Measuring Our Success

Baseline Document
Message from the Minister of State: Honourable Gordon Hogg

Measuring Our Success: Baseline Document is our province’s starting point for British Columbians’ journey to simple, easy ways to better health.

Significant research has been done on the prevalence of specific health risk factors and lifestyle behaviours throughout the province. Many of the chronic diseases British Columbians face are preventable with improvements in lifestyle choices such as becoming more physically active, making healthier eating choices, eliminating tobacco use, and making healthy choices during pregnancy. This rigorous analysis of British Columbians provides a base line of our province’s current health challenges and provides a better understanding of regional variations of particular risks.

The good news is that British Columbia ranks the best in Canada with the lowest smoking prevalence and obesity rate of any province, and here in the west we are the most physically active in the nation.

The reality however is that improvements are needed and action is necessary to decrease our province’s preventable health care costs that result from chronic disease and poor lifestyle choices.

When ActNow BC was launched in March 2005, as a multi-year health promotion focused initiative, cross-ministry programs and community partnerships were developed to support one of Government’s Five Great Goals – to lead the way in North America in healthy living and physical fitness.

As ActNow BC and its partners implement the current initiatives to meet its goals, and develop new programs, this document is intended to be the first in a series of annual reports that will continue to reveal the picture of our province’s health behaviours, and the impacts in various regions.

It is hoped that the data presented in this Baseline Document can be used as a resource tool and baseline for program planners and health authorities in the monitoring and evaluation of our province’s progress on our healthy living goals and partnered programs.

I look forward to receiving our province’s report card each year, and striving to make the grade to become the active and healthy province we aim to be. The final test is set for 2010, with the aim of ActNow BC to showcase British Columbia as the healthiest jurisdiction ever to host an Olympic and Paralympic Winter Games. The inspiration won’t stop there however – the promotion of physical activity and encouragement of active living throughout the province intends to be a deliverable that British Columbians can keep for life.

Actively yours,

Honourable Gordon Hogg
Minister of State for ActNow BC

November 2006
Table of Contents

Introduction 5

Section 1. Lifestyle Behaviours of British Columbians 9
   a. Where do people in British Columbia live? 9
   b. Does the birth rate differ in differing parts of the province? 11
   c. Do the rates of obesity and/or overweight among adults (aged 18+) differ in the province? 12
   d. Does the percent of British Columbians who consume the daily recommended number of fruits and vegetables differ in the province? 16
   e. Does the percent of British Columbians who engage in physical activity differ in the province? 21
   f. Do the rates of tobacco use differ in province? 27

Section 2. Act Now BC Planning Models and Indicators 31
   a. ActNow BC Planning Model 32
   b. Healthy Eating Component Planning Model 34
   c. Physical Activity Component Planning Model 36
   d. Tobacco Control Component Planning Model 38
   e. Key ActNow BC Indicators and Performance Measures 38
   f. Healthy Choices in Pregnancy Component Planning Model 40

Section 3. Baseline information On Outputs and Outcome Measures 45
   a. Physical Activity outputs and outcomes 45
      Active Communities 45
      Action Schools!BC 46
   b. Healthy Eating outputs and outcomes 49
      Dial-A-Dietitian 49
      Food and Beverage Sales in BC Schools 50
      BC School Fruit and Vegetable Snack Program 50
      Shapedown BC 51
      Community Food Action Initiative (CFAI) 51
   c. Tobacco Control outputs and outcomes 51
      QuitNow 51
      Municipal Smoking Bylaws 53
      Second Hand Smoke 54
      Tobacco Free Sports Program 55
      Honour Your Health 55
   d. Healthy Choices in Pregnancy outputs and outcomes 56
      Health Authority FASD Prevention Plans 56
      Service Provider Awareness and Education 56
      Knowledge of Risks Associated with Alcohol Consumption In Pregnancy 56

Section 4. Next Steps 57
Introduction

Chronic diseases are among the most prevalent and costly health issues in British Columbia, and they are among the most preventable. The major chronic diseases are frequently the direct result, often over time, of health compromising behaviours or risk factors. The risk factors that contribute most to the burden of disease are relatively few and comprise behaviours that are generally modifiable. These risk factors are:

- Tobacco use
- Physical inactivity
- Unhealthy eating
- Obesity
- Alcohol misuse
- Occupational risks

ActNow BC is a health and wellness initiative launched by the British Columbia Provincial Government in March 2005. It is a multi-year initiative involving several ministries, 2010 Legacies Now, the British Columbia Healthy Living Alliance (BCHLA), community organizations, and businesses throughout the province. The aim of ActNow BC is to make British Columbia the healthiest jurisdiction to host an Olympic and Paralympic Winter Games by targeting risk factors for chronic disease and taking integrated action to reducing these risk factors. Specifically, ActNow BC promotes physical activity, healthy eating, living tobacco free, and making healthy choices during pregnancy.

British Columbia is fortunate that it already has some of the best outcomes for the common underlying risk factors. It has the lowest smoking prevalence in Canada, which at 15 per cent (in 2005) is second only to Utah (10.5 per cent among adults) in North America. It has the lowest rate of obesity in Canada and British Columbians are among the most physically active in Canada.

Like most jurisdictions, however, improvements are needed and possible. Not only is health being adversely affected, the financial costs are substantial:

- In 2003, 42.3% of British Columbians (aged 18+) were overweight or obese. Overweight and obesity costs the province $730-830 million annually.
- In 2003, only 58.0% of British Columbians (aged 12+) were physically or moderately active. Physical inactivity costs more than $570 million a year.

---

1 Evaluation of Burden of Disease in BC. Strategic Policy and Research Branch, BC Ministry of Health Services, January 2001
6 Statistics Canada, Canadian Community Health Survey, Table 105-0209, 2003
8 Statistics Canada, Canadian Community Health Survey, Table 105-0233, 2003
ActNow BC is a strategic cross-government and cross-sectoral initiative with the overarching goal of creating healthy communities. It provides a unifying brand for everyone to use in their efforts to produce a healthy British Columbia.

“Lead the way in North America in healthy living and physical fitness”
Goal #2 of the Five Great Goals for BC

- In 2005, 15.0% of British Columbians (aged 15+) used tobacco. In 2002, costs of tobacco use in British Columbia were estimated to be about $2.3 billion.
- In 2001, approximately one in ten pregnant Canadian women drank alcohol while pregnant. Estimates are that full FAS occurs in the range of 0.9 to 4.8/live births (approximately 1 in 500) and the spectrum affects up to 9.1/1000 (approximately 1%) of the population. A recent study indicated that for each child diagnosed with FASD, the associated, total adjusted annual costs were $14,342.

In addition, the majority of the British Columbia population does not consume the recommended minimum five fruits and vegetables each day and about 25 per cent of the daily calories for adults in British Columbia come from “other foods”, primarily high in fat and/or sugar.

ActNow BC aims to address these risk factors. The BC Government has established ambitious targets for ActNow BC. Specifically, the ActNow BC 2010 targets are:

- Physical Activity – To increase by 20% the proportion of the B.C. population (aged 12+) who are physically active or moderately active during their leisure time from the current level (2003) of 58.1% to 69.7% of the B.C. population by 2010.
- Healthy Eating – To increase by 20% the proportion of the B.C. population (aged 12+) who eat the daily recommended level of fruits and vegetables from the current level (2003) of 40.1% to 48.1% of the population by 2010.
- Tobacco Use – To reduce by 10% the proportion of the BC population (aged 15+) that use tobacco from the current prevalence rate (2003) of 16.0% to 14.4% of the BC population by 2010.
- Overweight/Obesity – To reduce by 20% the proportion of the B.C. population (aged 18+) currently classified as overweight or obese from the current prevalence rate (2003) of 42.3% to 33.8% of the B.C. population by 2010.

---

18 Statistics Canada, Canadian Community Health Survey, Table 105-0233, 2003
19 Statistics Canada, Canadian Community Health Survey, Table 105-0249, 2003
21 Statistics Canada, Canadian Community Health Survey, Table 105-0209, 2003
• **Healthy Choices in Pregnancy** –
  • To increase by 50.0% the number of women counseled regarding alcohol use during pregnancy
  • By September 2006, for all health authority areas to have focused strategies for FASD prevention

To effectively and efficiently design, target and implement the numerous ActNow BC initiatives that have been planned, mechanisms need to be in place to identify provincial variation in health and behavioural factors. This document provides the first in a series of documents that visually present the major ActNow BC health behaviour status of British Columbians both provincially and in most cases by health region or health services delivery area (HSDA) where available.
Section 1 | Lifestyle Behaviours of British Columbians

These data provide a baseline by which information in future documents can be compared. As well, program planners and decision-makers can utilize these maps and accompanying tables to monitor progress toward achieving the ActNow BC targets and modify their programs and services to maximize impacts.

Each map is accompanied by a table that provides more precise, numeric comparisons of the information collected. As well, a brief interpretation of the maps and tables is provided. While attempts were made to interpret these data as accurately as possible, a note of caution is advised as interpreting data always requires a caveat – other interpretations are possible.

In some cases data may be lacking as it pertains to certain populations and if it does exist, some information may need to be interpreted with caution. For example, weight in children and adolescents is complicated because height and body composition are continually changing. These changes in adolescents occur at different rates in different populations and therefore are more variable compared to adult populations and are subject to different types of error (different validity concerns).

Another cautionary note pertains to the identification of greatest need. While certain parts of the province (e.g. the north) may exhibit high prevalence rates of a particular phenomenon (e.g. rates of obesity), this geographic location may consist of fewer people than are located in a different, but more populated part of the province where the rates of obesity may be lower. In other words the actual number of people who are overweight may be higher in the latter location. Therefore when determining greatest need, and how to maximize program effect, program planners need to consider not only the rate (or percent) of a particular health status indicator but also the actual number of persons this percentage actually represents.

a. Where do people in British Columbia live?

Table 1 presents the total population of British Columbia as well as the population of each Health Authority and Health Service Delivery Areas (HSDA). The largest segment of the BC population resides in the Fraser and Vancouver Coastal Health Authorities, followed by Vancouver Island, the Interior and finally the Northern Interior. Figure 1 presents a view of the province’s population variability using quintiles.

<table>
<thead>
<tr>
<th>Region #</th>
<th>HSDA</th>
<th>Total</th>
<th>Total (1,000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>British Columbia</td>
<td>4,196,383</td>
<td>4196.383</td>
</tr>
<tr>
<td>11</td>
<td>East Kootenay</td>
<td>81,397</td>
<td>81.397</td>
</tr>
<tr>
<td>12</td>
<td>Kootenay Boundary</td>
<td>79,718</td>
<td>79.718</td>
</tr>
<tr>
<td>13</td>
<td>Okanagan</td>
<td>323,396</td>
<td>323.396</td>
</tr>
<tr>
<td>14</td>
<td>Thompson Cariboo</td>
<td>219,483</td>
<td>219.483</td>
</tr>
<tr>
<td>1</td>
<td>Interior</td>
<td>703,994</td>
<td>703.994</td>
</tr>
<tr>
<td>21</td>
<td>Fraser East (Fraser Valley)</td>
<td>260,161</td>
<td>260.161</td>
</tr>
<tr>
<td>22</td>
<td>Fraser North (Simon Fraser)</td>
<td>554,439</td>
<td>554.439</td>
</tr>
<tr>
<td>23</td>
<td>Fraser South</td>
<td>626,227</td>
<td>626.227</td>
</tr>
<tr>
<td>2</td>
<td>Fraser</td>
<td>1,440,827</td>
<td>1440.827</td>
</tr>
<tr>
<td>31</td>
<td>Richmond</td>
<td>172,714</td>
<td>172.714</td>
</tr>
<tr>
<td>32</td>
<td>Vancouver</td>
<td>593,174</td>
<td>593.174</td>
</tr>
<tr>
<td>33</td>
<td>North Shore/Coast Garibaldi</td>
<td>271,082</td>
<td>271.082</td>
</tr>
<tr>
<td>3</td>
<td>Vancouver Coastal</td>
<td>1,036,970</td>
<td>1036.970</td>
</tr>
<tr>
<td>41</td>
<td>South Vancouver Island</td>
<td>346,523</td>
<td>346.523</td>
</tr>
<tr>
<td>42</td>
<td>Central Vancouver Island</td>
<td>247,461</td>
<td>247.461</td>
</tr>
<tr>
<td>43</td>
<td>North Vancouver Island</td>
<td>116,596</td>
<td>116.596</td>
</tr>
<tr>
<td>4</td>
<td>Vancouver Island</td>
<td>710,580</td>
<td>710.580</td>
</tr>
<tr>
<td>51</td>
<td>Northwest</td>
<td>84,030</td>
<td>84.030</td>
</tr>
<tr>
<td>52</td>
<td>Northern Interior</td>
<td>153,760</td>
<td>153.760</td>
</tr>
<tr>
<td>53</td>
<td>Northeast</td>
<td>66,222</td>
<td>66.222</td>
</tr>
<tr>
<td>5</td>
<td>Northern</td>
<td>304,012</td>
<td>304.012</td>
</tr>
</tbody>
</table>

