Vancouver Coastal Health
Promoting wellness. Ensuring care.

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HEALTHY RICHMOND 2012

FINAL REPORT

Prepared by:

Public Health Surveillance Unit
Vancouver Coastal Health
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"Great idea! Thank you! Richmond is very proactive in addressing health concerns in the community!"

- Healthy Richmond survey participant

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FOREWORD

"Have you eaten? 吃过饭了吗" This is an often heard Chinese greeting. While it is entirely superficial nowadays, we can imagine the greeting having its roots in the cyclic famines that occurred throughout Chinese history, when food security was a matter of life and death. We can also discern from the greeting a past society that recognized the importance of community support for one's survival and well-being.

We who live in Richmond like to point out to folks that we have the longest life expectancy of any municipality in British Columbia, and that we live in one of the healthiest communities in Canada. But what is health, and are all Richmond residents equally healthy? And, even if we are the healthiest community, are there things we can do better, as individuals, and as a community?

More than 60 years ago, the World Health Organization (WHO) stated in the preamble to its constitution that "health is the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." So health is not just about how long we live; and how does Richmond fare besides longevity? The WHO definition recognizes that the business of helping people to be healthy cannot be left alone to the traditional health care system. Governments at all levels are becoming more aware of this, driven in part by increases in the prevalence of lifestyle-related chronic conditions, the aging population, the increasing differences in health between population groups, and in the high cost of treating illness.

The Richmond Community Wellness Strategy, developed in 2010, provides a vision of what Richmond can be as a healthy community. The Strategy is the product of collaboration between the City of Richmond, School District 38 (Richmond) and Vancouver Coastal Health. One action from the Strategy is the 2012 Healthy Richmond Survey. This survey will help determine where we are now and where we should head in this journey to community wellness.

We are very pleased with the high level of interest and support for the survey among Richmond residents. We heard from over 2 percent of residents in just 10 days - that is more than four times the sample size of the Canadian Community Health Survey (CCHS) - our traditional source for community health data. At this level of response, we are able to report most of the survey results by Richmond's planning areas, which is far more informative than having averages for the entire city, which is all we can do with the CCHS data. Perhaps the most important finding from the 2012 Healthy Richmond Survey is the importance of community belonging to our well-being. We look forward to working with community partners to try to improve our sense of community in Richmond.

We thank the many partners who helped us in getting this survey successfully completed. But most importantly, we thank the 3639 residents who took the time to complete the survey. To wellness!

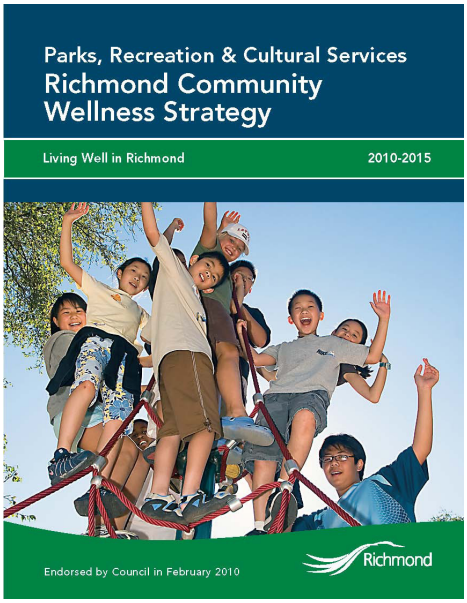
Sincerely,

Dr. James Lu
Medical Health Officer, Richmond
Vancouver Coastal Health

INTRODUCTION

Richmond is a city in British Columbia with a total population of 200,000, including an adult population (aged 18 years +) of 163.000[1]. It is an ethnically diverse city that attracts a large number of international immigrants. Richmond has a generally healthy population.

The Healthy Richmond Survey was developed in 2012 to provide a local perspective on health and wellness issues and to support the ongoing monitoring and evaluation of the Richmond Community Wellness Strategy.



The strategy was developed as a legacy of the 2010 Vancouver Winter Olympic Games. The strategy was developed with input from key informant interviews, a community wellness workshop and a community needs assessment and was approved by all three partners in Spring 2010.

The three desired outcomes of the strategy are for residents of Richmond to have:
1. An increased permanent commitment to wellness and well-being.
2. Increased physical activity and physical fitness.
3. An increased sense of connectedness to the community.

The Richmond Community Wellness Strategy can be found at http://www.richmond.ca/services/socialplan/wellness.htm.

Information gathered from the Healthy Richmond Survey will also be used to develop and guide wellness and health promotion programming in Richmond. It provides information at a level of detail that is not currently available from other provincial or national health surveys.

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EXECUTIVE SUMMARY

Introduction:

- The Healthy Richmond Wellness Survey was developed to fill an existing gap in local level health and wellness information and to support the monitoring and evaluation of the Richmond Community Wellness Strategy.

- The survey was administered both online and in person and ran in Spring 2012. In total, 3,639 adults aged 18 years or older completed the survey (2% of the adult population of Richmond). Content themes included general health, chronic conditions, fruit & vegetable consumption, tobacco use, physical activity, method of commute and community belonging.

Results:

- The respondent sample was representative of the Richmond neighbourhood census profiles by age, sex and ethnicity.

- Overall, 43% of Richmond adults rated their health as excellent or very good.

- Despite this, only 21% of adults reported eating the daily recommended number of servings of fruits and vegetables and only 33% are meeting the recommended weekly physical activity guideline. Eight percent of Richmond's adult population are current cigarette smokers.

- A strong association between sense of community belonging and overall health was found. Sense of belonging was found to be generally weaker among adults under the age of 40, those who have immigrated to Canada within the past ten years and those who do not regularly access community recreation facilities.

- A composite wellness score was derived for each respondent based on their responses regarding fruit and vegetable consumption, tobacco use, vigorous physical activity and daily walking. This score was strongly related to health status and sense of community belonging.

Conclusions:

- The results from the Healthy Richmond Wellness Survey will be used as a baseline measure for the evaluation of the Richmond Community Wellness Strategy.

- Behavioural lifestyle risk factors should be addressed collectively as they cluster according to social-economic status and neighbourhood.

- Removing barriers to full participation in leading healthy lives requires strategies that incorporate the social determinants of health.

- Multi-sectoral strategies are required to increase a sense of community belonging, an important determinant of positive lifestyle traits and healthier communities.

