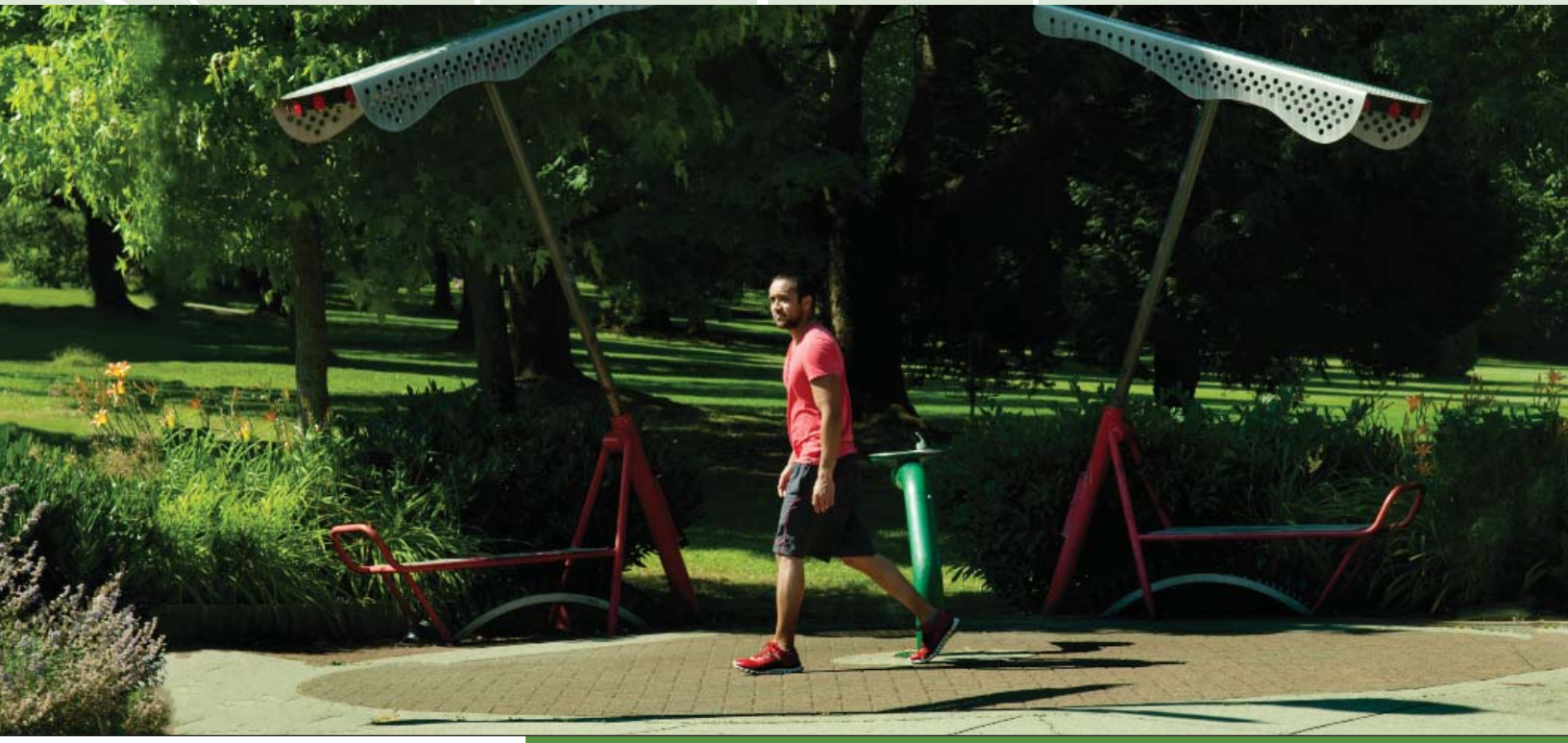


A health and social profile

FALL 2013

Vancouver CoastalHealth
Promoting wellness. Ensuring care.

Contents

Health is where we live, learn, work and play

We are pleased to present this package of Health and Social Profiles for the six Community Health Areas (CHAs) in Vancouver. The full package includes Health and Social Profiles for CHA 1 (City Centre), CHA 2 (Mid-East), CHA 3 (North East), CHA 4 (Westside), CHA 5 (Midtown) CHA 6 (South Vancouver), as well as a Citywide Summary.

These profiles were prepared by Vancouver Coastal Health (VCH). They were compiled by Nerissa Tai, a student in the Master of Public Health Program at Simon Fraser University, with guidance from Community Developers in Vancouver; Charito Gailling, Katie Hume, Lisa McCune, Nicole Latham, Lycia Rodrigues and Jazmin Miranda as well as Dr. Jat Sandhu and Eleni Kefalas at the VCH Public Health Surveillance Unit (PHSU).

VCH is the regional health authority responsible for providing public health services to over 1 million people in British Columbia. We serve the residents of Vancouver, Richmond, the North Shore and Coast Garibaldi, Sea-to-Sky, Sunshine Coast, Powell River, Bella Bella and Bella Coola. We operate 13 hospitals and also provide primary care, mental health and addiction services, community-based residential and home health care, and more. To deliver public health services in Vancouver, VCH divides the city into six geographical areas called "Community Health Areas" (CHAs). CHAs are roughly similar in population size and are each comprised of three to eight neighbourhoods.

A population health approach aims to improve the health of the entire population.

While hospital care and clinical services are an important part of the health care system, Vancouver Coastal Health also uses a population health approach to address the determinants that influence the health of a population. A population health approach aims to improve the health of the entire population and to reduce health inequities among population groups.

In these Health and Social profiles we report on some of the factors that influence the health of individuals and populations in Vancouver. These factors are called the "social determinants of health". In each profile we include population-level data about income, housing, education, employment and child development. We also report on traditional health indicators such as life expectancy, birth rates, standardized mortality ratios, and we include some information about health service utilization and identify key community resources.

Addressing the social determinants of health can improve the health of the whole population and reduce health inequities. But Vancouver Coastal Health cannot do it alone. We need to work in partnership across sectors and with communities to address local issues, create access to services and strengthen the environments in which people live, learn work and play. We hope that these profiles will help VCH staff and our partners in community to identify emerging needs, undertake strategic planning, and implement health-supporting initiatives.

The majority of the information presented in these profiles comes from BC Vital Statistics Agency, BC Stats, the 2006 Statistic Canada Census and Vancouver Coastal Health databases (see the References for a complete list of data sources).

Where possible, we have included information obtained through the 2011 Statistics Canada Census. Where data was unavailable for 2011, we have used information from the 2006 Census. The 2006 Census remains a valuable source of information about populations in Vancouver because it contains details collected through the mandatory long-form Census, which was discontinued prior to the 2011 Census. Also, at the time of publication of these Profiles, only limited data from the 2011 Census has been released.

We also consulted with community groups, public organizations and VCH staff to better inform the profiles and to share local knowledge about unique neighbourhood characteristics and emerging trends.

We hope that this will be a useful and stimulating document. Any comments or feedback is welcome at: phsu@vch.ca.

Acknowledgements

We would like to thank the following people for their contributions to the Vancouver Health and Social Profiles.

Participants in community consultation about the profile design:

Diane Ash, Westside Family Place
Adrian Archambault, Grandview Woodlands Community Policing Centre
Madeline Boscoe, REACH Community Health Centre
Sharon Babu, South Family Place
Donna Clarke, Renfrew-Collingwood Seniors Society
Terri Corcoran, David Thompson Secondary School
Kayo Devcic, Vancouver Coastal Health
Agata Feetham, Gordon Neighbourhood House
Christine Gillespie, Vancouver Coastal Health
Clemencia Gomez, South Granville Seniors Centre
Barb Kirby, BC Community Response Networks
Sandra Menzer, Vancouver Society of Children's Centres
Ken Paquette, The Kettle Friendship Society
Wei-Wei Siew, South Vancouver Neighbourhood House
Sanja Sladojevic, Little Mountain Neighbourhood House
Chelan Wallace, South Vancouver Neighbourhood House
Marla States, Helping Spirit Lodge Society
Ethel Whitty, Carnegie Centre

Authors of the introductions for each profile:

Joel Bronstein, Executive Director, Little Mountain Neighbourhood House
Michelle Fortin, Executive Director, Watari Youth, Family & Community Services
Jennifer Gray-Grant, Executive Director, Collingwood Neighbourhood House
Kate Hodgson, Executive Director, Network of Inner City Community Services Society
Eric Kowalski, Executive Director, West End Seniors Network
Karen Larcombe, Executive Director, South Vancouver Neighbourhood House
Emily Palmer, Director of Community Programs, Kitsilano Neighbourhood House

Organizations that provided data:

BC Centre for Disease Control

BC Centre for Excellence in HIV/AIDS

BC Minstry of Health

BC Vital Statistics Agency (VISTA)

Food Secure Vancouver

City of Vancouver

Immunize BC

Stats Canada

UBC Human Early Learning Partnership

VCH Aboriginal Health Strategic Initiatives Program

VCH Public Health Surveillance Unit (PHSU)

Vancouver School Board

Westcoast Childcare Resource Centre

Cover map created by Patient Health Education Materials Program, VCH Centre for Patients and Families, May 2012.

Reviewers:

Dr. John Carsley, Medical Health Officer, Vancouver Coastal Health

Dr. Meena Dawar, Medical Health Officer, Vancouver Coastal Health

Ken Hawkins, Advisor, Decision Support, Vancouver Coastal Health

Dr. Jat Sandhu, Regional Director, Public Health Surveillance Unit (PHSU), Vancouver Coastal Health

Additional Assistance:

Lianne Carley, Policy Consultant, Vancouver Coastal Health

Belinda Boyd, Leader, Community Engagement, Vancouver Coastal Health

Susann Richter, Leader, Community Engagement, Vancouver Coastal Health

Andi Cuddington, Leader, Community Engagement, Vancouver Coastal Health

Margreth Tolson, Leader, Community Engagement, Vancouver Coastal Health

Elizabeth Holliday, Health Systems Planning Adviser, Vancouver Coastal Health

Maritia Gully, Regional Epidemiologist, Public Health Surveillance Unit, Vancouver Coastal Health

Introduction by community partner

JOEL BRONSTEIN EXECUTIVE DIRECTOR, LITTLE MOUNTAIN NEIGHBOURHOOD HOUSE

CHA 5 is a vibrant community located geographically in the centre of Vancouver and comprised of four distinct neighbourhoods. South Cambie residents have significantly higher average incomes and claim the lowest child vulnerability rates in the area. Riley Park has seen more professionals moving in to this traditionally working class, single family dwelling neighbourhood. Mount Pleasant neighbourhood contains a high percentage of multi-family dwellings with lower average income. Kensington-Cedar Cottage is home to one of the highest populations of new immigrants.

CHA 5 is growing rapidly due to large scale planned developments. Up to 20,000 new residents are expected in the next 15 years. Mount Pleasant Neighbourhood House has just embarked on a three year community engagement process, and the Riley Park/South Cambie and Kensington/Cedar Cottage Community Vision Implementation Committees remain active in providing feedback and guidance into planning for future growth in our community.

CHA 5 has many community strengths. There is a strong history of community activism and neighbours helping each other. Active residents' groups, tenants' associations and planning committees have come together to address local issues such as affordable housing, transportation, amenities and safety. Neighbours volunteer their time and talents to build a vibrant community including community gardens, block parties, community arts groups, etc which are all indicators of a healthy and connected community.

There is a broad spectrum of community organizations that work collaboratively to engage the local residents including neighbourhood houses, family places, community centers, community service agencies, schools, aboriginal organizations, health and mental health services, libraries and community arts groups. There is a wide array of small and medium size businesses and destination sites that draw people to the area.

CHA 5 is in the heart of the city and is the 'the heart of the city'; active citizens, active street life, a growing diverse population.

Population estimates and projections

Population estimates and projections provide social agencies, government and other service providers with an opportunity to plan for emerging trends.

Population projections can be used to gauge future population and composition rates.

Multiple projection series are produced using different combinations of assumptions about future fertility (births), mortality (deaths), and migration.

TABLE 1. Population estimates. Community Health Areas, Vancouver, and British Columbia, 2011

	CHA 1	CHA 2	CHA 3	CHA 4	CHA 5	CHA 6	Vancouver	BC
Count	121,165	71,358	106,364	137,666	95,928	136,209	668,690	4,573,321
Total 0-19 years	8.5%	14.5%	20.0%	20.5%	20.1%	19.9%	17.4%	21.1%
0-4 years	3.6%	3.8%	5.2%	4.3%	5.7%	4.7%	4.5%	4.9%
5-19 years	5.0%	10.6%	14.9%	16.2%	14.4%	15.2%	12.9%	16.2%
Total 20-64 years	81.2%	75.5%	66.8%	67.3%	69.7%	66.3%	70.7%	63.6%
20-34 years	37.6%	25.8%	23.2%	26.2%	23.8%	22.8%	26.7%	20.9%
35-49 years	27.0%	28.3%	24.2%	22.9%	26.9%	22.7%	25.0%	21.5%
50-64 years	16.6%	21.5%	19.5%	18.1%	19.0%	20.8%	19.1%	21.2%
Total 65+years	10.3%	10.0%	13.1%	12.2%	10.2%	13.8%	11.8%	15.3%
65-79 years	7.4%	7.0%	9.1%	8.1%	7.1%	9.3%	8.1%	11.0%
80+ years	2.9%	3.1%	4.1%	4.1%	3.1%	4.5%	3.7%	4.3%

Source: BC Stats (2012, March)

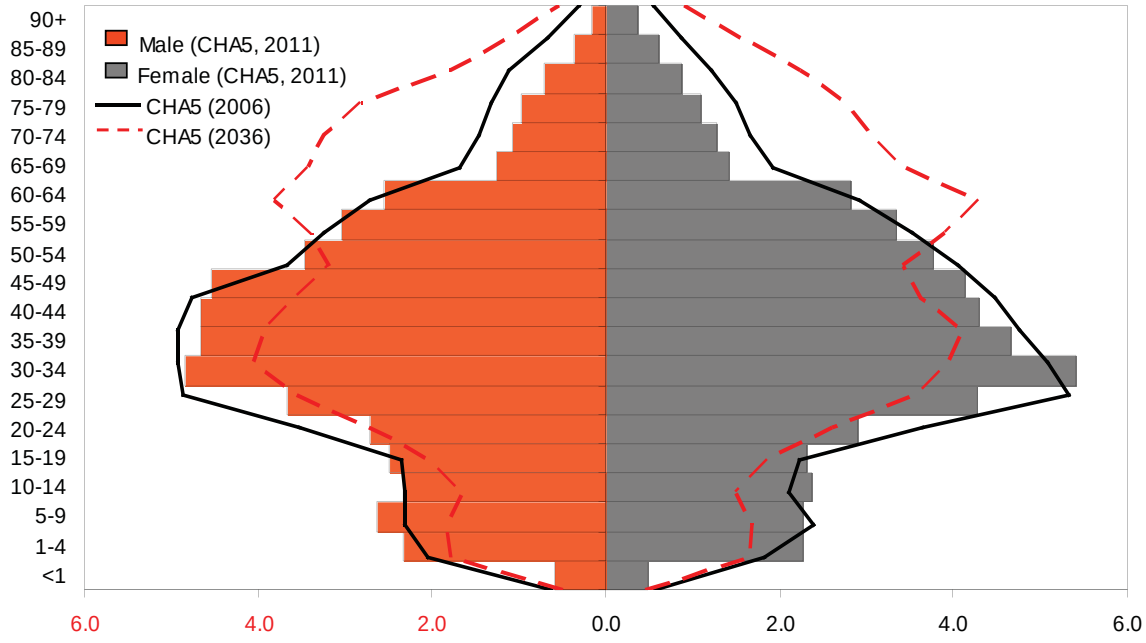
In 2011, the population of CHA 5 was 95,928, the second smallest of all CHAs, comprising 14.3% of Vancouver's population. CHA 5 is a family-oriented community and in 2011 it had the highest proportion of young children aged 4 years and under (5.7%) compared to other CHAs.

TABLE 2. Population projections. Community Health Areas, Vancouver, and British Columbia, 2036

	CHA 1	CHA 2	CHA 3	CHA 4	CHA 5	CHA 6	Vancouver	BC
Count	160,936	96,444	123,785	166,865	118,775	161,984	828,789	6,155,588
Total 0-19 years	15.6%	14.9%	16.5%	18.5%	14.9%	16.6%	16.3%	19.0%
0-4 years	3.6%	4.2%	3.8%	3.6%	4.4%	3.7%	3.9%	4.4%
5-19 years	12.0%	10.8%	12.6%	14.8%	10.5%	12.9%	12.5%	14.6%
Total 20-64 years	71.0%	64.5%	57.6%	59.9%	64.6%	57.0%	62.4%	57.3%
20-34 years	22.2%	18.4%	16.9%	25.3%	20.5%	16.8%	20.3%	17.0%
35-49 years	30.4%	25.3%	18.7%	18.1%	21.9%	19.1%	22.1%	21.1%
50-64 years	18.4%	20.9%	22.0%	16.6%	22.3%	21.2%	20.0%	19.2%
Total 65+years	13.4%	20.5%	25.9%	21.6%	20.5%	26.4%	21.3%	23.7%
65-79 years	10.5%	15.0%	18.4%	15.2%	15.9%	18.3%	15.5%	16.3%
80+ years	2.9%	5.5%	7.5%	6.4%	4.5%	8.0%	5.8%	7.4%

Source: BC Stats (2012, March)

FIGURE 1. Population distribution (%) by sex and age group. Community Health Area 5, 2006, 2011, and 2036



Source: BC Stats (2012, March)

Figure 1 illustrates the sex distribution of CHA 5 with males on the left and females on the right. Overall in 2011, there were 49.0% males and 51.0% females; however, the composition shifts according to the age group.

Figure 1 also shows the number of people in each five-year age group. The figure shows what the population composition was in 2006 (black line), 2011 (bars), and what it is expected to look like in 2036 (red dotted line).

The population distribution of CHA 5 has not changed significantly since 2006. By 2036, the total population of CHA 5 is projected to increase by 27.8%% to 118,775 persons. The projected aging of the population is apparent in this figure. In 2036 there will be 10.3% more people aged 65 years and over and 5.2% fewer people aged 19 years and under.

Demographic composition

This section draws attention to the demographic composition of Community Health Area 5 and how it relates to diversity, education and childhood development, employment and income, and housing and household characteristics.

Diversity

Visible Minorities. Both Statistics Canada and the Public Service Commission of Canada use the following definition of visible minority: A person in a visible minority group is someone who is non-white in colour/race, regardless of place of birth.

The immigrant population is defined as persons who are, or who have been, landed immigrants in Canada. This term does not include non-permanent residents, persons in Canada on employment or student authorizations, refugee claimants or persons born outside Canada who are Canadian citizens by birth (Statistics Canada, 2010, July 6).

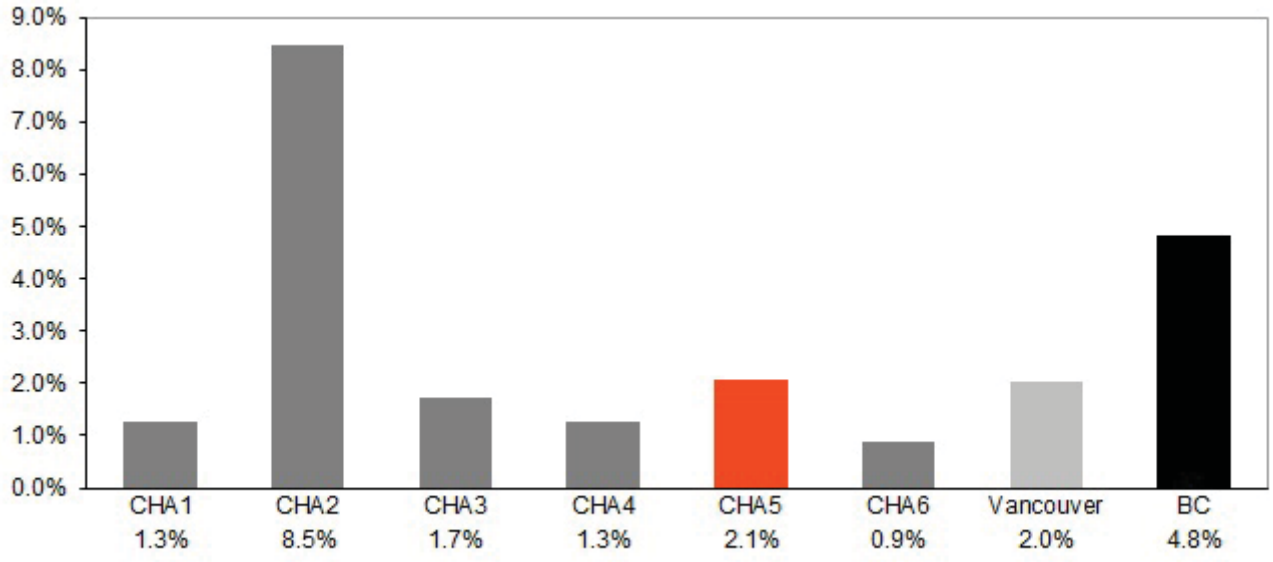
Recent immigrants refer to landed immigrants who came to Canada up to five years prior to a given census year. For the 2006 Census, recent immigrants are landed immigrants who arrived in Canada between January 1, 2001 and May 16, 2006 (Statistics Canada, 2010, July 6).

