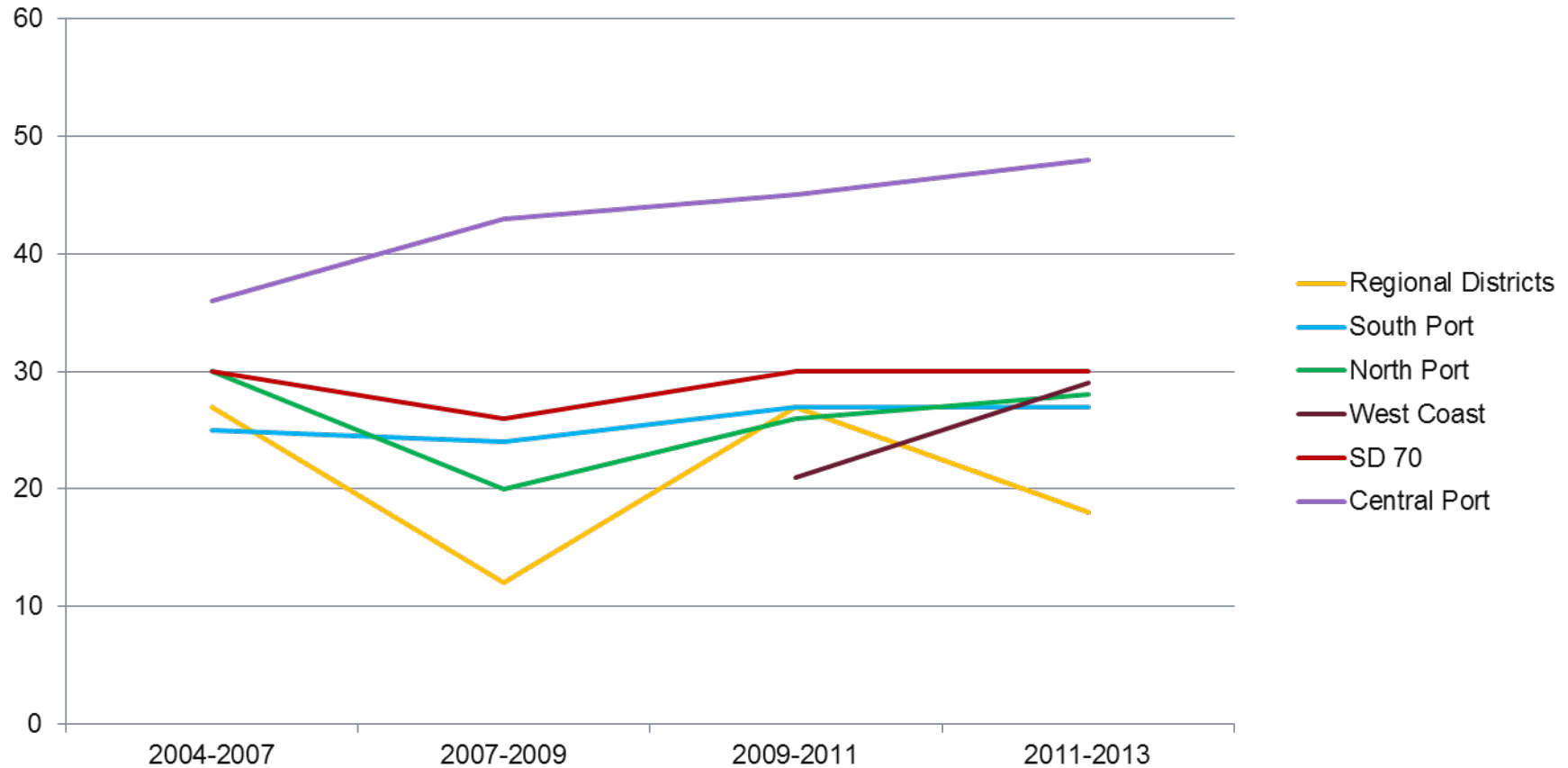
BIG NUMBERS

- **What just feels like it is too little or too much ?**
- **What causes the most number of problematic events?**