METHODS

Healthy Richmond is a health and wellness survey administered by Vancouver Coastal Health, in partnership with the City of Richmond, from February 24 to March 4, 2012.

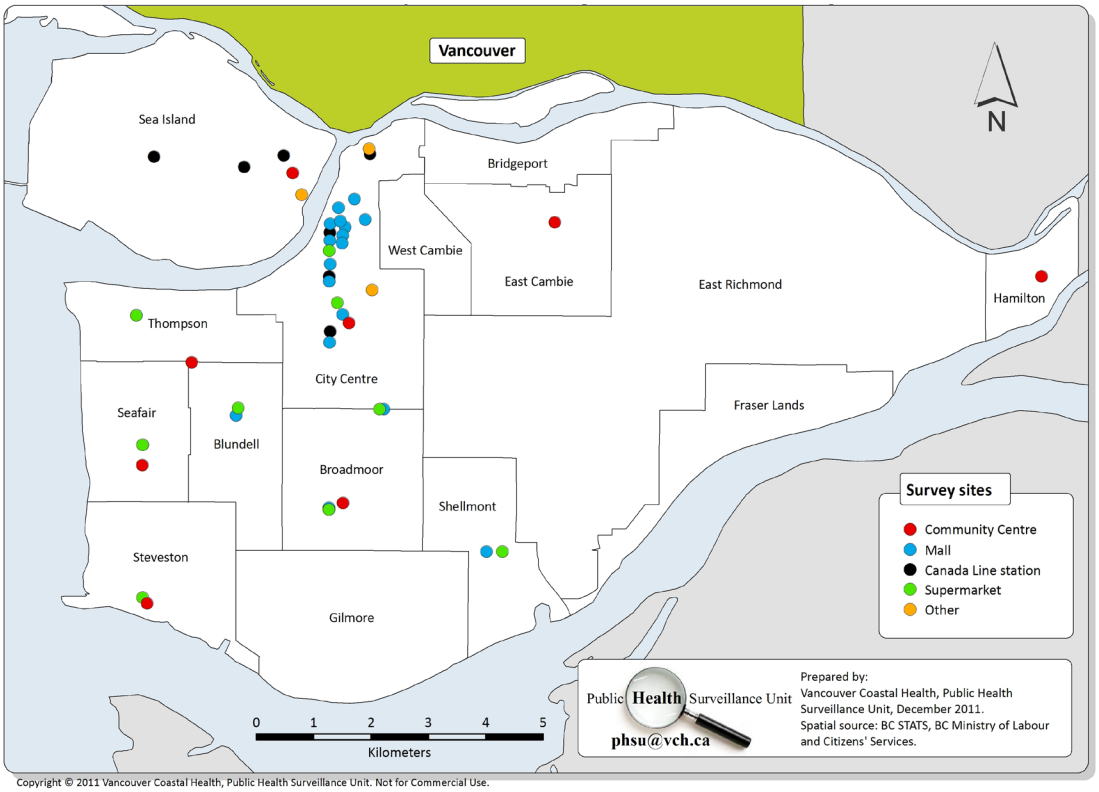
Questionnaire development

The questionnaire consisted of 35 questions. These questions focused on socio-demographic characteristics, immigration information, general health, chronic conditions, fruit & vegetable consumption, tobacco use, physical activity, method of commute and community belonging. Validated questions from the Statistics Canada Census[1], the Canadian Community Health Survey[2,3] and the International Physical Activity Questionnaire[4] were used where possible. Custom questions, specific to the community, were also included.

Data collection

The survey was administered online; participants could either complete the survey at home by accessing the survey URL or in person with a field surveyor who accessed the online survey on a tablet computer. Field surveyors were located throughout Richmond and were deployed based on statistics collected daily and neighbourhood benchmarks based on age, gender and ethnicity (Figure 1). Participants had the option to complete the survey in English (online and in the field), Mandarin (field), Cantonese (field) or Punjabi (field). On average, the survey took seven minutes to complete online and 11 minutes to complete in the field.

Figure 1. Healthy Richmond field survey locations



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METHODS

After 10 days of survey administration, 3639 surveys were completed, representing approximately 2% of the adult population (aged 18 years+) of Richmond. Of these, 2750 were completed in person with a field surveyor and 889 were completed online by the participant. The population who completed the survey online had a higher proportion of females, those aged 30 to 59 and were more highly educated. Those of visible minority were more likely to complete the survey in person (Table 1).

Table 1. Demographics of those who completed the Healthy Richmond survey online vs in person

	ONLINE	IN-PERSON
	n=889 (24%)	n=2750 (76%)
Gender		
Male	32%	52%
Female	68%	48%
Age (years)		
No age given	3%	5%
18 to 29	14%	16%
30 to 39	14%	13%
40 to 49	20%	19%
50 to 59	27%	19%
60 to 69	15%	16%
70 +	6%	12%
Education		
Below high school	1%	6%
High school graduation	14%	29%
Some post secondary	31%	24%
Bachelor's degree	33%	30%
Graduate degree	21%	11%
Ethnicity		
White/Caucasian	57%	31%
Chinese	28%	51%
Japanese	2%	1%
Korean	0%	0%
South Asian	5%	5%
Southeast Asian	0%	1%
Filipino	3%	6%
Arab	0%	1%
West Asian	1%	0%
Black	0%	1%
Latin American	1%	1%
Aboriginal	0%	1%
Other	3%	3%

Marketing and Communications

The Healthy Richmond survey was promoted through posters (Figure 2), advertisements (e.g. Facebook, daily newspaper), English and Chinese news stories, the VCH website, VCH staff newsletters, VCH's twitter account, email blasts to local businesses and community organizations and through word of mouth. The majority of participants heard about the survey through a friend, family or employer (37%), Facebook (34%) and the newspaper (11%).

Figure 2. Healthy Richmond posters in English and Simplified Chinese

Weighting & Analysis

A weighting scheme was constructed for each Richmond neighbourhood based on the population age and gender profile from 2006 Statistics Canada Census data (most recent data available). These weights were used to ensure the correct representation of each neighbourhood with respect to age and gender. All analyses shown exclude "don't know" or "prefer not to answer" responses.

HOW TO INTERPRET TABLES IN THIS REPORT

Most tables in this report are presented in the format shown in Table i.

a - percentages in each column add to 100%. Note that due to rounding, columns may not add to exactly 100%. In this example, 15% of the boys in the sample chose orange as their favourite colour.

b - unweighted n values and weighted percentages are reported. In this example, 26 boys were sampled out of a total sample of 50 kids, but the responses were weighted so that the boys represent 50% of the sample.

