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Benchmarking Wellness For British Columbia

This Atlas presents more than 120 different indicators related to wellness, some providing distinctions between gender and age, and over 270 maps showing how the values of these indicators vary within BC. One of the aims of the Atlas is to show how various aspects of wellness are distributed throughout the province.

While each map is accompanied by a brief description providing salient and significant points, the intention was always to let the “maps speak for themselves” in order to generate discussions about whether or not the geographical differences are important and, if so, what might or should be done to lessen the “inequities” in wellness between regions of the province. Understanding the reasons for the inequities is a job best left to those who live in communities within the administrative units that have been used for mapping purposes.

As noted at the beginning of the Atlas, the base geographical unit used for presenting the data is the Health Service Delivery Area (HSDA), of which there are 16 in the province. Examining the values of the various wellness indicators provides an opportunity to see which is the “best” HSDA for any particular indicator. Other regions that are below that value can set themselves a target of matching or even improving upon the “best” HSDA indicator value. Those areas with a lower value can also look to learn from those that have achieved the “best” result and examine why they are doing as well as they are: What are the characteristics that make a difference? Are there many Active Communities? Do they have more Action Schools? Do they have better local by-laws to encourage or discourage certain behaviours? Do they have public transit systems? Are their neighbourhoods safe and do they encourage walking? Are there accessible activity and recreation centres? Are sports clubs available? Are there

accessible stores selling fresh fruit and vegetables? These are just some of the questions that can be asked, but there are many more.

In order to give some examples of achievable wellness goals based on the information contained within this Atlas, this chapter provides some simple ways to determine the “best wellness” areas in the province based on different criteria.

For simplicity’s sake, we focus only on one data set that is consistently available for all HSDAs. We examine the detailed responses to the questions that have been mapped from the Canadian Community Health Survey (CCHS) in 2005. There are several reasons for focusing on this data set. First, it is of high quality and provides coverage for the vast majority of the province, geographically. Some of the other data sets we have used have gaps because not all communities responded to community-based questionnaires. This affects, for example, some of the data collected for the BC Recreation and Parks Association. Also, the Vital Statistics data related to births cover only those events that occurred to BC mothers in BC. Key birth events in the eastern parts of the province may have occurred in Alberta hospitals, thus making us cautious about including those data in the construction of an overall wellness index. Second, approximately one-half of the maps and one-third of all the key wellness indicators contained in the Atlas are based on the CCHS. Third, wellness is subjective in nature, thus, using responses of individuals to survey questions captures, to some degree, this subjectivity. Fourth, the CCHS has wellness indicators from the major “pillars” of ActNow BC: smoke-free environments and behaviour; healthy nutrition; physical activity; healthy weight; and healthy pregnancy. While the CCHS collected data on alcohol consumption during pregnancy, the number of responses

was too small for five HSDAs to provide complete provincial coverage for this indicator, and so it is not included in the group of maps in this chapter. The CCHS also provides data related to some key wellness determinants and wellness outcomes. The CCHS data are also collected across Canada so that provincial comparisons can be made if required.

What follows is a series of maps and tables that combine many of the indicators in a simple manner in order to identify the HSDAs that have the highest or “best” overall scores based on specific criteria. It also shows those that do less well, but our intent here is to highlight those that are the “best” based on the chosen indicators. The method used to develop these maps involves examining the responses to the CCHS questions and identifying those HSDAs having values that are statistically significantly higher or lower than the provincial average. Those that are significantly higher are given a “plus (+)” and those that are significantly lower are given a “minus (-).” The pluses and minuses are summed for each particular HSDA and then mapped based on the net score of pluses and minuses (negative numbers are taken away from positive numbers to give a net score). Although there are many different and sophisticated methods for combining indicators, our approach is simple, intuitive, and readily understandable by most individuals.

The first set of four maps presents information based on the set of indicators noted below for the age 12 and over population, the results of which are shown in the tables opposite.

Wellness determinants — Three indicators cover sense of belonging to community, emotional supports, and social supports.

Healthy outcomes — Eight indicators cover: mental health; free of chronic conditions; injury-free; repetitive strain injury-free; no restrictions to activities both inside and outside the home because of physical, mental, or other conditions; Health Utility Index (HUI); and satisfied with life. Two other variables in this group, perceived health and no sad or blue feeling, are not included because there were no HSDAs with either significantly high or low values and so there was no clear geographical variability in these indicators for the age 12 and over population as a whole.

Smoke-free environments and behaviour — Six indicators cover smoke-free public places, smoke-free work places, smoke-free vehicles, smoke-free homes, smoke-restricted homes, and non-smoking behaviour.

Healthy nutrition, physical activity, and weight — These three sets of indicators are dealt with as a single group because they are closely related from a wellness perspective. Six indicators cover fruit and vegetable consumption, availability of preferred foods, physical activity index, walking hours, satisfactory weight, and healthy BMI. Affordability of balanced meals was not included because there were no HSDAs with either significantly high or low values.

The second set of three maps provides a summary of 26 CCHS variables used in this Atlas together, based on the net results of totalling significantly high and significantly low (plus and minus) values by HSDA. Maps based on the table on page 212 are provided for the following groups:

- 20 to 64 middle age cohort for both sexes;
- 12 to 19 teen or youth age cohort for both sexes; and
- Age 65 and over seniors' cohort for both sexes.

This set of maps and tables enables us to identify an overall wellness value by HSDA based on the indicators included in the maps for the different sub-groups of the population based on age. The maps and supporting tables show which are the “best” or benchmark HSDAs based on differing age cohorts.

A final set of three maps, based on the table on page 213, provides the same information for age 12 and over, age 12 and over males, and age 12 and over females.

These maps and accompanying tables offer a variety of opportunities to identify those HSDAs that are the “best” or potential benchmarks in terms of wellness, and ones from which others may be able to learn if they wish to improve their own overall wellness. At the same time, they identify which HSDAs need most improvement and therefore provide an opportunity to target supports to enable them to improve certain wellness conditions.