Data Source: Statistics Canada

Aboriginal population

Over the past few decades the health status of Aboriginal peoples in Vancouver has improved, particularly in the areas of infant mortality, unintentional injuries and suicide. These improvements can be attributed to changes in the social determinants of health, improved access to health care services and greater emphasis on cultural teachings. Participants at the 2011 Forum for Aboriginal Elders identified many positive impacts that result from preserving Aboriginal cultural traditions. A number of community organizations operate in Vancouver to meet the needs of urban Aboriginal people. These include the Vancouver Aboriginal Council, the Vancouver Aboriginal Friendship Centre, the Urban Native Youth Association, and the Aboriginal Mother Centre Society.

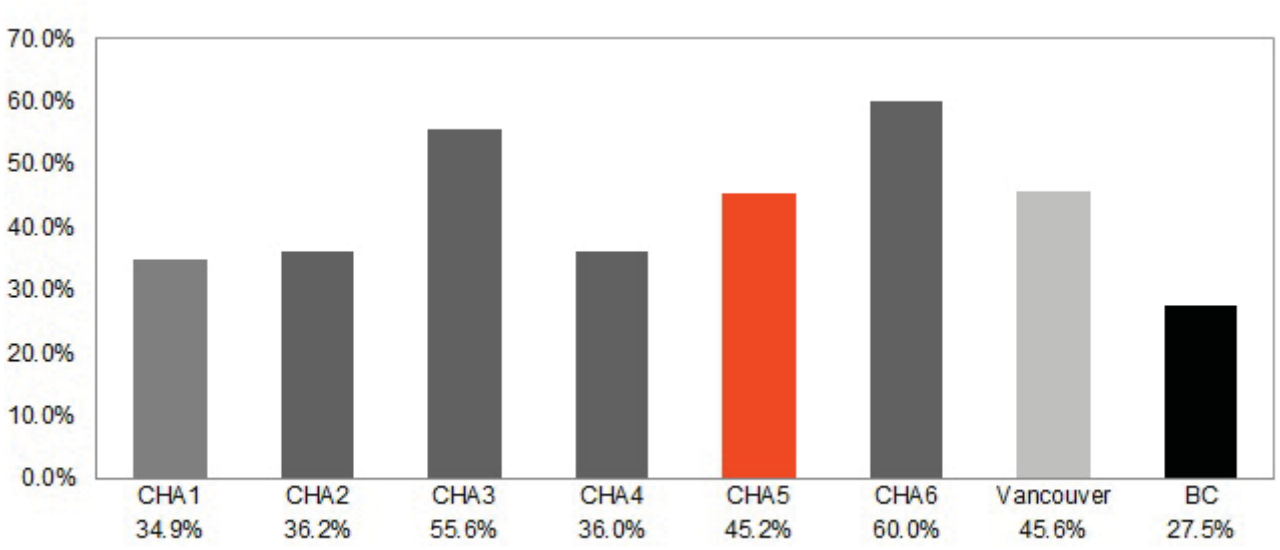
FIGURE 2. Aboriginal population as a percentage (%) of the total population. Community Health Areas, Vancouver, and British Columbia, 2006



Source: Statistics Canada, 2006 Census of Population

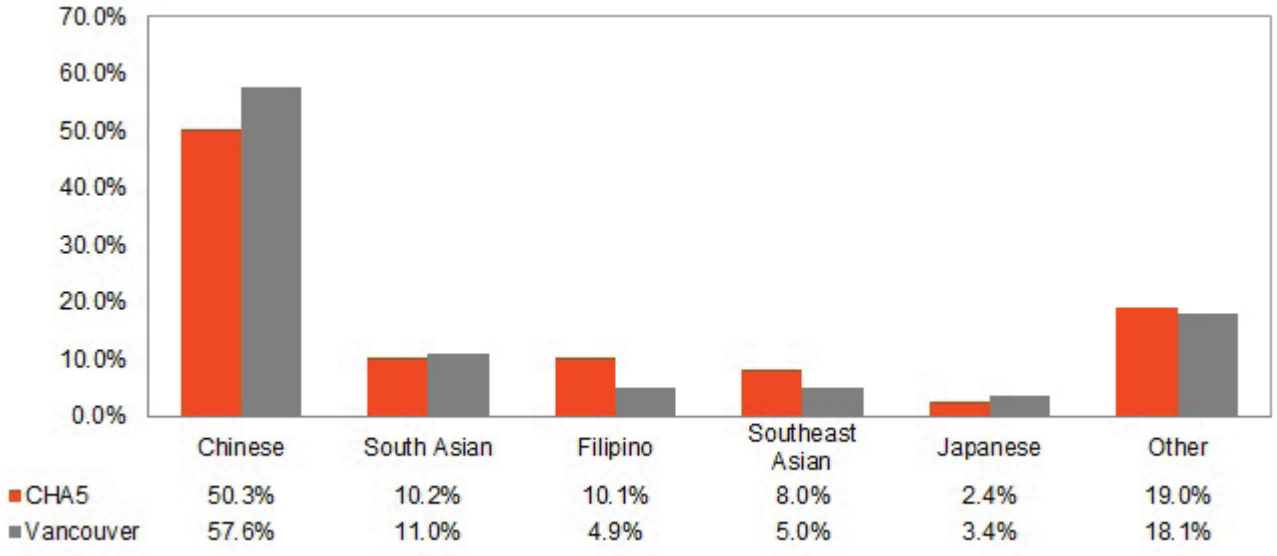
Immigrant population

FIGURE 3. Immigrant population as a percentage (%) of the total population. Community Health Areas, Vancouver, and British Columbia, 2006



Source: Statistics Canada, 2006 Census of Population

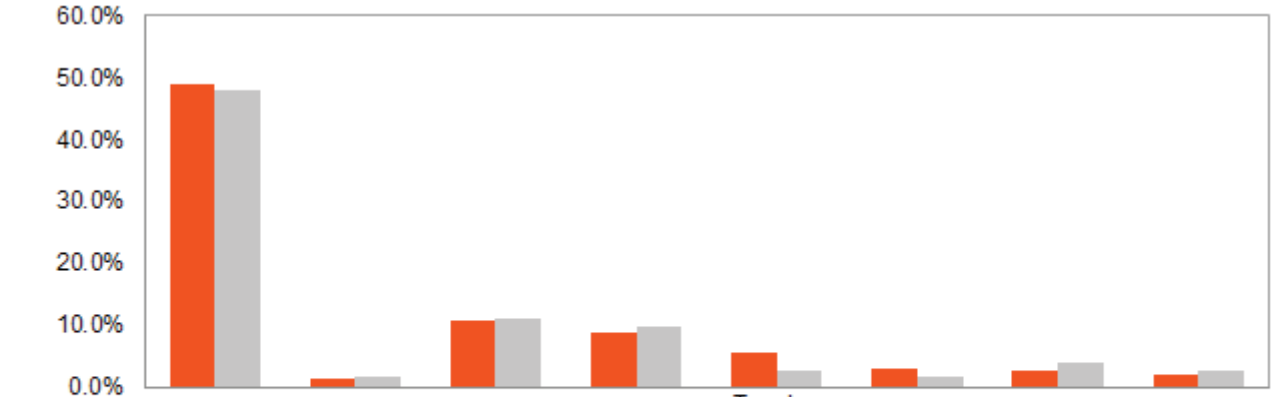
FIGURE 4. Select visible minority groups as a percentage (%) of the total visible minority population in Community Health Area 5



Source: Statistics Canada, 2006 Census of Population

Within CHA 5, the Chinese population is the most prominent visible minority group and make up 50.3% of the total visible minority population.

FIGURE 5. Total population by select mother tongue. Community Health Area 5 and Vancouver, 2006



	English	French	Cantonese	Chinese n.o.s.	Tagalog (Pilipino, Filipino)	Vietnamese	Mandarin	Panjabi (Punjabi)
CHA5	49.0%	1.5%	10.8%	8.9%	5.5%	3.1%	2.6%	2.1%
Vancouver	48.0%	1.6%	11.0%	9.8%	2.8%	1.8%	4.1%	2.7%

Source: Statistics Canada, 2006 Census of Population

"N.o.s." stands for "not otherwise specified". This refers to people who reported "Chinese" in their response to the question on language spoken most often at home without specifying Mandarin, Cantonese or other Chinese languages.

Education and healthy child development

Child care enables parents of young children to work or study on a full or part time basis. A vast body of research has demonstrated that quality early learning and child care has significant educational, social, and emotional benefits for children.

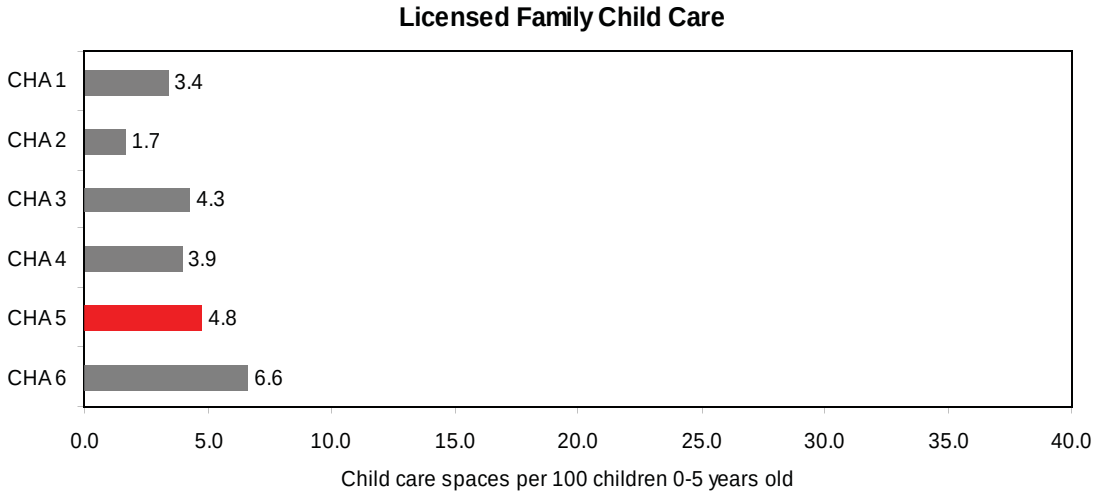
Licensed Family Child Care is offered in a child care provider's own home, and serves a maximum of 7 children from birth to age 12. Group Child Care serves children in two age groupings: from birth to 36 months and from 30 months to school-age. Preschools serve children age 30 months to school entry. Preschools are part-day programs, typically operating on the school-year, September to June (Vancouver Coastal Health, 2009).

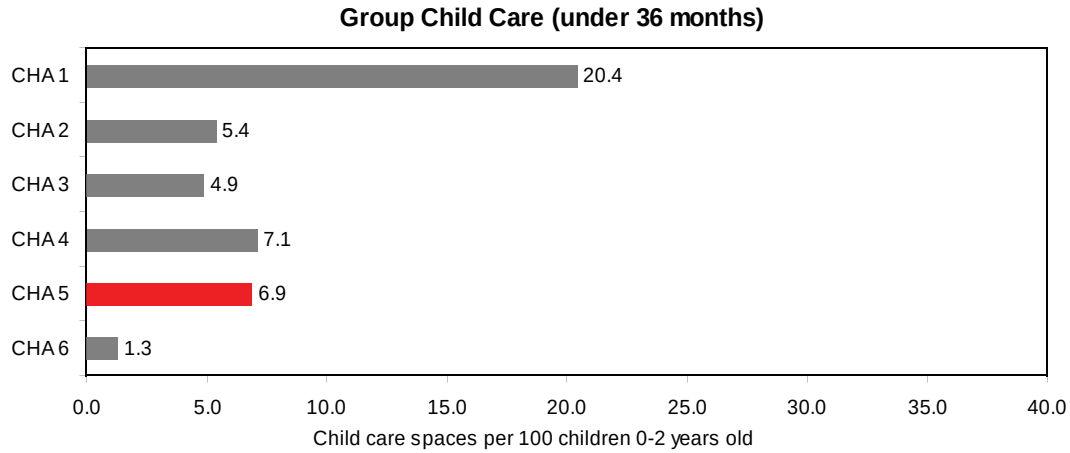
Within Vancouver, the number of child care spaces varies considerably by CHA. While the number of spaces has increased in recent years, the population under age 5 is also increasing and child care availability remains low. Many families rely on informal child care arrangements.

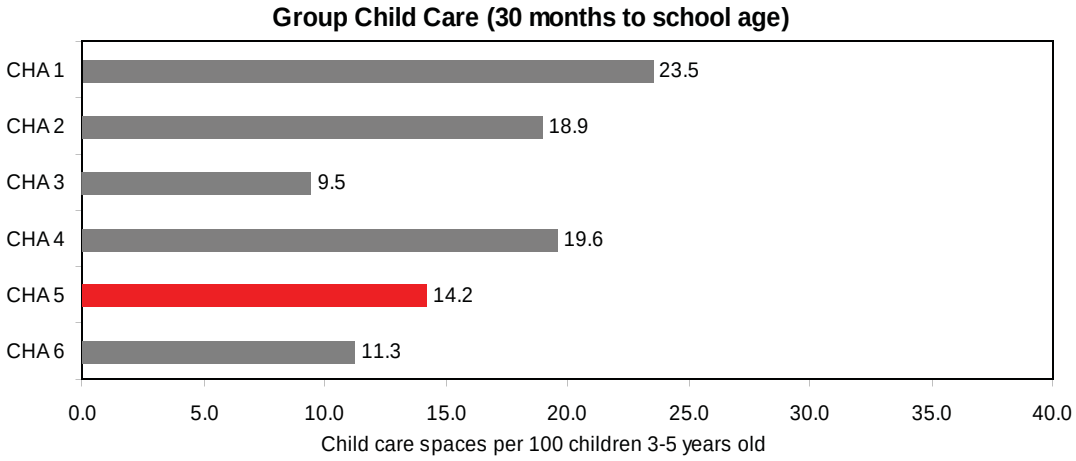
In CHA 5 there are 6.9 licensed group child care spaces for every 100 children under 36 months and 14.2 licensed group child care spaces for every 100 children age 3-5 years. More than 85 of every 100 children age 3-5 years do not have access to licensed group child care.

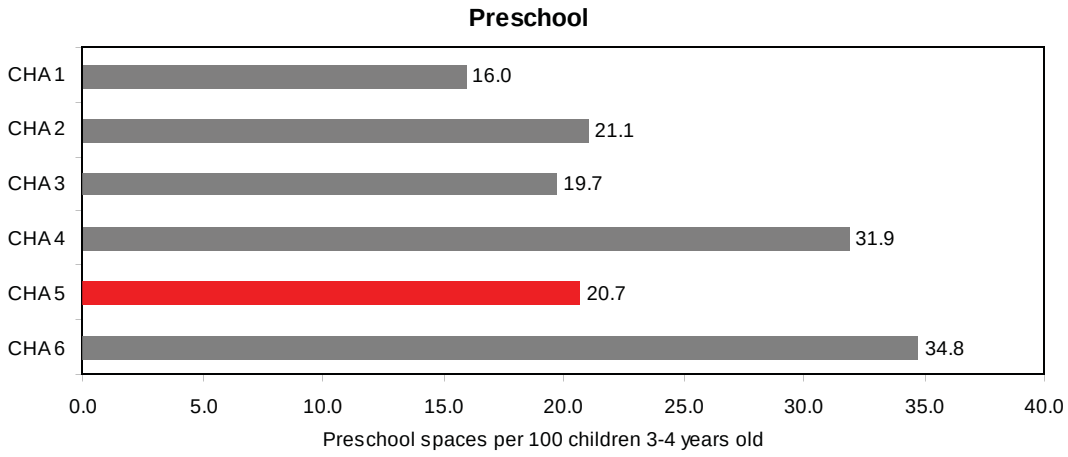
Note: data provided here do not include unlicensed, "licence-not-required" nor informal child care arrangements (e.g. care by relative, nanny).

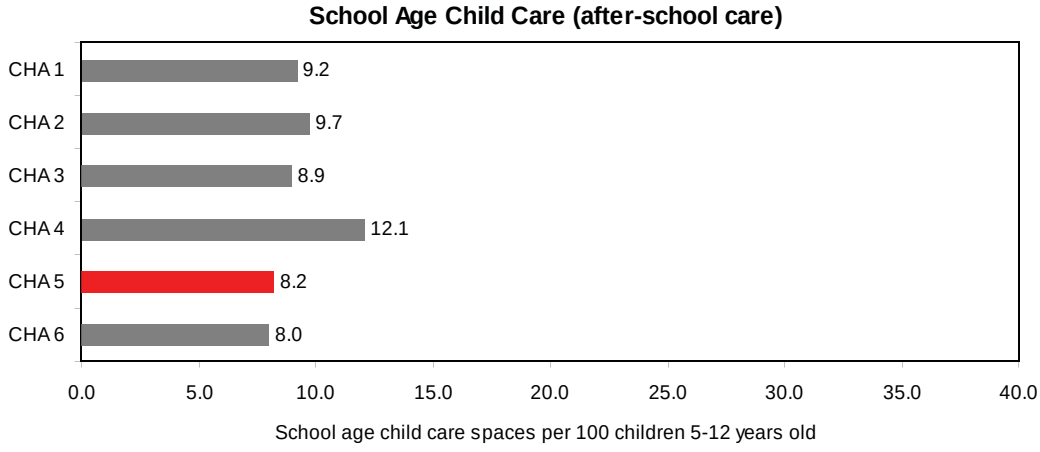
FIGURE 6. Child Care spaces per 100 children. Community Health Areas, 2012











Source: Westcoast Child Care Resource and Referral and City of Vancouver, personal communication, (2012, August 16).

TABLE 3. Percentage of Kindergarten children vulnerable on five domains of development as measured by the Early Development Instrument (EDI). Community Health Areas and British Columbia, 2009/11 (compared to 2007/09)

	Percent age vulnerable (%)						
	CHA 1	CHA 2	CHA 3	CHA 4	CHA 5	CHA 6	BC
Total Number of Children	252 (270)	210 (254)	643 (772)	627 (715)	557 (623)	988 (950)	47,318 (37,398)
Physical Health and Well Being	19% (14%)	24% (25%)	17% (18%)	8% (7%)	13% (13%)	17% (17%)	14% (12%)
Social Competence	17% (18%)	24% (24%)	18% (18%)	17% (13%)	17% (12%)	20% (19%)	15% (13%)
Emotional Maturity	17% (17%)	22% (25%)	13% (15%)	10% (10%)	14% (13%)	18 %(19%)	14% (12%)
Language and Cognitive Development	13% (8%)	16% (20%)	12% (4%)	7% (4%)	12% (8%)	14 %(13%)	10% (10%)
Communication Skills and General Knowledge	21% (22%)	25% (23%)	27% (28%)	14% (10%)	25% (20%)	27% (26%)	14% (13%)
One or more domain	39% (39%)	49% (47%)	43% (43%)	29% (25%)	37% (25%)	45% (43%)	31% (29%)

Source: University of British Columbia, Human Early Learning Partnership (2011, September 22).

The quality of a child's early development plays a significant role in lifelong health, social ability and educational achievement. Research has clearly shown that poor early development is associated with a wide range of acute and chronic health issues later in life.

This table shows the percentage of children in each CHA who are considered to be vulnerable in each of the five domains of the EDI. The first row shows the number of children who participated in the EDI in each of 2009/11 and 2007/09 (in parentheses).

In CHA 5, of 557 children who participated in the EDI in 2009/11, 25 percent are considered vulnerable in the domain of "Communication Skills and General Knowledge". 17 percent are considered vulnerable in the domain of "Social Competence".

The Early Development Instrument (EDI) is a research tool that measures children's health and well-being as they enter kindergarten in five core developmental domains: physical health and well-being, social competence, emotional maturity, language and cognitive development, and communication skills. These are proven and reliable predictors of later educational outcomes, social capability and adult health.

Reporting EDI data allows us to better understand levels of child "vulnerability". Children are considered to be vulnerable when they receive a low score on EDI in one or more of the domains of development. A child who is vulnerable is at increased risk of encountering difficulties in their school years and beyond. This information is viewed at a population level (e.g., community, health area, etc.) and this makes it possible to see the proportion of vulnerable children in a geographic area (See Table 3) (UBC Human Early Learning Partnership, personal communication, August 13, 2012).

Note: CHA 5 includes neighbourhood data for Cedar Cottage (which is typically included in CHA 3).