Table 1. British Columbia’s Population by Health Service Delivery Area, 2004


When presenting or analyzing measurements of a continuous variable it is sometimes helpful to group individuals into several equal groups. For example, to create five equal groups (quintiles) the data values are split such that 20% of the observations are in each group.
Figure 1. British Columbia’s Population by Health Service Delivery Area, 2004

Health Service Delivery Areas
11 East Kootenay
12 Kootenay Boundary
13 Okanagan
14 Thompson Cariboo Shuswap
21 Fraser East
22 Fraser North
23 Fraser South
31 Richmond
32 Vancouver
33 North Shore/Coast Garibaldi
41 South Vancouver Island
42 Central Vancouver Island
43 North Vancouver Island
51 Northwest
52 Northern Interior
53 Northeast

Inset 1

Inset 2

Population (1,000’s)
- 554.44 - 626.23
- 271.08 - 346.52
- 172.71 - 260.16
- 84.03 - 153.76
- 66.22 - 81.40

b. Does the birth rate differ in differing parts of the province?

Table 2 presents the crude birth rate (births per 1000 population), the rate of low birthweight births and the rate of teen births for British Columbia as well as the rates for each Health Region and HSDA. Highest birth rates occur in the Northeast, Fraser East and Fraser South HSDAs, while lowest rates occur in the East Kootenay, Kootenay-Boundary and Okanagan HSDAs. Fraser North and Vancouver HSDAs exhibit the highest rates of low birthweight births while the Northwest and North Vancouver Island HSDAs have the highest rates of teen births.

Table 2. Crude Birth Rate, and Rate of Low Birthweight Births and Teen Births in British Columbia by Health Service Delivery Area (2004)

<table>
<thead>
<tr>
<th>Region/HSDA</th>
<th># of births</th>
<th>Births/1,000 pop</th>
<th># of low birthweight births</th>
<th>Rate of low birthweight births</th>
<th># of teen births</th>
<th>Rate of teen births</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>40,318</td>
<td>9.61</td>
<td>2,255</td>
<td>55.93</td>
<td>1,425</td>
<td>35.34</td>
</tr>
<tr>
<td>East Kootenay</td>
<td>613</td>
<td>7.53</td>
<td>19</td>
<td>31.00</td>
<td>46</td>
<td>75.04</td>
</tr>
<tr>
<td>Kootenay-Boundary</td>
<td>609</td>
<td>7.64</td>
<td>35</td>
<td>57.47</td>
<td>18</td>
<td>29.56</td>
</tr>
<tr>
<td>Okanagan</td>
<td>2,522</td>
<td>7.80</td>
<td>137</td>
<td>54.32</td>
<td>114</td>
<td>45.20</td>
</tr>
<tr>
<td>Thompson/Cariboo</td>
<td>1,843</td>
<td>8.40</td>
<td>106</td>
<td>57.51</td>
<td>107</td>
<td>58.06</td>
</tr>
<tr>
<td>Interior</td>
<td>5,587</td>
<td>7.94</td>
<td>297</td>
<td>53.16</td>
<td>285</td>
<td>51.01</td>
</tr>
<tr>
<td>Fraser East (Fraser Valley)</td>
<td>3,095</td>
<td>11.90</td>
<td>175</td>
<td>56.54</td>
<td>157</td>
<td>50.73</td>
</tr>
<tr>
<td>Fraser North (Simon Fraser)</td>
<td>5,667</td>
<td>10.22</td>
<td>350</td>
<td>61.76</td>
<td>103</td>
<td>18.18</td>
</tr>
<tr>
<td>Fraser South</td>
<td>7,180</td>
<td>11.47</td>
<td>418</td>
<td>58.22</td>
<td>165</td>
<td>22.98</td>
</tr>
<tr>
<td>Fraser</td>
<td>15,942</td>
<td>11.06</td>
<td>943</td>
<td>59.15</td>
<td>425</td>
<td>26.66</td>
</tr>
<tr>
<td>Richmond</td>
<td>1,553</td>
<td>8.99</td>
<td>79</td>
<td>50.87</td>
<td>17</td>
<td>10.95</td>
</tr>
<tr>
<td>Vancouver</td>
<td>5,642</td>
<td>9.51</td>
<td>333</td>
<td>59.02</td>
<td>70</td>
<td>12.41</td>
</tr>
<tr>
<td>North Shore/Coast Garibaldi</td>
<td>2,396</td>
<td>8.84</td>
<td>129</td>
<td>53.84</td>
<td>52</td>
<td>21.70</td>
</tr>
<tr>
<td>Vancouver Coastal</td>
<td>9,591</td>
<td>9.25</td>
<td>541</td>
<td>56.41</td>
<td>139</td>
<td>14.49</td>
</tr>
<tr>
<td>South Vancouver Island</td>
<td>2,835</td>
<td>8.18</td>
<td>149</td>
<td>52.56</td>
<td>85</td>
<td>29.98</td>
</tr>
<tr>
<td>Central Vancouver Island</td>
<td>2,026</td>
<td>8.19</td>
<td>108</td>
<td>53.31</td>
<td>131</td>
<td>64.66</td>
</tr>
<tr>
<td>North Vancouver Island</td>
<td>978</td>
<td>8.39</td>
<td>49</td>
<td>50.10</td>
<td>93</td>
<td>95.09</td>
</tr>
<tr>
<td>Vancouver Island</td>
<td>5,839</td>
<td>8.22</td>
<td>306</td>
<td>52.41</td>
<td>309</td>
<td>52.92</td>
</tr>
<tr>
<td>Northwest</td>
<td>910</td>
<td>10.83</td>
<td>39</td>
<td>42.86</td>
<td>98</td>
<td>107.69</td>
</tr>
<tr>
<td>Northern Interior</td>
<td>1,570</td>
<td>10.21</td>
<td>89</td>
<td>56.69</td>
<td>116</td>
<td>73.89</td>
</tr>
<tr>
<td>Northeast</td>
<td>878</td>
<td>13.26</td>
<td>40</td>
<td>45.56</td>
<td>53</td>
<td>60.36</td>
</tr>
<tr>
<td>Northern</td>
<td>3,358</td>
<td>11.05</td>
<td>168</td>
<td>50.03</td>
<td>267</td>
<td>79.51</td>
</tr>
</tbody>
</table>


Crude Birth Rate: Total number of births per 1000 total population
Low Birth Weight Births: Any live born infant weighing less than 2500 grams
Teen Births: Any mother who was 19 years of age or younger at time of delivery of a live born infant
Rates: (other than live birth rates) Calculated by using total live births as the denominator
c. Do the rates of obesity and/or overweight among adults (aged 18+) differ in the province?

The next few tables and figures present the prevalence of obesity and/or overweight among BC adults and the differences that exist among Health Regions and by HSDA.

Table 3 presents the rates of overweight and obesity combined. Approximately 42.3% (51.7% males and 33.6% females\(^{23}\)) of the BC population is either overweight or obese with the percentages ranging from 32.8% in the Vancouver Coastal Health Region to 53.5% in the Northern Health Region\(^ {24}\). The prevalence of overweight/obesity in the province based on quintiles is presented in Figure 2. Rates are highest in the northern and eastern parts of the province and lowest in the lower mainland and south Vancouver Island area.

Table 3. Overweight and obesity combined by Health Region and Health Service Delivery Area for population (Aged 18+), 2003 (Based on self-reported height and weight)

<table>
<thead>
<tr>
<th>Region/HSDA</th>
<th>Tot. Pop.</th>
<th>Obese/Overweight</th>
<th>Per Cent Obese/Overweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>3,166,740</td>
<td>1,339,627</td>
<td>42.3</td>
</tr>
<tr>
<td>East Kootenay</td>
<td>60,750</td>
<td>32,394</td>
<td>53.3</td>
</tr>
<tr>
<td>Kootenay-Boundary</td>
<td>63,138</td>
<td>28,980</td>
<td>45.9</td>
</tr>
<tr>
<td>Okanagan</td>
<td>235,909</td>
<td>118,183</td>
<td>50.1</td>
</tr>
<tr>
<td>Thompson/Cariboo</td>
<td>158,437</td>
<td>76,065</td>
<td>48.0</td>
</tr>
<tr>
<td>Interior</td>
<td>518,234</td>
<td>255,622</td>
<td>49.3</td>
</tr>
<tr>
<td>Fraser East (Fraser Valley)</td>
<td>182,635</td>
<td>89,615</td>
<td>49.1</td>
</tr>
<tr>
<td>Fraser North (Simon Fraser)</td>
<td>439,485</td>
<td>174,040</td>
<td>39.6</td>
</tr>
<tr>
<td>Fraser South</td>
<td>467,969</td>
<td>198,941</td>
<td>42.5</td>
</tr>
<tr>
<td>Fraser</td>
<td>1,090,089</td>
<td>462,596</td>
<td>42.4</td>
</tr>
<tr>
<td>Richmond</td>
<td>139,698</td>
<td>45,356</td>
<td>32.5</td>
</tr>
<tr>
<td>Vancouver</td>
<td>478,148</td>
<td>143,888</td>
<td>30.1</td>
</tr>
<tr>
<td>North Shore/Coast Garibaldi</td>
<td>206,602</td>
<td>81,125</td>
<td>39.3</td>
</tr>
<tr>
<td>Vancouver Coastal</td>
<td>824,448</td>
<td>270,369</td>
<td>32.8</td>
</tr>
<tr>
<td>South Vancouver Island</td>
<td>266,201</td>
<td>108,683</td>
<td>40.8</td>
</tr>
<tr>
<td>Central Vancouver Island</td>
<td>183,806</td>
<td>90,992</td>
<td>49.5</td>
</tr>
<tr>
<td>North Vancouver Island</td>
<td>82,770</td>
<td>43,653</td>
<td>52.7</td>
</tr>
<tr>
<td>Vancouver Island</td>
<td>532,777</td>
<td>243,328</td>
<td>45.7</td>
</tr>
<tr>
<td>Northwest</td>
<td>50,604</td>
<td>25,232</td>
<td>49.9</td>
</tr>
<tr>
<td>Northern Interior</td>
<td>107,180</td>
<td>57,626</td>
<td>53.8</td>
</tr>
<tr>
<td>Northeast</td>
<td>43,480</td>
<td>24,852</td>
<td>57.3</td>
</tr>
<tr>
<td>Northern</td>
<td>201,192</td>
<td>107,710</td>
<td>53.5</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, Canadian Community Health Survey, Table 105-0209, 2003 (CANSIM Tables)

\(^{23}\)CCHS Share file, 2003, cycle 2.1. Not stated have been included to mirror the CANSIM data
\(^{24}\)Statistics Canada, Canadian Community Health Survey, Table 105-0209, 2003

Note: Percentages that appear in the CANSIM tables may differ slightly from those obtained from the Share file since the latter include only participants in the survey who agreed to sharing their PHN (Personal Health Number).
Figure 2. Per Cent of Population (Aged 18+) Who Are Overweight or Obese by Health Service Delivery Area (Quintiles), 2003

Health Service Delivery Areas
11 East Kootenay
12 Kootenay Boundary
13 Okanagan
14 Thompson Cariboo Shuswap
21 Fraser East
22 Fraser North
23 Fraser South
31 Richmond
32 Vancouver
33 North Shore/Coast Garibaldi
41 South Vancouver Island
42 Central Vancouver Island
43 North Vancouver Island
51 Northwest
52 Northern Interior
53 Northeast

Per Cent of Population (aged 18+)
- 53.4 - 57.3
- 49.8 - 52.7
- 45.9 - 49.5
- 39.6 - 42.5
- 30.1 - 39.2

Inset 1
Inset 2

Source: Statistics Canada, Canadian Community Health Survey, Table 105-0009, 2003, map compiled by BC Vital Statistics.
Table 4 presents in ascending order the percent of obese or overweight adults by HSDA. Sampling introduces the possibility of random error and therefore the table includes 95% Confidence Intervals for each HSDA’s estimated rate of overweight/obesity. Richmond and Vancouver exhibited significantly lower (p<.05) levels of overweight and obesity than the province while North Shore/Coast Garibaldi, Fraser North, Fraser South, South Vancouver Island and Kootenay Boundary did not differ from the provincial average. All other HSDAs in the province exhibited significantly higher (p < .05) overweight/obesity levels than the provincial average.

