

POPULATION HEALTH PROFILE 2010

SOUTH SURREY/WHITE ROCK LHA



This profile gives a brief view of health and health determinants in the South Surrey/White Rock (SS/WR); further information is available in Fraser Health's [Health Profile 2010](#).

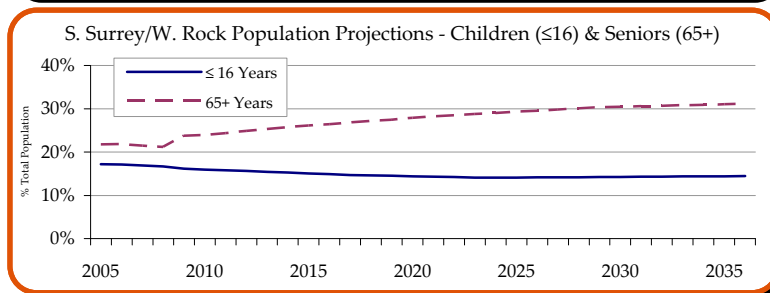
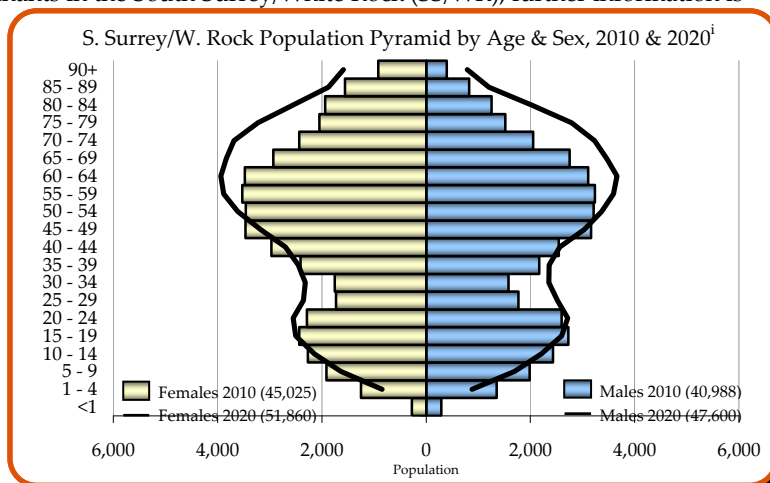
Executive Summary:

- 24% of the population are seniors 65-years and older, giving SS/WR the largest proportion of seniors among Fraser Health LHAs.
- By 2030, 30% of the SS/WR population will be seniors 65 and older.
- Low-income is less prevalent in SS/WR than in many of our other LHAs.
- SS/WR has the highest average family income in Fraser Health and one of the highest median incomes.
- Cancer, depression/anxiety, and dementia in seniors are major causes of illness, with higher rates than Fraser Health or BC overall.
- About 17% of Fraser South residents smoke, a major risk factor for cardiovascular disease and lung cancer, two of the leading causes of death in SS/WR.

Demographics: The SS/WR population is older than Fraser Health overall with more seniors 65+ than children ≤16 as seen in the inverted pyramid shape in the age-sex distribution graph. A popular retirement community with our lowest birth rate, SS/WR is home to one of the largest concentrations of seniors in our region.

Older adults can be heavy users of our healthcare system and their healthcare needs are generally more diverse and more complex than those of younger age groups. While a growing seniors' population could increase demand in our health care resources and other services, this age group also has much to offer society through volunteerism, civic participation, and community involvement. Fraser Health can help to protect this resource and reduce the anticipated demand on healthcare utilization by encouraging seniors to adopt healthy, active lifestyles and by providing supports for optimal aging.