TABLE 4. Middle Years Development Instrument Well-Being Index, 2011

Community Health Area	Number of students	Low	Medium/High	Very High/ Thriving
CHA 1	143	16.2%	30.9%	52.9%
CHA 2	180	22.3%	39.4%	38.3%
CHA 3	735	31.9%	35.5%	32.6%
CHA 4	600	17.3%	33.2%	49.5%
CHA 5	418	22.3%	35.9%	41.8%
CHA 6	925	31.3%	30.5%	38.3%

Source: University of British Columbia, Human Early Learning Partnership, Personal Communication (2012, August 13)

The Middle-Years Development Instrument (MDI) measures social and emotional health, and also gathers information about children's perceptions of the community assets available to support their health and development.

The MDI is a self-report questionnaire administered to Grade 4 children. It was used to gather data from all Vancouver School District children starting in 2011. Data from the Vancouver MDI project can be used to provide an overall picture of child well-being. The MDI calculates an overall health and well-being score, which is composed of 5 dimensions: optimism, happiness, self-esteem, general health, and sadness (reverse-scored) (UBC Human Early Learning Partnership, personal communication, August 13, 2012).

Table 4 shows that about 77% of children in CHA 5 are doing well (scored medium/high to very high/thriving). 418 grade 4 children from CHA 5 participated in the MDI questionnaire in 2011. Children who scored "high" agreed or strongly agreed with statements like: "I have more good times than bad times", "I am happy with my life", and "the things in my life are excellent". Children who were considered "medium" on the well-being index responded that these statements were partially or somewhat true for them. Children who responded that they disagreed with these statements were designated as having a "low" level of well-being.

TABLE 5. Middle Years Development Instrument percentage of students reporting presence of each asset, 2011

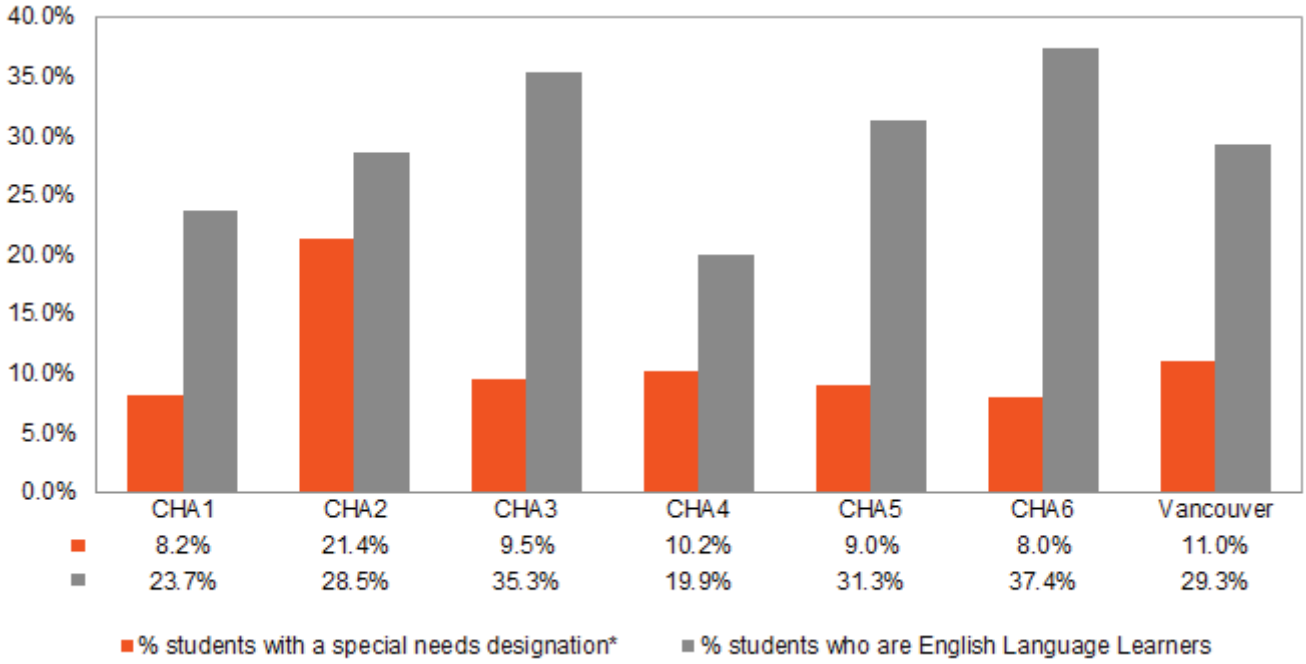
Community Health Area	Percentage of grade 4 students that report the presence of each asset			
	After School Activities	Peer Relationships	Nutrition and Sleep	Adult Relationships
CHA 1	67.4%	85%	72%	83.7%
CHA 2	76.2%	74%	63.3%	79.5%
CHA 3	63.5%	76%	65.2%	70.9%
CHA 4	88.5%	79.8%	76.7%	82.7%
CHA 5	71.4%	78.3%	71.8%	75.5%
CHA 6	72.6%	76.9%	67.2%	73.5%

Source: University of British Columbia, Human Early Learning Partnership, Personal Communication, (2012, August 13).

The MDI also gathers information from children about their perception of the community and school assets they experience. Children were asked about their experiences of connection with adults in their schools, neighbourhoods and at home and with their peers. They were also asked about how often they eat breakfast, how often they get a good night's sleep, and whether they participated in after-school activities.

Table 5 shows that children in CHA 5 report having positive relationships with peers and adults. Over 71% of children in CHA 5 participate in after-school activities. This is less than children in CHAs 2, 4 and 6 but more than children in CHAs 1 and 5. About 72% of children in CHA 5 report that they usually eat breakfast and get a good night's sleep.

FIGURE 7. Percentage of students enrolled in the Vancouver School Board with a special needs designation or who are English Language Learners, Community Health Areas and Vancouver, 2010/11 school year



Source: Vancouver School Board, Personal Communication, (2011, September 30)

*"Special needs designation" includes all children designated with any of the following needs: physically dependent – multiple needs, deaf-blind, moderate to profound intellectual disabilities, physical disability or chronic health impairment, visual impairment, deaf or hard of hearing, autism spectrum disorder (ASD), students requiring intensive behaviour intervention or students with serious mental illness, mild intellectual disabilities, gifted, learning disabilities, students requiring behaviour support or students with mental illness. Detailed definitions for these designations can be found here: http://www.vsb.bc.ca/ministry-designations

In September 2011 there were 55,062 students enrolled in the Vancouver School Board. Of these, about 1 in 10 students had a "special needs" designation and about 1 in 3 students were English Language Learners.

To best understand this information, it's important to consider both the percentages and numbers of children in each category. For example, while CHA 4 has a low percentage of students with a special needs designation (10.2%), it is home to the highest number of children with special needs designations (1,487 children).

TABLE 6. Percentage of families with children enrolled in the Vancouver School Board receiving income assistance (IA) and/or with a child in care of the BC Ministry of Children and Family Development. Community Health Areas and Vancouver, 2010/11 school year

	Total enrolment in Vancouver School Board	% of families on Income Assistance	% of families with a child in care
CHA 1	2,265	4.6%	0.2%
CHA 2	3,319	20.9%	2.2%
CHA 3	13,365	7.3%	0.9%
CHA 4	14,548	0.8%	0.2%
CHA 5	5,919	4.1%	0.6%
CHA 6	15,646	5.2%	0.5%
Vancouver	55,062	7.1%	0.8%

Source: Vancouver School Board, Personal Communication, (2006, September 30)

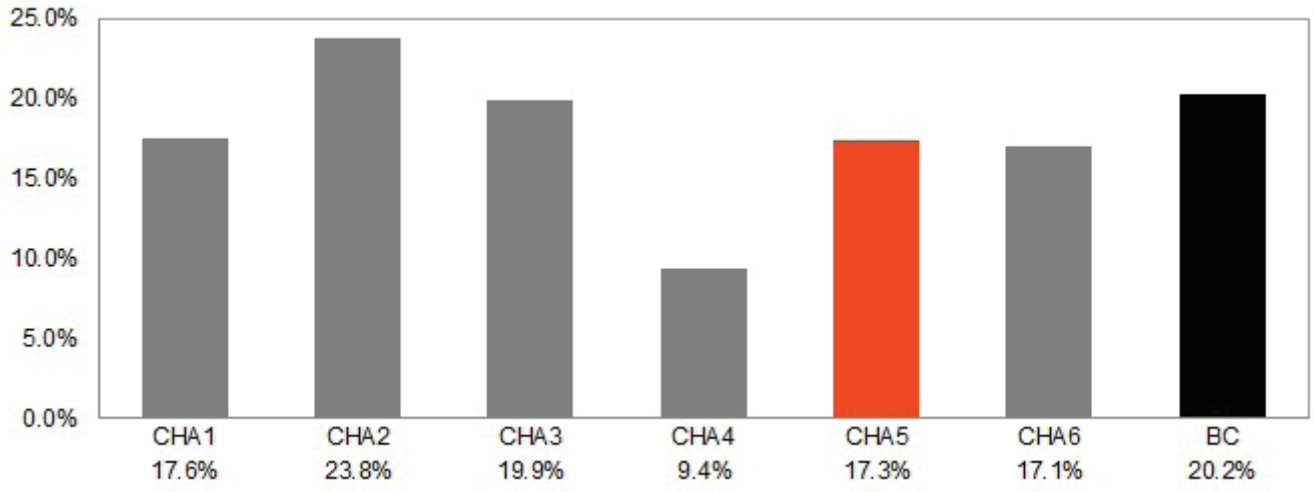
Families in BC who rely on income assistance (IA) may be experiencing temporary unemployment or disability. While income assistance helps these families with the basic costs of living, the support is limited and these families live in poverty.

Children and youth come into foster care with the BC Ministry of Children and Family Development (MCFD) for a variety of reasons including voluntary agreements with parents or guardians who are experiencing difficulties, specialized care for a child who has mental or physical difficulties, or to escape neglect or abuse in their own homes. Whatever the reason for coming into care for these children, separation from their families is a very difficult experience (BC Ministry of Children and Family Development, 2011).

Children and youth in care are highly vulnerable to poor health and poor educational attainment. Within BC, more than half (51.7%) of the children who come into care are Aboriginal (British Columbia Provincial Health Officer, 2006).

Note: this table reports data based on school of enrolment. Some students attend schools in a community health area that is different from their community health area of residence.

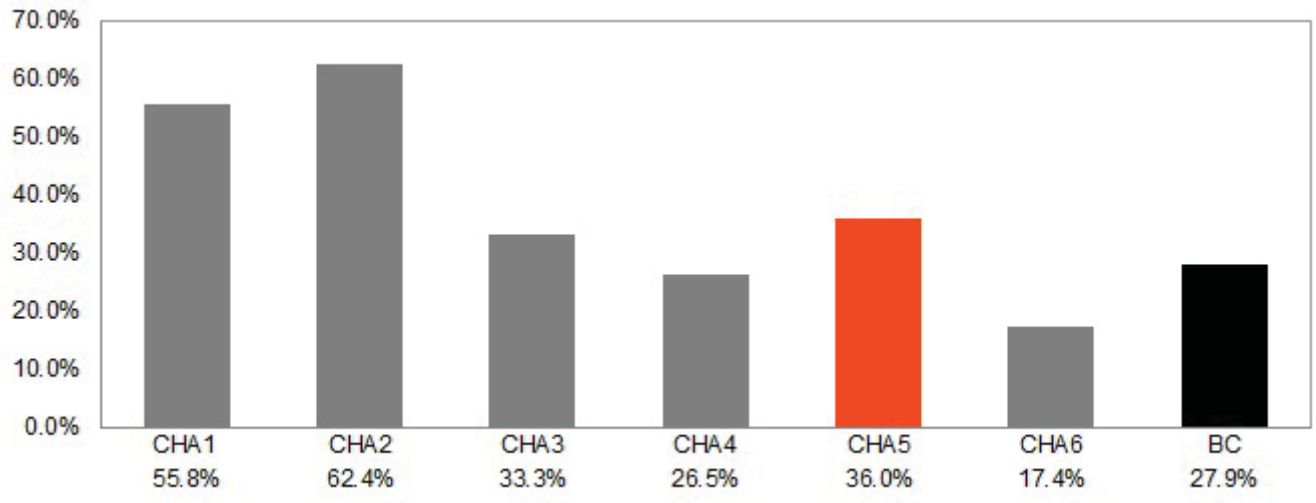
FIGURE 8. Percentage of students below the average on the Foundation Skills Assessment reading tests — average of Grade 4 and 7 students. Community Health Areas and British Columbia, average 2008/09-2010/11



Source: BC Stats (2011)

The Foundation Skills Assessment (FSA) is an annual, province-wide assessment of Grade 4 and 7 students' academic skills, providing a snapshot of how well BC students are performing in reading comprehension, writing, and numeracy (BC Ministry of Education.) There has been controversy over the meaningfulness and misuse of the data and many parents have opted their children out of writing these exams. As such, these numbers do not reflect all Grade 4 and 7 students.

FIGURE 9. Percentage of 18 years olds who did not graduate from high school. Community Health Areas and British Columbia, average 2008/09-2010/11

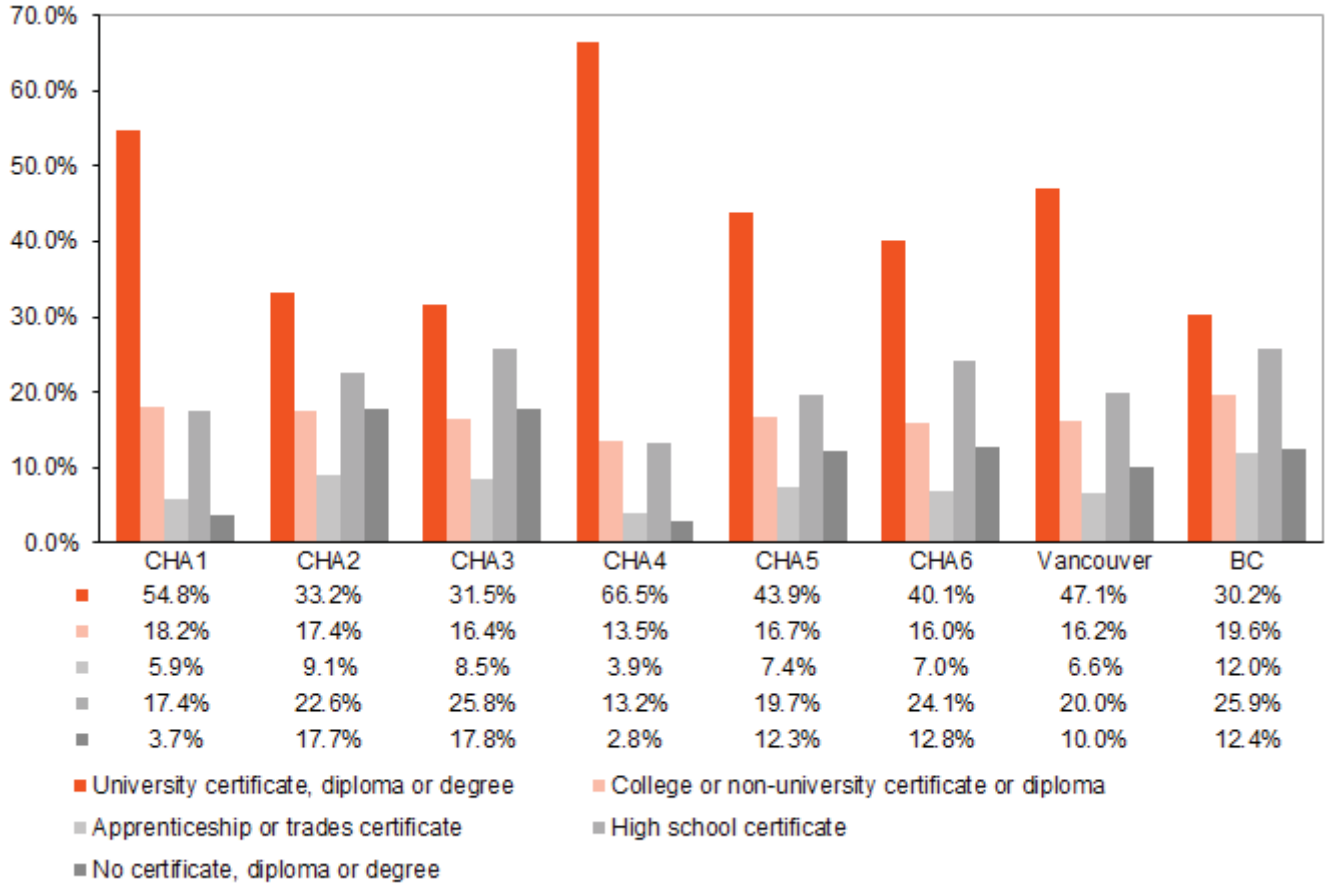


Source: BC Stats (2011)

This figure reports on the percentage of 18 year olds enrolled in the Vancouver School Board who did not graduate at age 18. However, a significant number of youth graduate at age 19 or older. The district-wide average for those who graduated in grade 12 (first time eligible) in 2008/09-2010/11 was 72%. The district average for students graduating within 6 years of starting grade 8 (the "six-year completion rate") for the same time period is higher (81%) (BC Ministry of Education, 2011).

There are various reasons why non-graduation rates for 18 year olds appear high in Vancouver. For example, newcomer students may take extra time to complete required courses. Also, youth with a special needs designation are entitled to an additional year of high school.

FIGURE 10. Percentage of total population, 25-64 years, by highest level of education attained. Community Health Areas, Vancouver, and British Columbia, 2006

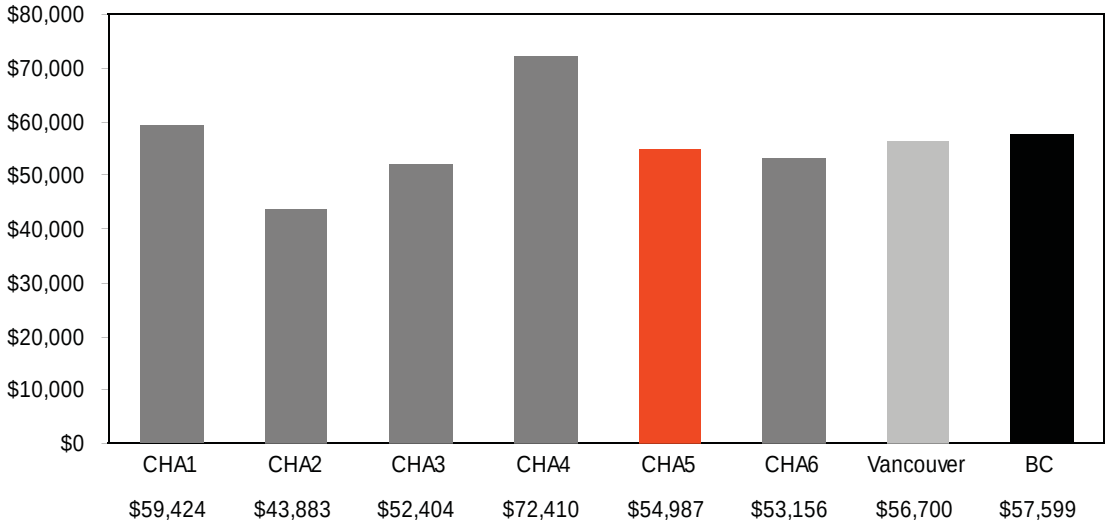


Source: Statistics Canada, 2006 Census of Population

Figure 10 shows the percentage of the population of each CHA that have attained various levels of education. For all CHAs, the percentage of the population that has attained a university certificate, diploma or degree is higher than the percentage in BC overall. CHA 4 is home to the highest percentage of people who have attained a university certificate, diploma or degree, while CHA 3 is home to the highest percentage of people who have not attained any certificate, diploma or degree. 9.1% of residents of CHA 2 have attained an apprenticeship or trades certificate, the highest rate for that certification among all CHAs.

Employment and income

FIGURE 11. Median after-tax incomes of economic families. Community Health Areas, Vancouver, and British Columbia, 2006

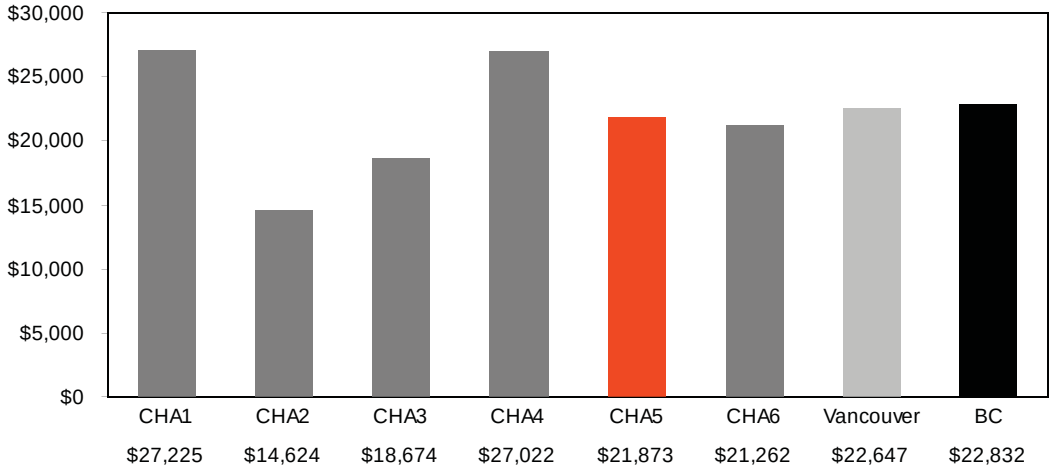


Source: Statistics Canada, 2006 Census of Population

Median income divides income distribution into two groups - half having income above that amount and the other below. This measure of income is not distorted by the highest and lowest values average income.