Constructing benchmarks

Determinants of wellness		Sense of belonging	Social supports	Emotional supports	Index
11	East Kootenay				0
12	Kootenay Boundary	+			+1
13	Okanagan		+		+1
14	Thompson Cariboo Shuswap	+			+1
21	Fraser East				0
22	Fraser North				0
23	Fraser South				0
31	Richmond		-	-	-2
32	Vancouver		-	-	-2
33	North Shore/Coast Garibaldi				0
41	South Vancouver Island				0
42	Central Vancouver Island				0
43	North Vancouver Island				0
51	Northwest	+			+1
52	Northern Interior				0
53	Northeast				0

Wellness outcomes		Healthy	Mentally healthy	Not feeling sad or blue	No chronic conditions	Injury-free	No repetitive strain injury	No restricted activity outside	No restricted activity at home	Health Utilities Index	Satisfied with life	Index
11	East Kootenay							-	-			-2
12	Kootenay Boundary				-				-			-2
13	Okanagan				-				-			-2
14	Thompson Cariboo Shuswap										+	+1
21	Fraser East											0
22	Fraser North											0
23	Fraser South		+									+1
31	Richmond				+	+		+	+			+4
32	Vancouver				+			+	+			+3
33	North Shore/Coast Garibaldi				+		+					+2
41	South Vancouver Island				-			-	-			-3
42	Central Vancouver Island				-					-		-2
43	North Vancouver Island				-			-				-2
51	Northwest											0
52	Northern Interior											0
53	Northeast								-			-1

Smoke-free environments		Smoke-free public	Smoke-free workplace	Smoke-free vehicles	Smoke-free home	Smoking restrictions in home	Currently non-smoker	Index
11	East Kootenay		-		-			-2
12	Kootenay Boundary							0
13	Okanagan							0
14	Thompson Cariboo Shuswap		-		-			-2
21	Fraser East		-	-				-2
22	Fraser North						+	+1
23	Fraser South		-					-1
31	Richmond		+	+			+	+3
32	Vancouver		+		+	-		+1
33	North Shore/Coast Garibaldi			+				+1
41	South Vancouver Island	+	+	+	+	+		+5
42	Central Vancouver Island		-					-1
43	North Vancouver Island					+		+1
51	Northwest							0
52	Northern Interior		-		-	-	-	-4
53	Northeast		-	-	-	-	-	-5

Healthy nutrition, physical activity, and weight		Afford balanced meals	Always had preferred food	Fruits and vegetables	Physical Activity Index	Hours walking	Weight about right	Self-estimated BMI	Index
11	East Kootenay			+	+	+			+3
12	Kootenay Boundary					+			+1
13	Okanagan					-			-1
14	Thompson Cariboo Shuswap						-	-	-1
21	Fraser East					-	-	-	-3
22	Fraser North						+	+	+2
23	Fraser South					-			-1
31	Richmond					-		+	0
32	Vancouver		-			-	+	+	0
33	North Shore/Coast Garibaldi				+			+	+2
41	South Vancouver Island			+	+	+			+3
42	Central Vancouver Island			+	+	+	-	-	0
43	North Vancouver Island					-			-1
51	Northwest							-	-1
52	Northern Interior			-			-	-	-2
53	Northeast					-	-	-	-3

Determinants and outcomes of wellness

We have combined these two clusters as they provide some of the key indicators that help determine overall wellness and show wellness outcomes.

Determinants of wellness index

Looking at the summary map and tables for this group of three variables (sense of belonging, social supports, and emotional supports), it is clear that for most HSDAs there was little difference among them. Of the 16 regional HSDAs, 10 had an overall score of zero (0), indicating that they were not significantly different in a statistical sense from provincial average values for any of these indicators.

A second group consists of four HSDAs that did have a statistically significantly higher value than for the province as a whole for one of the three indicators and are shown with a positive value (score of +1). All four of the HSDAs were in the interior or northern parts of the province, which are more rural in nature and whose populations are spread out among smaller communities. A higher than average sense of belonging was evident in Kootenay Boundary, Thompson Cariboo Shuswap, and Northwest, while stronger social supports emerged in the Okanagan.

The third group consists of two urban HSDAs, Vancouver and Richmond in the southwest, which both had significantly lower values for emotional and social support (score of -2).

Health Service Delivery Area	Determinants
012 Kootenay Boundary	+1
013 Okanagan	+1
014 Thompson Cariboo Shuswap	+1
051 Northwest	+1
011 East Kootenay	0
021 Fraser East	0
022 Fraser North	0
023 Fraser South	0
033 North Shore/Coast Garibaldi	0
041 South Vancouver Island	0
042 Central Vancouver Island	0
043 North Vancouver Island	0
052 Northern Interior	0
053 Northeast	0
031 Richmond	-2
032 Vancouver	-2

Wellness outcomes index

This summary map shows greater variation than for determinants, which is expected, given that there are twice as many indicators in this cluster of variables (perceived health, mental health, feeling sad or blue, no chronic conditions, injury-free, no repetitive strain injury, no restrictions of activity inside or outside the home, Health Utilities Index, and satisfied with life). Three major groups of HSDAs emerged. Five HSDAs had positive numbers overall. With one exception (Thompson Cariboo Shuswap in the central interior of the province), all were located in the urban lower mainland. Richmond had significant positive values for 4 of the 10 indicators (score +4), while Vancouver (score +3) and North Shore/Coast Garibaldi (score +2) also scored relatively well.