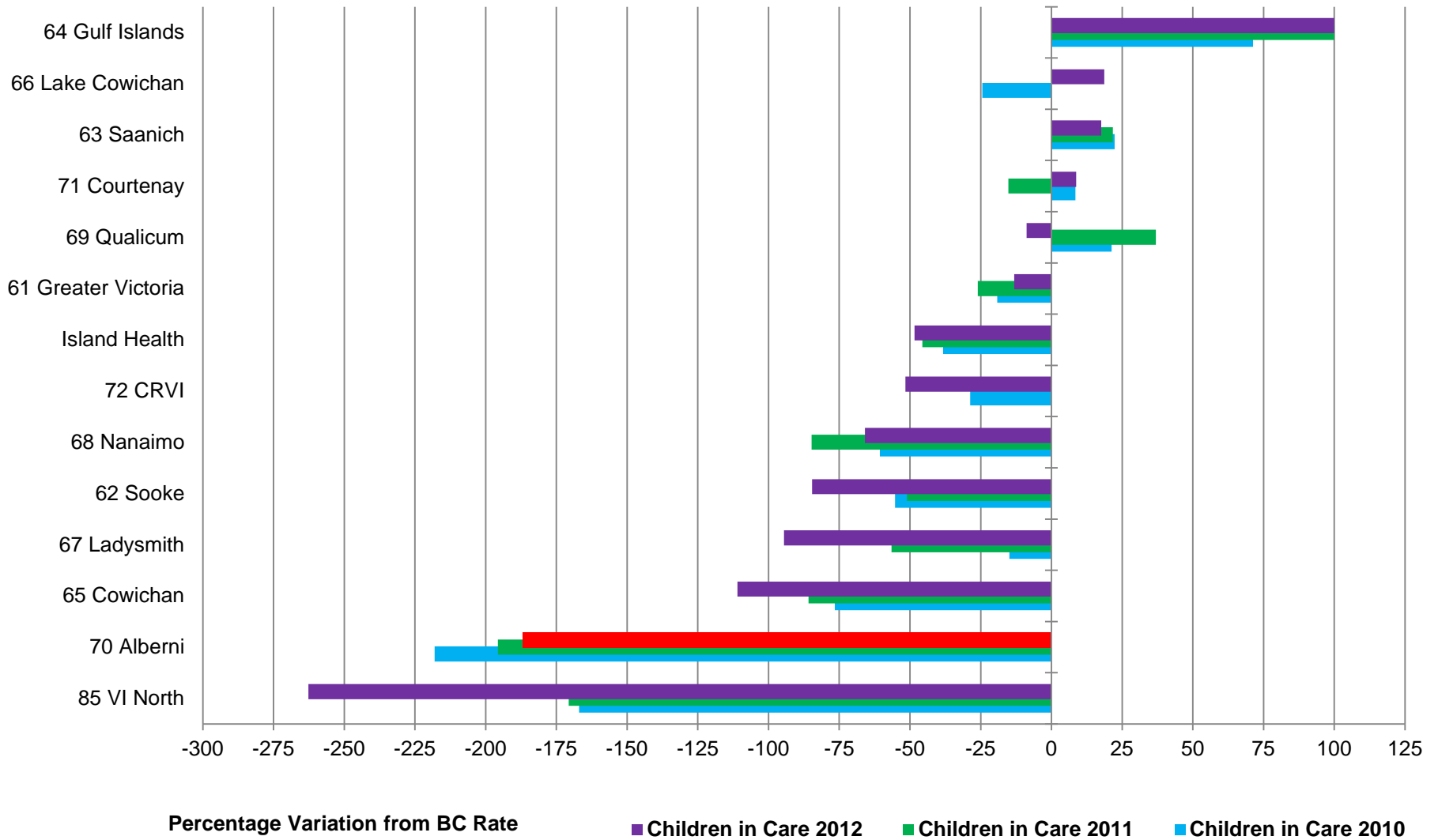


EARLY DEVELOPMENT INDEX 2004-2013

Vulnerability on One or More Scales, 2004 to 2013



Children in Care Island Health, 2010 - 2012

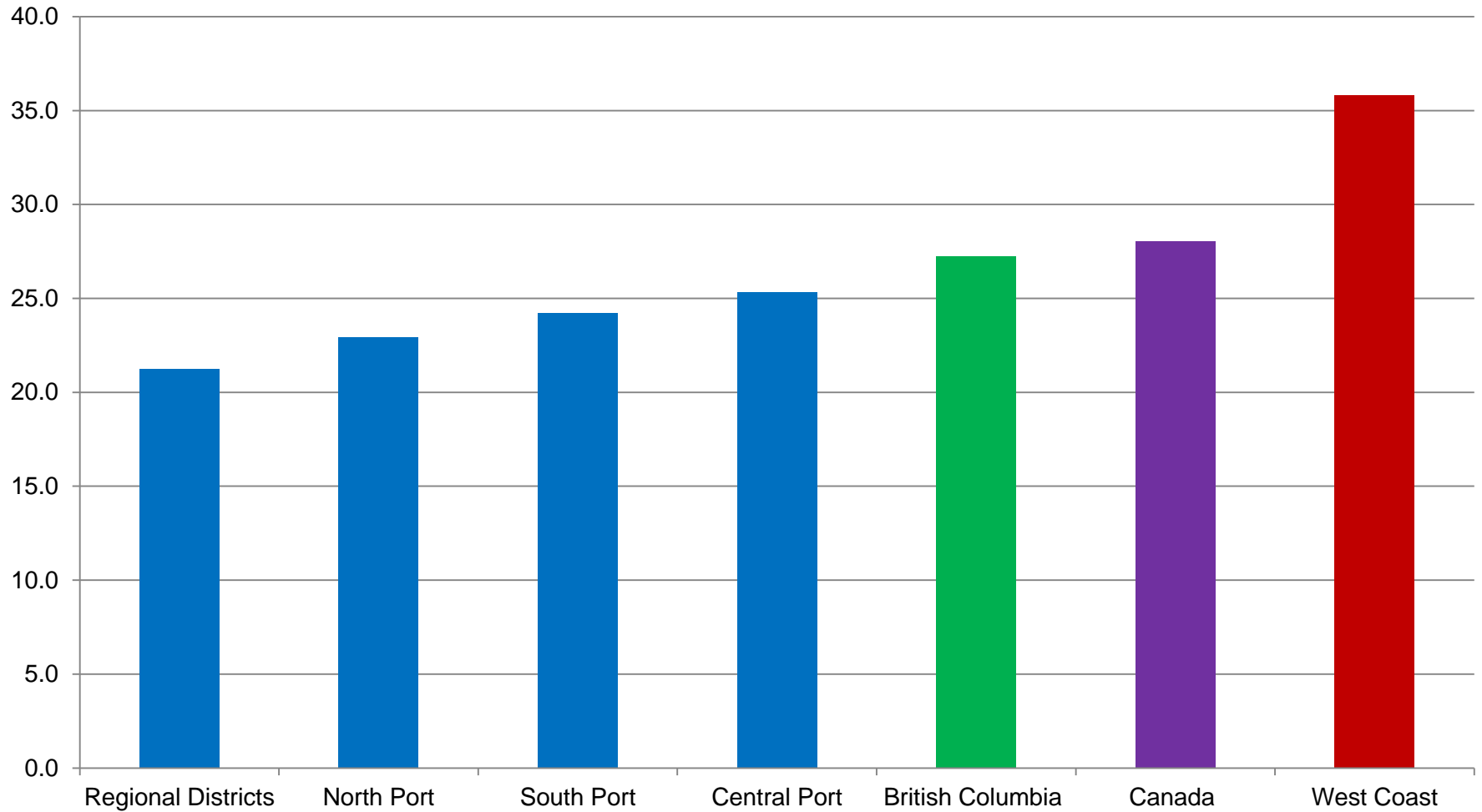


BIG DIFFERENCES

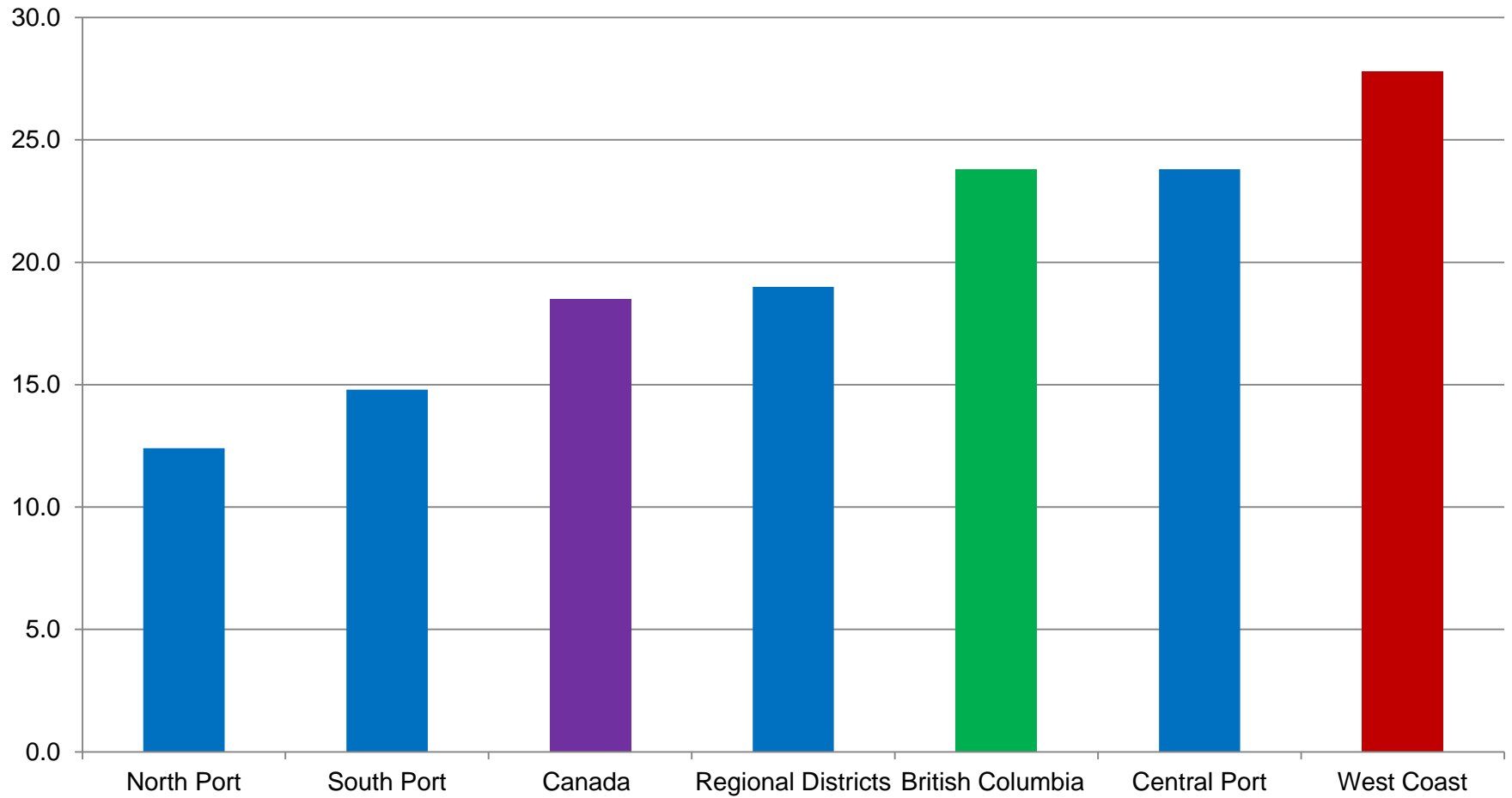
- **What stands out when compared with others**