Economic families refer to a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law or adoption. A couple may be of opposite or same sex. For 2006, foster children are included.

FIGURE 12. Median after-tax individual income of persons (aged 15+ years) not in economic families. Community Health Areas, Vancouver, and British Columbia, 2006



Source: Statistics Canada, 2006 Census of Population

TABLE 7. Median and average after-tax income of individuals (aged 15+ years) by sex. Community Health Areas, Vancouver, and British Columbia, 2005

	CHA 1	CHA 2	CHA 3	CHA 4	CHA 5	CHA 6	Vancouver	BC
Median after-tax income ($)								
Total	$27,624	$16,309	$18,916	$27,831	$21,334	$18,952	$21,840	$22,785
Male	$29,950	$16,823	$21,304	$31,885	$23,366	$21,276	$24,200	$28,251
Female	$25,585	$15,996	$17,231	$24,682	$19,812	$17,129	$19,951	$18,930
Difference (%)	17.1%	52.0%	23.6%	29.2%	17.9%	24.2%	21.3%	49.2%
Average after-tax income ($)								
Total	$34,233	$22,230	$22,719	$43,746	$26,229	$24,340	$30,107	$28,908
Male	$39,135	$22,801	$25,011	$56,323	$28,483	$27,347	$34,832	$34,652
Female	$29,222	$21,562	$20,547	$32,639	$24,122	$21,622	$25,595	$23,408
Difference (%)	33.9%	5.7%	21.7%	72.5%	18.1%	26.5%	36.1%	48.0%

Source: Statistics Canada, 2006 Census of Population

When looking at median income, males in CHA 5 make 17.9% more than females.

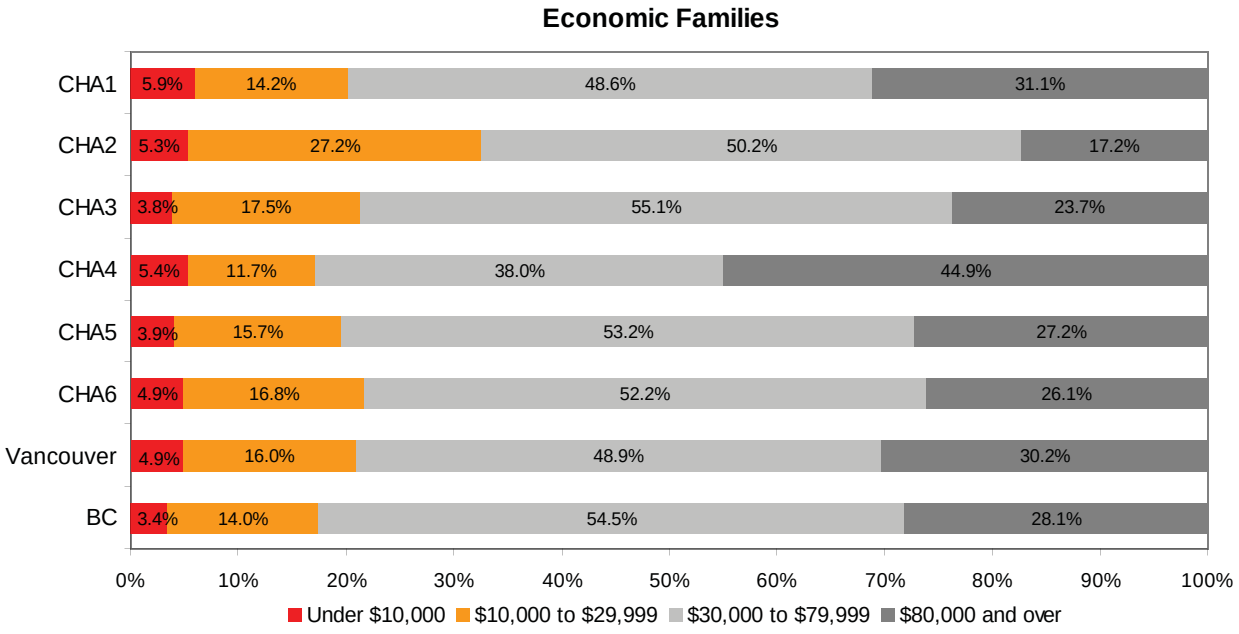
TABLE 8. Employment income and unemployment rates for Canadian-born, all immigrants, and recent immigrants. Community Health Areas and British Columbia, 2006

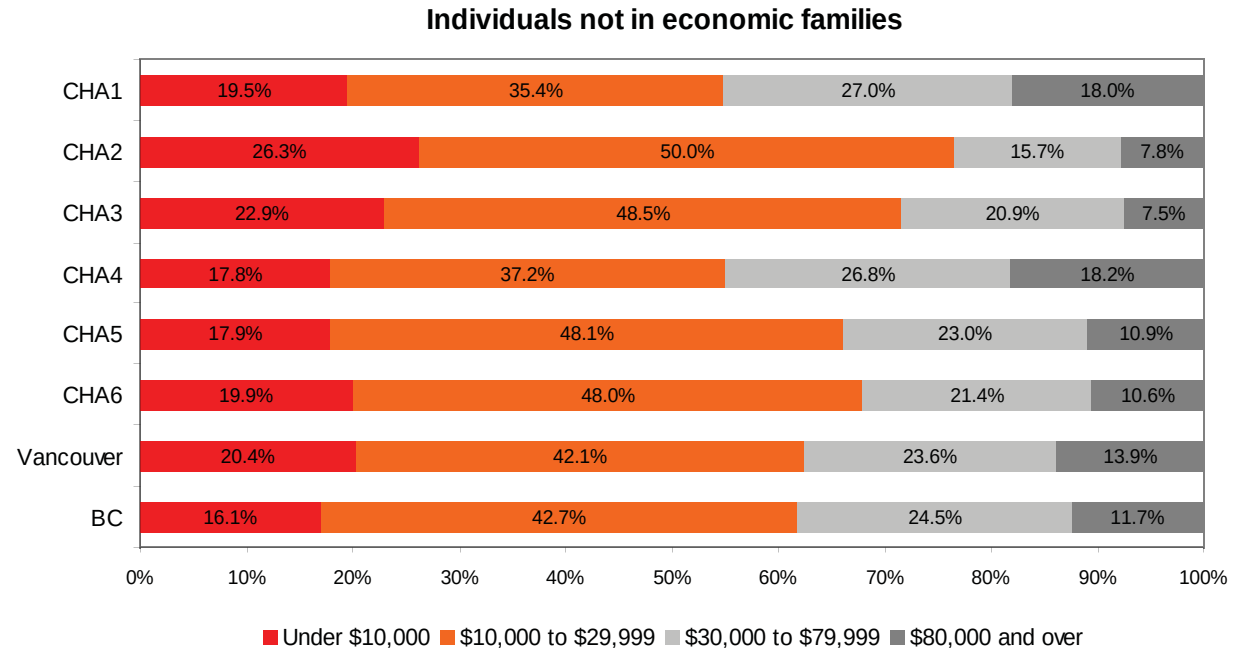
	Employment Income ($), 2005			Unemployment Rate (%), 2006		
	Canadian-Born	All Immigrants	Recent Immigrants	Canadian-Born	All Immigrants	Recent Immigrants
CHA 1	$41,201	$33,967	$22,973	3.8%	5.7%	8.5%
CHA 2	$28,520	$24,044	$19,202	8.1%	8.0%	9.9%
CHA 3	$34,922	$24,800	$17,940	6.0%	5.8%	7.5%
CHA 4	$41,597	$34,962	$18,164	3.4%	5.6%	10.2%
CHA 5	$35,067	$25,080	$17,992	4.4%	6.1%	11.9%
CHA 6	$37,202	$24,558	$14,643	4.8%	5.1%	8.7%
BC	$36,053	$28,009	$17,994	4.8%	5.5%	9.7%

Source: BC Stats (2011)

Immigrants and, in particular, recent immigrants experience a disadvantage in the labour force. Within CHA 5, recent immigrants earn $17,075 less than the average Canadian-born worker. Their rate of unemployment is 7.5 percentage points higher than Canadian-born, the largest discrepancy amongst the CHAs.

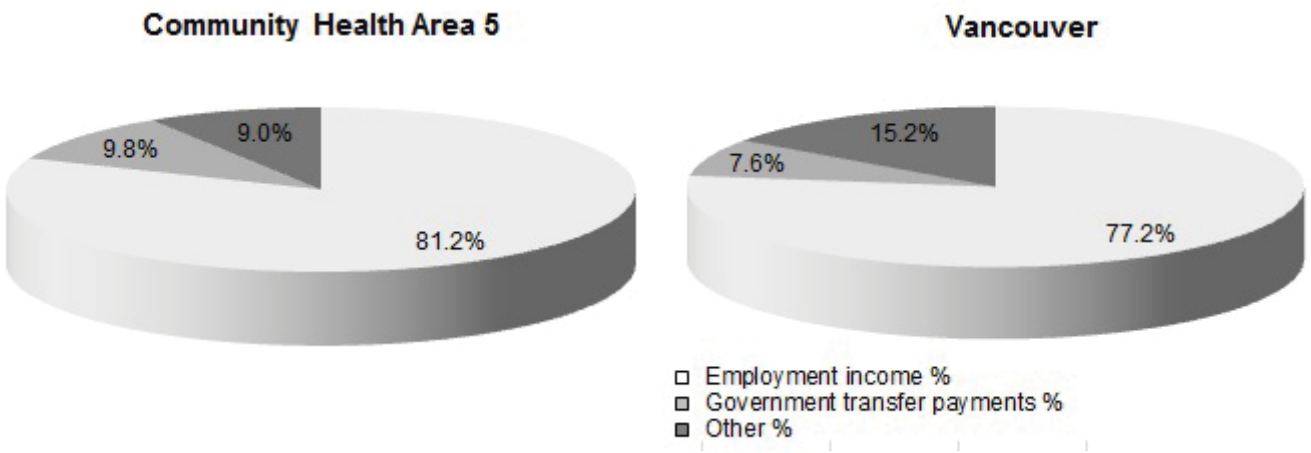
FIGURE 13. Income distribution, after-tax (%). Community Health Areas, Vancouver, and British Columbia, 2006





Source: Statistics Canada, 2006 Census of Population

FIGURE 14. Composition of family income of economic families (%). Community Health Area 5 and Vancouver, 2006



Source: Statistics Canada, 2006 Census of Population

These figures break down income source (employment, government transfer payments and other sources) as a percentage of the total income of economic families in CHA 5 compared to that of Vancouver.

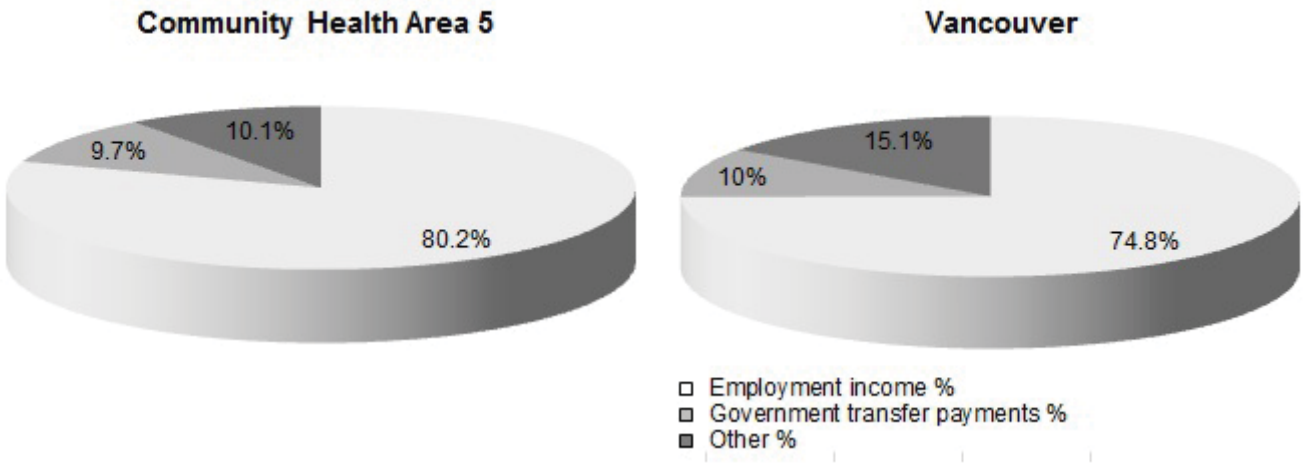
Government transfer payments include the Old Age Security pension and Guaranteed Income Supplement, benefits from the Canada Pension Plan, benefits from Employment Insurance, and child benefits.

Other money income includes dividends, interests, other investment income, retirement pensions, superannuation and annuities, and income from abroad (Statistics Canada, 2010).

Within CHA 5, government transfer payments make up 9.8% of total family income, which is higher compared to Vancouver (7.6%).

Note: see page 29 for definition of economic families.

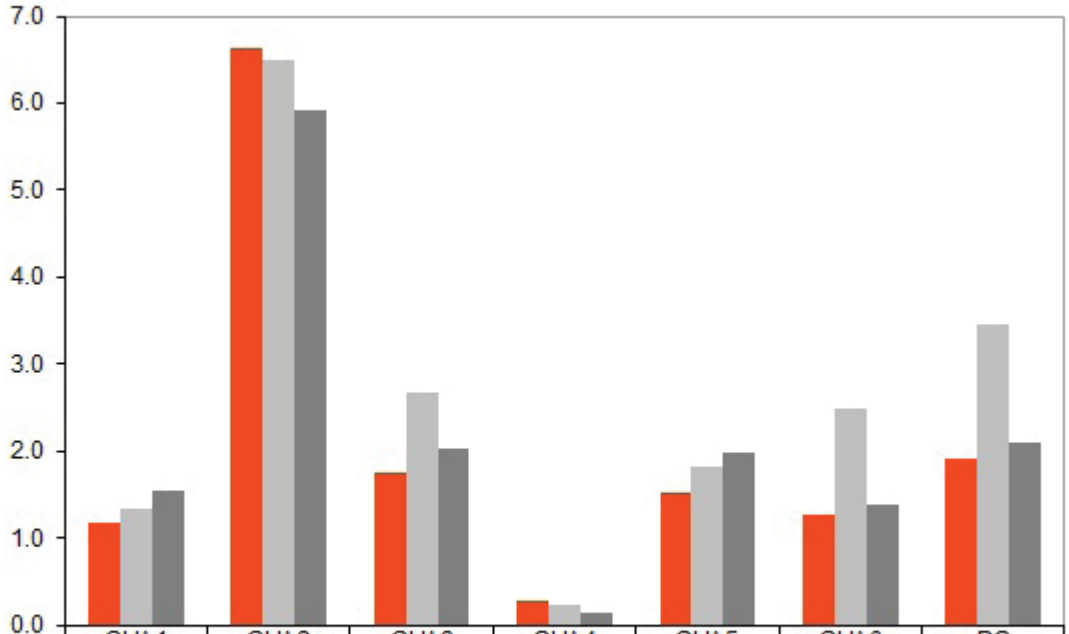
FIGURE 15. Composition of individual income for persons (aged 15+ years) not in economic families. Community Health Area 5 and Vancouver, 2006



Source: Statistics Canada, 2006 Census of Population

The relative share of employment income for individuals is second highest in CHA 5 (80.2%) only behind CHA 1 (80.8%, City Centre). This is higher than that of Vancouver (74.8%).

FIGURE 16. Percentage of population receiving income assistance. Community Health Areas and British Columbia, 2010

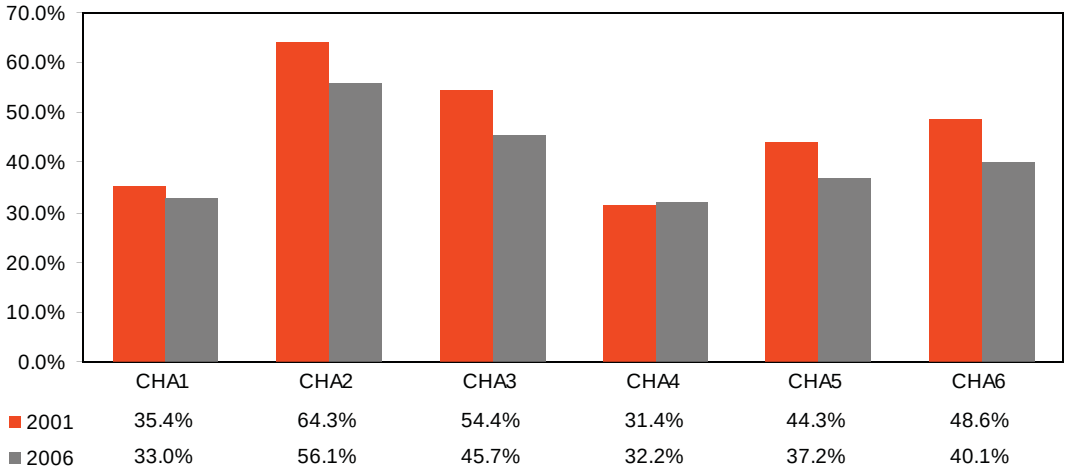


	CHA1	CHA2	CHA3	CHA4	CHA5	CHA6	BC
Total	1.2	6.6	1.8	0.3	1.5	1.3	1.9
Children (0-14 years)	1.3	6.5	2.7	0.2	1.8	2.5	3.5
Youth (15-24 years)	1.5	5.9	2.0	0.1	2.0	1.4	2.1

Source: BC Stats (2011)

The BC Employment and Assistance program is meant to assist British Columbians move from income assistance to sustainable employment. Applicants are expected to take advantage of all other sources of income and assets before qualifying and to actively seek work, and participate in employment programs while receiving assistance (BC Ministry of Social Development, 2010, May 28). Included are those on temporary assistance: expected to work, expected to work - medical condition, temporarily excused and persistent multiple barriers). Excluded are those on continual assistance who have access to other forms of assistance: persons with disabilities, children in the home of a relative, and Old Age Security/seniors (BC Stats, n.d.).

FIGURE 17. Incidence of low-income among individuals over age 15 after-tax. Community Health Areas, 2001 and 2006



	CHA1	CHA2	CHA3	CHA4	CHA5	CHA6
2001	35.4%	64.3%	54.4%	31.4%	44.3%	48.6%
2006	33.0%	56.1%	45.7%	32.2%	37.2%	40.1%

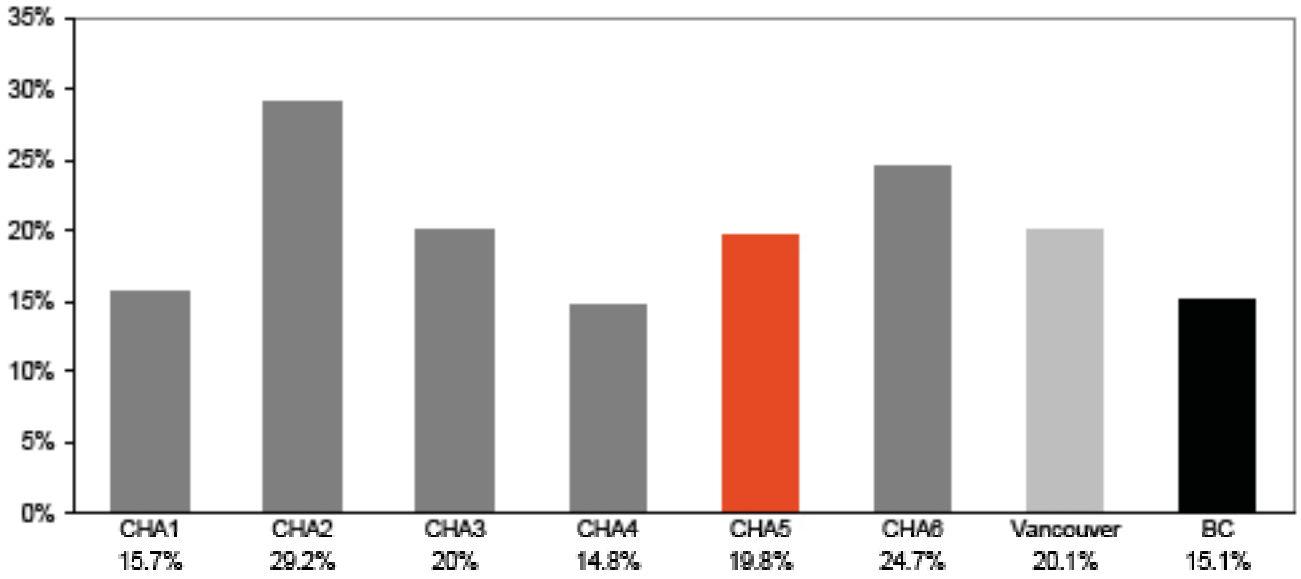
Source: Statistics Canada, 2001 Census of Population and 2006 Census of Population

The most widely recognized approach to understanding poverty is the "Low Income Cut Off" (LICO) calculated by Statistics Canada: "A LICO is an income threshold below which a family will likely devote a larger share of its income to the necessities of food, shelter and clothing than an average family would".