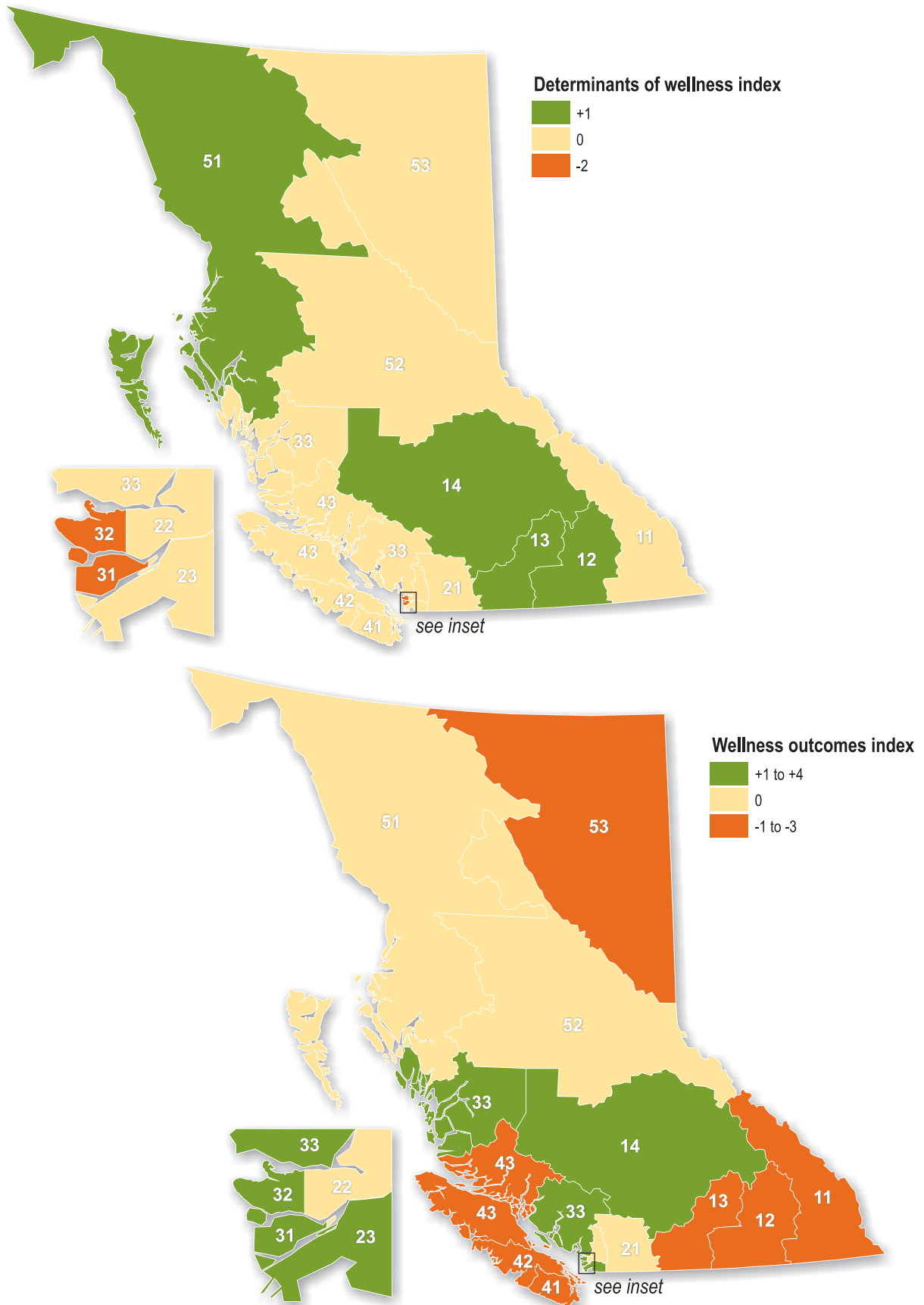
There were seven HSDAs with overall negative values. These were clustered on Vancouver Island and in the northeast, southeast, and southern interior parts of the province. All other regions (score of 0) were the same as average provincial values for these indicators.

Health Service Delivery Area	Outcomes
031 Richmond	+4
032 Vancouver	+3
033 North Shore/Coast Garibaldi	+2
014 Thompson Cariboo Shuswap	+1
023 Fraser South	+1
021 Fraser East	0
022 Fraser North	0
051 Northwest	0
052 Northern Interior	0
053 Northeast	-1
042 Central Vancouver Island	-2
011 East Kootenay	-2
012 Kootenay Boundary	-2
013 Okanagan	-2
043 North Vancouver Island	-2
041 South Vancouver Island	-3

What is this telling us?

There was relatively little differentiation between regions in the province related to determinants indicators. What emerges is that the urban southwest of the province, especially Vancouver and Richmond, had significantly high percentages of respondents who were not well-connected within their communities. On the other hand, in more rural areas there was a strong attachment to community. From a benchmarking perspective, no HSDA dominates. From an outcome perspective, it was the lower mainland HSDAs that were prominent. Although Richmond rated low on the determinants scale, ironically, it was the benchmark (best) HSDA for outcomes.

Determinants and outcomes of wellness



Smoke-free index

As noted earlier, the effect of smoking on health and wellness, particularly as it affects chronic disease, is still very high in BC despite the province having the lowest smoking rate in the country. The map of combined smoke-free behaviours and environments shows some major geographical variations and points to at least one HSDA that could be considered a leader based on this cluster of six indicators (smoke-free public places, smoke-free workplaces, smoke-free vehicles, smoke-free homes, smoking restrictions in home, and non-smoking behaviour).

There was a large range in scores among the regions, with a general southwest to northeast gradient based on positive to negative scores. The highest net positive scores occurred in the southwest of the province, particularly South Vancouver Island (score of +5), Richmond (score of +3), and Fraser North, Vancouver, and North Shore/Coast Garibaldi (all with scores of +1). North Vancouver Island was an outlier in terms of its positive score outside of the lower island and lower mainland. Vancouver was also unusual in that it scored significantly high for two indicators but significantly low on another for a net score of +1.