Socio-Economic Status: SS/WR fares well on a number of the socio-economic determinants of health. Family incomes are high, the population is well-educated and low-income families and income assistance recipients are less prevalent than in other LHAs, and SS/WR had the lowest rate of adults receiving employment insurance



Population Characteristics

Population	SS/WR LHA	Fraser Health	BC
Total population, 2010 ⁱ	86,013	1,607,394	4,523,995
Children (≤ 16), 2010 ⁱ	13,706	312,777	793,954
Seniors (65+), 2010 ⁱ	20,632	214,446	676,358
% Lone-parent families, 2006 ⁱⁱ	11.9%	14.8%	15.1%
Aboriginal, 2006 ⁱⁱ	1,185	38,105	196,070
Immigrant, 2006 ⁱⁱ	18,395	455,925	1,119,215
Recent Immigrants, 2006 ⁱⁱ	2,340	83,795	177,840

2010 Population Counts by Age Group and Sexⁱ

Age Group	SS/WR LHA			Fraser Health		
	Females	Males	Total	Females	Males	Total
≤5	1,866	2,067	3,933	51,383	55,042	106,425
6-12	2,921	3,020	5,941	60,124	65,313	125,437
13-16	1,795	2,037	3,832	38,940	41,975	80,915
Total ≤16	6,582	7,124	13,706	150,447	162,330	312,777
17-18	1,081	1,066	2,147	20,742	22,097	42,839
Total ≤18	7,663	8,190	15,853	171,189	184,427	355,616
19-24	2,762	3,209	5,971	66,005	72,816	138,821
25-44	8,857	8,059	16,916	229,440	227,255	456,695
46-64	13,918	12,723	26,641	222,047	219,769	441,816
65-74	5,367	4,810	10,177	60,077	55,906	115,983
75+	6,458	3,997	10,455	57,798	40,665	98,463
Total All Ages	45,025	40,988	86,013	806,556	800,838	1,607,394

benefits in 2009 (Sept.). However, pockets of disadvantage exist and not everyone share equally in the high socio-economic status of this area.

Socio-Economic Status						
SES Indicator	SS/WR LHA	Trend	Range Among FH LHAs	Fraser Health	BC	
Income						
Average family income after tax, 2005 ⁱⁱ	\$85,376	n/a	\$49,943-\$85,376	\$68,641	\$67,200	
Median family income after tax, 2005 ⁱⁱ	\$70,708	n/a	\$43,687-\$71,638	\$60,695	\$57,599	
% Low income family after tax, 2005 ⁱⁱ	5.9%	n/a	5.9%-17.3%	10.8%	9.9%	
% Low income after tax persons (ages 15+) not living in a family, 2005 ⁱⁱ	16.0%	n/a	15.0%-36.2%	29.5%	29.0%	
% EI beneficiaries (ages 19-64), September 2009 ^{iii,Ω}	1.4%	n/a	1.4%-4.3%	2.6%	3.0%	
% Children (ages ≤18) receiving income assistance benefits, September 2009 ⁱⁱⁱ	1.0%	n/a	1.0%-11.4%	3.6%	4.0%	
Language, 2006ⁱⁱ:						
% English as home language	92.6%	n/a	62.3%-98.2%	78.7%	83.6%	
% with Non-Official home language (neither English nor French)	7.2%	n/a	1.8%-37.4%	21.0%	16.0%	
Most common non-English language in SS/WR LHA: Chinese [□]	2.3%	n/a	0.3%-21.2%	5.8%	6.7%	
Visible Minority, ♦ 2006ⁱⁱ						
Total visible minority as % total pop.	11.1%	↑	2.7%-55.4%	32.7%	24.8%	
Most common visible minority group: Chinese	3.8%	S	0.5%-30.3%	8.9%	10.0%	
Children at Risk						
% Children under 6 living in low income families after tax, 2006 ⁱⁱ	10.7%	n/a	9.9%-22.5%	15.3%	15.1%	
% Kindergarteners vulnerable on at least one EDI domain, 2008/09†	17.3%	n/a	17.3%-40.2%	n/a	28.6%	
Children (≤18 yrs) in government care, rate per 1,000 children, Dec. 2009 ⁱⁱⁱ	5.1	n/a	4.1-39.0	8.2	9.4	
Child (≤18 yrs) abuse rate per 1,000 pop. ≤18 yrs, 2009 ⁱⁱⁱ	2.5	n/a	1.6-15.4	4.6	7.0	
Youth (12-17 yrs) serious crime rate per 1,000 pop. 12-17 yrs, 2006-2008 ⁱⁱⁱ	3.0 ^α	n/a	1.2-7.2	3.1	4.2	
Education						
Students below standard in reading, 2007/08 & 2008/09 Avg.ⁱⁱⁱ						
Grade 4	15.0%	n/a	13.5%-24.3%	19.1%	18.3%	
Grade 7	13.5%	n/a	13.5%-38.6%	23.2%	22.7%	
Highest level of Education, ages 25+, 2006ⁱⁱ:						
% Less than high school	10.9%	n/a	10.9%-25.8%	16.7%	16.6%	
% with Bachelor's or higher university degree	24.5%	n/a	9.9%-29.5%	19.6%	21.7%	
Six Year Dogwood Completion Rate^{iv}						
Surrey SD #36, 2008/09*	82.8%	n/a	63.2%-90.2%	n/a	79.2%	