Statistics Canada calculates different LICOs for families of various sizes living in rural and urban communities. For example, in 2006 the LICO, after tax, for a single person living in a city with a population over 500,000 was $17, 568. The LICO, after tax, for a family of four in a similar sized city was $33, 216 (Statistics Canada. 2012, December 20).

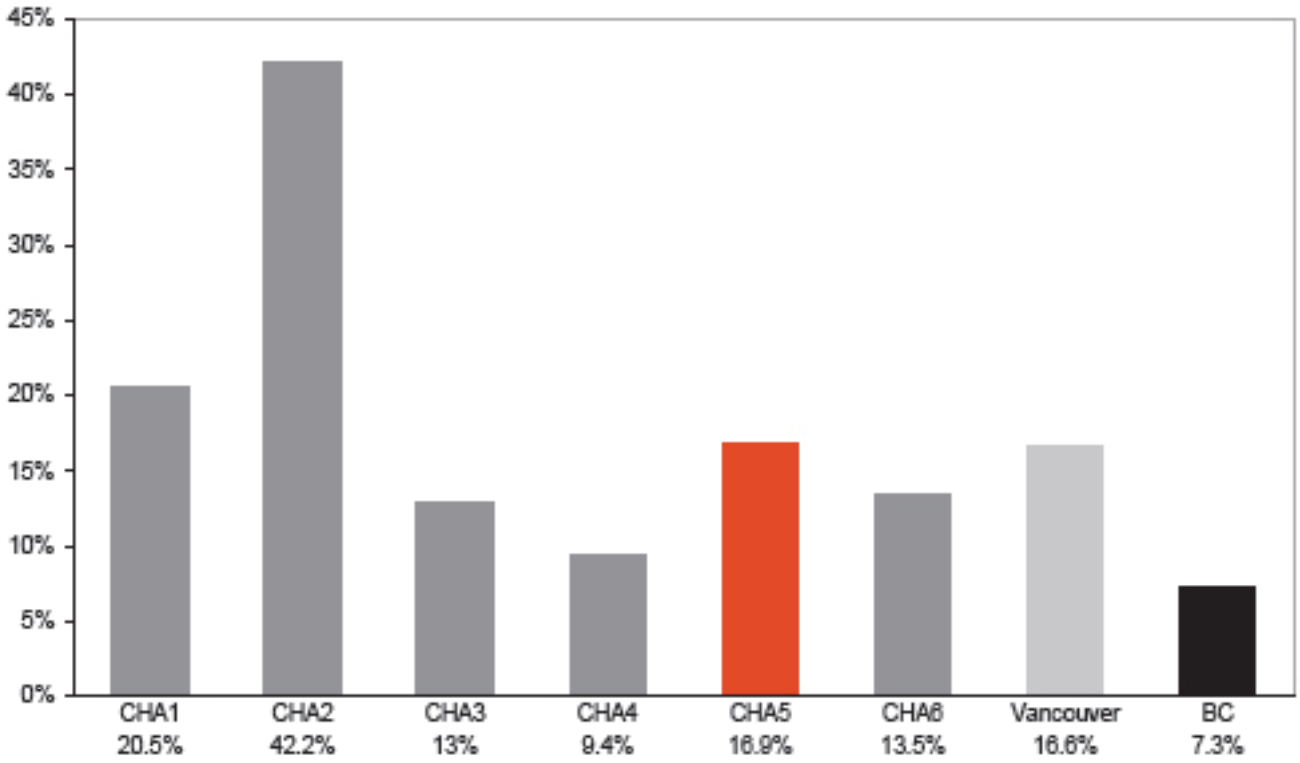
From 2001 to 2006, the incidence of low-income among individuals over the age of 15 decreased in all CHAs with the exception of CHA 4 (Westside), which showed a very small increase.

FIGURE 18. Children, aged less than 6 years, (%) living in low income conditions, after-tax. Community Health Areas, Vancouver, and British Columbia, 2006



Source: Statistics Canada, 2006 Census of Population

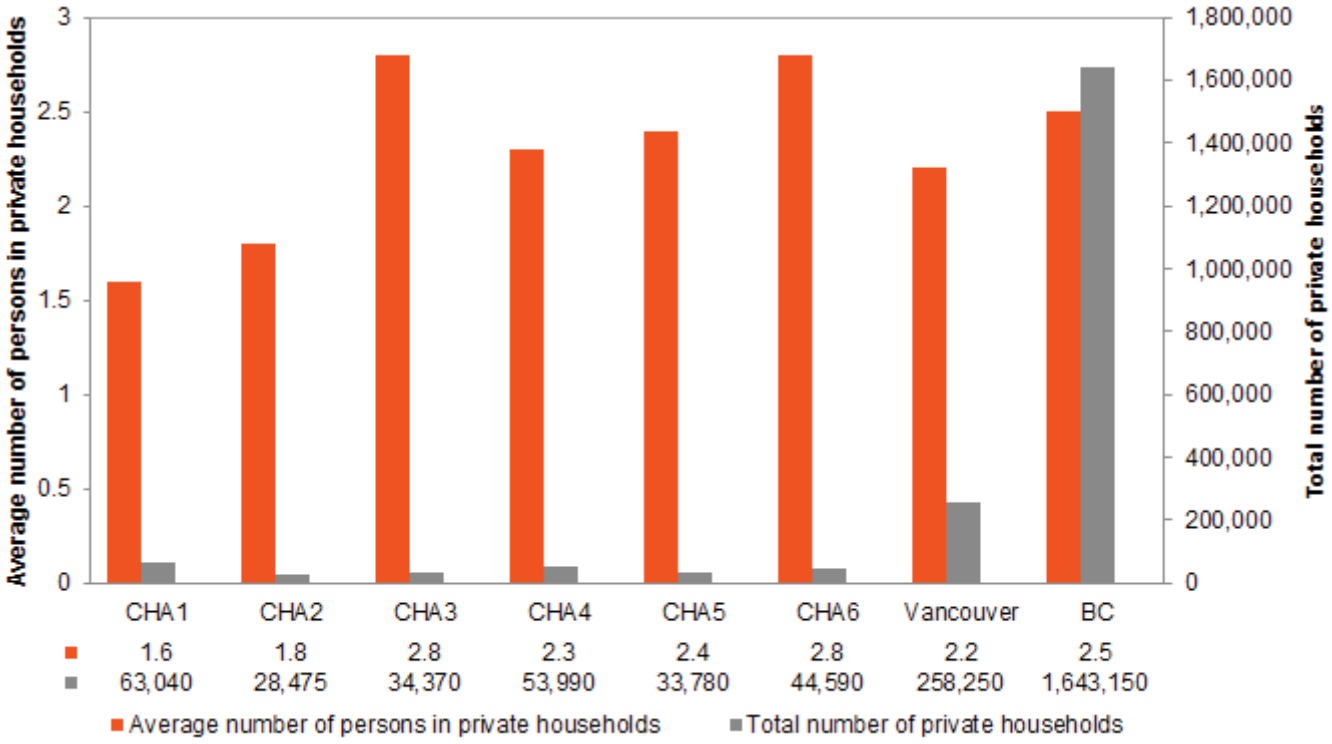
FIGURE 19. Seniors, aged 65 years and over, (%) living in low income conditions, after-tax. Community Health Areas, Vancouver, and British Columbia, 2006



Source: Statistics Canada, 2006 Census of Population

Housing and household characteristics

FIGURE 20. Average number of persons in households. Community Health Areas, Vancouver, and British Columbia, 2006



Source: Statistics Canada, 2006 Census of Population

As CHA 5 is a family-oriented community, there are an average of 2.4 people per household, third highest amongst the CHAs and comparable to BC overall.

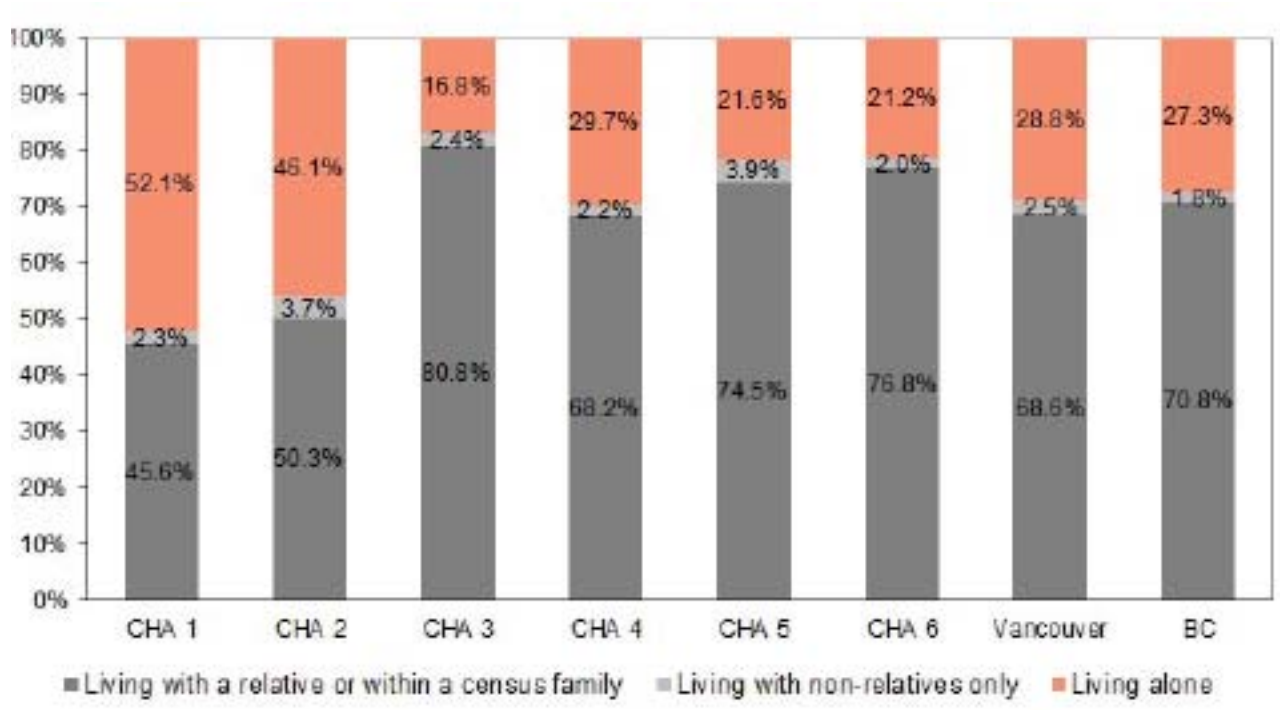
TABLE 9. Total lone parent families as a percentage of all census families by sex of parent. Community Health Areas, Vancouver, and British Columbia, 2006

	CHA 1	CHA 2	CHA 3	CHA 4	CHA 5	CHA 6	Vancouver	BC
Total lone-parent families	11.3%	22.4%	18.5%	13.1%	17.6%	17.5%	16.2%	15.1%
Female parent	81.4%	81.0%	81.0%	83.0%	78.0%	83.4%	81.6%	79.8%
Male parent	18.6%	19.0%	19.0%	17.0%	22.1%	16.6%	18.4%	20.2%

Source: Statistics Canada, 2006 Census of Population

Lone parent families, over 80% of whom are led by women, are often at a disadvantage economically. With housing costs so high and women's incomes typically lower than men's, children in lone parent families may live in poorer quality housing and have less access to enrichment programs than their counterparts in two-income households.

FIGURE 21. Living arrangements of seniors age 65 years and over. Community Health Areas, Vancouver and British Columbia, 2006



Source: Statistics Canada, 2006 Census of Population

CHA 5 has a lower percentage of seniors living alone (21.6%) and higher percentage living with a partner or relative as compared to Vancouver and BC.

Note: These figures cover seniors living in private homes and do not include those living in facilities or hospitals.

TABLE 10. Percentage of population 15 years and older by hours of unpaid care/assistance to seniors. Community Health Areas, Vancouver, and British Columbia, 2006.

	Total population 15 years and older	Hours unpaid care/assist. to seniors	Less than 5 hrs unpaid care/ assist. to seniors	5 – 9 hrs unpaid care/assist. to seniors	10+ hrs unpaid care/assist. to seniors
CHA 1	95,705	88.9%	7.2%	2.2%	1.6%
CHA 2	46,560	88.4%	6.4%	2.6%	2.6%
CHA 3	82,015	81.6%	10.3%	4.2%	3.9%
CHA 4	107,290	83.5%	10.7%	3.3%	2.5%
CHA 5	69,110	83.4%	10.0%	3.4%	3.1%
CHA 6	107,165	80.3%	11.0%	4.5%	4.2%
Vancouver	507,850	84.0%	9.6%	3.4%	3.0%
BC	3,394,910	82.5%	10.3%	3.9%	3.3%

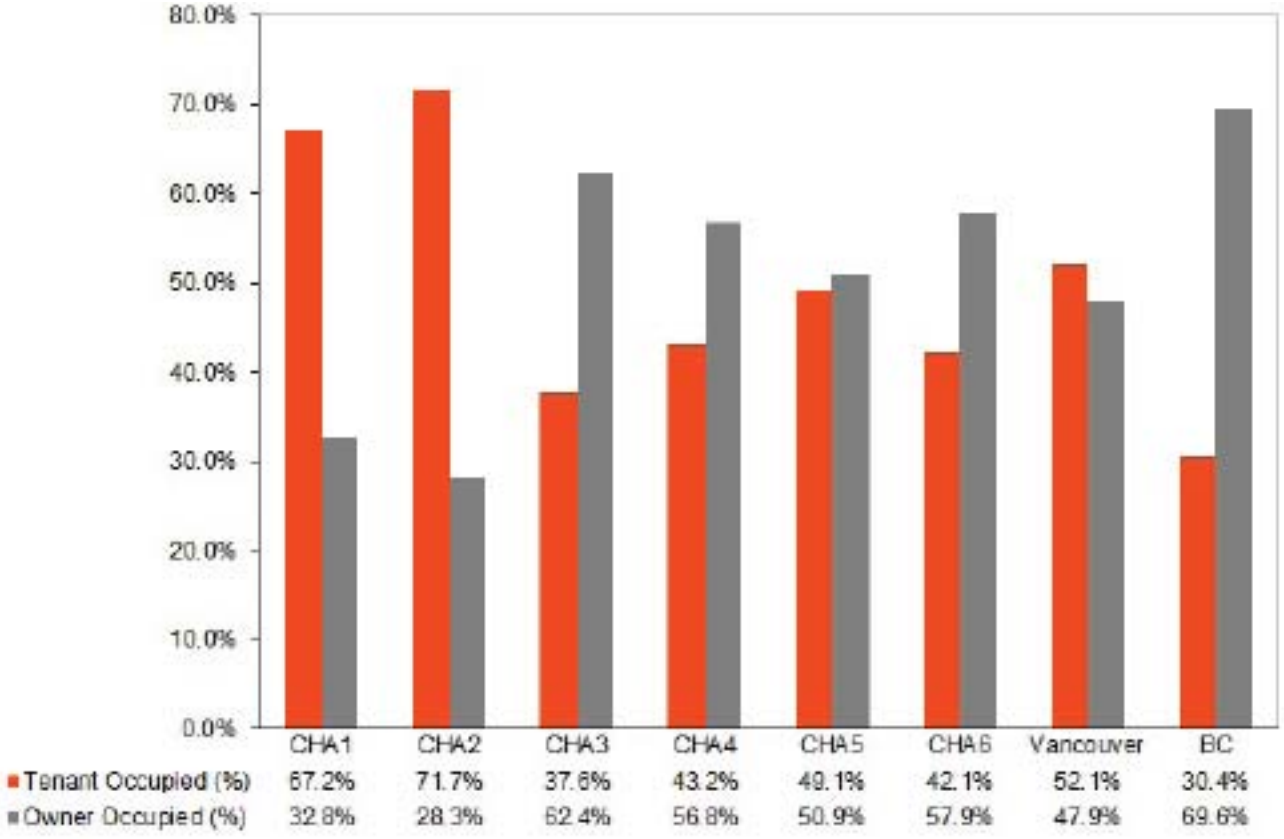
Source: Statistics Canada, 2006 Census of Population

Table 10 shows the percentage of the adult population that is providing unpaid care to seniors. These caregivers are most often relatives or spouses.

It also refers to the number of hours persons spent providing unpaid care or assistance to seniors of one's own household, to other senior family members outside the household, and to friends or neighbours in the week (Sunday to Saturday) prior to Census Day (May 16, 2006).

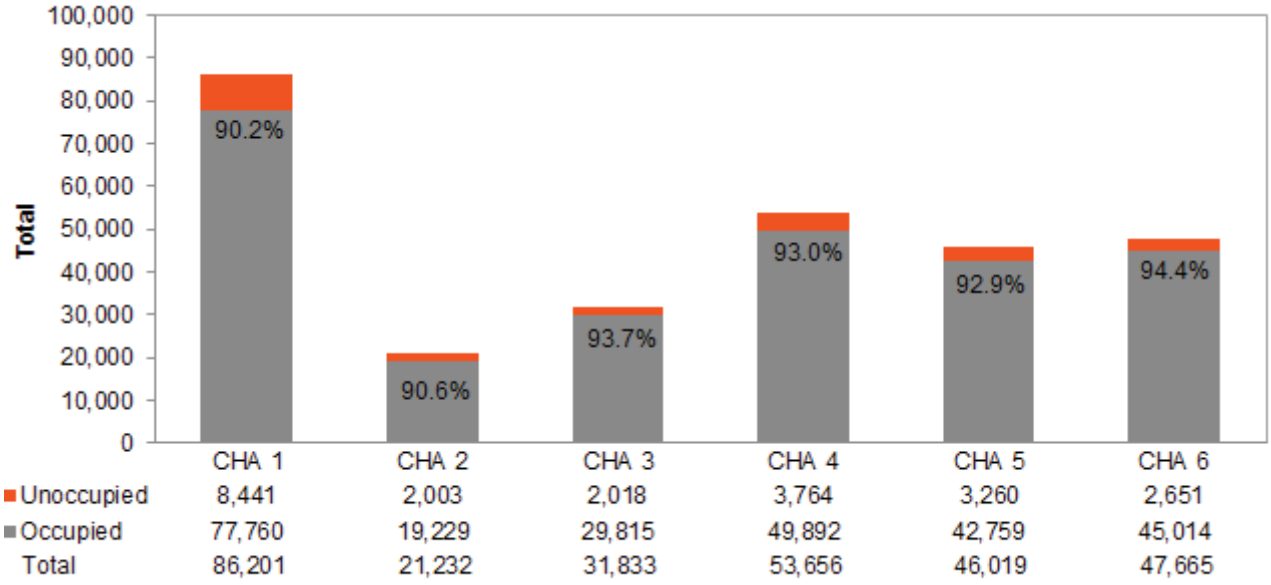
Unpaid care or assistance to seniors does not include volunteer work for a non-profit organization, religious organization, charity or community group, or work without pay in the operation of a family farm, business or professional practice.(2006 Census Dictionary).