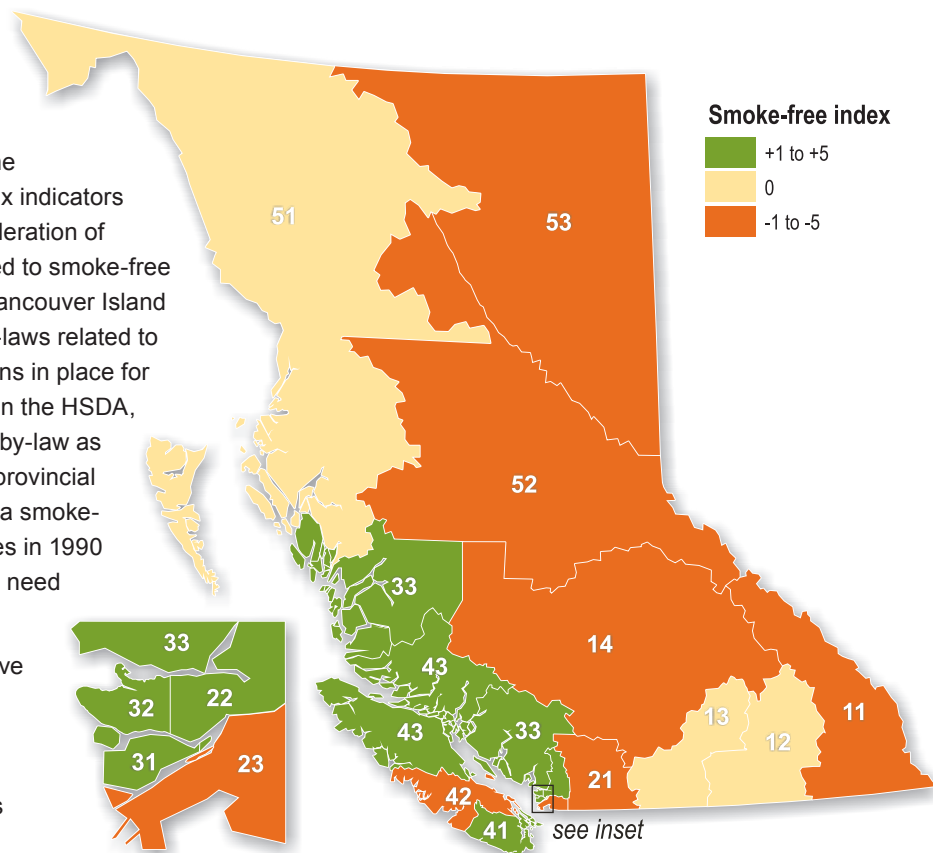
At the other extreme, northern and interior communities were more likely to have negative scores among this cluster of indicators. Northeast (score of -5) and Northern Interior (-4) had significantly poorer smoke-free environments than the province as a whole. Thompson Cariboo Shuswap in the central interior, East Kootenay in the southeast, and Fraser East (all with scores of -2) scored poorly among this group of indicators. Other negative scores occurred for Fraser South in the lower mainland and Central Vancouver Island (both with scores of -1).

Health Service Delivery Area	Smoke-free index
041 South Vancouver Island	+5
031 Richmond	+3
022 Fraser North	+1
032 Vancouver	+1
033 North Shore/Coast Garibaldi	+1
043 North Vancouver Island	+1
012 Kootenay Boundary	0
013 Okanagan	0
051 Northwest	0
023 Fraser South	-1
042 Central Vancouver Island	-1
011 East Kootenay	-2
014 Thompson Cariboo Shuswap	-2
021 Fraser East	-2
052 Northern Interior	-4
053 Northeast	-5

What is this telling us?

South Vancouver Island was clearly the benchmark HSDA, scoring significantly higher than the provincial average on five of the six indicators included in this analysis. A consideration of some of the other indicators related to smoke-free environments shows that South Vancouver Island also has very strong municipal by-laws related to no smoking and has had restrictions in place for well over a decade. Victoria, within the HSDA, had its first municipal no smoking by-law as early as 1984 and, as the seat of provincial administration, the introduction of a smoke-free workplace for provincial offices in 1990 also likely helped in promoting the need for smoke-free environments.

Richmond, with significantly positive scores for half of the indicators, is also worth considering as a benchmark. It too has a strong municipal no smoking by-law, thus setting an example for the region.



Nutrition, activity, and weight index

Three separate but related groups of indicators are provided. They deal with indicators for nutrition (afford balanced meals, availability of preferred food, fruit and vegetable consumption), physical activity (Physical Activity Index, hours walking), and healthy weights (satisfied with weight, BMI). The scores ranged from +3 to -3. The southwest and southeast regions of the province both had net positive scores.

South Vancouver Island in the southwest and East Kootenay in the southeast had leading scores of +3. Both had significantly higher values for fruit and vegetable consumption, Physical Activity Index, and walking 6 or more hours a week. Other HSDAs with net positive scores were found in the lower mainland and the southeast. Fraser North was significantly high for the two weight indicators. Vancouver also rated high on these two indicators, but these were negated by significantly low values for two other indicators.

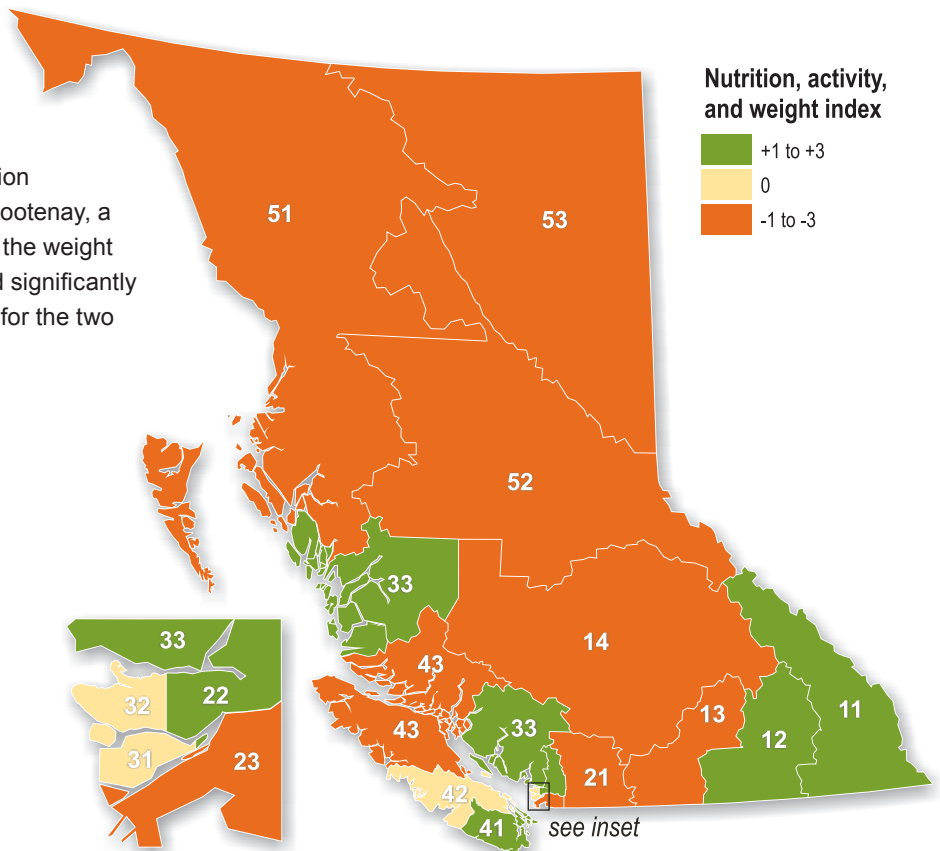
Much of the northern half of the province was significantly lower than the provincial average on several indicators, as was part of the interior, North Vancouver Island, and Fraser South in the lower mainland. Northeast (score -3), Northern Interior (score -2), and Fraser East (score -3) had the poorest net scores.