Table i. Favourite colours.

	TOTAL	Boys	Girls
	n=50 (100%)	n=26 (50%)	n=24 (50%)
Red	35%	35%	35%
Orange	20%	15%	25%
Yellow	13%	12%	14%
Green	17%	18%	16%
Blue	10%	15%	5%
Indigo	3%	3%	3%
Violet	2%	2%	2%

Note: unweighted n values and weighted percentages are reported.

c - by comparing proportions across the rows, we can find differences between subpopulations of the sample. In this example, more girls than boys chose orange as their favourite colour.

DATA CONSIDERATIONS

This report is intended to present overall results from the Healthy Richmond survey. More detailed analyses and interpretations are included in separate fact sheets and reports.

In reviewing the results presented here, it is important to consider that this survey was administered during a 10 day period during winter and may result in seasonal bias, especially for estimates such as fruit and vegetable consumption and physical activity. This may affect the comparability of these results to other surveys. However, seasonal bias is expected to be consistent across all demographics and neighbourhoods in Richmond and thus reliable comparisons can be made between demographic groups within these results.

The Healthy Richmond survey was administered in English, Mandarin, Cantonese and Punjabi. While efforts were made to ensure that translations were as accurate as possible, differences in interpretation of the questions and answer options are possible depending on what language the survey was taken in.

Data collection methods may also account for differences found between Healthy Richmond results and results from other regional health surveys. An online/in person approach may reach a different demographic than a telephone based survey. The Canadian Community Health Survey (CCHS) is administered by telephone interviews. In this report, Healthy Richmond results are compared to most recent CCHS data available: either from the 2011 cycle or the combined 2009-2010 cycle.

DEMOGRAPHICS

AGE & GENDER

Table 2. Age (years) and gender distribution in Richmond, Healthy Richmond 2012

	TOTAL	No age	18 to 29	30 to 39	40 to 49	50 to 59	60 to 69	70+
	n=3639 (100%)	n=155 (0.4%)	n=575 (20%)	n=473 (16%)	n=699 (22%)	n=775 (20%)	n=574 (11%)	n=388 (10%)
Male	47%	18%	51%	46%	47%	48%	48%	44%
Female	53%	82%	49%	56%	53%	52%	52%	56%
Note: unweighted n values and weighted percentages are reported.								

Table 2 shows the age and gender distribution of the population of Richmond as estimated by the survey sample. Both the 2006 Canadian Census and the 2011 Canadian Census reported that 53% of the Richmond population aged 15 years or older was female.

Being at least 18 years of age was required to complete the questionnaire; however, participants were not required to give their birthdate and could otherwise proceed with the questionnaire through consent.

EDUCATION & EMPLOYMENT

Highest level of education attained and current employment status were included in the questionnaire as measures of socio-economic status (Table 3). The World Health Organization recognizes education and employment as determinants of health[4]. Household income was not included because of the sensitive nature of the question and the fact that surveys would be completed in public.

The unemployment rate reported by Healthy Richmond (7%) is similar to what has been reported previously for Richmond (6%, 2006 Census) and for British Columbia (6%, 2006 Census; 7.4% 2012 BC Stats). Education levels are not easily compared to percentages reported by the Statistics Canada Census: the Census reports on highest level of education attained by those aged 15 and older, therefore inflating the proportion who have not graduated from high school.

Table 3. Education and employment status in Richmond, Healthy Richmond 2012

	TOTAL	Below high school	High school graduation	Some post-secondary	Bachelor's degree	Graduate degree
	n=3441 (100%)	n=171 (5%)	n=878 (25%)	n=885 (25%)	n=1063 (32%)	n=444 (13%)
Full/part time employed	62%	29%	46%	67%	70%	72%
Unemployed	7%	13%	7%	8%	6%	5%
Caring for family	5%	4%	7%	4%	6%	5%
Retired	17%	41%	20%	15%	13%	13%
Student	9%	11%	20%	4%	5%	4%
Note: unweighted n values and weighted percentages are reported.						

DEMOGRAPHICS

ETHNICITY

Table 4. Ethnicity in Richmond, Healthy Richmond 2012

	TOTAL	Born in Canada	Born outside of Canada
	n=3476 (100%)	n=1275 (37%)	n=2201 (63%)
White/Caucasian	35%	72%	13%
Chinese	45%	14%	65%
Japanese	1%	2%	1%
Korean	<1%	<1%	<1%
South Asian	5%	4%	6%
Southeast Asian	1%	<1%	1%
Filipino	6%	1%	8%
Arab	<1%	<1%	<1%
West Asian	<1%	<1%	1%
Black	1%	1%	1%
Latin American	1%	<1%	1%
Aboriginal	1%	1%	<1%
Other	3%	4%	3%
Note: unweighted n values and weighted percentages are reported.			

IMMIGRATION

Richmond has an immigrant population from all over the world - roughly 57% of the population was born outside of Canada, according to the 2006 Statistics Canada Census. Healthy Richmond results indicated that 63% were born outside of Canada (Table 4).

Overall, 14% of Richmond's adult population immigrated within the past five years and are considered to be recent immigrants (Table 5). City Centre neighbourhood has the highest proportion of recent immigrants (18%).

The high population of visible minorities and immigrants in Richmond was identified as key and the Richmond Community Wellness Strategy was developed to be inclusive of a diverse range of cultural and ethnic needs.

The 2006 Statistics Canada Census (most recent data available) reports that 35% of the adult population of Richmond is White/Caucasian and 44% is Chinese, matching the population of Healthy Richmond almost exactly (Table 4).

Healthy Richmond results indicated that 65% of the Richmond population prefers to speak in English, 22% in Cantonese and 12% in Mandarin.

Table 5. Immigration in Richmond, Healthy Richmond 2012

	TOTAL
Total not born in Canada - sample	2,164
Total not born in Canada - population	86,511
Length of time in Canada	
0 to 5 years	14%
6 to 15 years	27%
16+ years	58%
Note: population refers to those aged 18+ (weighted sample estimate)	

HEALTH & WELLNESS - HEALTH STATUS

Self-rated health status has been shown to be significantly associated with specific health problems, use of health services, recovery from episodes of ill health, mortality and socio-demographic characteristics[6].