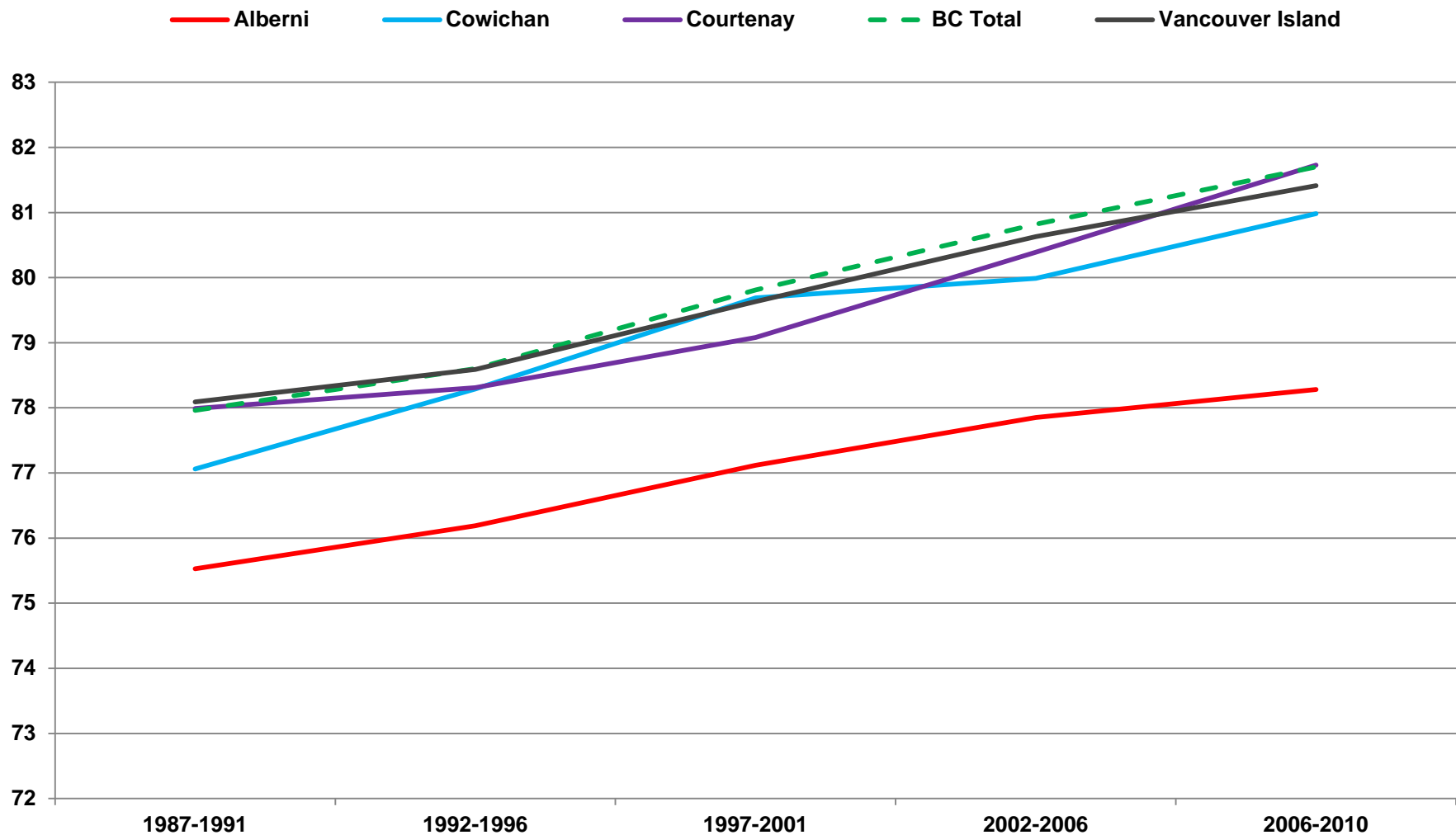
% SINGLE (NEVER MARRIED)