Figure 3 presents information on the prevalence of obesity or overweight with corresponding 95% confidence intervals for each HSDA in comparison to the provincial average (noted as a red line). Green bars illustrate HSDAs that were significantly below the provincial average, blue connotes those not significantly different from the provincial average, while brown identifies those with obesity/overweight rates that are significantly higher than the provincial average.

Figure 4 presents where these significant differences exist on a map of the province. Brown areas signify those parts of the province with significantly higher (p<.05) overweight/obesity levels than the provincial average. The figure also takes into consideration the population differences that exist across the province. The size of the circle in the legend denotes a population of 1 70,000 persons, while the red or white illustrate the proportion who are overweight/obese or neither, respectively. Most overweight/obese people (as denoted by the area of the red shading in the circles) are located in the lower mainland and on Vancouver Island.

### Table 4. Prevalence of Overweight and Obesity by Health Service Delivery Area (95% Confidence Interval) for population aged 18+ (2003)

<table>
<thead>
<tr>
<th>HSDA</th>
<th>% Obese/Overweight</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vancouver</td>
<td>31.6</td>
<td>28.08</td>
</tr>
<tr>
<td>Richmond</td>
<td>33.19</td>
<td>30.04</td>
</tr>
<tr>
<td>Fraser North (Simon Fraser)</td>
<td>41.02</td>
<td>37.26</td>
</tr>
<tr>
<td>North Shore/Coast Garibaldi</td>
<td>41.06</td>
<td>36.92</td>
</tr>
<tr>
<td>South Vancouver Island</td>
<td>41.14</td>
<td>37.52</td>
</tr>
<tr>
<td>British Columbia</td>
<td>43.63</td>
<td>42.39</td>
</tr>
<tr>
<td>Fraser South</td>
<td>44.51</td>
<td>40.45</td>
</tr>
<tr>
<td>Kootenay-Boundary</td>
<td>46.64</td>
<td>41.22</td>
</tr>
<tr>
<td>Thompson/Cariboo</td>
<td>48.76</td>
<td>44.86</td>
</tr>
<tr>
<td>Central Vancouver Island</td>
<td>50.39</td>
<td>45.90</td>
</tr>
<tr>
<td>Fraser East (Fraser Valley)</td>
<td>50.41</td>
<td>46.63</td>
</tr>
<tr>
<td>Northwest</td>
<td>51.13</td>
<td>45.80</td>
</tr>
<tr>
<td>Okanagan</td>
<td>51.64</td>
<td>47.24</td>
</tr>
<tr>
<td>East Kootenay</td>
<td>51.85</td>
<td>45.61</td>
</tr>
<tr>
<td>North Vancouver Island</td>
<td>54.45</td>
<td>47.66</td>
</tr>
<tr>
<td>Northern Interior</td>
<td>56.33</td>
<td>50.88</td>
</tr>
<tr>
<td>Northeast</td>
<td>59.10</td>
<td>54.77</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, Canadian Community Health Survey 2003 Share File (Cycle 2.1)

Note: Percentages that appear in the CANSIM tables may differ slightly from those obtained from the Share file since the latter include only participants in the survey who agreed to sharing their PHN (Personal Health Number).

Figure 3. Obese or Overweight by Health Service Delivery Area (95% Confidence Interval) for Population (Aged 18+), 2003
Figure 4. Percentage of Overweight or Obesity by Health Service Delivery Area Population (Aged 18+), 2003

Statistical Significance Compared to B.C. Average (42.3%)
- No Difference
- Significant High
- Significant Low

Obesity or Overweight (Aged 18+)
- Equivalent to 170,000 Pop.
- Obese or Overweight
- Neither Obese or Overweight

Health Service Delivery Areas
- 11 East Kootenay
- 12 Kootenay Boundary
- 13 Okanagan
- 14 Thompson Cariboo Shuswap
- 21 Fraser East
- 22 Fraser North
- 23 Fraser South
- 31 Richmond
- 32 Vancouver
- 33 North Shore/Coast Garibaldi
- 41 South Vancouver Island
- 42 Central Vancouver Island
- 43 North Vancouver Island
- 51 Northwest
- 52 Northern Interior
- 53 Northeast

Inset 1

Inset 2

Source: HSDA boundary - BC Stats; HSDA population - PEOPLE 30; Obesity or Overweight - CCHS Cycle 2.1
d. Does the percent of British Columbians who consume the daily recommended number of fruits and vegetables differ in the province?

Canada’s Food Guide to Healthy Eating\(^{25}\) recommends a pattern of eating for achieving adequate intakes of essential nutrients and calories. According to the BC Nutrition Survey\(^{26}\):

- Approximately 25% of women and 40% of men ate the recommended 5-10 servings of vegetables and fruit per day\(^{27}\).
- Approximately 15% of women and 25% of men met the daily recommendation of 2-4 servings of milk products\(^{28}\).
- Approximately 40% percent of British Columbians did not meet the minimum recommendations of five grain servings a day, with three times as many women as men falling below the minimum (61.3% versus 19.3%)\(^{29}\).

Table 5 presents the prevalence of British Columbians (aged 12+) by health region and HSDA who consume the daily recommended levels of fruit and vegetables (5+/ day).

The prevalence of persons (aged 12+) consuming recommended daily amounts of fruits and vegetables in the province based on quintiles is presented in Figure 5. The highest fruit and vegetable consumption ranges occurred in North Shore/Coast Garibaldi, East Kootenay, and Kootenay Boundary Health Service Delivery Areas, while the lowest ranges occurred in Richmond, North East, and Fraser North Health Service Delivery Areas.


### Table 5. Recommended Fruit and Vegetable Consumption (5 or More Servings per Day) by Health Region and Health Service Delivery Area for Population (Aged 12+)\(^{30}\), 2003

<table>
<thead>
<tr>
<th>Region #</th>
<th>Region/HSDA</th>
<th>Tot Pop.</th>
<th>Cons. Fruit/Veg</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>All BC</td>
<td>3,521,971</td>
<td>1,410,578</td>
<td>40.1</td>
</tr>
<tr>
<td>11</td>
<td>East Kootenay</td>
<td>68,707</td>
<td>30,818</td>
<td>44.9</td>
</tr>
<tr>
<td>12</td>
<td>Kootenay-Boundary</td>
<td>70,143</td>
<td>31,049</td>
<td>44.3</td>
</tr>
<tr>
<td>13</td>
<td>Okanagan</td>
<td>264,878</td>
<td>104,555</td>
<td>39.5</td>
</tr>
<tr>
<td>14</td>
<td>Thompson/Cariboo</td>
<td>178,653</td>
<td>74,996</td>
<td>42.0</td>
</tr>
<tr>
<td>1</td>
<td>Interior</td>
<td>582,381</td>
<td>241,418</td>
<td>41.5</td>
</tr>
<tr>
<td>21</td>
<td>Fraser East (Fraser Valley)</td>
<td>208,731</td>
<td>82,475</td>
<td>39.5</td>
</tr>
<tr>
<td>22</td>
<td>Fraser North (Simon Fraser)</td>
<td>483,534</td>
<td>177,574</td>
<td>36.7</td>
</tr>
<tr>
<td>23</td>
<td>Fraser South</td>
<td>527,524</td>
<td>212,519</td>
<td>40.3</td>
</tr>
<tr>
<td>2</td>
<td>Fraser</td>
<td>1,219,789</td>
<td>472,568</td>
<td>38.7</td>
</tr>
<tr>
<td>31</td>
<td>Richmond</td>
<td>152,786</td>
<td>51,290</td>
<td>33.6</td>
</tr>
<tr>
<td>32</td>
<td>Vancouver</td>
<td>512,805</td>
<td>189,482</td>
<td>37.0</td>
</tr>
<tr>
<td>33</td>
<td>North Shore/Coast Garibaldi</td>
<td>228,543</td>
<td>106,830</td>
<td>46.7</td>
</tr>
<tr>
<td>3</td>
<td>Vancouver Coastal</td>
<td>894,134</td>
<td>347,602</td>
<td>38.9</td>
</tr>
<tr>
<td>41</td>
<td>South Vancouver Island</td>
<td>292,240</td>
<td>128,049</td>
<td>43.8</td>
</tr>
<tr>
<td>42</td>
<td>Central Vancouver Island</td>
<td>206,451</td>
<td>91,235</td>
<td>44.2</td>
</tr>
<tr>
<td>43</td>
<td>North Vancouver Island</td>
<td>94,885</td>
<td>41,044</td>
<td>43.3</td>
</tr>
<tr>
<td>4</td>
<td>Vancouver Island</td>
<td>593,576</td>
<td>260,328</td>
<td>43.9</td>
</tr>
<tr>
<td>41</td>
<td>Northwest</td>
<td>58,036</td>
<td>22,873</td>
<td>39.4</td>
</tr>
<tr>
<td>42</td>
<td>Northern Interior</td>
<td>123,367</td>
<td>48,004</td>
<td>38.9</td>
</tr>
<tr>
<td>43</td>
<td>Northeast</td>
<td>50,689</td>
<td>17,783</td>
<td>35.1</td>
</tr>
<tr>
<td>5</td>
<td>Northern</td>
<td>232,092</td>
<td>88,660</td>
<td>38.2</td>
</tr>
</tbody>
</table>

Source: Canadian Community Health Survey (CCHS), Cycle 2.1 (2003)

**Note:** This data is based on respondents consuming fruit/vegetables at least 5 or more times/day

**Survey Questions:**
- How often do you usually drink fruit juices such as orange, grapefruit or tomato?
  1. per day
  2. per week
  3. per month
  4. per year
  5. never
- Not counting juice, how often do you eat fruit?
- How often do you (usually) eat green salad?
- How often do you (usually) eat potatoes, not including French fries, fried potatoes or potato chips?
- How often do you (usually) eat carrots?
- Not counting carrots, potatoes, or salad, how many servings of other vegetables do you usually eat?

\(^{30}\) Statistics Canada, Canadian Community Health Survey, Table 105-0249, 2003
Figure 5. Per Cent of Population (Aged 12+) Who Meet the Recommended Daily Intake of Fruits and Vegetables (5 or More Servings per Day) by Health Services Delivery Area (Quintiles), 2003

Health Service Delivery Areas
11 East Kootenay
12 Kootenay Boundary
13 Okanagan
14 Thompson Cariboo Shuswap
21 Fraser East
22 Fraser North
23 Fraser South
31 Richmond
32 Vancouver
33 North Shore/Coast Garibaldi
41 South Vancouver Island
42 Central Vancouver Island
43 North Vancouver Island
51 Northwest
52 Northern Interior
53 Northeast

Per Cent of Population (Aged +12)
- 44.27 - 46.74
- 43.26 - 44.19
- 39.47 - 41.98
- 36.95 - 39.41
- 33.57 - 36.72

Source: Statistics Canada, Canadian Community Health Survey, Table 105-0049, 2003
Table 6 presents in ascending order the percent of the population (aged 12+) who consumed the daily recommended levels of fruits and vegetables by HSDA. Sampling introduces the possibility of random error and therefore the table includes 95% confidence intervals for each HSDAs estimated rate of recommended consumption. Richmond exhibited significantly lower (p<.05) levels of fruit and vegetable consumption (daily recommended) than the province while North Shore/Coast Garibaldi exhibited significantly higher (p<.05) fruit and vegetable intake (daily recommended) than the provincial average. All other HSDAs in the province did not differ significantly in terms of their mean rates of recommended fruit and vegetable consumption levels from the provincial average.