A question asking participants to rate their overall health status is used in many Canadian surveys, including the Canadian Community Health Survey (CCHS). The 2009-2010 CCHS reported that 24% of those aged 18+ in Richmond rated their health as excellent, 34% as very good, 35% as good, 6% as fair and 2% as poor[3].

Healthy Richmond results indicate that 13% of Richmond adults rate their health as excellent, 30% as very good, 37% as good, 16% as fair and 3% as poor.

Table 6. Self-rated health status, population characteristics, Healthy Richmond, 2012.

	Self-rated health status	
	Excellent or very good n=1510 (43%)	Fair or poor n=744 (19%)
Sex		
Male	47.2%	47.9%
Female	52.8%	52.1%
Age		
18 to 29	20.9%	16.8%
30 to 39	18.7%	12.4%
40 to 49	22.0%	21.5%
50 to 59	19.7%	21.0%
60+	18.4%	27.8%
Education		
Below high school	3.8%	8.0%
High school graduation	22.4%	32.9%
Some post secondary	26.5%	21.5%
Bachelor's degree	31.5%	28.3%
Graduate degree	15.7%	9.2%
Ethnicity		
White/Caucasian	56.2%	26.5%
Chinese	43.2%	72.5%
Other visible minority	0.7%	1.1%

The prevalence of common chronic conditions among adults in Richmond is reported in Table 7.

Table 7. Prevalence of chronic conditions among population aged 18+ in Richmond, Healthy Richmond, 2012

	Prevalence (%)
Diabetes	8.0%
High blood pressure	18.3%
Lung cancer	0.2%
Breast cancer	1.3%
Prostate cancer	0.8%
Colorectal cancer	0.6%
Skin cancer	1.2%
Chronic bowel condition[1]	4.7%
Chronic skin condition[2]	5.5%
Chronic lung condition[3]	5.9%
Arthritis	12.5%
Chronic pain	10.9%

[1] Includes Crohn's Disease, ulcerative colitis and inflammatory bowel syndrome; [2] Includes psoriasis and other skin conditions; [3] Includes asthma and Chronic Pulmonary Obstructive Disease

The 2009-2010 CCHS reports the following prevalences of chronic conditions among those aged 18+ in Richmond: diabetes (6.7%), high blood pressure (17.5%), chronic bowel condition (5.3%), chronic lung disease (2.2%) and arthritis (11.0%). Other chronic conditions cannot be compared to the CCHS.

HEALTH & WELLNESS - FRUIT & VEGETABLES

Table 8. Daily fruit and vegetable consumption among Richmond adults, Healthy Richmond 2012

	# Daily Servings		
	0	1 to 4	5 +
	n=118 (4%)	n=2540 (76%)	n=768 (21%)
Gender			
Male	63.6%	50.7%	34.0%
Female	35.9%	49.1%	65.8%
Age (years)			
No age given	0.3%	0.4%	0.4%
18 to 29	34.5%	19.4%	18.8%
30 to 39	23.3%	16.7%	12.9%
40 to 49	9.0%	23.3%	19.8%
50 to 59	16.4%	20.1%	22.2%
60 to 69	9.5%	9.7%	14.7%
70 +	7.1%	10.4%	11.2%
Education			
Below high school	4.8%	5.3%	5.1%
High school graduation	27.9%	25.8%	24.3%
Some post secondary	29.5%	24.4%	24.2%
Bachelor's degree	31.0%	32.2%	29.7%
Graduate degree	6.7%	12.2%	16.7%
Ethnicity			
White/Caucasian	31.1%	30.1%	50.6%
Chinese	33.7%	49.3%	34.3%
Japanese	0.0%	1.4%	0.6%
Korean	1.0%	0.2%	0.4%
South Asian	11.0%	5.2%	4.3%
Southeast Asian	0.0%	1.1%	0.2%
Filipino	14.4%	6.0%	2.9%
Arab	0.4%	0.3%	0.5%
West Asian	0.1%	0.6%	0.1%
Black	1.7%	0.6%	0.8%
Latin American	0.0%	0.9%	0.7%
Aboriginal	1.0%	0.5%	0.5%
Other	5.6%	2.7%	4.0%
Self-rated health status			
Excellent or very good	24.8%	40.7%	56.5%
Fair or poor	32.9%	20.4%	13.1%

One of the goals of the Richmond Community Wellness Strategy is to increase the proportion of people who are eating at least five servings of fruits and vegetables each day.

Fruit and vegetable consumption has been associated with socio-economic status and is correlated with other behavioural lifestyle factors.

The results from Healthy Richmond suggest that only 21% of adults in Richmond are consuming five or more servings of fruits and vegetables each day. Those not meeting this target are more likely to be male and under the age of 40 (Table 8).

The 2010 CCHS reports that 34% of those aged 18 or older in Richmond are meeting the '5 servings a day' target.

HEALTH & WELLNESS - TOBACCO USE

Overall, Healthy Richmond indicated that the smoking prevalence (cigarettes only) among adults in Richmond is 7.7% [95% confidence interval: 6.7%-8.7%]. Additionally, Healthy Richmond results showed that 28.2% of the adult population of Richmond were past smokers, and 64.2% had never smoked. Of those who don't smoke (never smoked and past smokers), 44% report being in excellent or very good health compared to 33% of those who are current smokers.

The most recent cycle of the Canadian Community Health Survey (CCHS, 2011) reported an overall smoking prevalence among those aged 12 years and older in Richmond of 10.0% [95% CI: 4.7%-15.2%].

Table 9. Cigarette smoking prevalence by age, gender and birthplace, Healthy Richmond 2012

	Gender		Age						Birthplace	
	Male	Female	18-29	30-39	40-49	50-59	60-69	70 +	Canada	Elsewhere
Current smoker	10.3%	5.3%	11.3%	7.3%	7.8%	5.4%	5.4%	2.6%	10.2%	6.2%
Past smoker	33.3%	23.5%	14.9%	25.9%	28.9%	37.7%	37.7%	43.5%	39.6%	21.6%
Never smoked	64.6%	71.2%	73.8%	66.9%	63.3%	56.9%	56.9%	53.9%	50.3%	72.2%

It was found that smoking rates are highest among males under the age of 30 years (Table 9). The smoking rate among those born outside of Canada (6.2%) is significantly lower than the smoking rate among those Canadian born. Additionally, smoking rates decrease with increased educational attainment (Table 10).