Along with Vancouver, two other HSDAs, Richmond and Central Vancouver Island, had net scores of zero (0), as positive attributes were cancelled out by negative ones within the cluster of six indicators.

Health Service Delivery Area	Nutrition, activity, and weight index
011 East Kootenay	+3
041 South Vancouver Island	+3
022 Fraser North	+2
033 North Shore/Coast Garibaldi	+2
012 Kootenay Boundary	+1
031 Richmond	0
032 Vancouver	0
042 Central Vancouver Island	0
013 Okanagan	-1
014 Thompson Cariboo Shuswap	-1
023 Fraser South	-1
043 North Vancouver Island	-1
051 Northwest	-1
052 Northern Interior	-2
021 Fraser East	-3
053 Northeast	-3

What is this telling us?

There are three benchmark HSDAs worth considering based on this cluster of indicators. South Vancouver Island, as a largely urban region, scored well for nutrition and physical activity, as did East Kootenay, a rural region. Both were neutral on the weight indicators, but Fraser North scored significantly higher than the provincial average for the two healthy weight indicators.



Overall wellness index by age group: 26 CCHS indicators

The three maps and table have combined 26 of the CCHS indicators contained within the Atlas and provide an overall wellness index score based on these indicators. Indicators are given equal weight. Scores can range from +26 to -26. The highest potential positive score (+26) would be achieved if one HSDA had a statistically significantly higher value than the provincial averages for each of the 26 indicators. Likewise, there is a lowest possible score (-26). The three age groups used here are the ones used throughout the Atlas: 20- to 64-year-olds; 12- to 19-year-olds; and, 65 and older. It is possible to identify which HSDAs can be viewed as the benchmark for the three age groups individually.

Health Service Delivery Area	Ages 20-64	Ages 12-19	Ages 65+
033 North Shore/Coast Garibaldi	+5	0	+3
041 South Vancouver Island	+5	0	+2
032 Vancouver	+3	0	-3
031 Richmond	+3	+3	+2
022 Fraser North	+2	0	0
042 Central Vancouver Island	+1	0	-1
013 Okanagan	+1	0	+1
051 Northwest	+1	+3	+1
011 East Kootenay	0	+4	+1
023 Fraser South	0	0	0
043 North Vancouver Island	0	-1	+3
014 Thompson Cariboo Shuswap	0	0	0
012 Kootenay Boundary	-2	+4	+2
052 Northern Interior	-3	-2	-5
021 Fraser East	-4	+1	0
053 Northeast	-6	-1	-3

20 to 64 age group index

The range from highest to lowest went from +5 to -6. Eight HSDAs had positive scores and four had negative scores. The remainder had a net score of zero. The higher positive scores were clustered in the urban southwest and southern part of Vancouver Island, while negative scores were more prominent in the north and interior.

North Shore/Coast Garibaldi and South Vancouver Island had the highest scores (+5) and, from a benchmarking perspective, they were the best overall HSDAs in this age category. While the former had five significantly high indicators and no significantly low indicators, South Vancouver Island had seven positive indicators offset by two negative ones (both related to restricted activities because of chronic conditions). Richmond and Vancouver (both with scores of +3) had a higher number of positive variables, but scores were reduced because of offsetting negative score variables.

12 to 19 age group index

This group ranged from +4 to -2. Half of the HSDAs (8) had net values of zero (0). Geographically, the southeast part of the province had the best values, with youth in both East Kootenay and Kootenay Boundary having scores of +4. Neither had any significantly negative score indicators, and these would be the benchmark HSDAs for youth. Richmond, Northwest, and Fraser East were positive overall. Only Northern Interior, North Vancouver Island, and Northeast had negative scores.