FIGURE 22. Tenant and owner occupied dwellings. Community Health Areas, Vancouver, and British Columbia, 2006



Source: Statistics Canada, 2006 Census of Population

FIGURE 23. Total number of dwellings and percent that are occupied. Community Health Areas, 2012



	CHA 1	CHA 2	CHA 3	CHA 4	CHA 5	CHA 6
Unoccupied	8,441	2,003	2,018	3,764	3,260	2,651
Occupied	77,760	19,229	29,815	49,892	42,759	45,014
Total	86,201	21,232	31,833	53,656	46,019	47,665

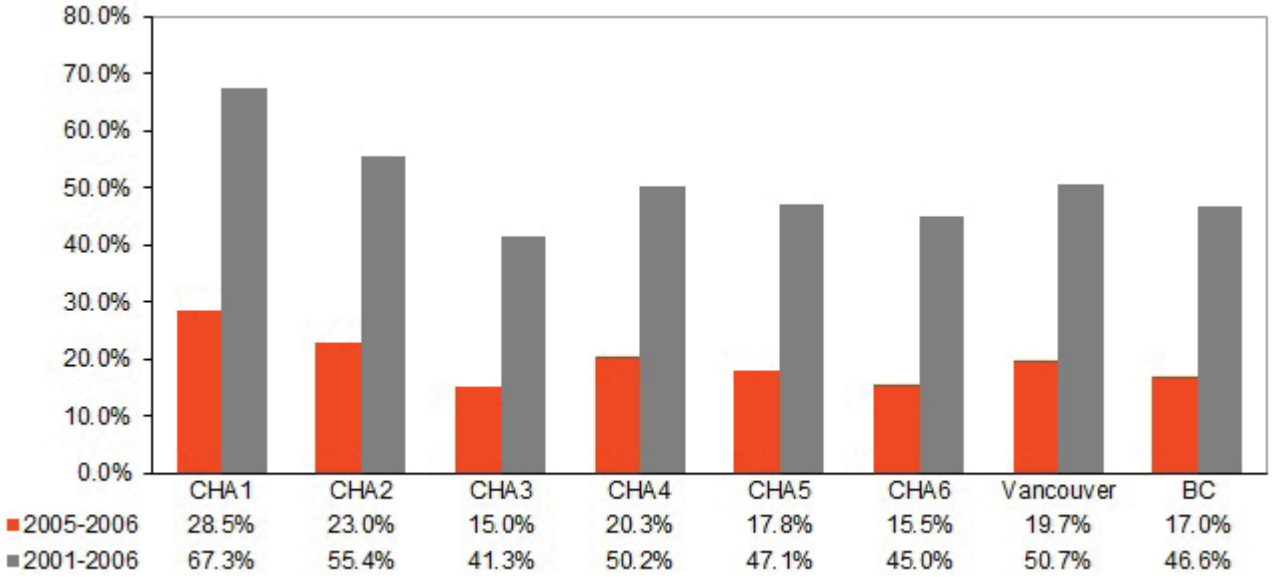
Source: City of Vancouver, Personal Communication, (2012, July 5)

A dwelling may be considered as "unoccupied" if there was someone living there who was not counted in the census (overseas visitors, etc.) or someone living there who the census didn't find, or a part-time resident. It also includes housing that is empty due to being renovated, those vacant and for sale, or those in-between tenants.

A high number of unoccupied dwellings in an area may have an impact on people's feelings of community vibrancy and safety. The above figure shows the total number of dwellings in each CHA and the percentage of dwellings that were occupied at the time of the 2011 Census.

Note: The neighbourhood of Cedar Cottage spans across CHAs 3 and 5. In this figure, data for Cedar Cottage is included in CHA 5 only.

FIGURE 24. Percentage of population who have moved recently (between 2005-2006 or 2001-2006). Community Health Areas, Vancouver, and British Columbia, 2006



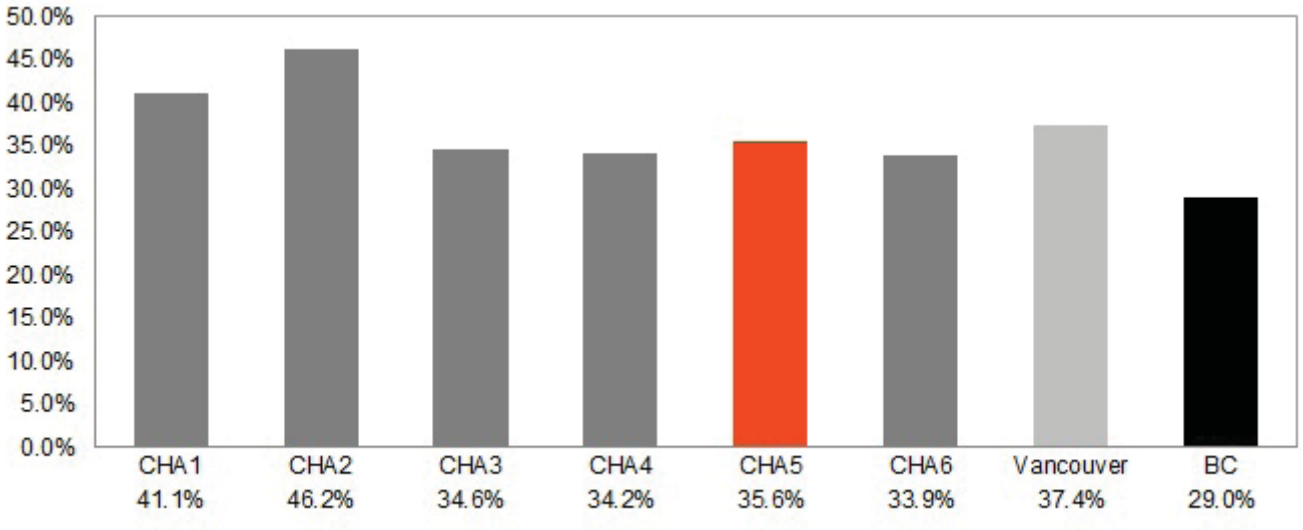
	CHA1	CHA2	CHA3	CHA4	CHA5	CHA6	Vancouver	BC
2005-2006	28.5%	23.0%	15.0%	20.3%	17.8%	15.5%	19.7%	17.0%
2001-2006	67.3%	55.4%	41.3%	50.2%	47.1%	45.0%	50.7%	46.6%

Source: Statistics Canada, 2006 Census of Population

Mobility refers to the number of people who have changed addresses within the last year (2005-2006) or last 5 years (2001-2006) before the Census Day. It takes into account the level of in-migration, nature of the population (i.e. students), and cost of housing (Statistics Canada, 2010, July 6).

A more stable community with lower mobility may imply a closer social support network with higher social capital and consequent positive health effects.

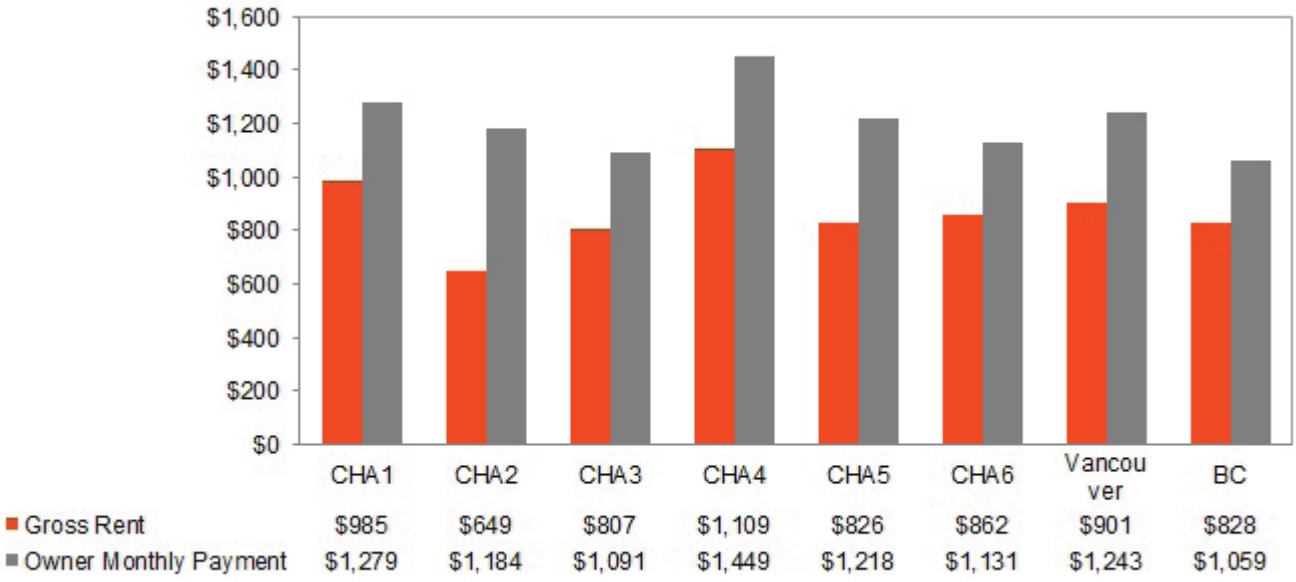
FIGURE 25. Percentage of households paying 30% or more of their income on housing costs. Community Health Areas, Vancouver, and British Columbia, 2006



Source: Statistics Canada, 2006 Census of Population

A household paying more than 30% of annual income on housing is considered to be living in unaffordable conditions. This cost burden makes it difficult to pay for other necessities such as food, clothing, education, transportation, and health care.

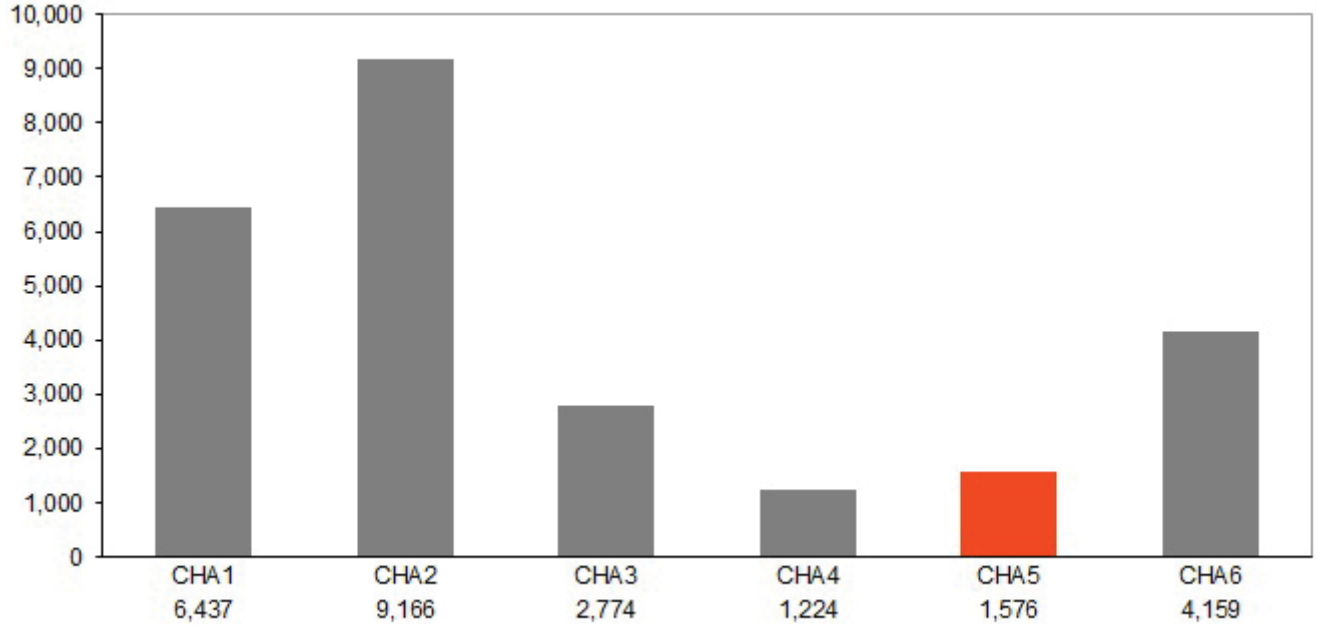
FIGURE 26. Average gross rent and owner monthly payment ($). Community Health Areas, Vancouver, British Columbia, 2006



Source: Statistics Canada, 2006 Census of Population

At $826 and $1,218, the CHA 5 average gross rent and owner monthly payment ranks in the middle amongst the CHAs. The average gross rent is 9.1% lower than in Vancouver, while the average owner monthly payment is 15% higher than in BC.

FIGURE 27. Number of non-market housing units. Community Health Areas, 2011



Source: City of Vancouver, 2012

Non-market housing provides housing mainly for those who cannot afford to pay market rents. It is housing owned by government, a non-profit, or co-operative society where rents are determined not by the market but by the residents' ability to pay (City of Vancouver, 2010). Non-market housing is designed for independent living. In 2010, non-market housing accounted for 8.4% of Vancouver's total housing stock (City of Vancouver, 2010).

TABLE 11. Number of permanent and temporary shelter spaces. Community Health Areas, 2011/2012

	Permanent Shelter Spaces	Temporary Shelter Spaces	Sheltered Homeless Population	Street Homeless Population
CHA 1	261	80	533	127
CHA 2	298	216	461	134
CHA 3	0	0	no data available	no data available
CHA 4	18	0	19	no data available
CHA 5	103	140	128	6
CHA 6	0	0	no data available	no data available

Source: City of Vancouver, Personal Communication, (2012, June 26)

According to the City of Vancouver (2012) Homeless Count, there are 128 sheltered homeless and 6 street homeless people within CHA 5, mostly found within the neighbourhood of Mount Pleasant. (Note: all homeless counts underestimate the number of homeless people at one time and do not take into account the mobility of this population). In CHA 5 there are 103 "year-round" and 140 "temporary" shelter spaces to accommodate this need for housing.

Note: For permanent shelters, three facilities that serve vulnerable populations (e.g. youth safe houses) do not publish their locations and/or number of spaces due to safety concerns and have been excluded from these Profiles.

For temporary shelter spaces, these include all HEAT or Winter Response shelters that were open at any point during 2011/2012 (some closed or are scheduled to close). This does not include Extreme Weather Alert shelter spaces.

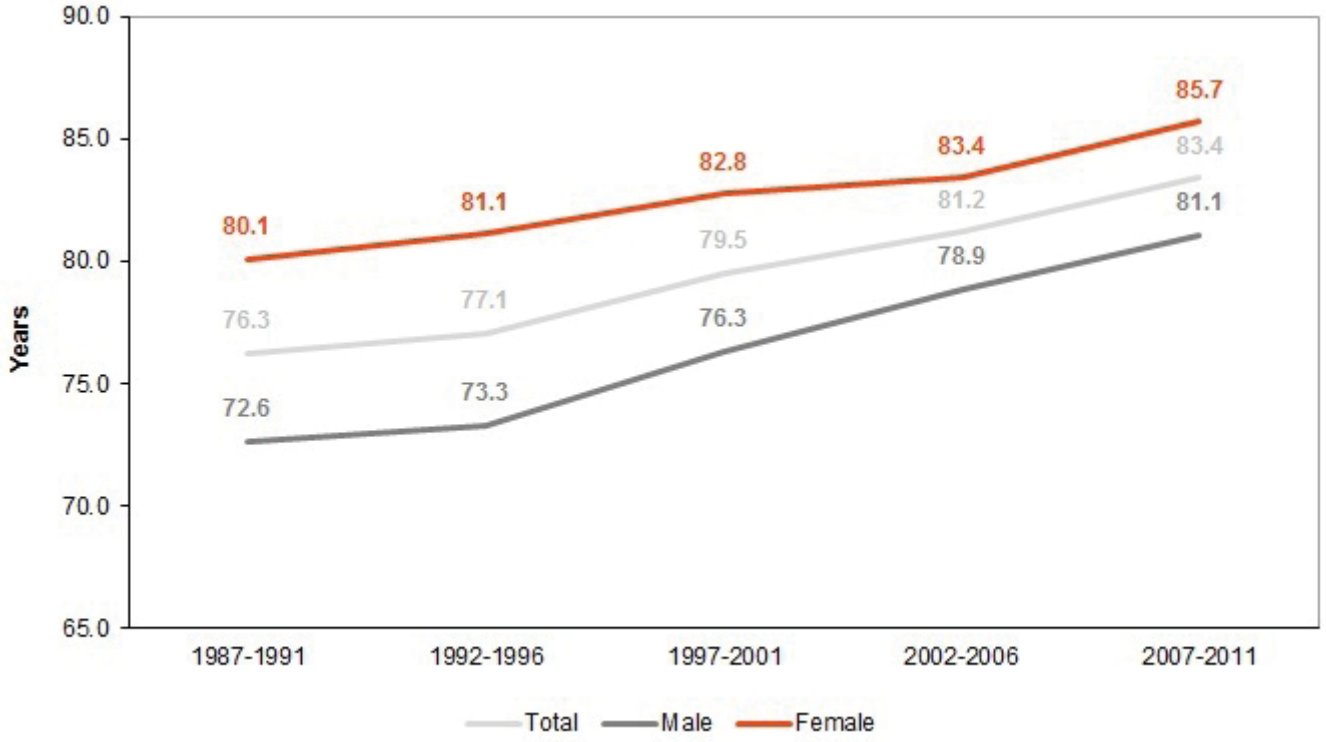
Health status

This section details the type of data used to profile the health of communities and illustrates the interaction between the determinants of health, illness and injury.

Understanding the health status of a population provides an opportunity to evaluate current health programs and to be proactive in planning future health initiatives and tailoring interventions to meet community needs.

Life expectancy

FIGURE 28. Life expectancy at birth. Community Health Area 5, 1987-2011

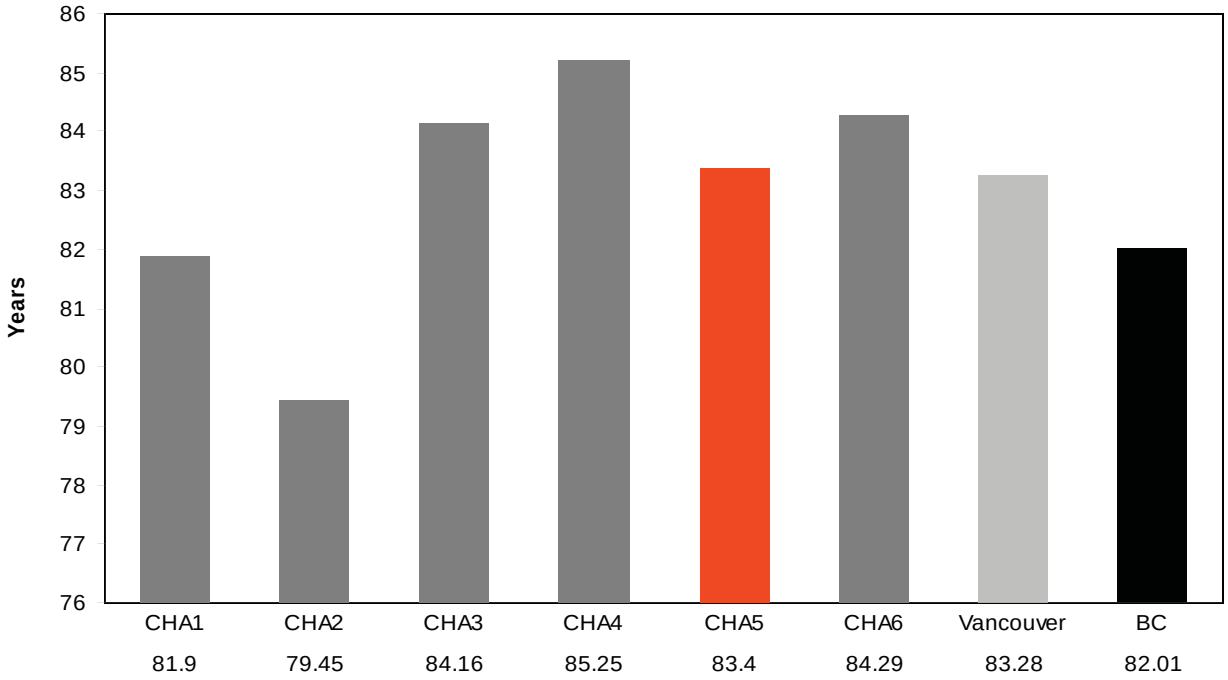


Source: BC Stats, 2012

Life expectancy at birth represents the mean number of years a birth cohort (persons born in the same year) may expect to live given the present mortality experience of a population. The life expectancy for a population is a summary measure that reflects the mortality rates for all ages combined, weighted in accordance with a life-table population structure. Life expectancy is an internationally accepted indicator of the health status of a population (British Columbia Vital Statistics Agency, "Selected Vital Statistics and Health Status Indicators, Annual Report 2008".

Within CHA 5, life expectancy has been steadily rising to 83.4 years in 2007-2011, with females living 4.6 years longer than their male counterparts.

FIGURE 29. Life expectancy at birth. Community Health Areas, Vancouver, and British Columbia, 2007-2011



Source: BC Stats, 2012

Figure 29 shows the average life expectancy for the total population (males and females together) within each CHA. Life expectancy in CHAs 3, 4, 5, and 6 is higher than the provincial average. While life expectancy in CHA 2 is the lowest among all CHAs, it is steadily increasing.