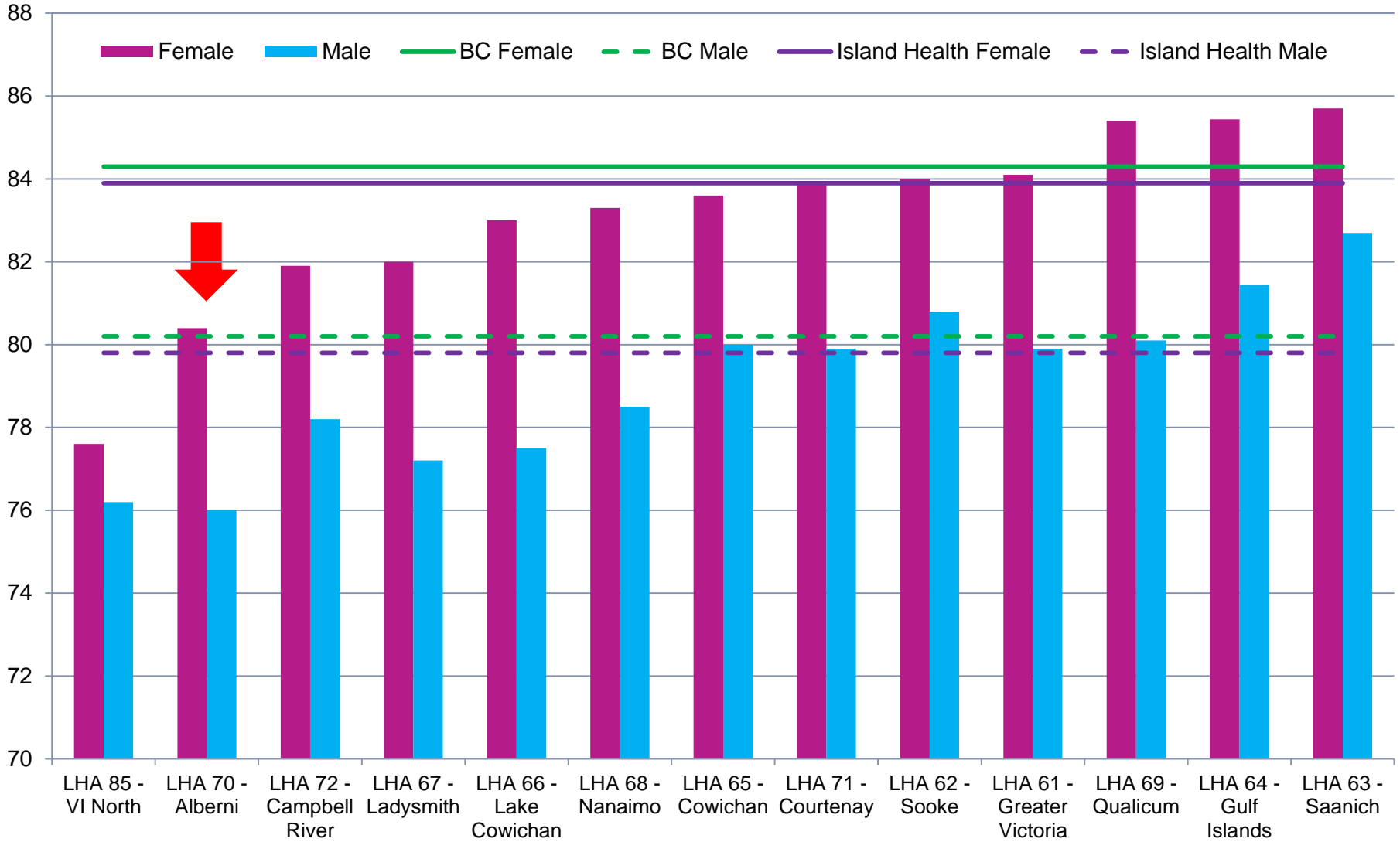
% SPENDING OVER 30%



Life Expectancy of Alberni Residents Compared to Cowichan, Courtenay, Island Health and BC 1987-1991 to 2006-2010

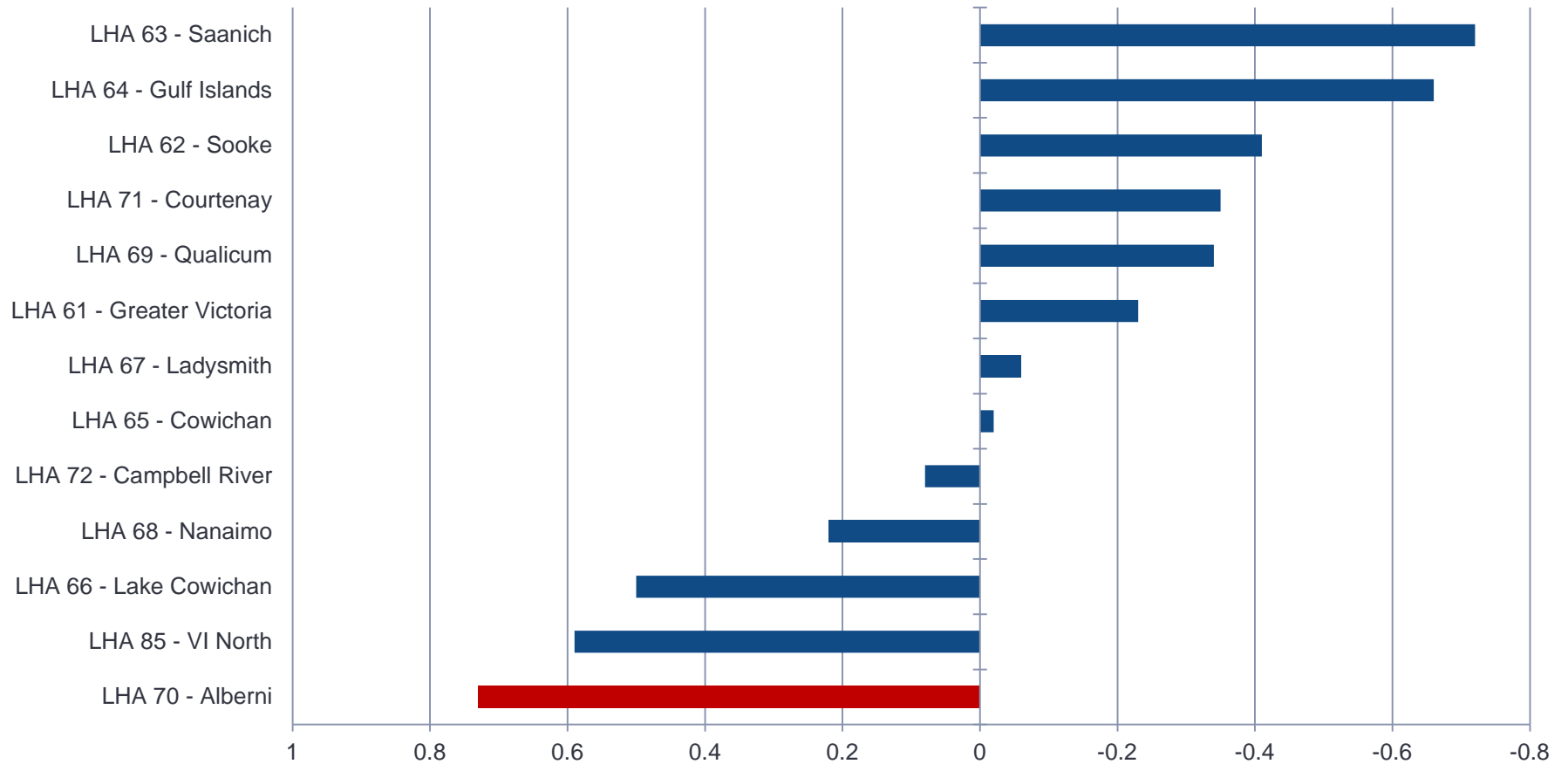


Life Expectancy of Island Health Residents Compared to Island Health and BC 2009-2013