Figure 6 presents information on the prevalence of recommended fruit and vegetable consumption with corresponding 95% confidence intervals for each HSDA in comparison to the provincial average (noted as a red line). Green bars illustrate HSDAs that were significantly above the provincial average, blue connotes those not significantly different from the provincial average, while brown identifies those with fruit and vegetable rates that are significantly lower than the provincial average.

Table 6. Prevalence of Meeting the Daily Recommended Fruit and Vegetable Consumption - 5 or More Servings per Day by Health Service Delivery Area (95% Confidence Interval) for Population (Aged 12+), 2003

<table>
<thead>
<tr>
<th>HSDA</th>
<th>% Frt/Veg 5 or More Times</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richmond</td>
<td>33.6</td>
<td>29.8 - 37.3</td>
</tr>
<tr>
<td>Northeast</td>
<td>35.1</td>
<td>29.7 - 40.5</td>
</tr>
<tr>
<td>Fraser North (Simon Fraser)</td>
<td>36.7</td>
<td>33.8 - 39.6</td>
</tr>
<tr>
<td>Vancouver</td>
<td>37.0</td>
<td>33.9 - 40.0</td>
</tr>
<tr>
<td>Northern Interior</td>
<td>38.9</td>
<td>33.9 - 43.9</td>
</tr>
<tr>
<td>Northwest</td>
<td>39.4</td>
<td>33.5 - 45.3</td>
</tr>
<tr>
<td>Okanagan</td>
<td>39.5</td>
<td>36.0 - 42.9</td>
</tr>
<tr>
<td>Fraser East (Fraser Valley)</td>
<td>39.5</td>
<td>35.5 - 43.5</td>
</tr>
<tr>
<td>British Columbia</td>
<td>40.1</td>
<td>39.0 - 41.1</td>
</tr>
<tr>
<td>Fraser South</td>
<td>40.3</td>
<td>37.1 - 43.5</td>
</tr>
<tr>
<td>Thompson/Cariboo</td>
<td>42.0</td>
<td>37.8 - 46.2</td>
</tr>
<tr>
<td>North Vancouver Island</td>
<td>43.3</td>
<td>38.5 - 48.1</td>
</tr>
<tr>
<td>South Vancouver Island</td>
<td>43.8</td>
<td>40.0 - 47.6</td>
</tr>
<tr>
<td>Central Vancouver Island</td>
<td>44.2</td>
<td>39.5 - 48.9</td>
</tr>
<tr>
<td>Kootenay-Boundary</td>
<td>44.3</td>
<td>39.2 - 49.3</td>
</tr>
<tr>
<td>East Kootenay</td>
<td>44.9</td>
<td>39.5 - 50.2</td>
</tr>
<tr>
<td>North Shore/Coast Garibaldi</td>
<td>46.7</td>
<td>43.0 - 50.5</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, Canadian Community Health Survey, Table 105-0249, 2003

Figure 6. Fruit and Vegetable Consumption - (5 or More Servings per Day) by Health Service Delivery Area (95% Confidence Interval) for Population (Aged 12+), 2003

Source: Statistics Canada, Canadian Community Health Survey, Table 105-0249, 2003
Figure 7. Per Cent Who Consume Recommended Daily Intake of Fruits and Vegetables (5 or More Servings per Day) by Health Service Delivery Area for Population (Aged 12+), 2003

Health Service Delivery Areas
11 East Kootenay
12 Kootenay Boundary
13 Okanagan
14 Thompson Cariboo Shuswap
21 Fraser East
22 Fraser North
23 Fraser South
31 Richmond
32 Vancouver
33 North Shore/Coast Garibaldi
41 South Vancouver Island
42 Central Vancouver Island
43 North Vancouver Island
51 Northwest
52 Northern Interior
53 Northeast

Inset 1

Inset 2

Source: HSDA boundary - BC Stats; HSDA population - PEOPLE 30; Fruits and Vegetables Intake - CCHS Cycle 2.1

Statistical Significance Compared to B.C. Average (40.1%)
- No Difference
- Significant High
- Significant Low

Population (Aged 12+)
Having Fruits/Vegetables
- Equivalent to 200,000 Pop.
- At Least 5 Times/Day
- Other Quantities
Figure 7 presents where these significant differences exist on a map of the province. Brown areas signify those parts of the province with significantly higher (p<.05) daily recommended fruit and vegetable intake levels than the provincial average. The figure also takes into consideration the population differences that exist across the province. The size of the circle in the legend denotes a population of 200,000 persons, while the white or red illustrate the proportion who consume 5+ fruits or vegetable daily or do not, respectively. Most people who consume less than 5 fruits or vegetable daily (as denoted by the area of the red shading in the circles) are located in the lower mainland and on Vancouver Island.

e. Does the percent of British Columbians who engage in physical activity differ in the province?

While varying definitions of physical activity and inactivity exist, regardless of which definition is utilized it is clear that many British Columbians are not sufficiently active. For example:

- Approximately one third (39%) of British Columbians (aged 12+) are physically inactive (get little or no exercise)\(^{31}\). Approximately 61% of males and 56% of females age 12+ years are active/moderately active\(^{32}\).
- As many as 46% of British Columbians are not active enough to achieve the health benefits of regular activity\(^ {33}\).
- While many adults are inactive, 80% of adult British Columbians believed that they were active enough to achieve health benefits - including weight control\(^ {34}\).
- Approximately 50% of BC youth aged 12 to 19\(^ {35}\) were not active enough for optimal growth and development. The level of physical activity required for optimal growth and development for children and youth is equivalent to 60 minutes of physical activity throughout the day.

Baseline data from Actions Schools! BC pilot of 10 lower mainland elementary schools (Grades 4, 5, and 6) found 45% of children were not meeting health guidelines for physical activity (60 min/day)\(^ {36}\).

Table 7 presents the prevalence of British Columbians by health region and HSDA who were classified as active or moderately active in their leisure-time physical activity. Approximately 58% of British Columbians (aged 12+) were classified as active or moderately active with the highest percentage of active British Columbians residing in the East Kootenay, North Shore/Coast Garibaldi and Kootenay Boundary areas (see Figure 8)\(^ {37}\).

---

\(^{31}\) Statistics Canada, Canadian Community Health Survey, Table 105-0233, 2003.

\(^{32}\) CCHS Share file, 2003, cycle 2.3. Not stated have been included to mirror the CANSIM data


\(^{37}\) Statistics Canada, Canadian Community Health Survey, Table 105-0233, 2003
### Table 7. Physically Active or Moderately Active by Health Region and Health Service Delivery Area for Population (Aged 12+), 2003

<table>
<thead>
<tr>
<th>Region #</th>
<th>Region</th>
<th>Tot. Pop.</th>
<th>Count Actv/Mod Actv</th>
<th>% Actv/Mod Actv</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>All BC</td>
<td>3,521,971</td>
<td>2,044,762</td>
<td>58.1</td>
</tr>
<tr>
<td>11</td>
<td>East Kootenay</td>
<td>68,707</td>
<td>45,608</td>
<td>66.4</td>
</tr>
<tr>
<td>12</td>
<td>Kootenay Boundary</td>
<td>70,143</td>
<td>42,518</td>
<td>60.6</td>
</tr>
<tr>
<td>13</td>
<td>Okanagan</td>
<td>264,878</td>
<td>148,337</td>
<td>56.0</td>
</tr>
<tr>
<td>14</td>
<td>Thompson Cariboo</td>
<td>178,653</td>
<td>106,030</td>
<td>59.3</td>
</tr>
<tr>
<td>1</td>
<td>Interior</td>
<td>582,381</td>
<td>342,493</td>
<td>58.8</td>
</tr>
<tr>
<td>21</td>
<td>Fraser Valley</td>
<td>208,731</td>
<td>118,510</td>
<td>56.8</td>
</tr>
<tr>
<td>22</td>
<td>Simon Fraser</td>
<td>483,534</td>
<td>270,825</td>
<td>56.0</td>
</tr>
<tr>
<td>23</td>
<td>South Fraser</td>
<td>527,524</td>
<td>305,078</td>
<td>57.8</td>
</tr>
<tr>
<td>1</td>
<td>Fraser</td>
<td>1,219,789</td>
<td>694,413</td>
<td>56.9</td>
</tr>
<tr>
<td>31</td>
<td>Richmond</td>
<td>152,786</td>
<td>83,621</td>
<td>54.7</td>
</tr>
<tr>
<td>32</td>
<td>Vancouver</td>
<td>512,805</td>
<td>286,990</td>
<td>56.0</td>
</tr>
<tr>
<td>33</td>
<td>North Shore/Coast Garibaldi</td>
<td>228,543</td>
<td>149,178</td>
<td>65.3</td>
</tr>
<tr>
<td>3</td>
<td>Vancouver Coastal</td>
<td>894,134</td>
<td>519,789</td>
<td>58.1</td>
</tr>
<tr>
<td>41</td>
<td>South Vancouver Island</td>
<td>292,240</td>
<td>173,242</td>
<td>59.3</td>
</tr>
<tr>
<td>42</td>
<td>Central Vancouver Island</td>
<td>206,451</td>
<td>123,673</td>
<td>59.9</td>
</tr>
<tr>
<td>43</td>
<td>North Vancouver Island</td>
<td>94,885</td>
<td>57,513</td>
<td>60.6</td>
</tr>
<tr>
<td>4</td>
<td>Vancouver Island</td>
<td>593,576</td>
<td>354,428</td>
<td>59.7</td>
</tr>
<tr>
<td>41</td>
<td>Northwest</td>
<td>58,036</td>
<td>34,227</td>
<td>59.0</td>
</tr>
<tr>
<td>42</td>
<td>Northern Interior</td>
<td>123,367</td>
<td>72,157</td>
<td>58.5</td>
</tr>
<tr>
<td>43</td>
<td>Northeast</td>
<td>50,689</td>
<td>27,255</td>
<td>53.8</td>
</tr>
<tr>
<td>5</td>
<td>Northern</td>
<td>232,092</td>
<td>133,639</td>
<td>57.6</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, Canadian Community Health Survey, Table 105-0233, 2003.

1. Population aged 12 and over reporting level of physical activity, based on their responses to questions about the frequency, duration and intensity of their participation in leisure-time physical activity.

2. Respondents are classified as active, moderately active or inactive based on an index of average daily physical activity over the past 3 months. For each leisure time physical activity engaged in by the respondent, an average daily energy expenditure is calculated by multiplying the number of times the activity was performed by the average duration of the activity by the energy cost (kilocalories per kilogram of body weight per hour) of the activity. The index is calculated as the sum of the average daily energy expenditures of all activities. Respondents are classified as follows: 3.0 kcal/kg/day or
Figure 8. Per Cent of Population (Aged 12+) Who Are Physically Active or Moderately Active by Health Service Delivery Area (Quintiles), 2003

Health Service Delivery Areas
11 East Kootenay
12 Kootenay Boundary
13 Okanagan
14 Thompson Cariboo Shuswap
21 Fraser East
22 Fraser North
23 Fraser South
31 Richmond
32 Vancouver
33 North Shore/Coast Garibaldi
41 South Vancouver Island
42 Central Vancouver Island
43 North Vancouver Island
51 Northwest
52 Northern Interior
53 Northeast

Source: Statistics Canada, Canadian Community Health Survey, Table 105-0033, 2003

Inset 1
Inset 2
Table 8 presents in descending order the percent of the population (aged 12+) who were classified as physically active or moderately active by HSDA (based on their responses to questions about the frequency, duration and intensity of their participation in leisure-time physical activity). Sampling introduces the possibility of random error and therefore the table includes 95% confidence intervals for each HSDA's estimated rate of being physically active or moderately active. This data is presented in graph form in Figure 9. Green bars illustrate HSDAs that were significantly above the provincial average, blue connotes those not significantly different from the provincial average. Only East Kootenay and North Shore/Coast Garabaldi areas exhibited significantly higher (p<.05) levels of physically active or moderately active residents than the province while all other areas of the province did not differ in a statistically significant way from the provincial average.