Table 10.Current smoking prevalence by highest educational level attained and employment status, Healthy Richmond 2012

	Education					Employment				
	No high school grad	High school grad	Some post-sec.	Bach. degree	Grad. degree	Em-ployed	Unem-ployed	Care for home*	Retired	Student
Current smoker	17.7%	10.2%	8.2%	5.8%	1.8%	8.1%	15.3%	3.7%	4.2%	6.9%
Past smoker	25.2%	22.4%	35.9%	25.8%	31.6%	28.8%	26.4%	17.0%	40.3%	7.9%
Never smoked	57.0%	67.4%	56.0%	68.4%	66.7%	63.1%	58.4%	79.3%	55.5%	85.1%

* Care for home = caring for home and family

Smoking rates varied by neighbourhood, ranging from 2.2% in West Cambie and 6.2% in Steveston to 9.3% in East Cambie and 9.7% in Shellmont (Table 11).

Table 11. Cigarette smoking prevalence by neighbourhood, Healthy Richmond 2012

	Blundell	Bridgeport	Broadmoor	City Centre	East Cambie	E. Richmond Fraser Lands	Gilmore	Hamilton	Sea Island	Seafair	Shellmont	Steveston	Thompson	West Cambie
Current smoker	7.9%	--	7.3%	9.3%	9.3%	7.9%	--	--	--	8.2%	9.7%	6.2%	6.4%	2.2%

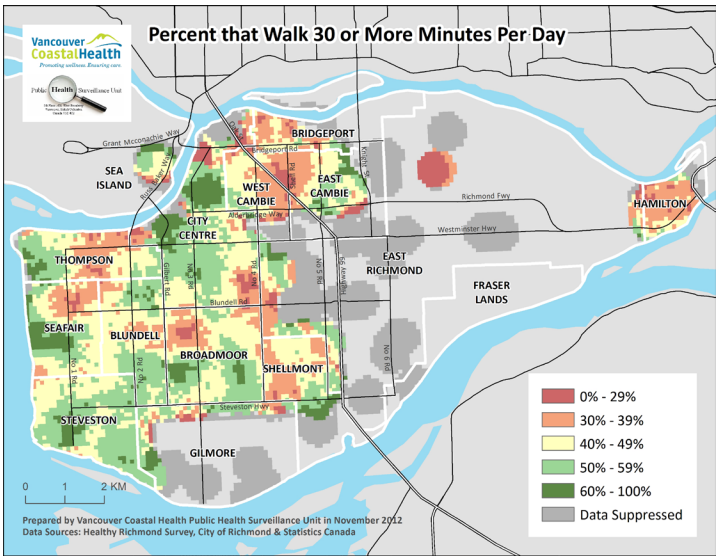
Note: Data with coefficients of variance greater than 35% were suppressed (--) due to sampling variability.

HEALTH & WELLNESS - DAILY WALKING

Overall, 41% of Richmond adults are walking for half an hour or more per day. Those walking for less than 30 minutes per day are more likely to be female, between the ages of 30 and 49 years, have more advanced education and be of visible minority (Table 12).

The proportion of those in excellent or very good health is slightly higher among those who walk 30 or more minutes per day.

Figure 3. Percent walking 30 or more minutes per day (top), relative to Richmond park space (bottom), Healthy Richmond 2012



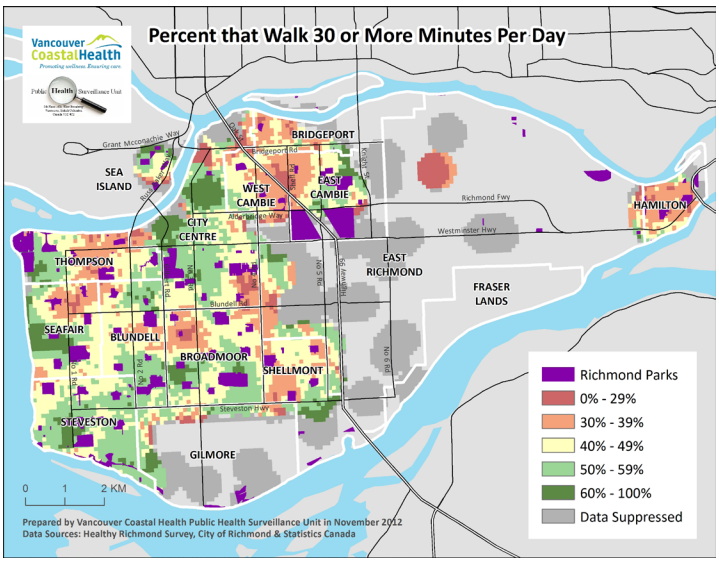


Table 12. Daily walking among Richmond adults, Healthy Richmond 2012

	Walking at least 30 minutes per day	
	No	Yes
	n=1881 (59%)	n=1368 (41%)
Gender		
Male	46.1%	50.2%
Female	53.9%	49.8%
Age (years)		
No age given	<1%	<1%
18 to 29	19.3%	21.5%
30 to 39	19.3%	11.8%
40 to 49	23.1%	20.2%
50 to 59	19.6%	21.3%
60 to 69	9.9%	11.6%
70 +	8.5%	13.2%
Education		
Below high school	4.3%	6.8%
High school graduation	24.4%	27.9%
Some post secondary	23.8%	25.9%
Bachelor's degree	33.2%	29.3%
Graduate degree	14.2%	10.0%
Ethnicity		
White/Caucasian	33.2%	36.9%
Chinese	48.3%	43.7%
Japanese	1.4%	0.8%
Korean	0.3%	0.2%
South Asian	5.3%	4.8%
Southeast Asian	1.2%	0.6%
Filipino	4.8%	6.5%
Arab	0.3%	0.3%
West Asian	0.5%	0.4%
Black	0.8%	0.4%
Latin American	0.9%	0.8%
Aboriginal	0.4%	0.9%
Other	2.7%	3.8%
Self-rated health status		
Excellent or very good	41.8%	44.4%
Fair or poor	20.6%	18.7%

Daily walking was assessed using the International Physical Activity Questionnaire.