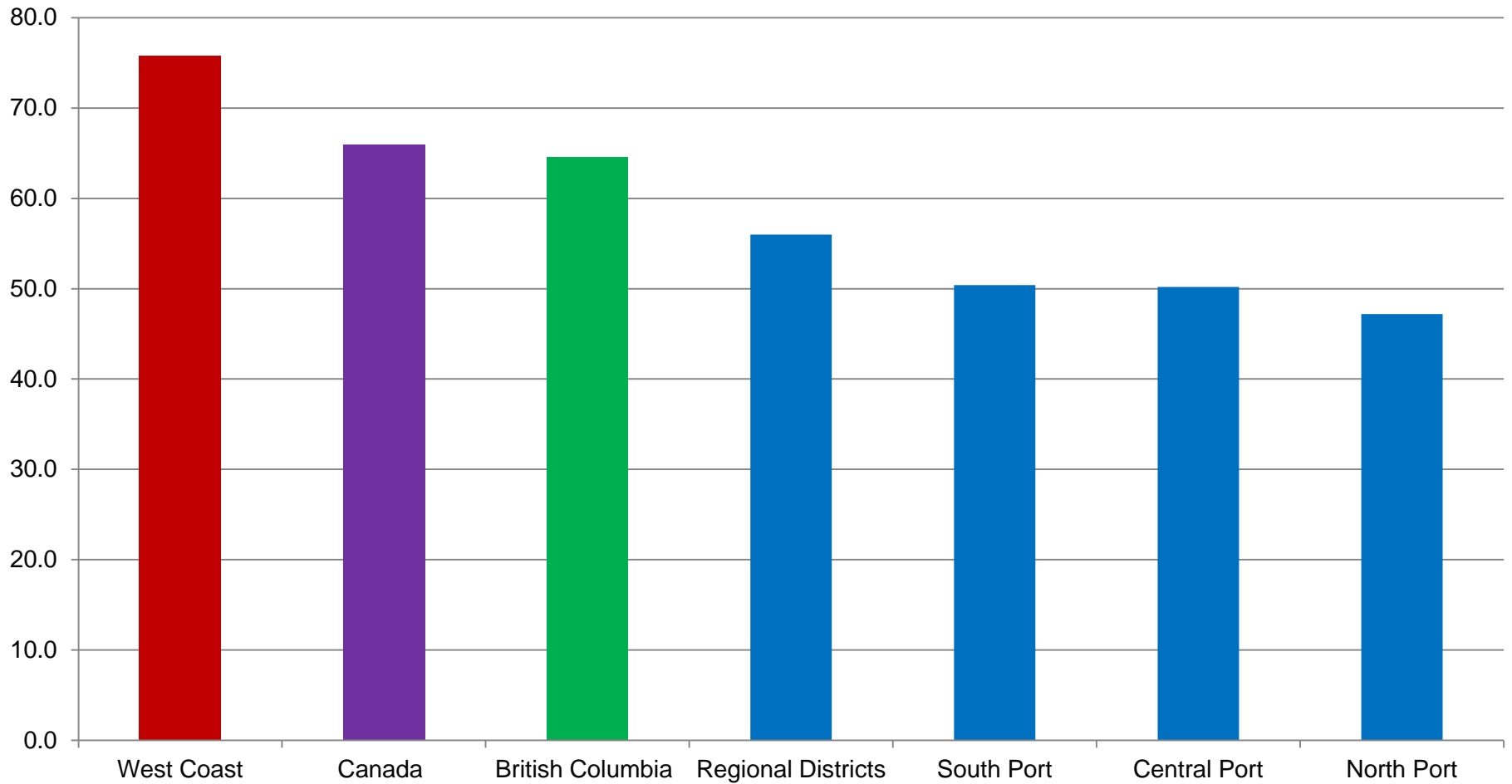


BC STATS SOCIO-ECONOMIC INDEX

Socio-Economic Index - 2012 BC Stats



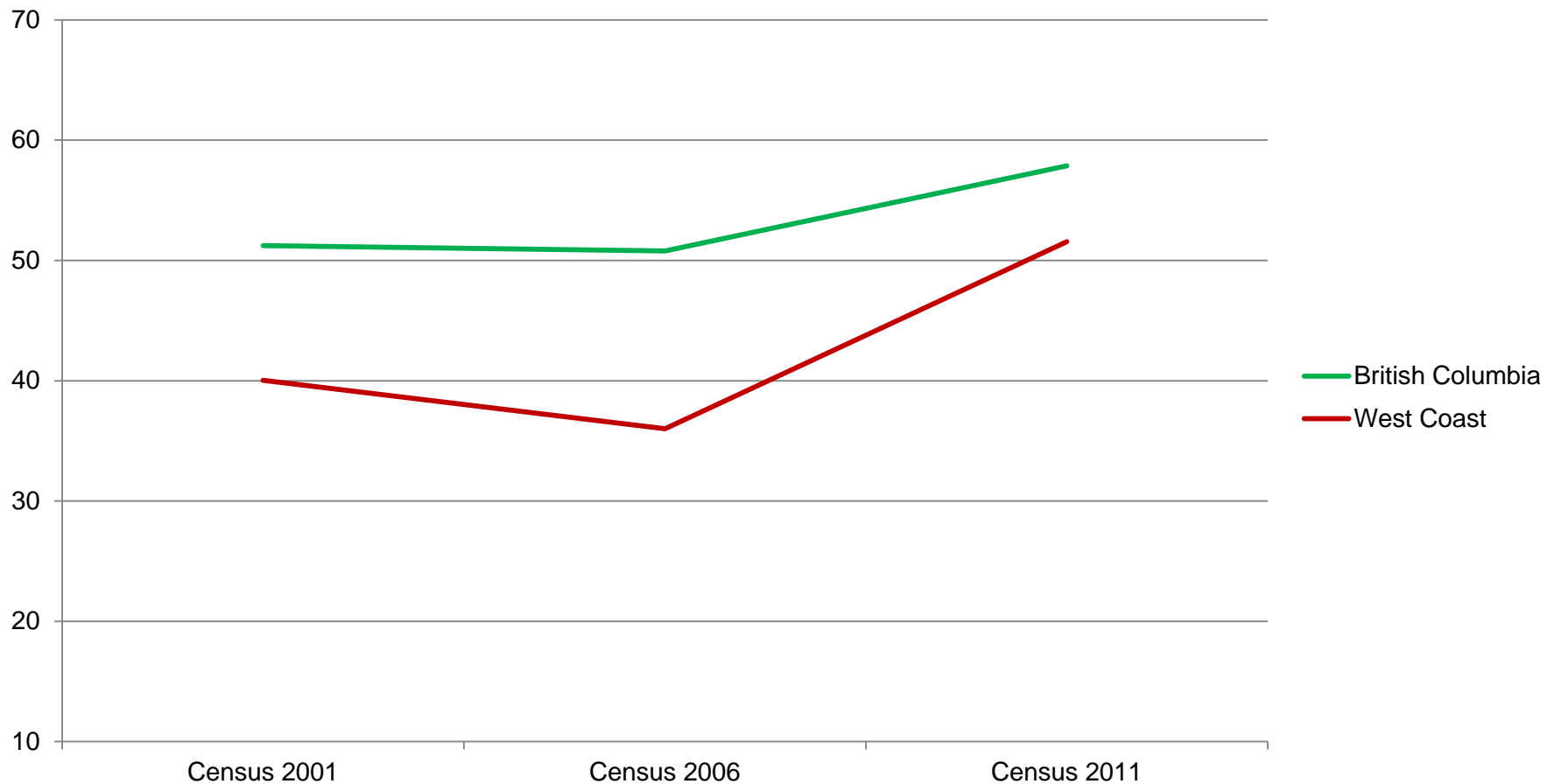
LABOUR FORCE PARTICIPATION



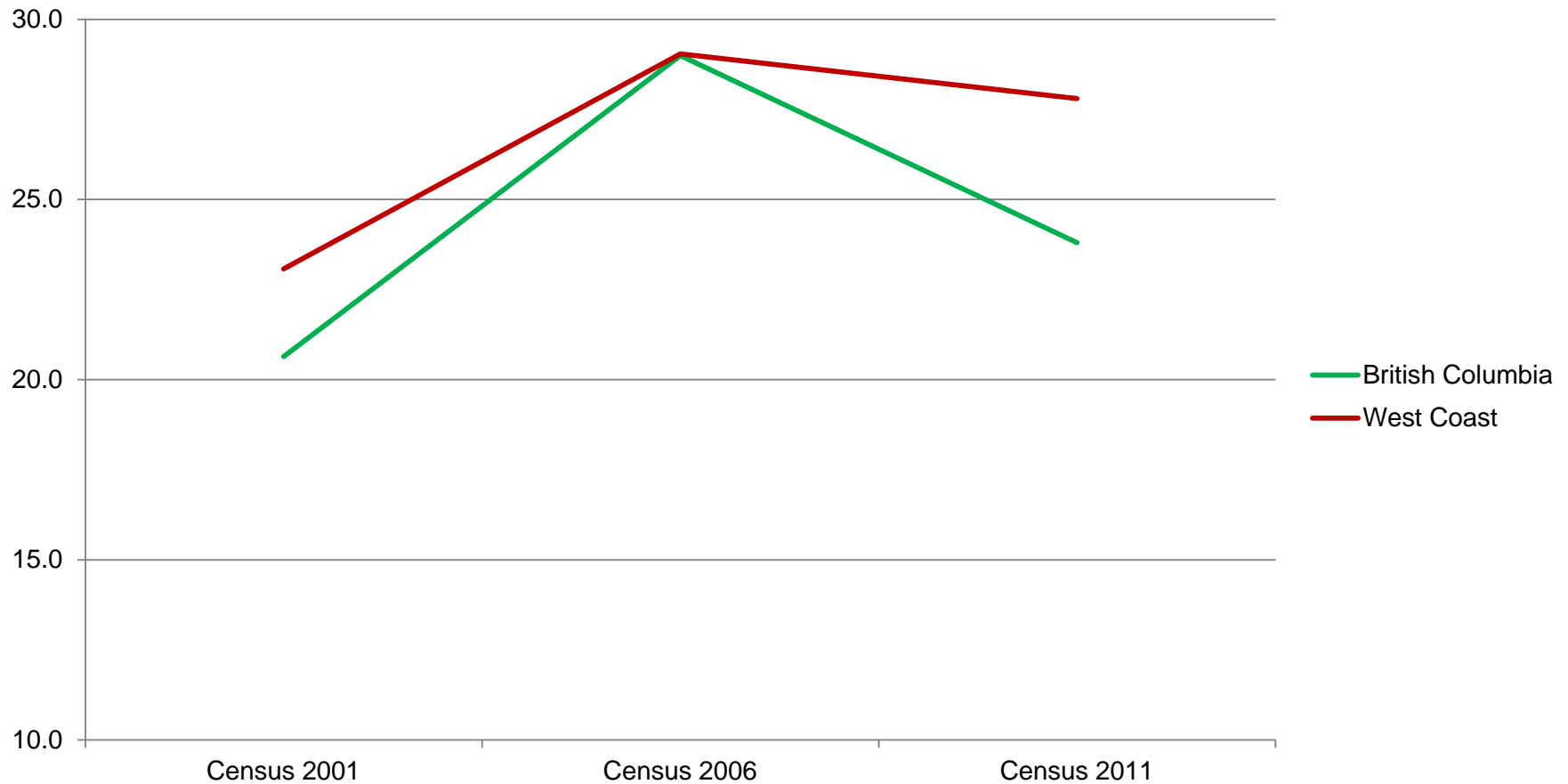
BIG CHANGES

- **Monitoring data over time.**
 - **Downward trending (or something bad getting more common).**
 - **Upward trending (or something getting better).**
 - **No changes (may be good or bad).**