Table 8. Prevalence of Physically or Moderately Active by Health Service Delivery Area (95% Confidence Interval) for Population (Aged 12+), 2003

<table>
<thead>
<tr>
<th>HSDA</th>
<th>Percentage</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>53.8</td>
<td>48.0</td>
</tr>
<tr>
<td>Richmond</td>
<td>54.7</td>
<td>50.5</td>
</tr>
<tr>
<td>Okanagan</td>
<td>56.0</td>
<td>52.3</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>56.0</td>
<td>52.7</td>
</tr>
<tr>
<td>Vancouver</td>
<td>56.0</td>
<td>52.9</td>
</tr>
<tr>
<td>Fraser Valley</td>
<td>56.8</td>
<td>52.3</td>
</tr>
<tr>
<td>South Fraser</td>
<td>57.8</td>
<td>54.0</td>
</tr>
<tr>
<td>British Columbia</td>
<td>58.1</td>
<td>57.0</td>
</tr>
<tr>
<td>Northern Interior</td>
<td>58.5</td>
<td>54.0</td>
</tr>
<tr>
<td>Northwest</td>
<td>59.0</td>
<td>54.6</td>
</tr>
<tr>
<td>Thompson Cariboo</td>
<td>59.3</td>
<td>55.8</td>
</tr>
<tr>
<td>South Vancouver Island</td>
<td>59.3</td>
<td>55.5</td>
</tr>
<tr>
<td>Central Vancouver Island</td>
<td>59.9</td>
<td>55.4</td>
</tr>
<tr>
<td>Kootenay Boundary</td>
<td>60.6</td>
<td>55.6</td>
</tr>
<tr>
<td>North Vancouver Island</td>
<td>60.6</td>
<td>55.6</td>
</tr>
<tr>
<td>North Shore/Coast Garabaldi</td>
<td>65.3</td>
<td>61.0</td>
</tr>
<tr>
<td>East Kootenay</td>
<td>66.4</td>
<td>61.6</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, Canadian Community Health Survey, Table 105-0233, 2003, Statistics Canada, CCHS CANSIM Tables, 2003 (Cycle 2.1) and with CCHS.
**Figure 9.** Physically Active/Moderately Active by Health Service Delivery Area (95% Confidence Interval) for Population (Aged 12+) 2003

![Bar chart showing percentage of physically active and moderately active by Health Service Delivery Area.]

Source: Statistics Canada, Canadian Community Health Survey, Table 105-0233, 2003. Statistics Canada, CANSIM Tables, 2003 (Cycle 2.1) and with CCHS.

**Figure 10** presents where these significant differences exist on a map of the province. Green areas signify those parts of the province with significantly higher (p<.05) rates of physically active or moderately active residents than the provincial average. The figure also takes into consideration the population differences that exist across the province. The size of the circle in the legend denotes a population of 260,000 persons, while the white or red illustrate the proportion who are active (physically active or moderately active) or inactive (neither physically active or moderately active), respectively. Most people, in terms of absolute numbers, who are physically active or moderately active (as denoted by the area of the red shading in the circles) are located in the lower mainland and on Vancouver Island.
Figure 10. Per Cent of Population (Aged 12+) Who Are Physically or Moderately Active by Health Service Delivery Area 2003

Health Service Delivery Areas
11 East Kootenay
12 Kootenay Boundary
13 Okanagan
14 Thompson Cariboo Shuswap
21 Fraser East
22 Fraser North
23 Fraser South
31 Richmond
32 Vancouver
33 North Shore/Coast Garibaldi
41 South Vancouver Island
42 Central Vancouver Island
43 North Vancouver Island
51 Northwest
52 Northern Interior
53 Northeast

Statistical Significance Compared to B.C. Average (58.1%)
- No Difference
- Significant High
- Significant Low

Physically Active Population (aged 12+)
- Equivalent to 260,000 Pop.
- Not Active
- Active

Source: HSDA boundary - BC Stats; HSDA population - PEOPLE 30; Physical Activity - CCHS Cycle 2.1
f. Do the rates of tobacco use differ in the province?

The proportion of British Columbians classified as smokers varies slightly depending on the survey used. Variations may be due to differences in the wording of questions, response categories and survey methodologies. For example, according to the Canadian Tobacco Use Survey (CTUMS) 15%\(^\text{38}\) of the BC population above the age of 15 are smokers while the Canadian Community Health Survey, in 2003, reports that 18.7% of British Columbians (aged 12 and over) are current daily or occasional smokers\(^\text{39}\). BC Stats utilizes a 12-month rolling average to determine smoking rates. According to BC Stats the twelve month average, surveyed monthly from April ‘05 – March ‘06, is 18.2% (19.3% men and 17.1% women\(^\text{40}\)). Table 9 presents the estimated percentage of smokers, by HSDA for those persons 15 years of age and older, while Figure 11 presents the prevalence of current smokers in the province based on quintiles.

Table 9. Percent of Population (Age 15+) Who Are Current (Daily and Occasional) Smokers by Health Service Delivery Area, 2005

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All BC</td>
<td>3,559,109</td>
<td>647,142</td>
<td>18.2</td>
</tr>
<tr>
<td>Interior</td>
<td>604,901</td>
<td>137,283</td>
<td>22.7</td>
</tr>
<tr>
<td>East Kootenay</td>
<td>69,409</td>
<td>18,626</td>
<td>26.8</td>
</tr>
<tr>
<td>Kootenay/Boundary</td>
<td>68,517</td>
<td>16,525</td>
<td>24.6</td>
</tr>
<tr>
<td>Okanagan</td>
<td>281,282</td>
<td>58,021</td>
<td>20.6</td>
</tr>
<tr>
<td>Thompson/Cariboo</td>
<td>185,693</td>
<td>43,821</td>
<td>23.5</td>
</tr>
<tr>
<td>Fraser</td>
<td>1,201,737</td>
<td>203,094</td>
<td>16.9</td>
</tr>
<tr>
<td>Fraser East (Fraser Valley)</td>
<td>212,133</td>
<td>31,322</td>
<td>14.7</td>
</tr>
<tr>
<td>Fraser North (Simon Fraser)</td>
<td>469,872</td>
<td>82,518</td>
<td>17.6</td>
</tr>
<tr>
<td>Fraser South</td>
<td>519,732</td>
<td>88,007</td>
<td>16.9</td>
</tr>
<tr>
<td>Vancouver/Coastal</td>
<td>894,815</td>
<td>127,287</td>
<td>14.2</td>
</tr>
<tr>
<td>Richmond</td>
<td>148,218</td>
<td>19,230</td>
<td>12.9</td>
</tr>
<tr>
<td>Vancouver</td>
<td>514,706</td>
<td>73,392</td>
<td>14.2</td>
</tr>
<tr>
<td>North Shore/Coast Garibaldi</td>
<td>231,891</td>
<td>34,991</td>
<td>15.1</td>
</tr>
<tr>
<td>Vancouver Island</td>
<td>614,054</td>
<td>119,786</td>
<td>19.5</td>
</tr>
<tr>
<td>South Vancouver Island</td>
<td>302,079</td>
<td>57,997</td>
<td>19.2</td>
</tr>
<tr>
<td>Central Vancouver Island</td>
<td>213,291</td>
<td>41,745</td>
<td>19.6</td>
</tr>
<tr>
<td>North Vancouver Island</td>
<td>98,684</td>
<td>20,136</td>
<td>20.4</td>
</tr>
<tr>
<td>Northern</td>
<td>243,602</td>
<td>59,655</td>
<td>24.5</td>
</tr>
<tr>
<td>Northwest</td>
<td>66,313</td>
<td>15,356</td>
<td>23.2</td>
</tr>
<tr>
<td>Northern Interior</td>
<td>123,556</td>
<td>30,554</td>
<td>24.7</td>
</tr>
<tr>
<td>Northeast</td>
<td>53,733</td>
<td>14,027</td>
<td>26.1</td>
</tr>
</tbody>
</table>

Source: BC Stats, CHESS Twelve (12) month average, surveyed monthly April 05 – Mar 06

Note: counts may not equal the % smoker rate due to rounding and fact that counts are based on gender specific rates.


\(^{39}\) Statistics Canada, Canadian Community Health Survey, Table 105-0227, 2003, http://www.statcan.ca/english/freepub/82-221-XIE/00604/nonmed/behaviours1.htm#smoke

\(^{40}\) BC Stats. Summary of Smoking Rates for BC, March 2006, p. 3.
**Figure 11.** Tobacco Use by Health Service Delivery Area for Population (Aged 15+), 2005 (Quintiles)

**Per Cent of Population (Aged 15+)**

- **24.7 - 26.8**
- **20.7 - 24.6**
- **19.3 - 20.6**
- **15.2 - 19.2**
- **12.9 - 15.1**

**Health Service Delivery Areas**

- 11 East Kootenay
- 12 Kootenay Boundary
- 13 Okanagan
- 14 Thompson Cariboo Shuswap
- 21 Fraser East
- 22 Fraser North
- 23 Fraser South
- 31 Richmond
- 32 Vancouver
- 33 North Shore/Coast Garibaldi
- 41 South Vancouver Island
- 42 Central Vancouver Island
- 43 North Vancouver Island
- 51 Northwest
- 52 Northern Interior
- 53 Northeast

Source: BC Stats, CHESS Twelve (12) month average, surveyed monthly April 05-Mar 06
Regardless of the method used, overall smoking rates in BC have been declining. Figure 12 presents the trends in smoking rates (occasional and daily) for the province as well as for each of the Health Regions between December, 2004 to March 2006. At the regional level, the proportion of smokers has generally been declining, while rates in the North have remained high.

Figure 12. Percent of British Columbia Population (Aged 15+) Who Are Current (Daily and Occasional Smokers)


Prevalence rates are calculated by BC Stats from the Community Health Education and Social Services (CHESS) Survey. CHESS survey data are collected monthly by BC Stats. Daily and occasional smokers are grouped together in the survey results as "current smokers". Despite the name of the indicator, "tobacco use" only refers to cigarette smoking and ignores cigar smoking, chewing tobacco and pinch and snuff use.

Survey data are weighted to accurately reflect age and gender distribution within each health authority based on BC STATS population estimates.

Figure 13. Logic Model Planning Framework — General Concepts

**Inputs**
- What we invest
  - Resources (e.g. staff, funding) used to carry out activities, produce outputs and/or accomplish results

**Outputs**
- What we do and who we reach
  - Direct products or services stemming from the activities of a policy, program or initiative, and delivered to a target group or population.
    - Examples include:
      - Number and types of policies or resources created
      - Number of participants involved
      - Number and types of best-practice resources distributed

**Outcomes**
- What results—Impacts of our program or service
  - External results attributed to an organization, policy, program or initiative.
    - Outcomes can be short term (impacts), medium term or long term.
    - Examples include:
      - Change in participants knowledge, attitudes or practices/behaviours
      - Change in quality of environment that is conducive to healthy choices
      - Change in prevalence rates of obesity
This section presents an overview of the importance of strategic planning and evaluation and how this will guide us in achieving the 2010 targets. A brief overview of the definitions to the components of the planning model will be provided. This will be followed by the overall ActNow BC planning model and the planning models for each of the four ActNow BC components:

- Healthy Eating
- Physical Activity
- Tobacco Control
- Healthy Choices in Pregnancy

**Why monitor and evaluate?**

Evaluating ActNow BC serves many purposes – it not only provides a means by which stakeholders can assess whether services and programs have been implemented as planned (process evaluation), but also provides valuable information on the possible changes that may have occurred as a result of implementation (outcome evaluation) and whether resources were adequately allocated and utilized (accountability). Information gleaned from evaluation findings can be used to assist planners in identifying successful initiatives as well as areas that require improvement; and, justify continued or expanded funding for programs and services that are successful. Evidence of successful healthy living initiatives in one location provides opportunities to share and disseminate this information with other areas throughout the province (diffusion of innovation).