^ΩEmployment Insurance (EI) beneficiary data represent a four-month average (Dec. 2008 and Mar., June, & Sept. 2009). [□]For the most common non-English home language, 'Chinese' represents the sum of all Chinese languages (1.3% Mandarin, <1% Cantonese, <1% Chinese not otherwise stated, and <0.1% Taiwanese). [♦]Visible minority does not include Aboriginal peoples. ^{*}In BC, a high school diploma is also known as a dogwood diploma; six year dogwood completion rates are available only at school district (SD) and BC levels. Surrey SD #36 includes SS/WR and Surrey LHAs. ^αYouth crime rate based on police jurisdiction so it includes S. Surrey/W. Rock.

Children at Risk: About one in ten children younger than six live in low income families and 17% of kindergarteners were vulnerable on at least one domain of the Early Development Instrument, highlighting a need to focus on healthy development for children and youth. Positive environments and experiences keep children and youth healthy and have life-long health, social, and emotional effects. Supporting their healthy development will prevent future illness and disease and in turn may reduce the growing burden on the health care system.

Health Status: In general, South Surrey/White Rock residents enjoy good health and have long life expectancies. But South Surrey/White Rock has higher incidence rates for cancer and prevalence rates for dementia among the elderly and depression/anxiety compared to the Fraser Health and BC averages. The prevalence rates for a number of chronic diseases are on the rise and a cause for concern and some health practices can also be further improved. For example, less than 40% of Fraser South residents eat the recommended five daily servings of fruits and vegetables. In addition, 17% of residents smoke, and smoking remains the single most significant preventable risk factor for cardiovascular disease and a number of different types of cancer. Cardiovascular disease remains one of the leading causes of hospitalization among men age 25-64 and among men and women age 65 and older in South Surrey/White Rock, and is the leading cause of death as well. Cancer is also a significant cause of death. In fact, chronic diseases contribute to 9 out of 10 of the leading causes of death in South Surrey/White Rock.