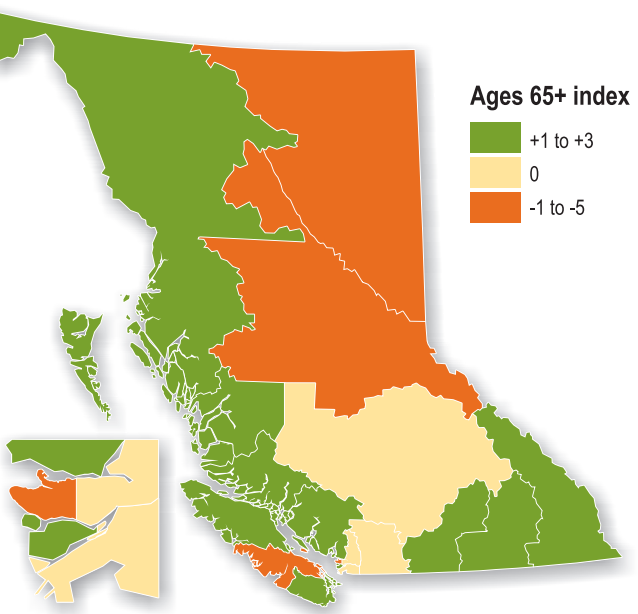
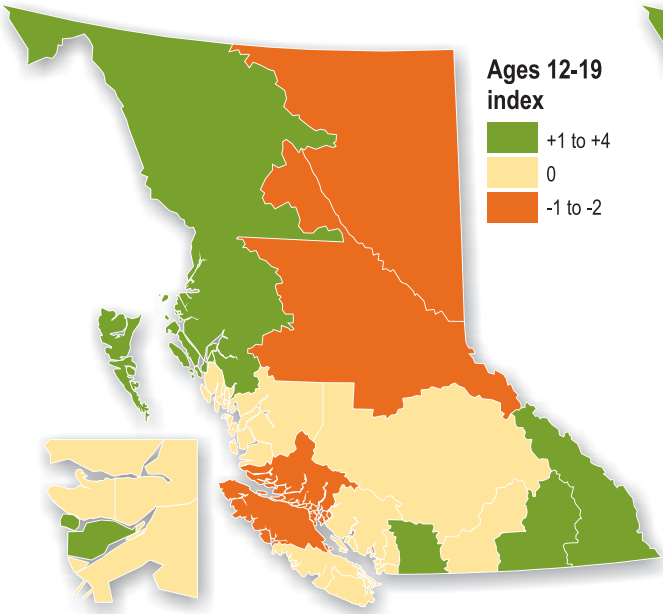
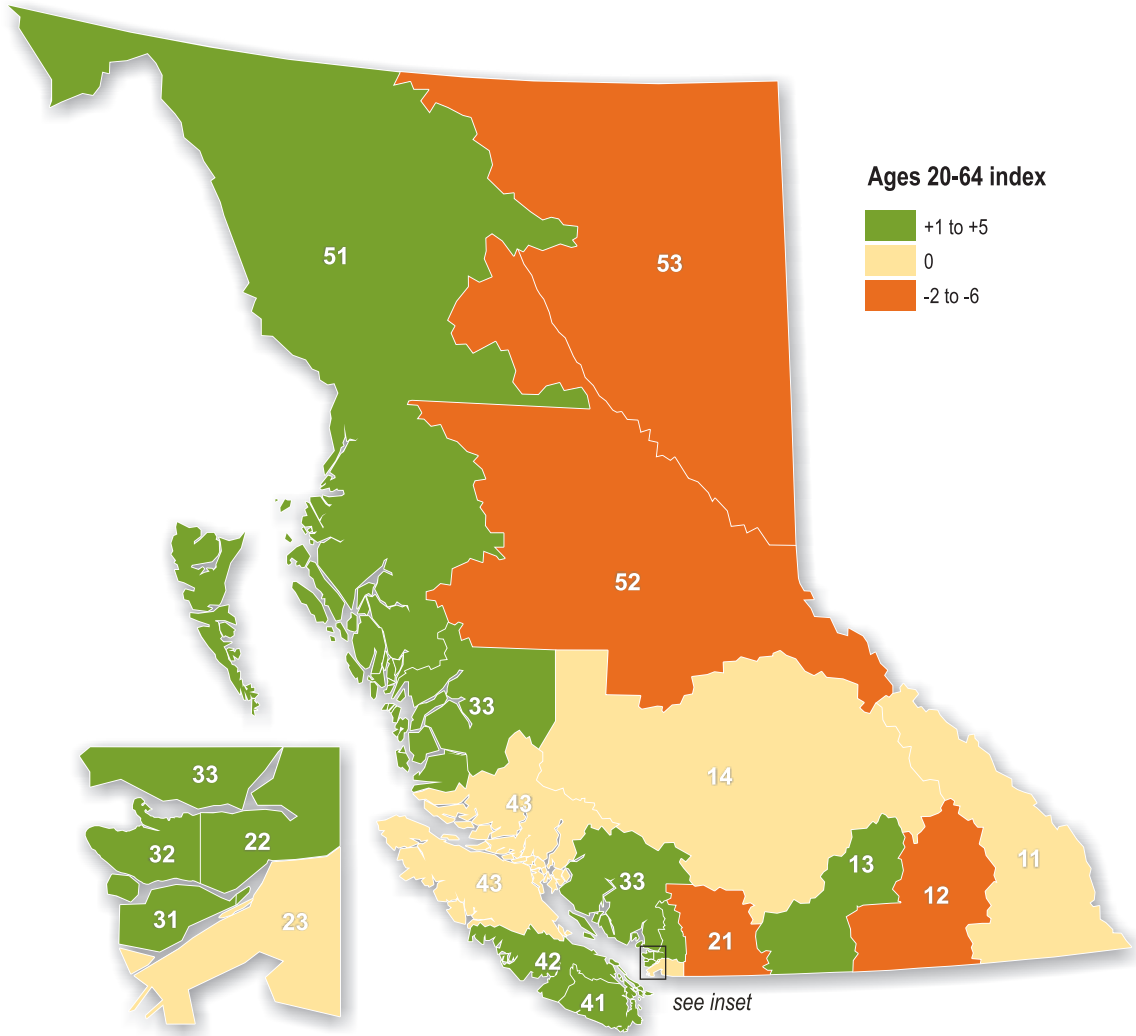
65 and over age group index

The seniors group had a range of eight points between HSDAs. North Shore/Coast Garibaldi and North Vancouver Island were the benchmarks (both with scores of +3). Neither HSDA had any significantly negative values for the 26 indicators. There was no clear overall geographic pattern for seniors, although two northern regions had negative scores (Northern Interior with -5 and Northeast with -3). Vancouver in the lower mainland (-3) and Central Vancouver Island (-1) were also negative.

What is this telling us?

For the middle age cohort, 20 to 64 years, there were two HSDAs, both urban, that can be considered benchmarks. These were South Vancouver Island and North Shore/Coast Garibaldi. Both rated highly overall, although South Vancouver Island had several indicators that were significantly negative, offsetting other positive scores. For youth (12 to 19 age group), the two HSDAs in the rural southeast of the province, East Kootenay and Kootenay Boundary, rated highest and can be considered benchmark regions. For the urban areas, Richmond might also be considered a benchmark. North Vancouver Island for rural communities can be considered the benchmark for seniors (65 years and over), while North Shore/Coast Garibaldi might be best for urban regions.

Overall wellness index by age group: 26 CCHS indicators



Overall wellness index for ages 12 and over

The three maps and table presented here provide scores for the total CCHS sample, and individually for males and females. The scores are developed in the same way as for the previous three maps. Positive and negative indicators are offset against each other to give an overall wellness score.

