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Brian McKee, Ashgrove Geographic Services Ltd, Victoria

Leslie T. Foster and C. Peter Keller

University of Victoria, May 2008
Introduction to the seniors supplement

The BC Atlas of Wellness was published in 2007 (see Leslie T. Foster and C. Peter Keller, *The BC Atlas of Wellness*, Western Geographical Press, University of Victoria, 2007, for further explanation. See also [http://www.geog.uvic.ca/wellness](http://www.geog.uvic.ca/wellness)). This Supplement provides a further, more in depth look at the geographic variations in the wellness of seniors (those aged 65 or over) in British Columbia. In total, 39 separate indicators are presented based on the Canadian Community Health Survey (CCHS): 3.1, undertaken in 2005. As noted in the BC Atlas of Wellness, the CCHS surveyed only those individuals who resided in the community, and did not include seniors who may have resided in hospitals or long term care facilities, in jails, on Indian reserves or in very small, remote communities. Accordingly, caution in interpreting the maps and supporting tables is required.

The maps are grouped into five key areas for convenience purposes:

- Smoke-free environment and behaviour (5 indicators);
- Nutrition and alcohol (6 indicators);
- Physical health (8 indicators);
- Free of chronic conditions (9 indicators); and,
- Emotional/psychological/social wellness (11 indicators).

Each indicator is mapped based on positive responses to the questions asked. Five demographic groups are considered so that comparisons can be made among the 16 Health Service Delivery Areas (HSDA), similar to the main BC Atlas of Wellness.

The five groups (with sample sizes) are as follows:

- age 65 and over (3164)
- males age 65 and over (1333)
- females age 65 and over (1831)
- age 65 to 74 (1656)
- age 75 and over (1508)

Tables also accompany the maps so that it is possible to compare the following groups for significant differences, both at the provincial level, and at the individual Health Service Delivery Area level as follows:

- age 65 and over compared with those between age 20 to 64
- males age 65 and over compared with females age 65 and over
- age 65 to 74 compared with those age 75 and over

A short section summarizes the results and patterns that emerge from the five key areas in this supplement. Further discussion of seniors’ wellness issues in British Columbia is available in Denise Cloutier-Fisher, Leslie T. Foster and David Hultsch (Eds.), *Health and Aging in B. C.: Vulnerability and Resilience*, Western Geographical Press, University of Victoria, 2008.

The following two pages provide a guide to interpreting the tables and maps contained within this Supplement.
Sample data – how to interpret the maps

<table>
<thead>
<tr>
<th>Health Service Delivery Area</th>
<th>All respondents Ages 65+(%)</th>
<th>Males Ages 65+(%)</th>
<th>Females Ages 65+(%)</th>
<th>All Ages 65-74</th>
<th>All Ages 75+</th>
<th>All Ages 20-64</th>
</tr>
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<tbody>
<tr>
<td>32 Vancouver</td>
<td>68.34‡</td>
<td>72.40</td>
<td>61.54</td>
<td>75.17</td>
<td>61.25</td>
<td>83.62</td>
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<tr>
<td>31 Richmond</td>
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<td>73.55</td>
<td>60.34</td>
<td>72.76</td>
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<tr>
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<td>66.57‡</td>
<td>69.55</td>
<td>58.35</td>
<td>76.84*</td>
<td>53.67</td>
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<td>33 North Shore/Coast Garibaldi</td>
<td>66.48‡</td>
<td>73.89</td>
<td>56.72</td>
<td>77.20*</td>
<td>55.33</td>
<td>84.06</td>
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<tr>
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<td>66.54</td>
<td>81.24*</td>
<td>52.66</td>
<td>84.57</td>
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<td>43 North Vancouver Island</td>
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<td>61.93</td>
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<td>71.79</td>
<td>50.64</td>
<td>78.71</td>
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<tr>
<td>52 Northern Interior</td>
<td>62.77‡</td>
<td>F</td>
<td>62.69</td>
<td>68.18</td>
<td>55.12</td>
<td>83.23</td>
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<tr>
<td>51 Northwest</td>
<td>62.03</td>
<td>81.27</td>
<td>F</td>
<td>F</td>
<td></td>
<td>75.98</td>
</tr>
<tr>
<td>22 Fraser North</td>
<td>61.22‡</td>
<td>66.10</td>
<td>52.95</td>
<td>72.06*</td>
<td>48.08</td>
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<td>71.80</td>
<td>47.23</td>
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<td>49.15</td>
<td>67.23</td>
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<tr>
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<td>59.68</td>
<td>55.93</td>
<td>68.97*</td>
<td>48.06</td>
<td>81.74</td>
</tr>
<tr>
<td>13 Okanagan</td>
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<td>56.21</td>
<td>56.77</td>
<td>70.45*</td>
<td>48.48</td>
<td>80.66</td>
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<tr>
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<td>65.93*</td>
<td>42.99</td>
<td>83.50</td>
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<tr>
<td>12 Kootenay Boundary</td>
<td>55.34‡</td>
<td>F</td>
<td>62.03</td>
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<tr>
<td>53 Northeast</td>
<td>53.87‡</td>
<td>F</td>
<td>38.48E</td>
<td>57.77</td>
<td>F</td>
<td>77.92</td>
</tr>
</tbody>
</table>