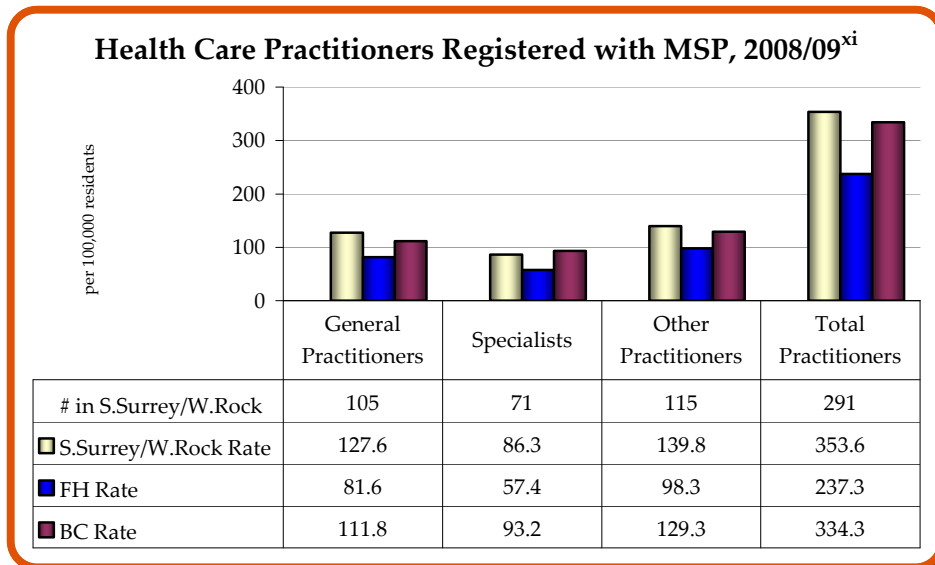
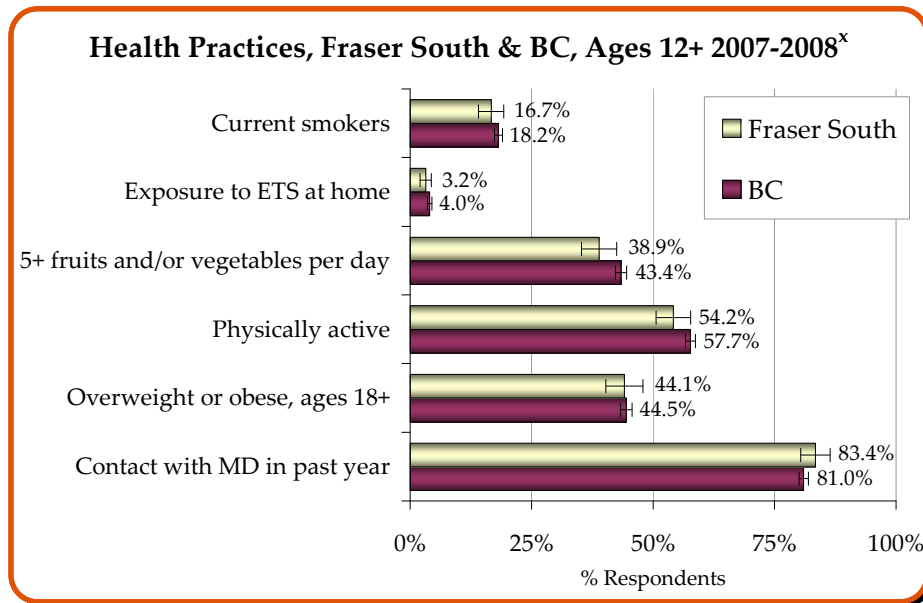
Health Status					
Health Status Indicator	SS/WR LHA	Trend	Range Among FH LHAs	Fraser Health	BC
General					
Life expectancy at birth ^v , 2005-2009, Overall	83.0	↑	75.5-83.0	81.5	81.4
Females	85.2	↑	76.9-85.2	83.5	83.6
Males	80.6	↑	74.1-80.7	79.3	79.2
Reproductive & Infant Health^{vi}					
Birth rate, births per 1,000 population, 2008	6.6	↓	6.6-14.0	11.3	10.1
# Live births, 2008	545	S	89-5,209	17,403	44,156
Low birth-weight (<2,500g) as % of all live births, 2008	5.9%	S	4.5%-6.7%	5.8%	5.4%
Teen birth rate per 1,000 female teenagers aged 15-19, 2008	2.8	↓	2.7-39.0	7.1	10.6
# Live births to teenage mothers aged 15-19, 2008	7	↓	7-109	372	1,466
Infant mortality rate per 1,000 live births, 2005-2009	1.9	↓	1.6-8.2	3.4	3.9
# Infant deaths, 2005-2009	≤5	↓	≤5-112	287	830