HEALTH & WELLNESS - PHYSICAL ACTIVITY

Table 13. Weekly vigorous physical activity in Richmond by age and gender, Healthy Richmond 2012

	Weekly vigorous physical activity (mins)		
	0	1 to 149	150 +
	n=1508 (42%)	n=796 (25%)	n=1080 (33%)
Gender			
Male	42.2%	46.3%	56.3%
Female	57.8%	53.7%	43.7%
Age (years)			
No age given	0.5%	0.2%	0.3%
18 to 29	13.7%	23.8%	25.4%
30 to 39	15.6%	21.0%	14.2%
40 to 49	24.3%	23.0%	18.7%
50 to 59	21.3%	17.4%	19.6%
60 to 69	11.2%	7.8%	11.8%
70+	13.4%	6.8%	9.9%
Ethnicity			
White/Caucasian	31.5%	47.4%	53.0%
Chinese	67.4%	51.5%	46.3%
Other visible minority*	1.1%	1.1%*	0.8%
Immigration			
Within the past 5 years	15.5%	14.0%	12.4%
Between 6 and 10 years ago	12.7%	11.8%	10.8%
Between 11 and 20 years ago	39.6%	37.7%	34.9%
Over 20 years ago	32.2%	36.5%	41.8%
Education			
No high school grad	6.9%	2.0%	6.0%
High school grad	25.8%	25.7%	25.4%
Some post secondary	23.6%	24.5%	25.1%
Bachelor's degree	32.2%	33.6%	29.3%
Graduate degree	11.4%	14.2%	14.3%
Self-rated health status			
Excellent or very good	31.4%	45.4%	56.0%
Fair or poor	26.7%	15.5%	13.9%

* Includes Japanese, Korean, South Asian, Southeast Asian, Filipino, Arab, West Asian, Black, Latin American, Aboriginal and Other.

The Canadian Physical Activity Guidelines suggest that all adults over the age of 18 years engage in 150 minutes of moderate or vigorous physical activity each week (activity that causes the respondent to breathe harder than usual)[7]. Healthy Richmond results indicated that 33% of the Richmond population is meeting this guideline. Those not meeting the guideline are more likely to be female, over the age of 40, recent immigrants and of visible minority. (Table 13).

Increased vigorous physical activity is also associated with better self-reported health status. The majority of those who are meeting the physical activity guideline indicate that their health is excellent or very good, while those who are getting zero minutes of physical activity are more likely to be in poorer health.

Physical activity levels also vary by neighbourhood. The proportion meeting the target of 150 minutes per week ranges from 27% in West Cambie to 38% in Broadmoor.

HEALTH & WELLNESS - METHOD OF COMMUTE

The Richmond Community Wellness Strategy recognizes that creating an urban environment that supports public transit, walking or cycling as a commuting method may help achieve the strategy's health outcomes.

When asked about a primary method of commuting to and from work or school, the majority of Richmond adults responded that they commute by personal vehicle (61%), followed by public transit (29%), walking (6%), carpooling (2%) and cycling (2%). Demographic details are provided in Table 14.

Table 14. Method of commute to work or school among Richmond adults, Healthy Richmond 2012

	Personal Vehicle	Carpool	Public Transit	Walk	Bicycle
	n=989 (61%)	n=44 (2%)	n=462 (29%)	n=118 (6%)	n=29 (2%)
Gender					
Male	59.5%	42.8%	51.0%	47.5%	76.3%
Female	40.4%	57.2%	49.0%	52.5%	23.7%*
Age (years)					
18 to 29	18.5%	31.7%	50.9%	25.4%	16.0%*
30 to 39	21.1%	15.7%*	14.8%	16.4%	14.0%*
40 to 49	28.6%	25.2%*	19.1%	24.9%	29.1%*
50 to 59	23.2%	18.2%*	11.8%	25.3%*	32.5%*
60 +	7.4%	--	2.6%	5.1%	--
Education					
Below high school	2.6%*	--	5.3%*	--	--
High school grad	23.5%	26.1%*	36.4%	30.4%	--
Some post secondary	27.9%	30.3%*	18.5%	21.9%	32.3%*
Bachelor's degree	34.3%	32.8%	30.8%	27.8%	40.5%
Graduate degree	11.7%	--	9.1%	12.9%*	--

Note: Data with a coefficient of variation from 25% to 35% are identified with an (*) and should be interpreted with caution. Data with a coefficient of variation greater than 35% were suppressed (--) due to sampling variability. Data excludes those who work from home and those who are unemployed.

46% in excellent or very good health
27% getting enough physical activity
51% walking 30 minutes a day

46% in excellent or very good health
33% getting enough physical activity
38% walking 30 minutes a day

60% in excellent or very good health
64% getting enough physical activity
49% walking 30 minutes a day

48% in excellent or very good health
42% getting enough physical activity
44% walking 30 minutes a day

42% in excellent or very good health
37% getting enough physical activity
45% walking 30 minutes a day

COMMUNITY BELONGING

A strong sense of community belonging has been found to be associated with increased health behaviour change and may be an important component of population health prevention strategies[8]. Participants were asked to rate their perceived sense of belonging to their community on a 4-point Likert scale. Those reporting a weak sense of community belonging were also less likely to utilize Richmond community facilities and libraries and were less likely to have voted in the most recent municipal election (Table 15).

Overall, 76% of Richmondites reported that they had a strong sense of community belonging (25% very strong; 51% somewhat strong) and 24% reported that they had a weak sense of community belonging (18% somewhat weak; 6% very weak).

CCHS 2009-2010 reports 20% having a very strong sense of community belonging, 47% somewhat strong, 25% somewhat weak, 8% very weak.

Table 15. Healthy Richmond participants' reported sense of community belonging and involvement in community facilities.

	Total	Sense of community belonging	
		Very strong	Somewhat weak or very weak
Accessed a Richmond facility in the past 30 days:			
A city or school park, field or outdoor court	29.0%	34.2%	23.3%
Community centre fitness room, fitness centre or gym	22.1%	24.3%	17.3%
Richmond West Dyke Trail	19.0%	22.9%	16.5%
Other Richmond parks trails	10.5%	13.0%	10.4%
Minoru Aquatic Centre	7.2%	6.4%	8.3%
Richmond Olympic Oval	6.4%	7.2%	4.3%
Watermania	4.6%	3.9%	5.1%
Minoru Arenas	2.9%	3.8%	2.0%
Richmond Ice Centres	2.9%	3.7%	1.9%
None	36.5%	30.9%	45.0%
Richmond libraries:			
Have a Richmond library card	77.8%	78.5%	74.8%
Of those who have a Richmond library card:			
Never access library services	31.0%	28.5%	31.8%
Access library services once a month	22.2%	19.9%	23.3%
Access library services 2-4 times a month	32.3%	36.0%	30.5%
Access library services more than once a week	14.5%	15.6%	14.4%
Voted in the 2011 City of Richmond municipal election*	61.4%	73.4%	47.4%

*of those eligible to vote

COMMUNITY BELONGING

A strong sense of community belonging was found to be more prevalent among females and those over the age of 40 (Table 16). There were no differences based on level of education attained. Although differences were minimal between those who were born in Canada compared to those born outside of Canada, a higher proportion of recent immigrants (those who immigrated within the past five years) reported a weak sense of community belonging.