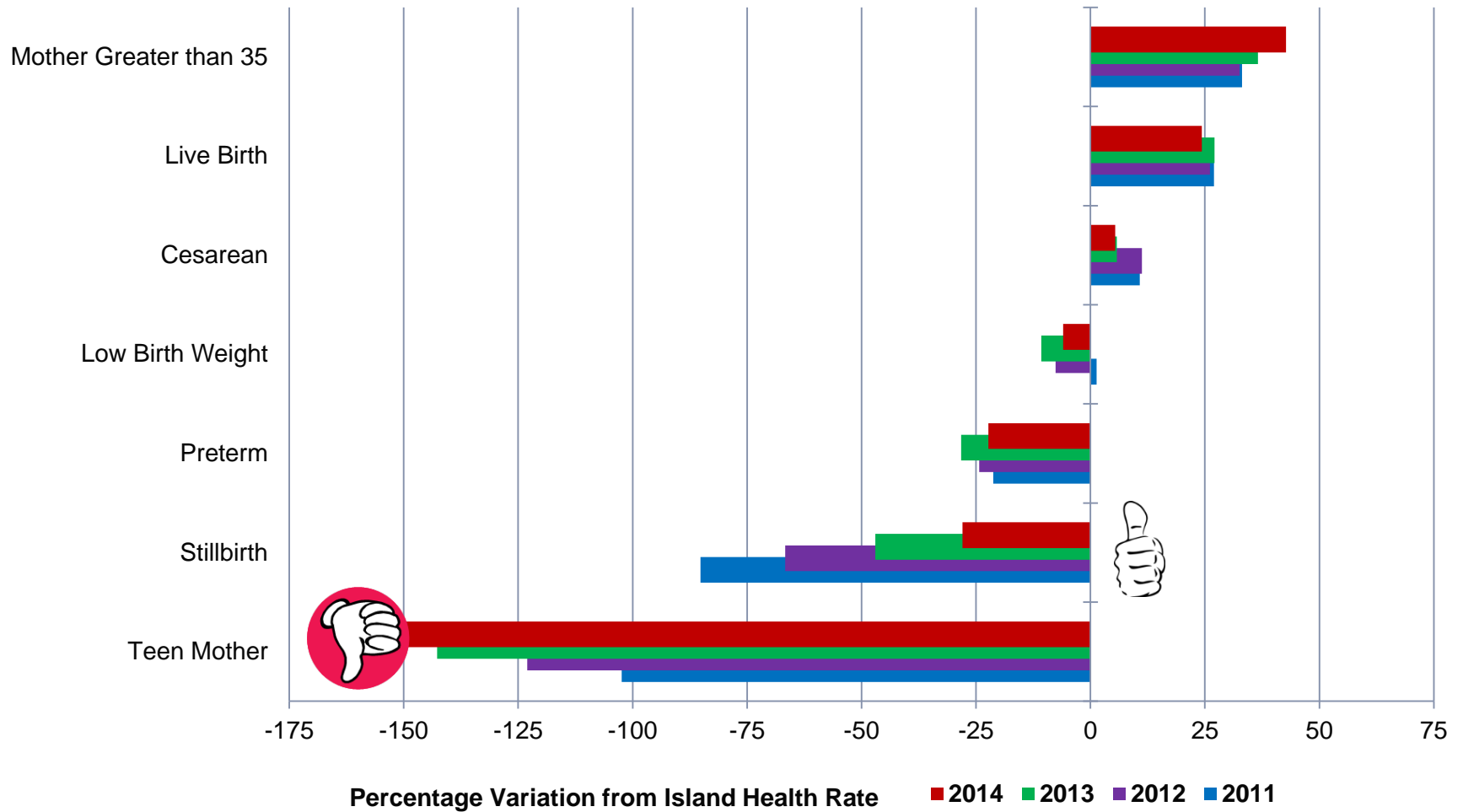
% OF MARRIED OR LIVING COMMON-LAW FAMILIES OVER THREE CENSUS



% SPENDING >30% OF INCOME ON ACCOMMODATION OVER TIME.



BIRTH STATISTICS



BIG IMPACT

Attributable risk fraction

Preventable fraction

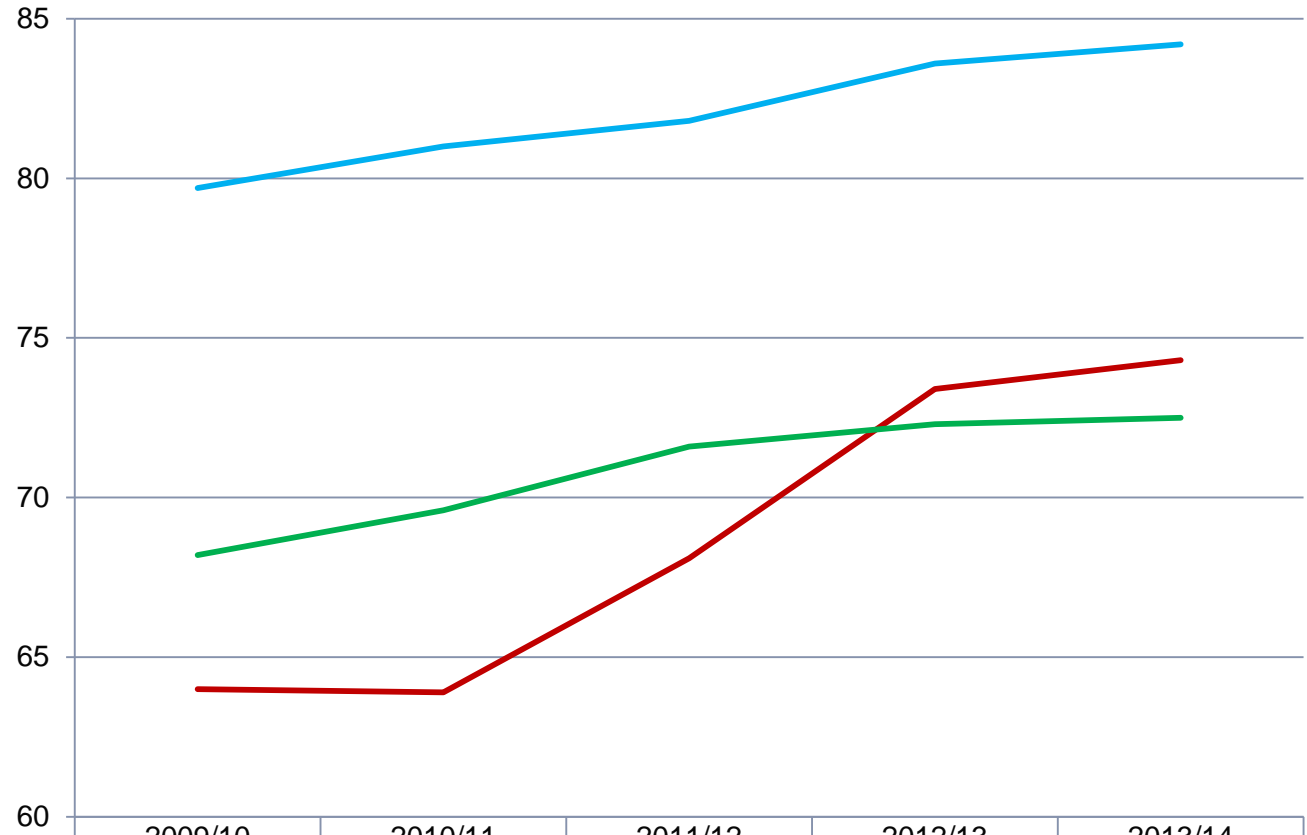
What can you do that will make a difference locally?