Over the next few years as the healthy living initiatives begin to take shape and are implemented it will be crucial that program planners have the appropriate tools and indicators to provide them with the ability to make appropriate and timely programmatic and policy decisions. The proposed framework provides a means by which progress of the ActNowBC goals and objectives can be monitored and achievement of these goals and objectives can be determined.

**The ActNow BC Planning (Logic) Model**

Evaluation is a comparison of objectives with achievements. Evaluations can assess both the process (what did we do, who did we reach, was our program implemented as planned?) and outcomes (what results or impacts did our program have?).

The logic model provides not only a useful tool for program planning, but also a comprehensive way to monitor the multiple components of an initiative and evaluate shorter and longer-term impacts (see Figure 13). Following are the more detailed topic model planning frameworks for ActNow BC and the planning frameworks for each of the ActNow BC component. After this, key ActNow BC indicators and performance indicators are presented.
ActNow BC
Goal: BC is the healthiest jurisdiction ever to host the Olympic & Paralympic Games

Inputs
- Fiscal Resources
- Material Resources
- Human Resources
- Partnering Resources

Components
- Tobacco Reduction
- Physical Activity
- Healthy Eating
- Healthy Choices during Pregnancy

Activities
- Education and Awareness
- Programs and Services
- Policies and Legislation
- Knowledge Development and Transfer

Reach / Approach
- Population Health
- Multiple Settings (Schools, Worksites, Health Care Settings, Communities)
- Priority Populations
Outputs

- ActNow BC services and programs:
  - Volume (reach)
  - Type (e.g. policy)
  - Quality (e.g. satisfaction)

Short and Intermediate Outcomes

- Decreased Tobacco Use
- Increased Physical Activity
- Increased Fruit and Vegetable Intake
- Decreased Overweight and Obesity
- FASD Prevention Plans and Increased Counselling

Longer Term Outcomes

- Increased Life Expectancy
- Improved Quality of Life
- Decreased Low Birth Weight
- Decreased Infant Mortality

Ultimate Outcomes

- Improved Health
- Decrease in preventable health care costs

Context and External Factors

Monitoring, Surveillance and Evaluation
Healthy Eating Component — ActNow BC

Vision: All British Columbians access healthy foods and eat well.

Target: To increase by 20% the proportion of the BC population (aged 12+) who eat the daily recommended level of fruit and vegetables by 2010
# Calls to Dial-A-Dietitian
# Website hits – DAD ActNow/Making It Happen
# Resources distributed

# Participants in programs
# ActNow HE workshops
# ShapeDown programs
# School fruit & vegetable snack programs
# Health Check restaurants

# School/workplace policies
# Community food action networks/plans/policies
# Specialty food services
# Farm markets

# Surveys/Surveillance
# Partner Meetings
# Champion Organizations
# Reports/Publications
# Conferences/Presentations

## Outputs

## Short and Intermediate Outcomes

- Inc. awareness of the benefits of healthy eating
- Inc. awareness of opportunities/resources
- Inc. skills in choosing healthy foods

- Inc. supply of affordable fruits and vegetables
- Inc. opportunities to purchase/grow and eat fruit and vegetables in schools workplaces and communities

- Inc. healthy eating environments in early childhood, school and workplace settings
- Inc. community food

- Inc. best practice wt. mgt.
- Inc. understanding of determinants of healthy eating
- Inc. health/Agri-food partnerships

## Longer Term Outcomes

- Improved Healthy Eating Knowledge, Attitudes and Practices
- Inc. Fruit and Vegetable Consumption
- Inc. Availability of Healthy Foods
- Decrease in Overweight and Obesity

## Ultimate Outcomes

- Optimal growth and development
- Decrease in premature mortality and morbidity from major chronic disease
- Improved health and quality of life
- Decrease in Preventable health care costs

## Context and External Factors

## Monitoring, Surveillance and Evaluation
Physical Activity Component — ActNow BC
Vision: All British Columbians are physically active

Target: To increase by 20% the proportion of the BC population (aged 12+) who are physically active or moderately active during their leisure time by 2010
Outputs

- # Materials disseminated (brochures, pamphlets, toolkits, brochures etc.)
- # Website hits
- # Participants reached
- # Events offered

Short and Intermediate Outcomes

- Increased awareness of the benefits of PA
- Increased awareness of PA recommendations
- Awareness of PA opportunities/resources
- Improved attitude toward PA

 Longer Term Outcomes

- Increased PA levels
- Increased PA opportunities and access (ASI BC, ACs, 0-5 Physical Activity Family Resource, Healthy Schools)

 Ultimate Outcomes

- Optimal growth and development
- Decreased premature mortality and morbidity from major chronic disease
- Improved Health/Quality of Life
- Decreased preventable health care costs

Context and External Factors

- # Resources/toolkits distributed
- # Workshops delivered
- # Grants administered
- # Participants in programs and services
- # Programs offered
- # /km bike lanes
- # /km trails
- # Facilities/spaces
- # Surveys/surveillance
- # Meetings
- # Partnerships
- # Of knowledge exchange opportunities (conferences)

Monitoring, Surveillance and Evaluation

ActNowBC | Measuring Our Success
**Tobacco Control Component — ActNow BC**

*Vision:* All British Columbians are tobacco free.

*Target:* To reduce by 10% the proportion of the BC population (aged 15+) who use tobacco by 2010
Outputs
- # resources/toolkits distributed (bc. tobaccofacts)
- # workshops delivered (worksite wellness)
- # of people reached
- # of calls to QuitNow
- # of registrants who access website resource
- # of schools offering Kick the Nic
- Legislative changes passed
- # of smoke free resources distributed (decals, brochures, posters)
- % of school districts with policies prohibiting use of tobacco products on school grounds.
- # of retailer visits
- discovery complete
- other jurisdictions join BC’s legal action
- # of partnerships
- # of knowledge exchange opportunities (conferences)

Short and Intermediate Outcomes
- Changes in public knowledge and attitudes toward tobacco use
- Increased awareness of the benefits of not using tobacco
- Increased awareness of where opportunities/resources exist
- # of clients who are supported by Quitnow services
- # Health Promoting Schools and Post Secondary School initiatives
- Legislation strengthened
- # of communities with smoke free bylaws
- # of compliant retailers
- Increased public knowledge of the lawsuit
- court date set
- Changes in tobacco community mobilization
- # partnerships

Longer Term Outcomes
- Society that supports tobacco control
- Decrease in people who start smoking (youth and young adults)
- Increase in people who quit smoking
- Decrease exposure to second-hand smoke
- Increase in evidence-based decision-making
- Tobacco Industry held accountable/changed behavior

Ultimate Outcomes
- Decreased premature mortality and morbidity from major chronic disease
- Improved health and quality of life
- Decreased preventable health care costs

Context and External Factors

Monitoring, Surveillance and Evaluation
ActNow BC Healthy Women in Pregnancy Logic Model

Vision: All women in BC are supported in making healthy choices during pregnancy

**Inputs**
- Fiscal Resources
- Material Resources
- Human Resources
- Partnering Resources

**Components**
- Knowledge development and transfer
- Health promoting policies
- Prevention programs and services
- Public Education and Awareness

**Programs/Activities**
- Comprehensive education plan for care providers, including resource development.
- Public awareness of healthy pregnancy
- Healthy workplaces, breastfeeding support.
- Enhanced perinatal capacity of BC NurseLine.
- Enhancement of pregnancy support services.
- Supporting HAs in development of comprehensive FASD prevention plans

**Reach / Approach**
- Population Health
- Multiple Settings (Schools, Worksites, Health Care Settings, Communities)
- Priority Populations
Outputs

Education resources: number and type of products.

Improved access to information: number of pregnant women receiving counselling.

Knowledgeable providers: number of sessions, number and type of attendees.

# of HAs supported in development of FASD prevention plans.

Each HA has completed FASD prevention plan.

Short and Intermediate Outcomes

Women are provided with information on alcohol and pregnancy.

Women who use tobacco and alcohol during pregnancy are offered screening, support and referral.

Health providers are knowledgeable and comfortable providing counselling on tobacco and alcohol use during pregnancy.

FASD prevention plans are completed and implementation underway in each HA.

Longer Term Outcomes

Women quit or reduce tobacco and/or alcohol use during pregnancy.

Adequate range of preconception, prenatal and postpartum services are available to women.

Environment is supportive of healthy pregnancy (including physical, social, economic and policy environments).

Decreased incidence of FASD

Ultimate Outcomes

Improved maternal and infant health and well-being

Context and External Factors

Monitoring, Surveillance and Evaluation
Key ActNow BC Indicators

For purposes of developing a baseline by which to compare progress toward achieving the ActNow BC targets, a number of key indicators and corresponding performance measures were identified. Some of the measures will provide indications of how well initiatives are being implemented (outputs) while others will provide data on the changes that are occurring in the target population (outcomes) over time. The following tables provide a detailed list of the variables that will be monitored as the ActNow BC platform is implemented.

1. Physical Activity

<table>
<thead>
<tr>
<th>Component Area</th>
<th>Indicators</th>
<th>Performance measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Activity</td>
<td>% of BC population (age 12+) who are physically active or moderately active during their leisure time from the current level (2003) of 58.1% to 69.7% of the B.C. population by 2010</td>
<td>CCHS - 2001 &amp; every 2 yrs. afterward. Detail available summer of following year. Action Schools website – reports monthly (provincial and by HSDA).</td>
</tr>
<tr>
<td></td>
<td>% of schools registered in AS!BC (Provincially by HSDA)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% of communities classified as Active Communities (by HSDA)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BCRA – monthly updates (provincial and by HSDA)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• # of schools registered</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• # of workshops</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• # of student participants</td>
<td></td>
</tr>
</tbody>
</table>

2. Overweight and Obesity

<table>
<thead>
<tr>
<th>Component Area</th>
<th>Indicators</th>
<th>Performance measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight/Obesity</td>
<td>% of BC population (age 18+) who are overweight or obese</td>
<td>CCHS 1.1, 2.1, 3.1, (optional content provincial only)</td>
</tr>
<tr>
<td></td>
<td>% of clients and families receiving services at ShapeDownBC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Note: please refer to healthy eating and physical activity components for other indicators</td>
<td></td>
</tr>
</tbody>
</table>
3. Healthy Eating

<table>
<thead>
<tr>
<th>Component Area</th>
<th>Indicators</th>
<th>Performance measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Eating</td>
<td>To increase by 20% the proportion of the B.C. population (aged 12+) who eat the daily recommended level of fruits and vegetables from the current level (2003) of 40.1 % to 48.1% of the population by 2010.</td>
<td>1999 BCNS, CCHS 1.1, 2.1, 3.1, (optional content provincial only)</td>
</tr>
<tr>
<td></td>
<td>• % of adult BC population (aged 12+) who eat 5+ servings of fruit and vegetables/day</td>
<td>PHSA - annually (May 2006) by HA</td>
</tr>
<tr>
<td></td>
<td>• % of schools with food and nutrition policies)</td>
<td>Survey by Min of Ed. Baseline done Spring 2005. Done periodically (possibly annually). Goal 90% by 2009</td>
</tr>
<tr>
<td></td>
<td>• # of school fruit and vegetable snack programs</td>
<td>BC Agriculture in the Classroom. 10 pilot schools in 2005. Goal: all schools by 2010</td>
</tr>
<tr>
<td></td>
<td>• # of calls to Dial-A-Dietitian</td>
<td># of calls determined semi-annually (Oct and May) by region.</td>
</tr>
</tbody>
</table>