Births

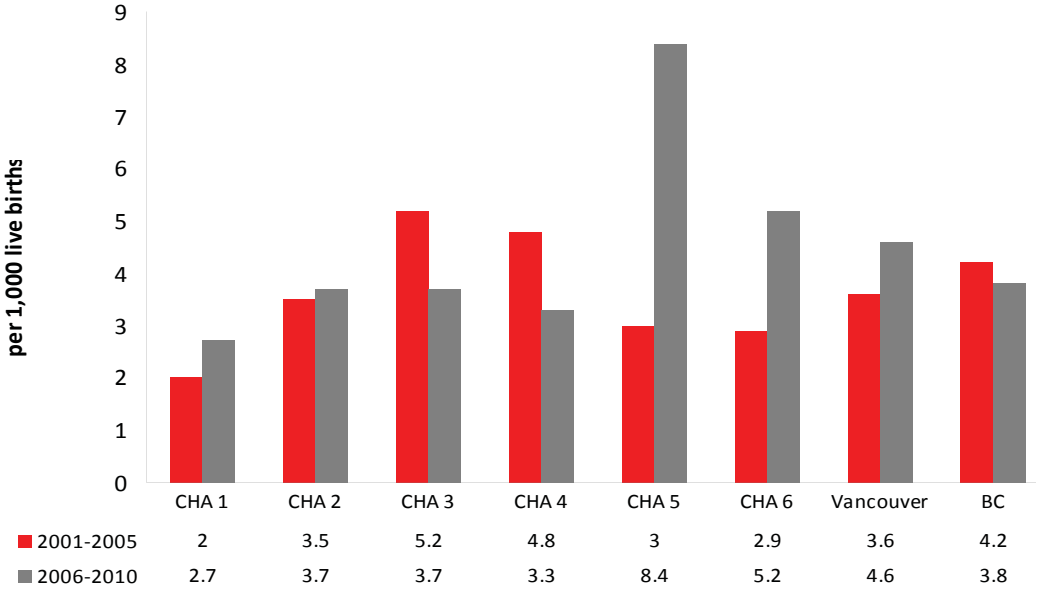
FIGURE 30. Crude live birth rate per 1,000 population. Community Health Areas, Vancouver, and British Columbia, 2001-2005 vs. 2006-2010

Source: BC Vital Statistics Agency (VISTA), June 16, 2011

The crude live birth rate is the number of births divided by the mid-year population and converted to a rate per 1,000 population. Crude rates allow for comparisons to be made between different time periods or geographic areas where the populations are not identical (BC Vital Statistics Agency, 2009).

CHA 5 has the highest crude live birth rate among the CHAs, remaining stable at 11.8 per 1,000 population from the 2001-2005 through 2006-2010 periods.

FIGURE 31. Infant mortality rate per 1,000 live births. Community Health Areas, Vancouver, and British Columbia, 2001-2005 vs. 2006-2010



Source: BC Vital Statistics Agency (VISTA), April 14, 2011

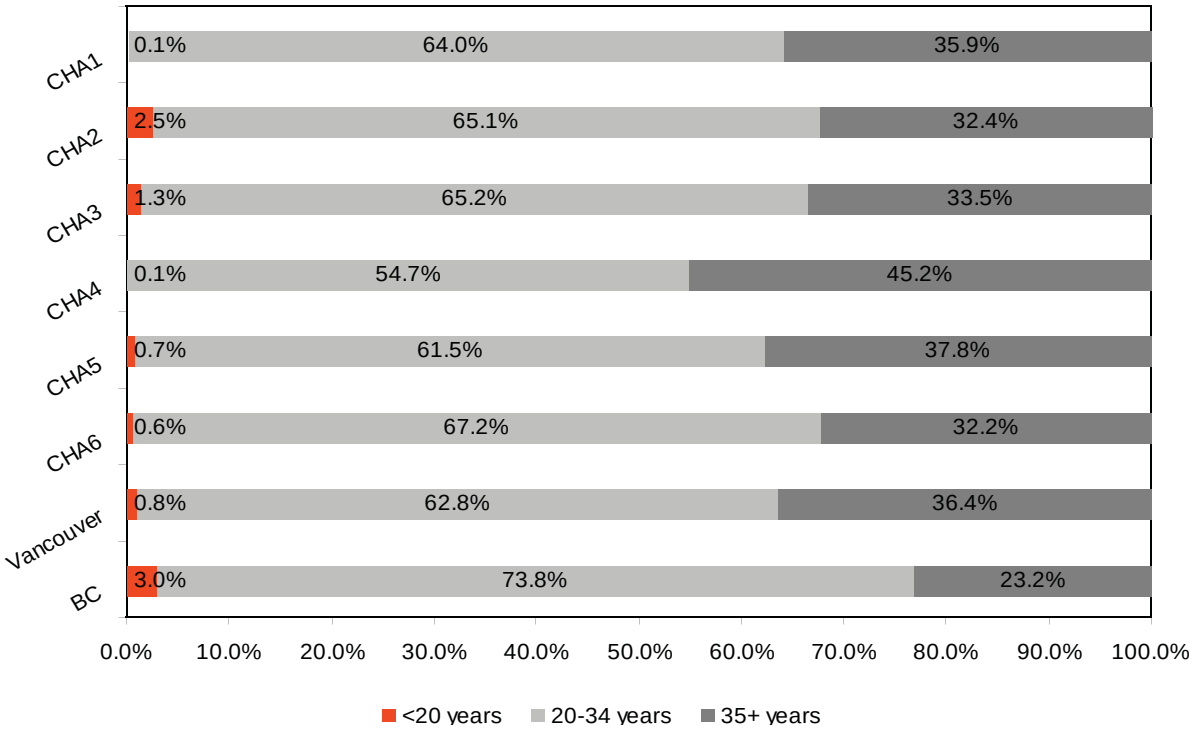
Figure 31 shows that infant mortality rates increased in some CHAs between 2001-2005 and 2006-2010, notably CHAs 1, 2, 5 and 6. However, these rates need to be interpreted with caution as the population size is small giving rise to tremendous variability. The infant mortality rate in Vancouver increased slightly between 2001-2005 and 2006-2010. The rate in Vancouver is slightly higher than the provincial average.

The infant mortality rate is calculated as the number of deaths of children less than one year of age per 1,000 live births in the same year. Infant mortality is an internationally accepted indicators of maternal and child health. "[Infant mortality rates] reflect not only on the state of health care within a jurisdiction, but also on the social environments, the policy supports, and the priority that a society places on childbearing. Our societal goal is to improve infant health and reduce infant mortality to the lowest level possible" (BCProvincial Health Officer, 2003).

In 2003 the BC Provincial Health Officer published a review of infant mortality rates in BC. The review sought to determine whether increases in the number and rate of deaths in infants are long-term trends or random fluctuations. It concluded that there is an overall trend in BC toward declining rate of infant mortality, though random fluctuations may occur in any given year. Major causes of infant mortality include perinatal conditions (where the fetus or newborn is affected by maternal factors and complications of pregnancy, labour and delivery), respiratory and cardiovascular disorders specific to the perinatal period, congenital anomalies (such as defects of the heart and circulatory system), Sudden Infant Death Syndrome (SIDS) and pneumonia/influenza.

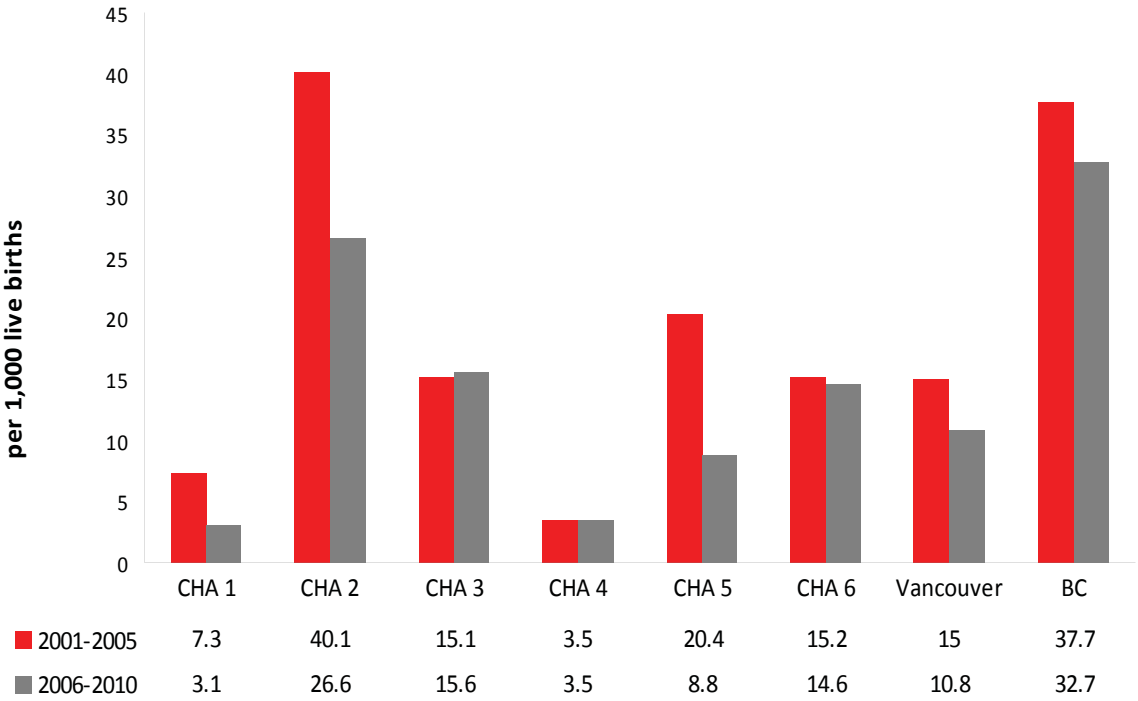
Infant mortality can be reduced by ensuring access to maternal and newborn care as well as by attending to the environments in which infants live (e.g. via immunization, injury prevention, and measures to reduce the risk of SIDS) (BC Provincial Health Officer, 2003).

FIGURE 32. Live births by age of mother. Community Health Areas, Vancouver, and British Columbia, 2010



Source: BC Statistical Agency (VISTA), June 16, 2011

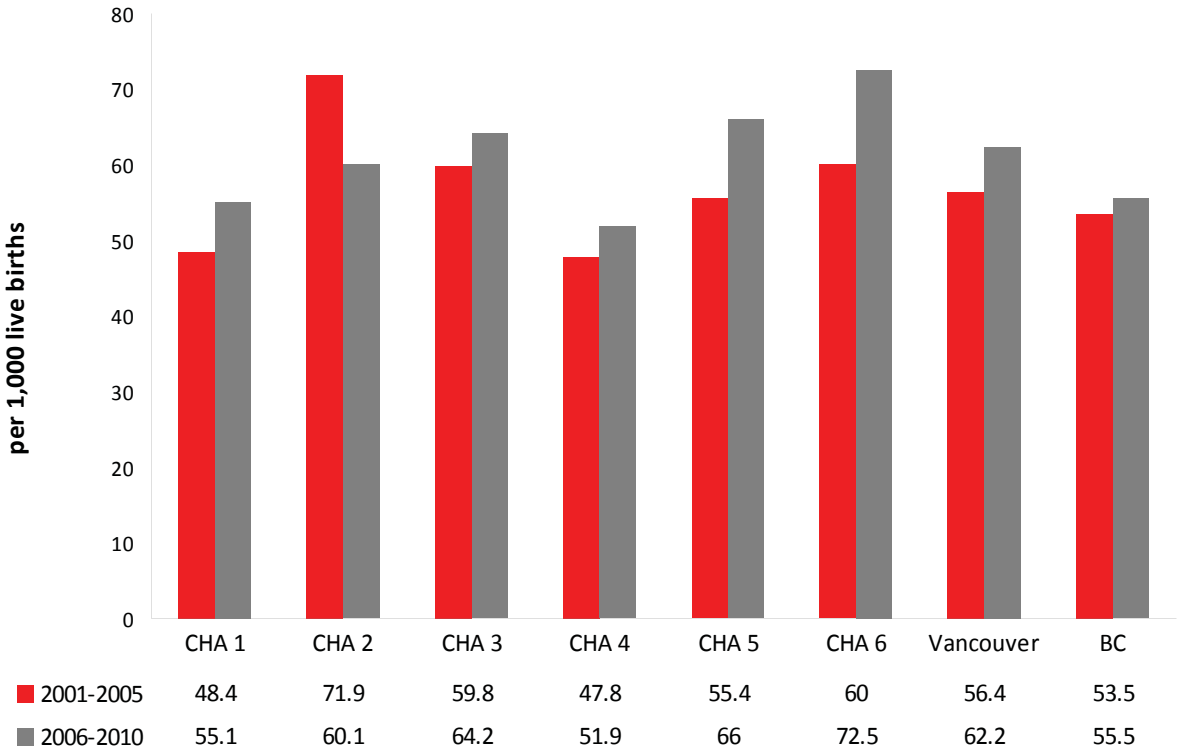
FIGURE 33. Teenage mother (females aged less than 20 years) birth rates per 1,000 live births. Community Health Areas, Vancouver, and British Columbia, 2001-2005 vs. 2006-2010



Source: BC Vital Statistics Agency (VISTA), June 16, 2011

Within CHA 5, teenage mother birth rates have dropped by 56.7% from second highest in 2001-2005 to third lowest in the 2006-2010 period.

FIGURE 34. Low birth weight (less than 2,500 grams) rate per 1,000 live births. Community Health Areas, Vancouver, and British Columbia, 2001-2005 vs. 2006-2010



Source: BC Vital Statistics Agency (VISTA), June 16, 2011

Birth weight is an indicator of the general health of newborns, and a key determinant of infant survival, health and development. Low birth weight infants are at a greater risk of dying during the first year of life, and of developing chronic health problems (Human Resources and Skills Development Canada, 2012).

Figure 34 shows the number of low birth weight births for every 1,000 births in each CHA. For example, in CHA 5 there were 66.1 babies born with low birth rate for every 1,000 babies born between 2006 and 2010. The figure also shows that the rate of low birth weight is increasing in every CHA except in CHA 2.

There are many factors that contribute to low birth weight, and these factors tend to overlap. Risk factors for low birth weight include multiple births, pre-term births (less than 259 days gestation), maternal infections, maternal use of alcohol, tobacco, cocaine or narcotics, maternal experience of violence/abuse and fertility/IVF treatments. Efforts to address low birth weight need to be multidisciplinary and include substance use prevention and prenatal medical care.

Mortality

Cancer mortality includes deaths from all forms of malignant tumours (neoplasms).

Cardiovascular disease mortality includes deaths from coronary heart disease, heart failure, hypertensive heart disease, and more.

Cerebrovascular disease mortality includes deaths from ischemic or hemorrhagic stroke as a result of blood clots or bleeding inside the head.

Chronic pulmonary disease mortality includes deaths from emphysema or chronic bronchitis.

Infectious disease mortality includes deaths from Human Immunodeficiency Virus (HIV), viral hepatitis, bacterial intestinal infectious, and other viral and bacterial infections. These are largely preventable and mortality is rare in most cases.

Unintentional ("accidental") injuries includes injuries due to causes such as motor vehicle collisions, falls, drowning, burns, and poisoning, but not medical misadventures/complications.

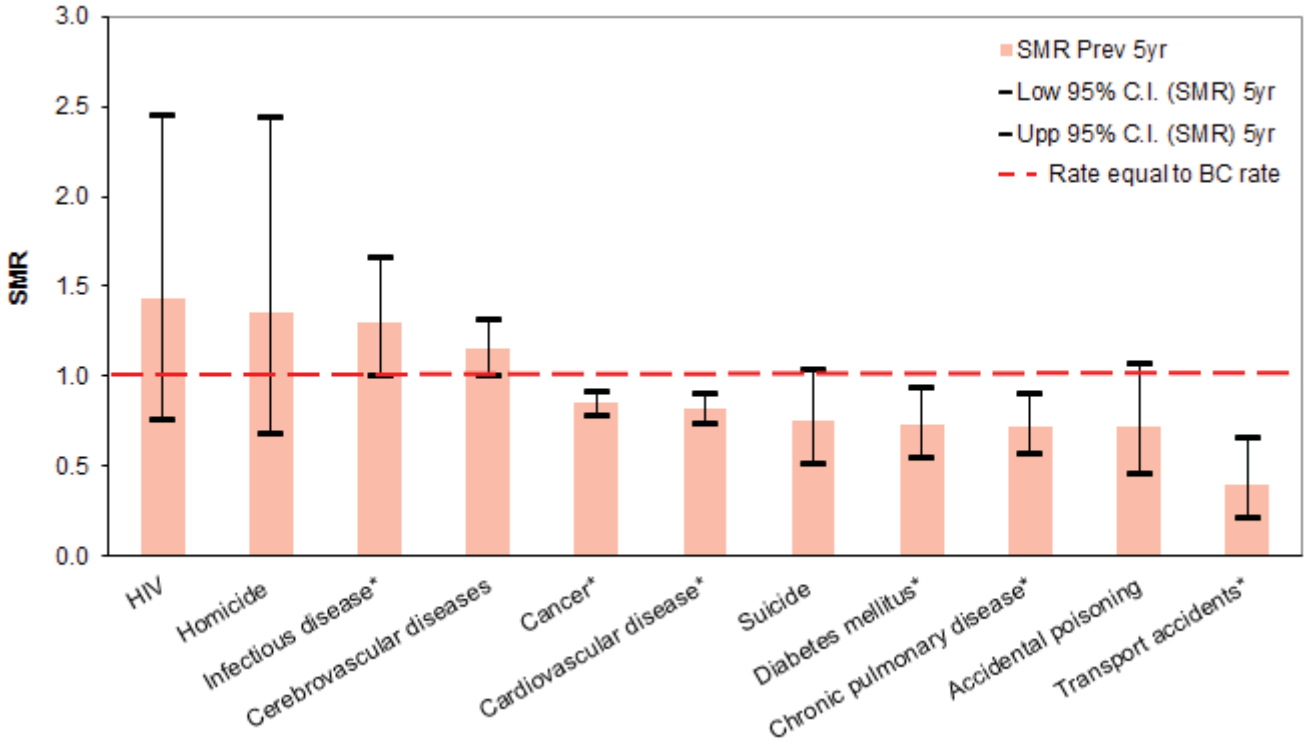
Table 12. Leading causes of death per 10,000 population. Community Health Areas, Vancouver, and British Columbia, 2006-2010

Cause of death	CHA 1	CHA 2	CHA 3	CHA 4	CHA 5	CHA 6	Vancouver	BC
Malignant neoplasms	15.8	19.2	18.0	14.5	13.8	16.4	16.1	20.2
Cardiovascular disease	10.1	14.6	9.9	12.1	10.0	13.8	11.7	15.4
Cerebrovascular diseases	3.8	4.6	4.6	4.6	4.8	5.2	4.6	5.3
Unintentional injuries	1.9	7.3	1.8	1.6	2.0	1.8	2.3	3.1

Souce: BC Vital Statistics Agency (VISTA), October 2012.

With the exception of CHA-2, the top three leading causes of death for each region are malignant neoplasms, cardiovascular disease and cerebrovascular diseases. For CHA-2, the top three leading casues of death are malignant neoplasms, cardiovascular disease, unintentional injuries.

FIGURE 35. Standardized mortality ratio (SMR) by specific cause of death. Community Health Area 5, 2007-2011



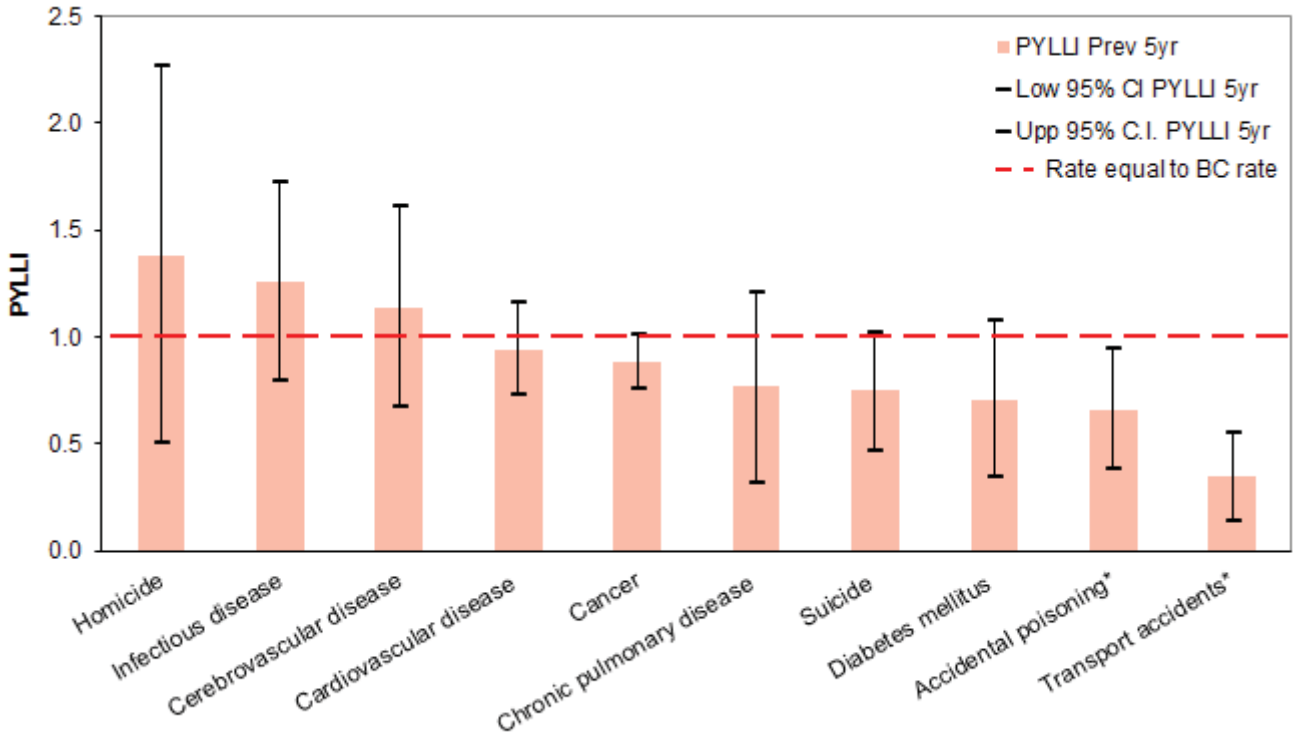
Source: BC Vital Statistics Agency (VISTA), July 28, 2011

The standardized mortality ratio (SMR) is a ratio of the number of deaths occurring to residents of a geographic area to the expected number of deaths in that area based on provincial age-specific mortality rates (BC Vital Statistics Agency, 2009).[1]

There are significantly more people experiencing mortality from infectious diseases (1.30) in CHA 5 than what is expected based on provincial rates. However, the number of deaths due to cancer (0.85), diabetes, (0.73), cardiovascular disease (0.82), chronic pulmonary disease (0.72), and transport accidents (0.40) are significantly lower in CHA 5 than what is expected. Although not significantly different from the expected value, CHA 5 has the highest SMR for cerebrovascular disease at 1.15.