Internally directed actions

Externally directed activity



HIGH SCHOOL SIX YEAR GRADUATION RATE



Alberni - SD 70

64

63.9

68.1

73.4

74.3

Nanaimo-Ladysmith - SD 68

68.2

69.6

71.6

72.3

72.5

BC

79.7

81

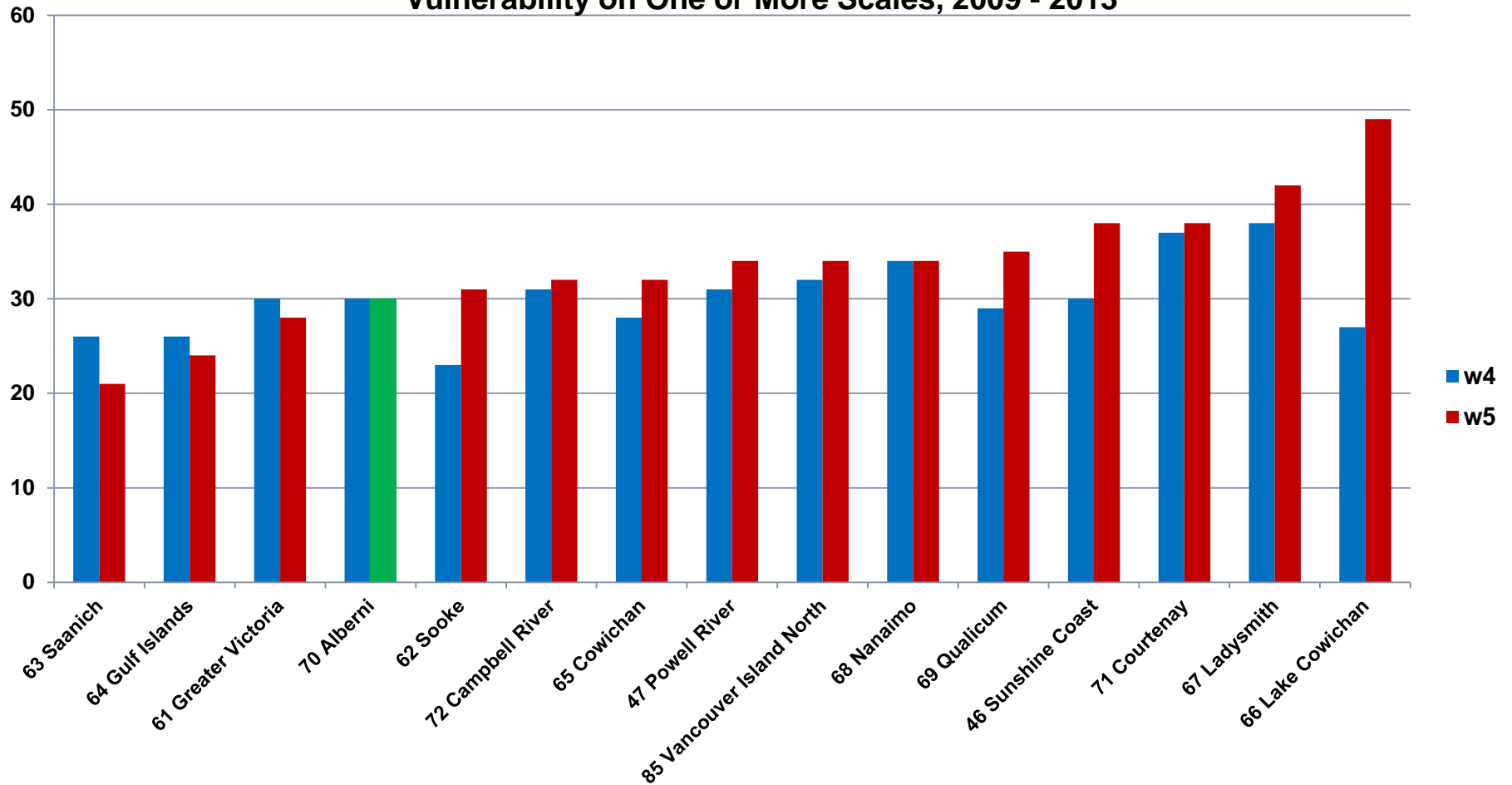
81.8

83.6

84.2

EDI VULNERABILITY BY LHA

Vulnerability on One or More Scales, 2009 - 2013



BIG EMOTIONS

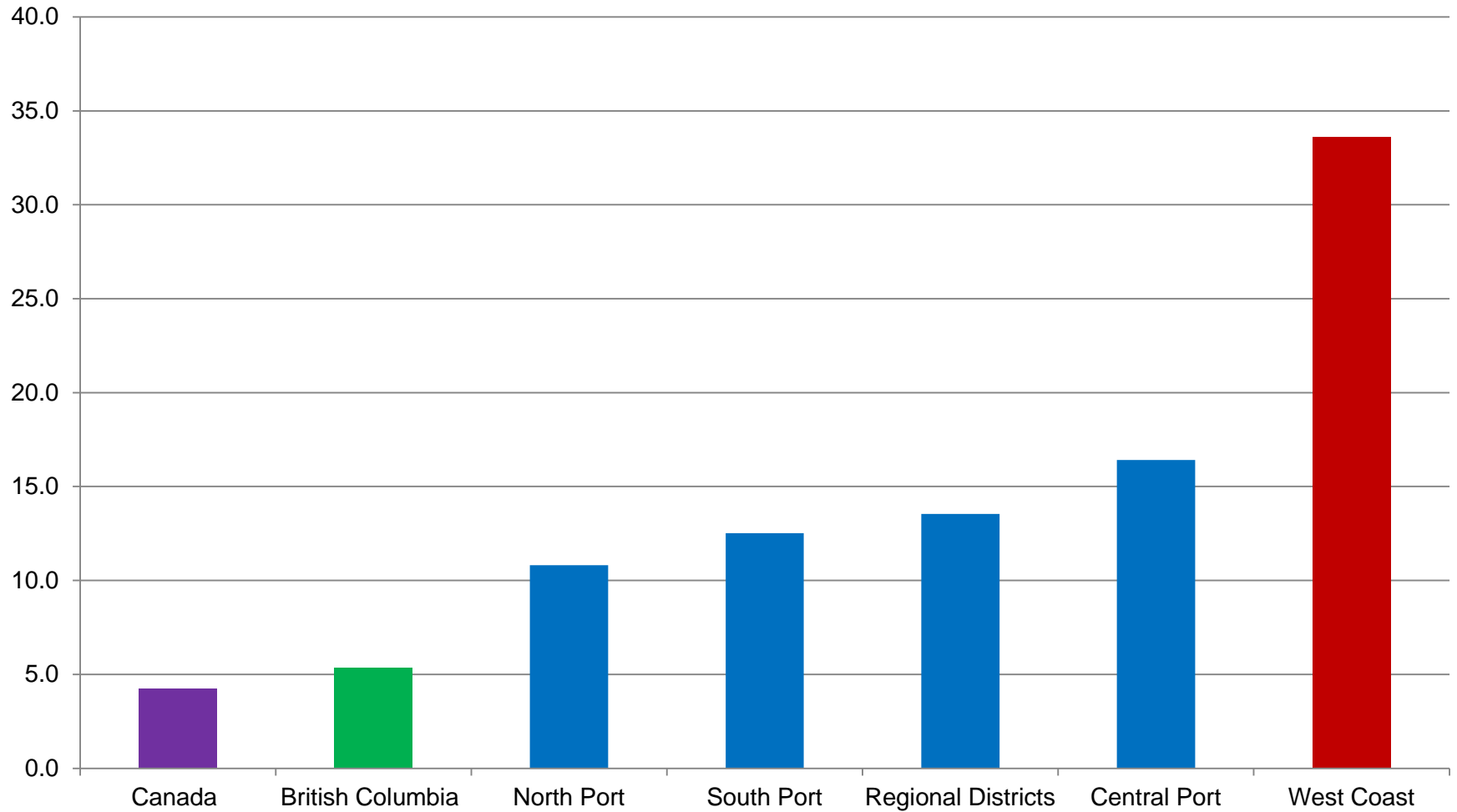
Feeling good facilitates doing more and better.

Early wins

Celebrations of success



% ABORIGINAL



DATA DRIVEN ACTION

Information is a catalyst for change.

Data empowers people.

Data enables decision makers to improve the quality of their decisions.

- Data may dissuade poorer decisions.



KEY DATA SOURCES

Census and National Household Survey

<http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/fogs-spg/?Lang=E>

LHA profiles http://www.viha.ca/mho/stats/lha_profiles.htm
(2010-2013)

McCreary adolescent health survey

http://www.mcs.bc.ca/2013_AHS_Reports

HELP <http://earlylearning.ubc.ca/maps/edi/nh/>

BC Statistics <http://www.bcstats.gov.bc.ca/Home.aspx>

SUMMARY

Many dimensions - slicing and dicing is driven by values

Process of getting there just as important as outcome

Different people have different perceptions - guided by
their personal values

transparency and equity

“Own the podium”

Big wins come with **Big** effort

Big effort follows from **Big** Commitment