4. Tobacco Control

<table>
<thead>
<tr>
<th>Component Area</th>
<th>Indicators</th>
<th>Performance measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco Use</td>
<td>To reduce by 10% the proportion of the BC population (aged 15+) that use tobacco from the current prevalence rate (2003) of 16.0% to 14.4% of the BC population by 2010. (Note: these rates apply to the BC population 15 years of age and older).</td>
<td>1999 BCNS, CCHS 1.1, 2.1, 3.1, (optional content provincial only)</td>
</tr>
<tr>
<td></td>
<td>• % of BC population (age 15+) who use tobacco products</td>
<td>QuitNow by Phone: Clinidata - # of calls reported monthly - Provincial and HA</td>
</tr>
<tr>
<td></td>
<td>• # of participants using QuitNow services - either quit line or web program</td>
<td>Interactive Cessation Website: BC Lung Assoc. - monthly reports. Provincial, HA and HSDA levels</td>
</tr>
<tr>
<td></td>
<td>• # of homes that are smoke free</td>
<td># of new registrants for access to website resource (personalized information)</td>
</tr>
<tr>
<td></td>
<td>• # of people aware of Tobacco Free Sports</td>
<td># of ongoing members who continue to access website resources</td>
</tr>
<tr>
<td></td>
<td>• # of aboriginal communities that participate in Honour Your Health initiative</td>
<td># of communities with 100% smoke free bylaws,</td>
</tr>
<tr>
<td></td>
<td></td>
<td># of communities with smoking bylaws</td>
</tr>
<tr>
<td></td>
<td></td>
<td># of people 15+ years old exposed to tobacco smoke in the home</td>
</tr>
<tr>
<td></td>
<td></td>
<td># of British Columbians 15+ who are aware of BC's Tobacco Free Sports Program</td>
</tr>
<tr>
<td></td>
<td></td>
<td># of Honour Your Health trainers</td>
</tr>
<tr>
<td></td>
<td></td>
<td># of community grants</td>
</tr>
<tr>
<td></td>
<td></td>
<td># of communities that participate</td>
</tr>
</tbody>
</table>
## 5. Healthy Choices In Pregnancy

<table>
<thead>
<tr>
<th>Component Area</th>
<th>Indicators</th>
<th>Performance measure</th>
</tr>
</thead>
</table>
| Healthy Choices in Pregnancy | • To increase by 50.0% the number of women counseled regarding alcohol use during pregnancy  
• By September 2006, for each health authority to have focused strategies for FASD prevention |  
• % of health authorities that have completed comprehensive FASD prevention plans  
• # of service providers (by profession) providing services to pregnant women who receive training on counseling women about alcohol use during pregnancy  
• changes in knowledge in general population and among pregnant women about alcohol use during pregnancy |  
# of (1st) draft plans completed by March 2006  
# of finalized plans completed by Sept. 2006.  
Quarterly report (starting Fall, 2006) from PHSA on # of providers (Physicians, Midwives, Public Health Nurses, POPs and Addictions Counselors) who attend educational events by type of event. Number of practice guidelines disseminated to health professionals.  
Quarterly report on BCRCP data on:  
• # of pregnant women MD’s report they have counseled  
Knowledge levels of general population (including women who are pregnant) on the health risks associated with consuming alcohol during pregnancy (BC Stats, CCHS) |
Section 3 | Baseline information on outputs and outcome measures

This section provides the baseline results by which progress will be determined as we move toward 2010. In some cases multiple measures (e.g. data have been collected on a monthly basis since program inception) already exist. For these indicators, an opportunity exists to assess whether progress is occurring and trajectories can be posited. For other areas, baseline information will not be available till later in 2006. When this information becomes available, it will be added to the ongoing monitoring process and will be made available in a forthcoming document.

a. Physical Activity

Active Communities

The Active Communities Initiative is part of a much larger wellness initiative being planned and supported by the Province to meet the 20% increase in physical activity levels of British Columbians by the year 2010. The BC Recreation and Parks Association is implementing the Initiative with support from the BC Ministry of Health and in partnership with ActNow BC and 2010 Legacies Now.

An Active Community is one that promotes and supports, through a coordinated strategy, a way of life in which physical activity is valued and integrated into daily life. The Active Communities Initiative will mobilize and support local governments and partner organizations to undertake actions that promote: healthy lifestyles; building healthy communities; and, increasing physical activity levels amongst British Columbians. This will be achieved by:

• Supporting communities to develop an Active Community plan
• Increasing local awareness of the benefits of regular physical activity
• Creating opportunities to increase participation levels by 20%
• Strengthening community partnerships
• Linking with other strategies under ActNow BC and 2010 Legacies Now

Progress of the Active Communities initiative will be monitored by collecting information on the number of registered communities. A community is not defined by geographical location – for example, a community can be a municipality, an aboriginal community, or a wellness coalition. Linkages and partnerships within geographical communities are encouraged, however, there may be more than one Active Community within a geographical boundary.

Figure 14 presents the number of registered Active Communities from the inception of the initiative in late September 2005 to March 31, 2006.
Action Schools! BC promotes the creation of inclusive and diverse physical activity opportunities throughout the school day. Students, school staff, families and community practitioners can contribute to and benefit from balanced action plans that provide opportunities for children to be more physically active more often.

To help increase physical activity in schools, Action Schools! BC focuses on Six Action Zones:

1. **School Environment** – Action Schools! BC makes healthy choices the easy choices for schools by creating safe and inclusive environments, and supporting active living policy;

2. **Scheduled Physical Education** – Action Schools! BC supports the curriculum goal to deliver 150 minutes of scheduled physical education per week (IRP, 1995);

3. **Classroom Action** – Action Schools! BC provides creative, alternative classroom physical activity ideas that complement scheduled physical education and support the curriculum;

4. **Family and Community** – Action Schools! BC fosters the development of partnerships with families and community practitioners to benefit from the wealth of resources available to promote and encourage active living;

5. **Extra-Curricular** – Action Schools! BC balances classroom action and physical education with a variety of opportunities for students, school staff and families to be physically active before and after school, and during lunch and recess; and

6. **School Spirit** – Action Schools! BC cultivates school spirit by encouraging physical activity and celebrating the benefits of active living for the whole school.
There are four steps to becoming an Action School! BC: registering, which provides the school with access to resources and the assistance of the Action Schools! BC Support Team; bringing together an Action Team; developing a School Action Plan; and recording how the plan unfolds.

The following three figures present data between January 2004 and April 2006 on the increase in the number of schools that registered as Action Schools! BC, the number of students in those schools and the numbers of teachers, principals and other school personnel involved in Action Schools! BC initiatives. As of April 30, 2006 there were 2,653 classroom action bins distributed, 565 workshops delivered, 50 regional trainers in place and 98% of school districts that had at least one Action Schools! BC school in their district.

Figure 15. Number of Registered Action Schools! BC (January 2004 to April 2006)

Source: Monthly Status Reports provided by Action Schools! BC Support Team, Information on current month located at: [http://www.actionschoolsbc.ca/Content/stats.asp](http://www.actionschoolsbc.ca/Content/stats.asp)

---

42 Action Schools! BC, 2005-2006 Monthly Stats Overview, as of April 30, 2006
Figure 16. Number of Students in Schools Registered in Action Schools! BC

Source: Monthly Status Reports provided by Action Schools! BC Support Team, Information on current month located at: http://www.actionschoolsbc.ca/Content/stats.asp

Figure 17. Number of Teachers, Principals and Other School Personnel Involved in Action Schools! BC

Source: Monthly Status Reports provided by Action Schools! BC Support Team, Information on current month located at: http://www_actionschoolsbc.ca/Content/stats.asp
b. Healthy Eating Outputs and Outcomes

**Dial-A-Dietitian**

Dial-A-Dietitian provides free nutrition information by phone and mail or internet website to British Columbians. Registered dietitians answer questions from the public, health educators and the media through a toll free number (1-800-667-3438) or provide nutrition information through a website at www.dialadietitian.org. By tallying the number of calls answered by Dial-A-Dietitian staff and the number of website pages viewed or visited, an indication of the public’s demand for nutrition information can be determined. From April to March, 2002-03, 2003-04 and 2004-05 the number of calls answered by Dial-A-Dietitian staff increased from 18,553, to 18,564 and 20,000 respectively. Between April 2003 and March 2004, there were 275,142 pages viewed on the Dial-A-Dietitian website. This increased to 284,332 pages being viewed between April 2004 and March 2005. Figure 18 presents the nutrition topics callers to Dial-A-Dietitian posed.

**Figure 18.**

_Dial-A-Dietitian Nutrition Topics (19,483)_

_April 2004-March 2005_

**Food and Beverage Sales in BC Schools**

In November 2005, the School Food Policies and Sales Report[^43], the Guidelines for Food and Beverage Sales in BC Schools, fact sheets and reference tools were released and posted on the Ministry of Education website for Healthy Schools. Of the 1,169 responding schools who participated in the School Food Policies and Sales Report survey, 654 (56%) reported having implemented policies or guidelines in at least one of the seven categories outlined in Table 10. A further 110 schools (9%) were in the process of developing guidelines/policies in at least one of these categories.[^44]

<table>
<thead>
<tr>
<th>Categories of School Food Policies/Guidelines</th>
<th>In place</th>
<th>Under Development</th>
<th>Neither</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Types of food sold in school vending machines, cafeterias or school stores</td>
<td>20.3%</td>
<td>14.6%</td>
<td>65.1%</td>
</tr>
<tr>
<td>B. Types of food sold at school special events and field trips</td>
<td>10.6%</td>
<td>16.8%</td>
<td>72.6%</td>
</tr>
<tr>
<td>C. Fundraising by selling food outside the school</td>
<td>7.2%</td>
<td>8.5%</td>
<td>84.2%</td>
</tr>
<tr>
<td>D. Competitive pricing to promote healthy food choices</td>
<td>17.3%</td>
<td>12.6%</td>
<td>70.1%</td>
</tr>
<tr>
<td>E. Discouraging the use of food as a reward</td>
<td>12.7%</td>
<td>15.0%</td>
<td>72.3%</td>
</tr>
<tr>
<td>F. Limiting access to less nutritious foods during school hours</td>
<td>28.7%</td>
<td>13.8%</td>
<td>55.5%</td>
</tr>
<tr>
<td>G. Providing adequate time and pleasant spaces to eat</td>
<td>45.6%</td>
<td>8.5%</td>
<td>43.8%</td>
</tr>
</tbody>
</table>


At the time of reporting, 256 schools (25.2%) had a formal group with a central focus on nutrition in place (Table 11).[^45] As shown in the table, middle schools were most likely to have these groups. Percentages are based on the number of schools reporting.

<table>
<thead>
<tr>
<th>Elementary</th>
<th>Middle</th>
<th>Secondary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>184</td>
<td>24.7%</td>
<td>26</td>
<td>32.1%</td>
</tr>
</tbody>
</table>


**BC School Fruit and Vegetable Snack Program**

This initiative is a partnership with Ministries of Health, Education and Agriculture and Lands and is delivered through BC Agriculture in the Classroom Foundation. School children in ten pilot elementary schools began in September 2005 receiving twice per week a free BC grown fruit or vegetable. As well, teachers, students and their families receive information on BC grown fruits and vegetables. These ten pilot schools represent 3300 elementary school children who receive approximately 6600 fruits and vegetables per week. An evaluation of this initiative will be completed by September 2006.


Shapedown BC
In partnership with the Provincial Health Services Agency (PHSA), BC Children's and Women's Hospital, and the Child Health Services Network, this initiative provides assessment and treatment services for children and youth who are obese. By 2006, a prototype clinic was developed in Vancouver; plans are underway to expand the program to other areas of the province. The first report on the evaluation of this initiative is expected from PHSA in April 2007.

Community Food Action Initiative (CFAI)
Health authorities received funding in June 2005 to support the implementation of integrated community food security plans to help improve long-term access to healthy foods for all members of the community, especially those living with low income. The PHSA is providing coordination for implementation and evaluation of the CFAI. As of April 30, 2006, sixty-three projects/communities have been funded under this initiative. Table 12 provides a detailed description of the type of grant funded by location (i.e. Health Authority).

Table 12. Community Food Action Initiative Reporting from Regional Health Authorities on Community Funding 2005/06

<table>
<thead>
<tr>
<th>Regional Health Authority</th>
<th>Grants for Community Capacity Building</th>
<th>Grants to develop Community Food Action Plan</th>
<th>Grants to fund implementation of Better Practices (Food Resources)</th>
<th>Grants to fund Implementation of a Community Food Action Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIHA</td>
<td>10</td>
<td>7</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>VCHA</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IHA</td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NHA</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FHA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>15</td>
<td>12</td>
<td>1</td>
</tr>
</tbody>
</table>

c. Tobacco Control Outputs and Outcomes

QuitNow
QuitNow.ca is an internet-based cessation program managed by the BC Lung Association. From January to December 2005, 3,498 persons who smoke registered with QuitNow.ca – a monthly average of 291.5.