Health Status Cont'd						
Health Status Indicator	SS/WR LHA		Trend	Range Among FH LHAs	Fraser Health	BC
	# Prev. Cases	Rate				
Morbidity – ASPR[♦], 2008/09						
Diabetes Mellitus ^{vii}	5,584	4.8%	↑	4.8%-8.9%	7.1%	6.0%
Asthma (ages 5-54) ^{vii}	4,757	7.4%	↑	6.3%-10.4%	8.2%	7.7%
COPD (ages 45+) ^{vii}	2,217	1.6%	S	1.5%-2.9%	1.8%	1.9%
Cardiovascular Disease ^{vii}	5,729	4.1%	↑	3.7%-5.5%	4.5%	4.2%
History of Stroke ^{vii}	1,415	1.0%	S	0.9%-1.3%	1.1%	1.1%
Hypertension ^{vii}	18,026	14.6%	↑	14.6%-18.3%	16.6%	15.6%
Depression/Anxiety ^{vii}	20,781	23.2%	↑	16.4%-25.4%	21.0%	21.0%
Dementia ^{vii} (ages 65+), age-specific rate per 100 people 65+, 2008/09	1,532	8.2%	↑	4.6%-8.2%	6.1%	7.0%
Cancer incidence^{viii}, ages 20+, per 100,000 people, 2008 (All Cancers), by sex						
Females	n/a	467.0	↓	408.6-629.1	448.2	454.1
Males	n/a	599.5	↓	526.2-688.5	587.5	579.3

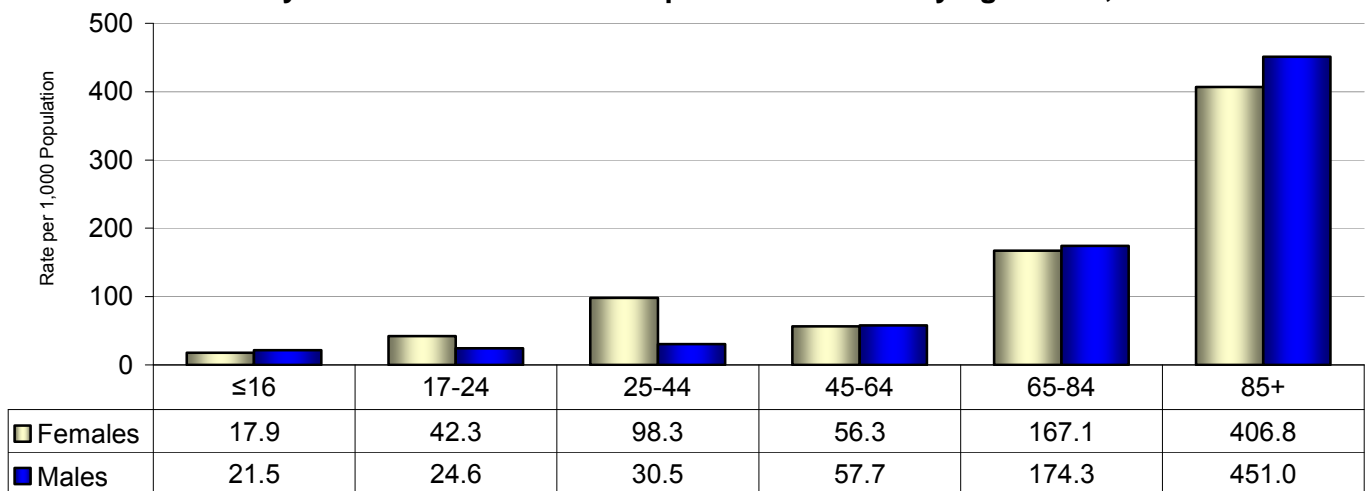
♦ASPR = Age-standardized prevalence rate per 100 people.

Prevention					
Measure	SS/WR LHA	Trend	Range Among FH LHAs	Fraser Health	BC
2-yr old immunization, up-to-date for age, 2009	69.1%	↑	51.7%-73.9%	61.5%	64.0%
Cervical cancer screening, ages 20-69, 2006-2008 (Fraser South rates) ^{ix}	58.5%	S	54.3%-61.6%*	n/a	63.7%
Screening mammography biennial rates, ages 50-69 yrs, 2008 & 2009 ^{ix}	54.7%	S	43.2%-54.7%	49.2%	50.7%
% Diabetics having 2 or more A1C tests per year, 2008/09 ^{vii}	56.1%	↑	41.5%-57.6%	49.7%	50.6%
% CHF patients prescribed ACE/ARB inhibitors, 2008/09 ^{vii}	57.4%	↑	51.2%-62.7%	58.7%	58.0%

*Data on cervical cancer screening participation rates are available only at HSDA and provincial levels; rate shown for South Surrey/White Rock is the Fraser South rate and the range is among FH HSDAs.