These results support what has already been reported in Canadian literature: sense of belonging is generally weaker among young adults aged 18 to 29 and increases with age[9]. The 2003 General Social Survey of Canadians found that recent immigrants were somewhat more likely to have a weak sense of belonging, perhaps because their shorter tenure in Canada had provided them with less opportunity to cultivate a strong sense of attachment[10].

Table 16. Demographics of those reporting strong versus weak sense of community belonging.

	Sense of community belonging	
	Very strong	Somewhat weak or very weak
Gender		
Male	42.9%	51.4%
Female	57.1%	48.6%
Age (years)		
No age given	0.3%	0.4%
18 to 29	10.9%	27.9%
30 to 39	12.1%	19.1%
40 to 49	20.6%	20.3%
50 to 59	21.9%	18.7%
60 to 69	15.7%	7.2%
70+	18.5%	6.4%
Education		
Below high school	5.4%	5.8%
High school graduation	24.5%	26.8%
Some post secondary	24.4%	23.4%
Bachelor's degree	30.3%	31.4%
Graduate degree	15.3%	12.6%
Birthplace		
Born in Canada	36.3%	36.0%
Born outside of Canada	63.7%	64.0%
Immigration		
Immigrated within the past 5 years[1]	7.3%	23.7%
Immigrated between 6 and 10 years ago[1]	10.3%	14.0%
Immigrated between 11 and 20 years ago[1]	35.3%	35.6%
Immigrated over 20 years ago[1]	47.1%	26.7%
Self-rated health status		
Excellent or very good	56.9%	34.0%
Fair or poor	14.5%	28.5%

[1]Proportion of those born outside of Canada

COMPOSITE WELLNESS SCORE

A composite wellness score was constructed based on daily walking, weekly vigorous physical activity, daily servings of fruits and vegetables and tobacco use in order to examine their cumulative effect. Each indicator was given a sub-score from 0 to 4, with 4 representing the "healthiest" end of the spectrum. The final score was based on a sum of these four sub-scores. Each respondent was assigned a score from 0 (least healthy) to 16 (most healthy) based on their responses. The median score was 7.0 (range: 0 to 15) and scores were normally distributed across the sample. Overall, 19.8% of participants had a wellness score of 10 or greater. The relationship between a wellness score of 10+ and socioeconomic status is illustrated in Figures 4 to 7.

Figure 4. Wellness score and age

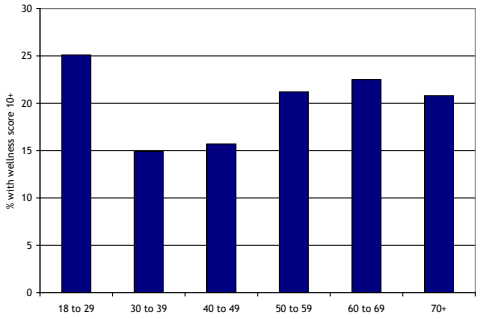


Figure 5. Wellness score and education

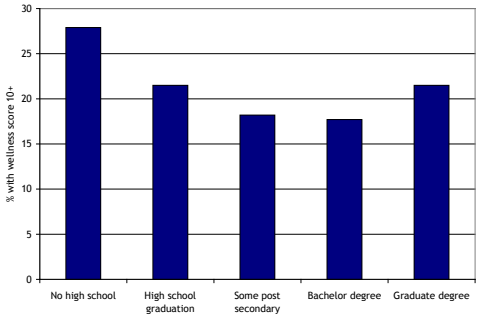


Figure 6. Wellness score and employment

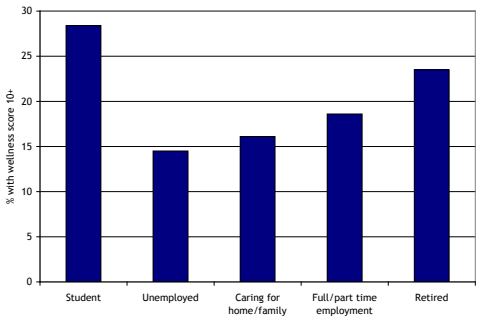
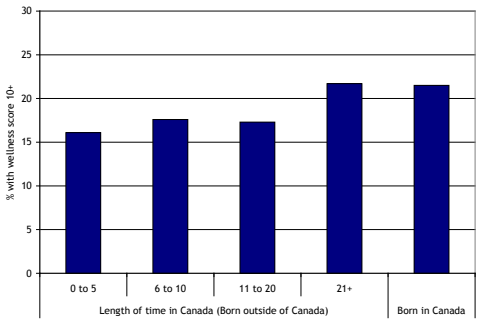


Figure 7. Wellness score and immigration



The relationship between the wellness score and self-rated health status and sense of community belonging are illustrated in Figure 8 and Figure 9.