QuitNow by phone - A toll-free 24/7 intervention and counseling service available in 130 languages and with Telecommunications Device for the Deaf operated by Clinidata. The purpose of the service is to encourage and assist tobacco users to quit or reduce their use of tobacco products. From February 1 to December 31, 2005, 1,377 persons called QuitNow by phone, while 1,714 outbound calls were made by QuitNow by phone.
Table 13. Registrations and Inbound Calls by Health Authority — January to December 2005

<table>
<thead>
<tr>
<th>Cessation Resource</th>
<th>Sum of Health Authorities</th>
<th>Interior Health Authority</th>
<th>Fraser Health Authority</th>
<th>Vancouver Coastal Health Authority</th>
<th>Vancouver Island Health Authority</th>
<th>Northern Health Authority</th>
<th>Undefined Health Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>QuitNow registrations</td>
<td>3,498</td>
<td>786</td>
<td>984</td>
<td>758</td>
<td>700</td>
<td>250</td>
<td>20</td>
</tr>
<tr>
<td>QuitNow by phone</td>
<td>1,153</td>
<td>211</td>
<td>288</td>
<td>256</td>
<td>237</td>
<td>161</td>
<td></td>
</tr>
</tbody>
</table>

Source: QuitNow BC

Undefined Health Authority is when it was not determined or it is unknown as to which health authority the registrant resides or caller is from.

Table 14 presents the percent of current smokers, age 15+, who stated either “QuitNow.ca” or “QuitNow by phone” when asked to provide three examples of resources or support that might help them to quit smoking. Percentages ranged from 0 to 6% for the former and 1 to 7% for the latter over the survey period.

Table 14. Top-of-Mind Cessation Resources, Current Smokers, Age 15+

<table>
<thead>
<tr>
<th>Cessation Resource</th>
<th>June-05</th>
<th>July-05</th>
<th>Aug-05</th>
<th>Sept-05</th>
<th>Oct-05</th>
<th>Nov-05</th>
<th>Dec-05</th>
<th>Jan-06</th>
<th>Feb-06</th>
<th>Mar-06</th>
</tr>
</thead>
<tbody>
<tr>
<td>QuitNow.ca registrations</td>
<td>3%</td>
<td>2%</td>
<td>5%</td>
<td>3%</td>
<td>2%</td>
<td>0%</td>
<td>2%</td>
<td>3%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>QuitNow by phone</td>
<td>2%</td>
<td>1%</td>
<td>4%</td>
<td>4%</td>
<td>7%</td>
<td>6%</td>
<td>6%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: BC STATS, CHESS three (3) month average. Summary of Smoking Rates for BC - March 2006. p. 34.

Question: When you think of resources or support that you might use to help you quit smoking, what is the first type of resource or support that comes to mind? And what comes to mind next? Third?

Approximately one in five British Columbia smokers reported that they were aware of QuitNow.ca, while approximately 12% were aware of QuitNow by phone.46

Table 15 Percent of Smokers Who Are Aware of QuitNow.ca or QuitNow by Phone by Province and Health Authority

<table>
<thead>
<tr>
<th>Cessation Resource</th>
<th>British Columbia</th>
<th>Interior Health Authority</th>
<th>Fraser Health Authority</th>
<th>Vancouver Coastal Health Authority</th>
<th>Vancouver Island Health Authority</th>
<th>Northern Health Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>QuitNow.ca</td>
<td>20%</td>
<td>24%</td>
<td>20%</td>
<td>16%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>QuitNow by phone</td>
<td>12%</td>
<td>16%</td>
<td>11%</td>
<td>9%</td>
<td>12%</td>
<td>18%</td>
</tr>
</tbody>
</table>


Question: I am going to read you a list of resources used by smokers to quit. Could you please tell us which of the following resources you are aware of?

46 BC STATS, CHESS twelve (12) month average, surveyed monthly April ’05 - March ’06. Summary of Smoking Rates for BC - March 2006. p.26
Municipal Smoking Bylaws
Most British Columbians agree or strongly agree that smoking in public places should not be tolerated (see Figure 19).

Figure 19. Attitudes Towards Smoking in Public Places.

The purpose of smoke free bylaws is to protect people from known health hazards of exposure to second hand smoke. Three designations or standards exist for the extent of a bylaw:

**Gold Standard:** bylaws that prohibit smoking in all public places. There is no allowance for Designated Smoking Rooms (DSRs)

**Silver Standard:** bylaws that prohibit smoking in most public places, including restaurants. Smoking is permitted among bars, billiard halls, bingo halls, bowling alleys and casinos/slots. This exemption may or may not stipulate the need for a DSR or a Designated Smoking Area (DSA).

**Bronze Standard:** bylaws that prohibit smoking in most public places including restaurants. Two or more exemptions are permitted among bars, billiard halls, bingo halls, bowling alleys and casinos/slots. Bronze Standard exemptions may include DSRs and DSAs.

As of April 2006, five municipalities in BC were designated as achieving Gold Standard smoking bylaws, while eleven achieved Silver Standard bylaws, and no municipalities were found to have Bronze Standard bylaws.\(^\text{47}\)

Second Hand Smoke

Almost half (49%) of all BC smokers aged 15+ agreed or strongly agreed with the statement that their smoking bothered other people a great deal, while 71% agreed or strongly agreed that second hand smoke is dangerous to those around them.48

Figure 19 presents the percent of non-smokers, aged 15 years and older, who report being exposed to second hand smoke in different contexts. Approximately one in five British Columbians in this sample reported being exposed to second hand smoke in either an indoor public place such as a bar, restaurant or shopping mall, or in an outdoor public place such as an outdoor stadium, field or event.

Smoke-Free Homes and Vehicles - In partnership with Health Canada, this public educational and awareness campaign will produce a brochure that focuses on the health consequences to infants and children of exposure to second-hand smoke and will include decals for both smoke-free homes and vehicles. Brochures and decals were distributed to every grade 4 and 5 class (approximately 96,000 students) during National Non-Smoking Week, January 2006.49

Figure 20. Percent of Non-Smoking Population (Aged 15+) Who Are Exposed to Second-hand Smoke.


Question: In the past month, were you exposed to second hand smoke in (location) every day, almost every day, or not at all? Note: the in your work place question applies to those people 15+ who work outside the home for pay.

49 Fraser Health Authority did not wish to receive these materials.
**Tobacco Free Sports Program**

The Tobacco Free Sports Program provides support for tobacco-free athletes and sports environments and includes a toolkit for coaches, posters of high performance athletes endorsing a tobacco-free lifestyle, and funding for community education and policy work. Figure 21 presents the percent of British Columbians above 15 years of age who are aware of this initiative.

**Figure 21. Awareness of BC’s Tobacco Free Sports Program in Population (Aged 15+)**

Source: Summary of Smoking Rates for BC – March 2006, p. 42. BC Stats. CHESS, Three (3) month rolling average.

Question: There is a program in BC that provides anti-smoking resources and materials to sporting events. Have you seen or heard anything about BC’s tobacco free sports program?

**Honour Your Health**

Honour Your Health Challenge is a community-based program developed through the BC Aboriginal Tobacco Strategy that brings together best practices in health and the best Aboriginal traditions to promote the health and well-being of Aboriginal people, and to prevent and stop tobacco misuse. This program provides train-the-trainer training and grants, to help build capacity in Aboriginal communities to raise awareness about health and tobacco misuse through community level health promotion events.

In 2005/2006 the Honour Your Health program included 100 communities from throughout BC. One hundred and forty three front line workers participated in a training event in October 2005. In November/December 2005, 71 community service grants were awarded. From January to March 2006, 86 communities participated in the 2006 Honour Your Health Challenge (71 with assistance from provincial grants and 15 through their own financial sources).
d. Healthy Choices In Pregnancy Outputs and Outcomes

**Health Authority FASD Prevention Plans**

By September 2006, all health authorities are expected to have focused plans for FASD prevention. As of May 2006, most health authorities had begun the planning process, varying from community round table forums, to active, stakeholder committees through to draft logic models and draft program plans. It is encouraging that all the regions that have provided feedback, have incorporated relevant community partners into their planning process. It is anticipated that all regions will have completed plans in place by year-end.

**Service Provider Awareness and Education**

The Provincial Health Services Authority has engaged in partnerships with the Ministry of Children and Family Development, Public Health Agency of Canada, BC Association of Pregnancy Outreach Programs, BC Centre of Excellence for Women’s Health, and the health authorities in the development a Provincial education plan addressing best practices for counseling women on the use of alcohol in pregnancy. The education delivery plan will target perinatal service providers including: physicians, midwives, addiction workers, public health nurses, and pregnancy outreach program staff. As of May 2006, an in-service training session has been provided for Pregnancy Outreach Program staff and another is planned for the end of May 2006. PHSA will be providing its first quarterly report in Fall 2006 on the numbers of service providers reached through education events and the types of events that occurred.

**Knowledge of the Risks Associated With the Use of Alcohol in Pregnancy**

The Provincial Health Services Authority in collaboration with the Ministry of Children and Family Development, Public Health Agency of Canada, BC Association of Pregnancy Outreach Programs, BC Centre of Excellence for Women’s Health, and the health authorities is developing evidence-based resources and materials for women, their families, and the community that inform them of the harm of using alcohol in pregnancy. The British Columbia Reproductive Care Program (BCRCP) has produced and distributed to all physicians, midwives and other service providers, the “Guidelines for Alcohol Use in the Perinatal Period and Fetal Alcohol Spectrum Disorder”. These guidelines will be available at all forthcoming education events. Other products such as an instructional DVD, website article and poster campaign are in development. PHSA will be providing in Fall 2006 its first quarterly report on the numbers of products produced and the types of products.

To estimate the percentage of antenatal records that have documentation of alcohol being discussed with pregnant women by physicians and midwives a sample chart review will be completed in the Fall of 2006. This will consist of random selection of 385 charts from each HA and will form the baseline from which a determination can be made as to whether a 50% increase in the number of women counseled re: alcohol in pregnancy has occurred.
As ActNow BC initiatives, programs and services are planned, pilot-tested, implemented and evaluated it will become exceedingly important to monitor the impacts these activities have on the overall health status of British Columbians. Measuring Our Success: Baseline Document is intended as a beginning - a foundational document that is the first in a series of reports that visually present the status of British Columbians in relation to the key 2010 targets. The data contained within Measuring Our Success provides a baseline by which information in subsequent reports can be compared, progress can be noted and gaps can be identified.

A number of observations can be made from this baseline report:

- Chronic diseases are among the most prevalent and costly health issues in British Columbia.
  - In 2003, approximately 42% of British Columbians (aged 18+) were overweight or obese and only 58% of British Columbians (aged 12+) were physically or moderately active;
  - In 2005, 15% of British Columbians (aged 15+) continued to use tobacco; and
  - In 2001, approximately one in ten pregnant Canadian women drank alcohol while pregnant.

- Most British Columbians (aged 12+) do not eat the daily recommended levels of fruits and vegetables. While variations occur throughout the province, in no HSDA is the percentage of the population who consume 5+ servings of fruits and vegetables daily above 50%.

- The ActNow BC planning models provide not only a useful tool for program planning, but also a comprehensive way to monitor the components of the multiple initiatives that make up the ActNow BC platform and evaluate their shorter and longer-term impacts.

The information contained in this report is intended as a guide for program planners and decision makers, both within and external to government. Future documents will include results on the outputs that are produced, in terms of the volume (reach), type (e.g. policy) and quality (e.g. satisfaction) as well as the short and intermediate outcomes. Whenever possible comparisons will be presented at a provincial, health region and Health Service Delivery Area level. By monitoring our progress toward achieving the ActNow BC targets, the impacts of our programs and services can be maximized and the improved health and well-being of all British Columbians can be realized.