South Surrey/White Rock Resident Hospitalization Rates by Age & Sex, 2009/10^{xii}



Leading Causes of Hospitalization[‡] Among FEMALES, 2009/10^{xii}

Diagnosis	Cases	Days	% Total Discharges	LHA Rate per 1,000	FH Rate per 1,000
≤24 Years Old					
Mood [affected] disorders	13	163	4.8%	1.3	1.2
Intestinal infectious diseases	11	19	4.0%	1.1	1.0
Diseases of appendix	10	12	3.7%	1.0	1.2
General symptoms and signs	9	55	3.3%	0.9	0.6
Episodic and paroxysmal disorders	9	21	3.3%	0.9	0.7
All Causes of Hospitalization	273	1,535	100%	26.7	38.8
25-64 Years Old					
Mood [affected] disorders	64	978	3.9%	2.9	2.5
Noninflammatory disorders of female genital tract	62	132	3.8%	2.8	3.2
Arthrosis	49	173	3.0%	2.2	1.6
Benign neoplasms	46	89	2.8%	2.1	2.0
Other diseases of intestines	39	122	2.4%	1.7	1.5
All Causes of Hospitalization	1,629	8,279	100%	72.7	88.5
65+ Years Old					
Other forms of heart disease	224	2,491	9.1%	19.5	16.9
Injuries to the hip and thigh	155	4,117	6.3%	13.5	9.5
Ischemic heart diseases	125	1,211	5.1%	10.9	8.9
Arthrosis	118	714	4.8%	10.3	9.7
General symptoms and signs	118	1,580	4.8%	10.3	7.1
All Causes of Hospitalization	2,463	32,446	100%	214.5	207.4

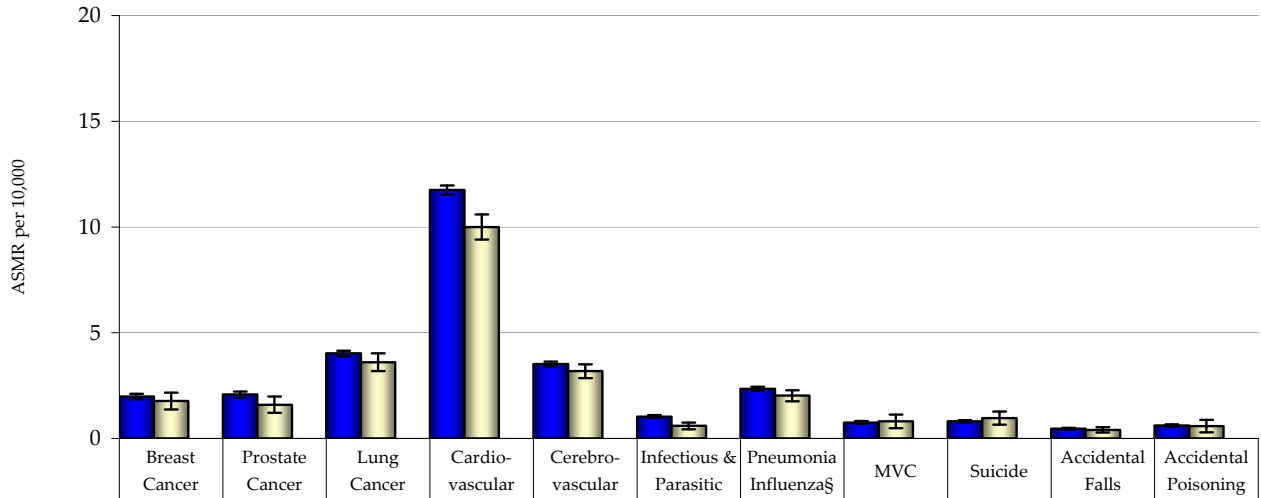
[‡]For this analysis, conditions related to pregnancy/delivery were excluded from the leading five; these accounted for 21% of all hospitalizations among women aged ≤24 and 35% among women aged 25-64. Also excluded from the leading five is the category “persons encountering health services for specific procedures and health care,” which refers to follow-up medical surveillance or care. These accounted for 1% of all hospitalizations among women ≤24, 3% among women 25-64, and 6% among women 65+.