Figure 8. The relationship between wellness score and self-rated health status

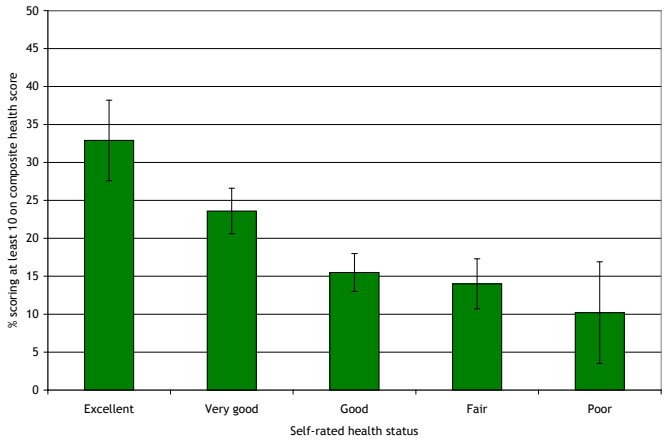
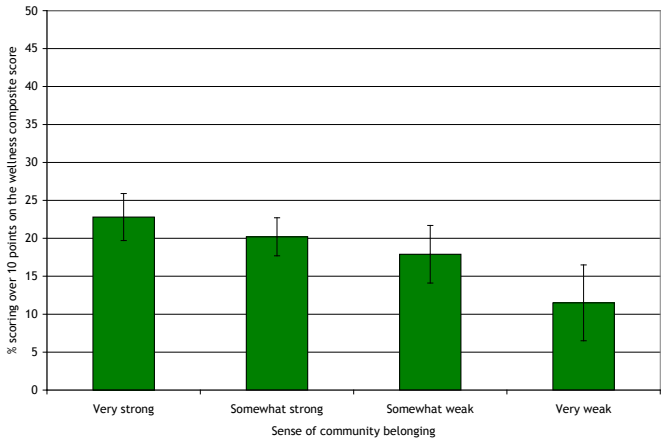


Figure 9. The relationship between wellness score and sense of community belonging.



NEIGHBOURHOOD SUMMARY

Table 17. Summary of neighbourhood health and wellness characteristics, Health Richmond 2012

	% in excellent or v. good health	% with very strong community belonging	% who do not smoke[1]	% meeting daily fruit & veg. guideline	% meeting weekly phys. act. guideline	% walking 30 mins a day	% scoring 10+ on wellness score
Richmond	42.9%	25.5%	92.3%	20.6%	32.5%	40.9%	19.8%
Blundell	42.3%	27.4%	92.1%	19.4%	32.1%	44.2%	21.4%
Bridgeport	37.9%	14.9%	94.7%	22.9%*	28.1%	25.0%*	13.4%
Broadmoor	42.7%	23.9%	92.7%	21.1%	37.8%	41.0%	21.2%
City Centre	36.2%	24.2%	90.7%	18.6%	29.1%	44.4%	18.2%
East Cambie	35.8%	21.9%	90.7%	16.2%	32.9%	37.3%	16.9%
ER/FL[2]	45.7%	22.8%	92.1%	20.2%*	35.1%	42.6%	26.9%
Gilmore	55.5%	27.0%*	--	--	--	--	29.4%
Hamilton	36.7%*	21.5%	--	--	29.0%	30.1%*	12.4%
Sea Island	57.4%*	36.7%*	--	--	31.0%	60.7%*	29.0%
Seafair	49.6%	26.9%	91.8%	21.6%	32.2%	36.1%	23.3%
Shellmont	51.3%	23.7%	90.3%	19.8%	34.1%	38.9%	15.1%
Steveston	49.5%	31.8%	93.8%	29.2%	37.0%	45.4%	25.1%
Thompson	48.9%	26.3%	93.6%	24.1%	29.4%	35.5%	15.3%
West Cambie	34.2%	21.0%	--	--	27.0%	36.2%	16.5%

Note: Data with a coefficient of variation from 25% to 35% are identified with an (*) and should be interpreted with caution. Data with a coefficient of variation greater than 35% were suppressed (--) due to sampling variability.

[1] Includes past smokers and those who have never smoked.

[2] East Richmond/Fraser Lands

CONCLUSION & NEXT STEPS

The Richmond Community Wellness Strategy was developed with an awareness that "improving physical activity and sense of community belonging (are) priorities for advancing wellness in Richmond" (page 23, Richmond Community Wellness Strategy). The Healthy Richmond Survey results affirm the soundness of this approach by providing neighbourhood level details for the first time on the connection between belonging and wellness. In order to reach the three desired outcomes, the Community Wellness Strategy identified a number of action items and grouped them under seven strategic directions. Results of Healthy Richmond 2012 can be used to prioritize the action items contained in the Strategy and future community wellness surveys can be used for continual monitoring and evaluation.

Desired Outcome 1. An increased permanent commitment to wellness and well-being.

Forty-three percent of Richmondites report being in excellent or very good health. Self-reported health status was shown to have a strong relationship to a composite wellness score that takes a number of lifestyle risk factors into account. The lifestyle factors in turn were shown to vary between different socio-economic groupings, and those groupings that show a clustering of the most adverse lifestyle traits are an identifiable group for collective action.

Findings from the survey affirm the importance of strategic direction 3 of the Community Wellness Strategy: *Reduce Barriers to Living a Physically Active Life for Vulnerable Populations and People Living with a Disability.* The survey results also suggest that attention to social and economic barriers will also be important in order to successfully achieve strategic directions 1 and 2 (Increase Active Living Literacy, Help Children and Youth Build Healthy Habits) across all Richmond neighbourhoods.

Desired Outcome 2. Increased physical activity and physical fitness.

Results from Healthy Richmond 2012 suggested that the majority of Richmond adults need to be more physically active (only 33% are currently meeting the target). Increasing the proportion of people who commute with active modes (bicycling or walking) may be one way to increase the proportion of people who are meeting physical activity targets.

The survey findings emphasize the relevance and importance of strategic direction 5: *Create Urban Environments that Support Wellness and Encourage Physical Activity.* The results also support the intention of the recently updated Richmond Official Community Plan to enhance opportunities for active (non-motorized) transportation across the community.

CONCLUSION & NEXT STEPS

Desired Outcome 3. An increased sense of connectedness to the community.

Evidence has shown that an increased sense of connectedness to the community will lead to increased health in that community[8]. The Healthy Richmond results suggested that community connectedness is related to access to community services. The results also show that recent immigrants to Canada have a harder time developing a sense of community belonging.

Action items grouped under Strategic Direction 4 - *Build a Connected and Activated Social Environment*, address the need to build residents' sense of belonging using a multi-sectoral approach. From a neighbourhood level perspective, Action items 4b (Develop initiatives that encourage social interaction at the neighbourhood level) and 5h (Work towards community centres as being 'centres of the community') hold particular promise. This information will assist as the City of Richmond implements its recently completed social development strategy.

In summary, the Healthy Richmond Survey provides a baseline assessment of wellness at the neighbourhood level. It confirms the approach taken by the Richmond Community Wellness Strategy to build community wellness. In particular, the survey results suggest that enhancing community belonging has the potential to lead to the adoption of positive lifestyle traits, increased community participation and a healthier Richmond.

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