Provincial population, 12 and over index

The range between the highest and lowest scoring HSDAs was 14. The highest, and therefore the benchmarks for the total sample group, were South Vancouver Island, North Shore/Coast Garibaldi, and Richmond, all with a net positive score of +5. In achieving these scores, North Shore/Coast Garibaldi had no negative value indicators, while South Vancouver Island and Richmond both had a total of eight statistically significantly high value indicators offset by three statistically significantly low values. For South Vancouver Island, these low values were related to chronic conditions and conditions that interfered with normal activities both inside and outside the home. For Richmond, the negative values related to emotional and social supports and hours walking. At the other end of the spectrum, Northern Interior (-6), Northeast (-9), and Fraser East (-5) had negative scores overall, and none of the three had any significantly positive value indicators.

Males index

There was a range of 11 points for males. Southern Vancouver Island with a score of +3 was the benchmark HSDA. Richmond (score of +2) and Vancouver, Northwest, East Kootenay, and North Shore/Coast Garibaldi (all with scores of +1) were also positive. Close to half of the HSDAs had overall net negative scores. Northeast was particularly notable for its high negative score (-8).

As the benchmark HSDA for males, South Vancouver Island had a total of five significantly positive indicators offset by two significantly low value indicators (both related to conditions that restrict activities inside and outside the home).

Females index

The range was only 7 points for females, indicating relatively more equity in wellness than for males among the regions. Only three HSDAs had net negative scores

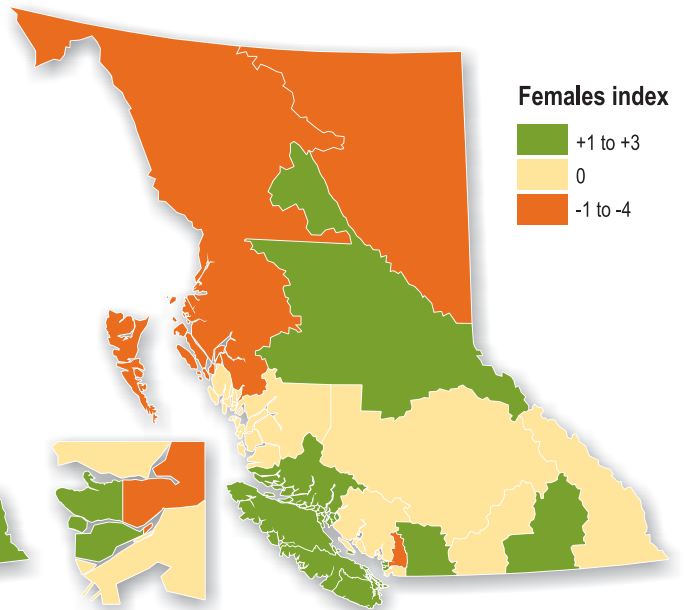
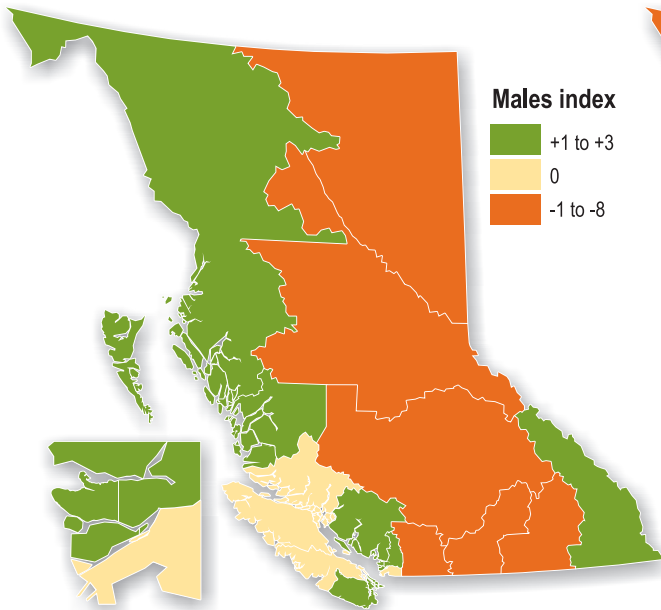
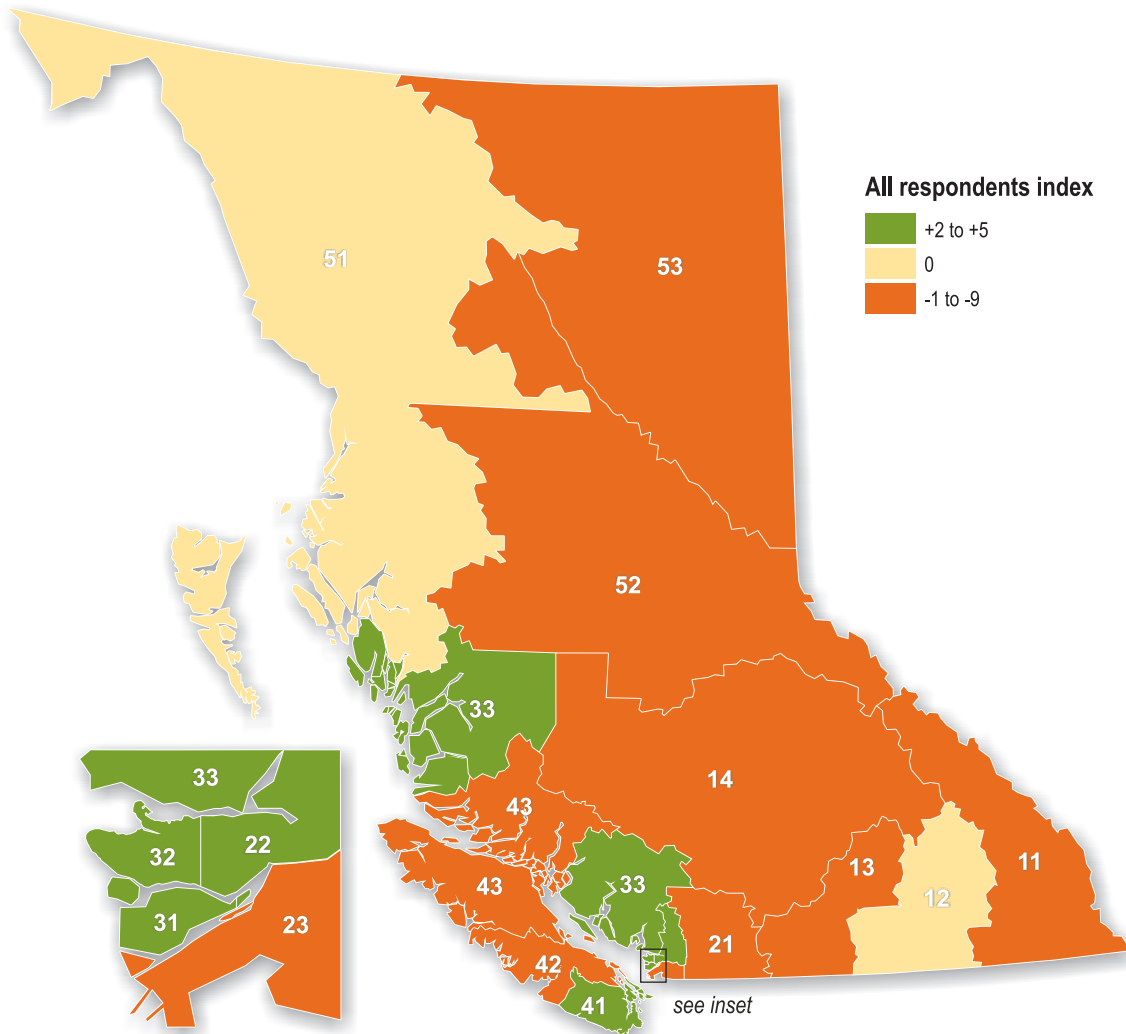
Health Service Delivery Area	All respondents	Males	Female
041 South Vancouver Island	+5	+3	+3
031 Richmond	+5	+2	+2
033 North Shore/Coast Garibaldi	+5	+1	0
022 Fraser North	+3	+1	-1
032 Vancouver	+2	+1	+1
051 Northwest	0	+1	-2
012 Kootenay Boundary	0	-1	+1
011 East Kootenay	-1	+1	0
023 Fraser South	-1	0	0
014 Thompson Cariboo Shuswap	-1	-1	0
042 Central Vancouver Island	-2	0	+2
043 North Vancouver Island	-2	0	+2
013 Okanagan	-2	-2	0
021 Fraser East	-5	-3	+1
052 Northern Interior	-6	-2	+1
053 Northeast	-9	-8	-4