99 Province | 63.31‡ | 65.54† | 57.47 | 72.67* | 52.03 | 82.35

± 65+ age group differs significantly from 20-64 age group. † males differ significantly from females. * 65-74 age group differs significantly from 75+ age group. E interpret data with caution (16.77< coefficient of variation< 33.3). F data suppressed (n<30, or coefficient of variation >33.3). HSDA rate differs significantly from the Provincial rate.

The five maps plot, by quintile, the values in percent (%) for HSDA cohorts who answered the CCHS Cycle 3.1 question in a positive way from a wellness asset perspective. The colour index at the side of the maps provides the range of the values of the five quintiles used for mapping. For example, the DARK GREEN or highest wellness quintile has a range of 66.57% – 68.34% for the larger top map and includes the three HSDAs (Vancouver, Richmond and Fraser South) with the highest values; the next highest quintile, in LIGHT GREEN, has a range of 63.61% - 66.48% and includes the three HSDAs with the next highest values; the middle quintile (which has four HSDAs because the 16 HSDAs cannot be divided into five equal groupings) contains the four HSDAs with the middle values which are coloured BEIGE; the next three HSDAs are coloured ORANGE and have lower values than the middle group; and finally the three HSDAs with the lowest values are RED and have a range of 53.87% - 58.14% (Thompson Cariboo Shuswap, Kootenay Boundary and Northeast). When HSDAs are GREY it indicates that data are not available for mapping, usually because the sample size is too small (less than 30) to report for that HSDA (see map at bottom left opposite). This follows the convention developed by Statistics Canada for these survey data.

CROSSHATCHED HSDAs have values that are significantly different statistically from the overall provincial value (see Northwest in the Males 65+, which is significantly higher than the provincial average). An inset for the lower mainland HSDAs is provided; although these have a small land mass, this is where the majority of the province’s population resides. Four smaller maps below the larger map focus on characteristics of the CCHS respondents. The first two look at the patterns for males and females individually, and also note by CROSSHATCHING any HSDAs that have statistically significantly higher or lower values than the provincial average by gender (see Northwest as mentioned previously). The second two maps focus on. One looks at the younger seniors ages 65 - 74, while the other looks at the 75 and over seniors' cohort. The table above supports the maps opposite. Using the same colour scheme and hatching symbols as the maps, the left hand column shows the values of the HSDAs from highest to lowest. The other columns keep the HSDA order of the left hand column and provide the actual data for each HSDA by gender and for three separate age cohorts. The “dagger” symbol (†) indicates that there is a statistically significant difference between males and females within a particular HSDA; the “double dagger” (‡) indicates there is a significant difference between the 65+ cohort and the 20 to 64 cohort within the HSDA, and an asterisk (*) indicates a significant difference in the two senior age cohorts. No separate map is provided for the population aged 20-64 years because of space constraints. The symbol F denotes that the sample size is less than 30 or has a very high coefficient of variation, and the symbol E denotes caution in interpretation because of a high coefficient of variation.

This allows the user to get a more complete picture of any of the wellness related indicators mapped and provides a tabular mosaic of the values of the indicator by HSDA.
Welcome to a smoke-free environment