Leading Causes of Hospitalization[‡] Among MALES, 2009/10^{xii}

Diagnosis	Cases	Days	% Total Discharges	LHA Rate per 1,000	FH Rate per 1,000
≤24 Years Old					
Diseases of appendix	19	49	7.4%	1.7	1.6
Injuries to the head	12	17	4.7%	1.1	1.0
Diseases of oral cavity, salivary glands and jaws	12	18	4.7%	1.1	0.3
Neurotic, stress-related and somatoform disorders	9	43	3.5%	0.8	0.5
Injuries to the abdomen, lower back, lumbar spine and pelvis	9	42	3.5%	0.8	0.4
All Causes of Hospitalization	256	1,083	100%	22.7	27.5
25-64 Years Old					
Ischemic heart diseases	72	426	7.5%	3.5	3.3
Other forms of heart disease	60	220	6.3%	3.0	1.8
Complications of surgical and medical care, not elsewhere classified	38	268	4.0%	1.9	1.5
Symptoms and signs involving the circulatory and respiratory systems	38	74	4.0%	1.9	1.2
Schizophrenia, schizotypal and delusional disorders	30	579	3.1%	1.5	1.7
All Causes of Hospitalization	958	7,079	100%	47.2	49.4
65+ Years Old					
Other forms of heart disease	188	1,725	10.4%	22.0	20.2
Ischemic heart diseases	124	786	6.8%	14.5	17.0
Chronic lower respiratory diseases	84	982	4.6%	9.8	10.1
General symptoms and signs	78	1,776	4.3%	9.1	6.8
Influenza and pneumonia	74	864	4.1%	8.7	6.8
All Causes of Hospitalization	1,813	21,676	100%	212.3	224.6

[‡]The category “persons encountering health services for specific procedures and health care” was excluded from the analysis, which refers to follow-up medical surveillance or care. These accounted for 0% of all hospitalizations among men ≤24, 6% among men 25-64, and 6% among men 65+.

Age-Standardized Mortality Rates for Select Causes of Death, 2004-2008^{vi}



	Breast Cancer	Prostate Cancer	Lung Cancer	Cardio-vascular	Cerebro-vascular	Infectious & Parasitic	Pneumonia Influenza§	MVC	Suicide	Accidental Falls	Accidental Poisoning
■ Fraser Health	1.98	2.08	4.02	11.75	3.52	1.04	2.35	0.76	0.81	0.46	0.61
■ S.Surrey/W.Rock	1.77	1.60	3.60	10.00	3.18	0.60	2.02	0.81	0.96	0.41	0.59
# LHA Deaths	76	64	277	1,081	351	53	239	25	37	42	16

Leading Causes of Death in SS/WR LHA, 2004-2008^{vi}

Underlying Cause of Death	ASMR [†]	95% CI	# Deaths
Ischemic heart diseases (I20-I25)	7.18	±0.51	781
Cancer of digestive organs (C15-C26)	3.93	±0.42	334
Lung cancer (C34)	3.60	±0.42	277
Cerebrovascular diseases (I60-I69)	3.18	±0.34	351
Other forms of heart disease (I00-I02, I30-I51)	2.32	±0.29	250
Pneumonia/Influenza§ (J09-J181, J188, J189)	2.02	±0.26	239
Nervous system diseases (G00-G98)	1.92	±0.28	192
Breast cancer, female (C500-C509)	1.77	±0.40	76
Digestive system diseases (K00-K93)	1.71	±0.27	154
Chronic obstructive pulmonary disease (J44)	1.63	±0.26	161
All Cancers* (C00-C97)	14.49	±0.84	1,162
All Causes	46.59	±1.39	4,306

Notes: [†]ASMR is the age-standardized mortality rate per 10,000 population. *The category All Cancers (C00-C97) includes specific cancers reported in the table. §Pneumonia/Influenza excludes hypostatic.

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