(Northeast, -4; Northwest, -2; and Fraser North, -1). South Vancouver Island had the highest positive score (+3), followed by Central and North Vancouver Island and Richmond (all with scores of +2). Vancouver (+1) had the highest number of statistically significantly positive indicators (5), but these were offset by negative indicators (4).

What is this telling us?

For all age groups combined (ages 12 and over), South Vancouver Island, Richmond, and North Shore/Coast Garibaldi were the “best” HSDAs and can be considered as the overall benchmarks for wellness in the province. South Vancouver Island and Richmond, though, both had a couple of significant negative factors that need to be taken into account. For both males and females individually, South Vancouver Island was also the benchmark HSDA.

Overall wellness index for ages 12 and over



A Final Word

We hope that the data, tables, and maps produced in this Atlas will give users enough information to ask themselves: Why do we get so much regional variation in wellness-related indicators? Is this variation something that should be addressed? If so, what can be done, and which areas rate highly enough that we might want to learn from them? As noted earlier, the maps should, to a large degree, “speak for themselves.” The text just points out some of their key features. It should be emphasized, however, that the maps are static and give a pattern at one point in time, in most cases 2005, the year that ActNow BC was initiated. Updates can be provided over time as new information becomes available.

For many of the indicators we have used in this Atlas, wellness decreased as distance from the urban lower mainland part of the province and South Vancouver Island increased. This is a very dominant pattern throughout the Atlas. It confirms other studies that have noted the difference in health and wellness between urban and rural regions, not only in BC, but elsewhere in Canada.

The examples used to develop benchmarks are just that—examples. Users can develop their own group or clusters of indicators in order to develop benchmarks that might be important to them. For example, some indicators could be given more weight than others so that, say, “non-smoking behaviour” has twice as much importance as “frequenting public places that are smoke free.” Nutrition indicators may be weighted more highly than activity-related indicators. Groups of indicators and weights might be developed through a community process, through the use of technical groups, or through focus groups. Analyses and comparisons can be made in numerous ways, depending on community priorities.

Other wellness indicators can be added. For example, many of the non-CCHS indicators could be included by giving a positive value for those HSDAs that are in the highest quintile, and a negative value for those in the lowest quintile. Negative values could be ignored altogether. Further, communities or HSDAs can compare themselves to neighbouring HSDAs or to those in the same Health Authority. For example, South Vancouver Island could become the benchmark for the Vancouver Island Health Authority, or Richmond for the Vancouver Coastal Health Authority. Individuals

specifically interested in youth might want to convert the school district data to HSDA level data so that indicators from the CCHS might be combined with school district data, or even with survey data from the McCreary Adolescent Health Surveys.

The main points to note are, first, that the possibilities are immense and, second, that different geographical areas within the province can learn from each other in terms of what has been accomplished on different wellness indicators. How did the “best” become the “best”? Our approach has been to use clusters of indicators rather than focusing on just a very limited number of factors. This helps to achieve, we believe, an overall picture of wellness in a particular area.

In conclusion, we see this Atlas as the start, not the finish, of understanding geographical variations in wellness throughout the province. We have taken available data that can be updated over time, and combined indicators to develop benchmark HSDAs. These are HSDAs that have achieved the “best” statistically significant results somewhere in the province. There will undoubtedly be better results at a smaller community level. There will be geographical “highs” and “lows” within all of the HSDAs because they cover a large geographical area and/or have a large population.

A next step might be to examine the “best” HSDAs and see what they are doing “right” to obtain the results that they have achieved. Are there key communities within them that make the difference? A good understanding of the processes and conditions that help to create the “best” results can then be used, to some degree, by others to do the same. Processes can be adapted to the local conditions within any HSDA.

We hope that this Atlas will contribute to the discussion of why some regions are more “well” than others and what might be done about it, and how ActNow BC can help focus and target its resources and those of its numerous partners to achieve overall improvements in the health and wellness of people in British Columbia.