[1] SMR=1, the observed deaths in the area are as would be expected based on provincial rates ; SMR>1, observed deaths are higher than expected; SMR<1, observed deaths are lower than expected; The black bars show the 95% confidence interval (CI) or range of accuracy of the SMR.

FIGURE 36. Potential years of life lost index (PYLLI) by specific cause of death. Community Health Area 5, 2007-2011



Source: BC Vital Statistics Agency (VISTA), July 28, 2011

The potential years of life lost (PYLL) is the number of years of life lost when a person dies before a specified age (75 years) (BC Vital Statistics Agency, 2009) is an indicator of premature death and highlights the causes of death that occur at younger ages.

Within CHA5, there are significantly fewer premature deaths related to accidental poisonings and transport accidents than what is expected based on provincial rates. [2]

[2] The PYLL index (PYLLI) is the ratio of the geographic area's observed PYLL to its expected PYLL. The black bars show the 95% confidence interval (CI) or range of accuracy of the PYLLI. The black bars show the 95% confidence interval (CI) or range of accuracy of the PYLLI.

TABLE 13. Age specific suicide rates per 10,000 people. Community Health Areas, Vancouver, and British Columbia, 2006-2010 (compared to 2001-2005)

	CHA 1	CHA 2	CHA 3	CHA 4	CHA 5	CHA 6	Vancouver	BC
< 24 years	2.3 (2.5)	1.7 (2.6)	2.3 (0.6)	0.7 (0.8)	1.6 (1.1)	1.4 (1.0)	1.5 (1.1)	1.6 (1.9)
25-44 years	1.4 (1.2)	2.7 (3.5)	0.8 (1.4)	0.6 (0.8)	0.7 (1.5)	0.8 (0.7)	1.1 (1.4)	1.2 (1.5)
45-64 years	3.3 (3.1)	3.5 (4.3)	0.7 (1.7)	1.6 (1.3)	1.4 (1.7)	1.0 (0.8)	1.8 (1.9)	1.4 (1.6)
65-84 years	1.4 (1.8)	2.5 (2.2)	1.4 (0.9)	1.0 (1.2)	0.5 (1.5)	1.0 (1.2)	1.2 (1.4)	1.2 (1.2)
85+ years	2.4 (5.3)	0.0 (0.0)	0.0 (7.9)	2.0 (1.5)	1.5 (1.8)	1.3 (0.0)	1.4 (2.4)	1.3 (1.8)

Source: BC Vital Statistics Agency (VISTA), July 28, 2011

Table 13 shows the suicide rates for five age groupings for the periods 2006-2010 compared with 2001-2005. Overall in Vancouver the highest rate is within the age group of 45-64 years.

The BC Crisis Centre reports various statistics about suicide. While suicide deaths include people from all socioeconomic, age, gender, culture and ethnic groups, some groups experience higher rates. Suicide rates tend to be higher among youth, Aboriginal people and people who identify as lesbian, gay, bisexual, transgender and two-spirit. It is estimated that in more than 70 percent of suicides, the person was suffering from one or more unmanaged mental health issues.

In CHA5 the highest suicide rate in 2006-2010 is within the age group of under 24 years.

TABLE 14. Lifestyle related deaths, Community Health Area 5, 2006 -2010

	Standardized Mortality Ratio (SMR)	Potential Years of Life Lost (PYLL)	PYLL Index (PYLLI)
Alcohol-related	0.68*	1898	0.63*
Medically treatable	0.95	403	0.91
Drug induced	0.73	943	0.69*
Smoking attributable	0.87*	2124	0.89

*significantly different from expected values based on provincial rates
Source: BC Vital Statistics Agency (VISTA), March 2011

Alcohol-related deaths include deaths where alcohol was a contributing factor (indirectly related) as well as those due to alcohol (directly related). Alcohol-related and drug overdose deaths are the only cause of death categories that are not based entirely upon underlying causes of death.

Deaths due to drug-induced causes excludes unintentional injuries, homicides, and other causes that could be indirectly related to drug use and are based on those used by the National Center for Health Statistics.

Medically treatable disease deaths are ones for which mortality could potentially have been avoided through appropriate medical intervention. The incidence of deaths from medically treatable diseases can be used by public health professionals as a way of monitoring the effect of health promotion programs.

The absence on death certificates of complete and reliable data on smoking requires the use of estimation techniques to approximate the extent of smoking-attributable deaths. These are derived by multiplying a smoking-attributable mortality percentage by the number of deaths aged 35+ years in smoking-related categories including cancers, circulatory system diseases, and respiratory system diseases (BC Vital Statistics Agency, 2009).

Within CHA 5, significantly fewer people are dying from alcohol related and drug-induced deaths than what is expected based on provincial rates.

Chronic and communicable disease

Chronic diseases are typified by long duration and slow progression. They are by far the leading cause of death across Canada.

Human Immunodeficiency Virus (HIV) is a virus that attacks the immune system, resulting in a chronic progressive illness that leaves people vulnerable to opportunistic infection. HIV is transmitted from person to person through unprotected sexual intercourse, shared needles or equipment for injection drug use, or perinatally (from mother to her baby) (Public Health Agency of Canada, 2012).

Hepatitis C is a virus that results in chronic liver disease and is transmitted in the same ways as HIV, i.e. sharing of sharp instruments or unsterilized personal hygiene equipment with an infected person, sharing of drug-use equipment, unprotected sexual intercourse, or perinatally.

TABLE 15. Chronic and communicable disease new diagnosis rates per 100,000 people. Community Health Area 5, Vancouver, and British Columbia

	CHA 5	Vancouver	BC
Chronic disease new diagnosis rate per 100,000 population, 2010/11 (compared to 2008/09)			
Arthritis (osteoarthritis and rheumatoid arthritis)	471.2 (438.9)	487.2 (447.6)	690.5 (642.8)
Cardiovascular disease	277.3 (313.3)	358.5 (364.8)	421.7 (469.6)
Chronic obstructive pulmonary disease (COPD) (aged 45+ years)	264.8 (468.7)	298.0 (476.1)	424.7(643.5)
Diabetes	603.6 (571.5)	641.0 (561.3)	644.6 (650.4)
Communicable disease new diagnosis rate per 100,000 population, 2009/11 (compared to 2006/08)			
HIV (males)	11.1 (24.9)	42.0 (51.0)	11.1 (13.7)
HIV (females)	5.7 (3.1)	5.2 (7.9)	2.6 (3.3)
Hepatitis C	37.7 (58.2)	58.4 (75.7)	N/A (64.3)

Sources: BC Primary Health Care Disease Registries, November 2011, BC Centre for Disease Control, Annual Report 2011, VCH, Public Health Surveillance Unit (PARIS), July 16 2012

Similar to Vancouver overall, CHA 5 residents have relatively low levels of chronic conditions and the lowest new diagnosis rate for cardiovascular disease amongst all the CHAs. COPD rates of new diagnoses noticeably decreased by 43.5% from 2008/09 to 2010/11. CHA 5 also has fairly moderate diagnosis rates for HIV and Hepatitis C, which are both below the citywide rates. These rates have decreased from 2006-2008 to the 2009-2011.

Note: Chronic disease cases are notified to various registries by primary care physicians and therefore may not truly reflect rates of new diagnosis. Communicable disease data are collected by primary care physicians, laboratories, hospitals and institutions and reported to the local public health unit through a mandatory notification system. Even though the reporting of diseases is mandatory under legislation, the number of cases may be underreported for a number of reasons: 1) not all diseases present signs and symptoms, 2) not all individuals who experience illness seek care, and 3) health care providers do not always conduct laboratory tests.

School-age immunization coverage

Immunization is one of the most effective methods to protect adults and children from communicable disease illness or deaths. Widespread immunization reduces the number of susceptible people making it difficult for disease to spread from person to person.

The figures in this section report on two indicators for school immunization coverage. Meningococcal C immunization protects against meningococcal infection that affects the lining around the spinal cord and brain often resulting in death or permanent brain damage to those who survive. The Tdap immunization protects against the potentially lethal diseases of diphtheria, tetanus, and pertussis. (British Columbia Centre for Disease Control, 2011).

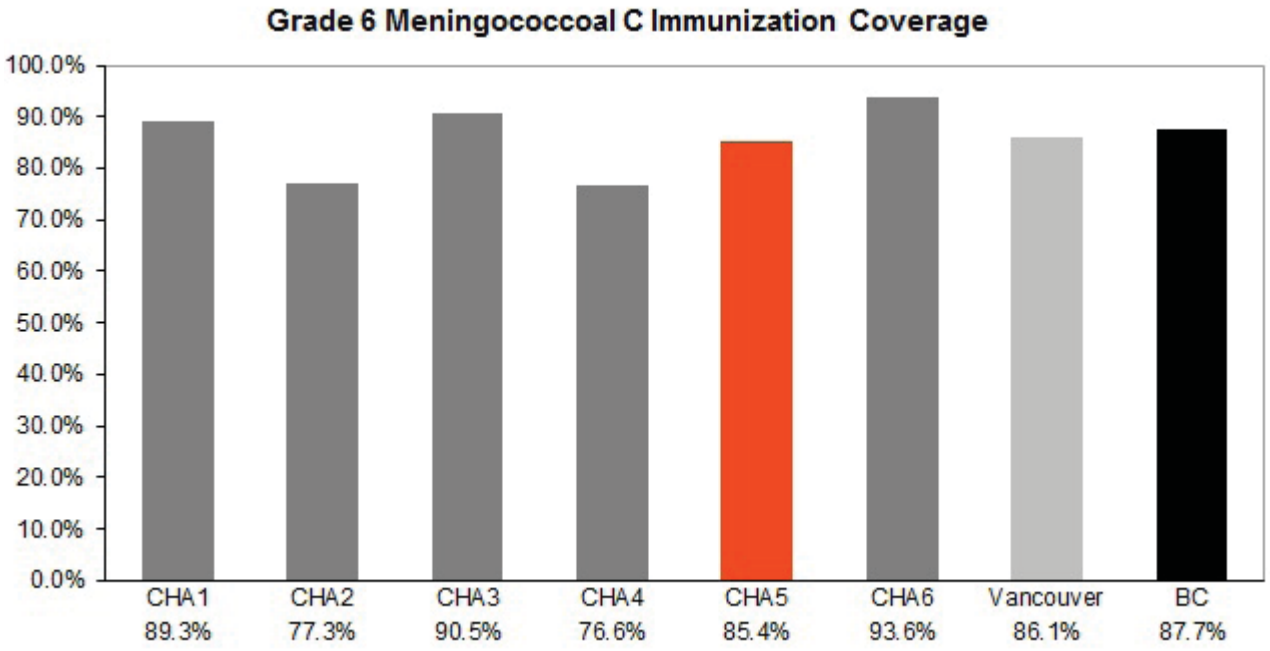
BC's publicly funded immunization program offers many vaccinations free of charge. VCH is the public health authority in Vancouver responsible for providing these vaccinations in the school setting, however, private practice general practitioners may also provide the vaccine (British Columbia Centre for Disease Control, 2011).

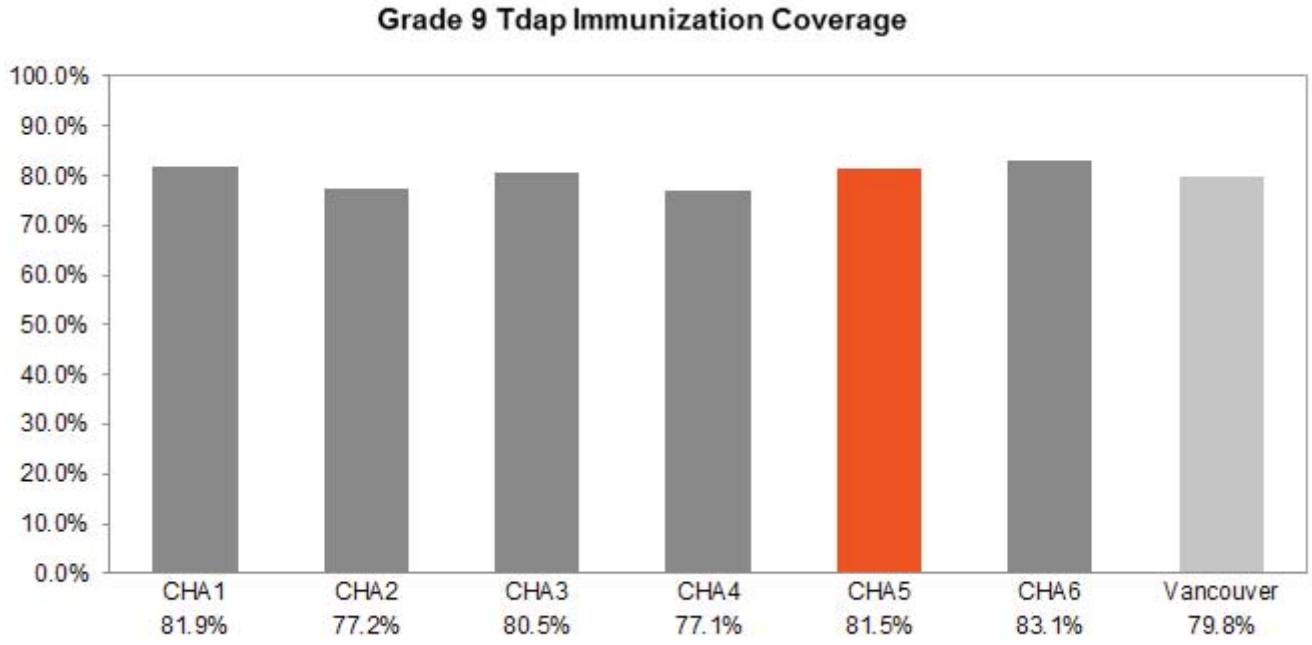
Within CHA 5, rates of coverage for both of these immunizations are on par with the Vancouver and/or provincial averages. CHA 2 has one of the lowest rates of school-age immunization coverage amongst the CHAs, which are lower than both the Vancouver and/or provincial rates, with 77% of grade 6 students.

Immunization coverage may be lower in some CHAs for several reasons. Although vaccines are demonstrated to be safe, some families do not consent to their children receiving vaccinations. Some children may receive vaccinations via their primary care practitioner and not through the VCH public health.

Newcomer students also tend to have lower rates of immunization. They may have been vaccinated in their home countries but have incomplete records or they may be living with sponsors or in home-stay situations with adults who are unable to authorize vaccination for minors.

FIGURE 37. Grade 6 Meningococcal C and Grade 9 Tdap (diphtheria, tetanus, and pertussis) immunization coverage, 2010/11 school year





Source: Vancouver Coastal Health Public Health Surveillance Unit, August 18, 2011

Immunize BC, 2011

Primary Access Regional Information System (PARIS) for Vancouver, August 18, 2011 via Vancouver Coastal Health, Public Health Surveillance Unit

Health service utilization

Health care utilization has evolved as the population's need for care has changed over time. Factors which have influenced the population's need for care include: aging, socio-demographic population shifts and changes in the prevalence and incidence of different diseases.

The prevalence of chronic health conditions has resulted in the emergence of both residential and community-based health services designed to promote functional independence and hence, keep people out of institutional settings.

Health service utilization data provide valuable insight into the health of a population and can be used to help determine the allocation of health prevention efforts and resources.

Acute care services

Acute care services include hospital admissions related to the:

- Circulatory system include heart disease, hypertensive disease, and diseases of the arteries or veins
- Digestive system include diseases of the oral cavity, esophagus, stomach, small intestine, liver, gallbladder, appendicitis, hernia, enteritis and colitis
- Respiratory system include pneumonia, influenza, COPD, and acute respiratory infections
- Mental disease and disorders include organic brain disorders, mental and behavioural disorders due to psychoactive substance use, schizophrenia, mood disorders, and more

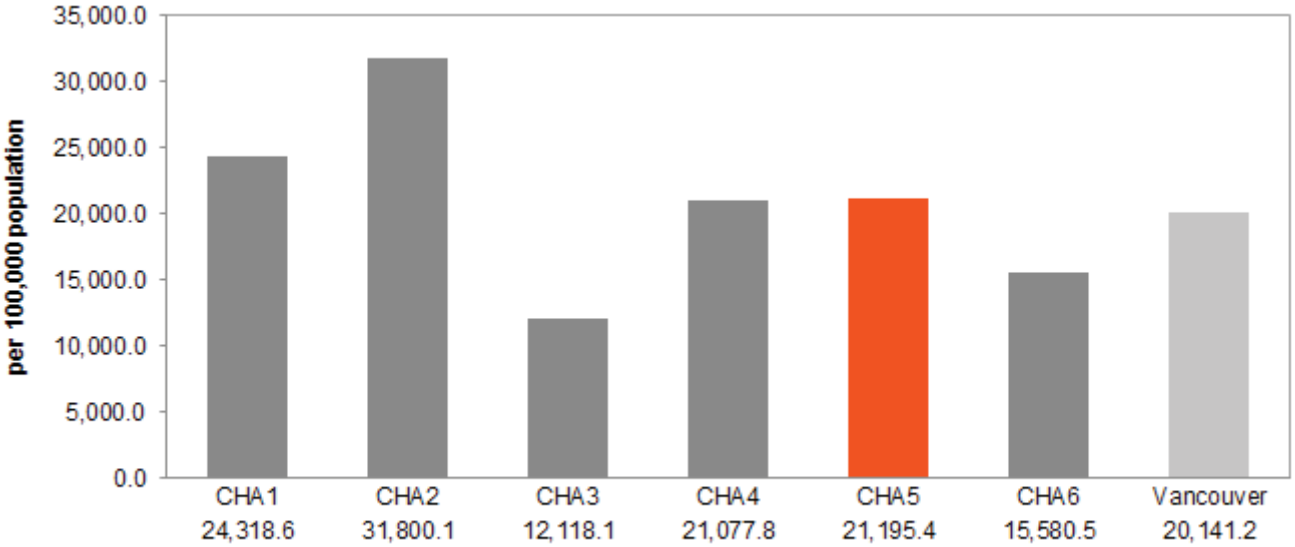
TABLE 16. Acute care hospital admissions (inpatient) by clinical category per 100,000 people. Community Health Areas, Vancouver, and British Columbia, 2007/08

	CHA1	CHA 2	CHA3	CH4	CH5	CHA 6	Vancouver	BC
Circulatory system	500.7	717.8	595.4	557.8	582.4	682.6	598.0	1049.5
Mental disease and disorders	666.4	1669.1	504.5	426.8	514.2	477.0	645.8	645.2
Respiratory system	329.7	992.5	488.9	514.2	687.1	508.7	495.6	622.3
Significant trauma, injury, poisoning, and toxic effect of drugs	417.1	688.6	447.8	457.4	470.6	458.1	471.9	705.2
Pregnancy and childbirth	962.5	882.6	1221.2	993.0	1353.1	1175.4	1102.3	1184.9

Source: BC Ministry of Health Services, Management Information Branch (Discharge Abstract Database), December 2008 via Vancouver Coastal Health Authority Knowledge Base

As CHA 5 has the highest crude live birth rate (11.8 per 1,000 population) amongst the CHAs, it is fitting that CHA 5 also has the highest acute care hospital admission rates for pregnancy and childbirth, 18.5% higher as compared to Vancouver overall.

FIGURE 38. Emergency room visits per 100,000 people. Community Health Areas and Vancouver, 2010



Source: Vancouver Coastal Health, Emergency Department Systems (CareCast, Eclipsys and McKesson)

In 2010, the rate for emergency room visits by CHA 5 residents was 21,195.4 visits per 100,000 people. This is 5.0% higher compared to Vancouver and the third highest rate of emergency room visits amongst the CHAs.

Home and community care services

Adult day centres (ADCs) are community based services for seniors and people with disabilities that provide health care supports such as medication management, personal care such as bathing, health education, and therapeutic social and recreational programs such as meal programs, fitness, and out trips. The purpose of ADCs is to support people to remain at home and provide respite for their caregivers.

Assisted living provides housing plus supportive health services for seniors or people with physical disabilities who need extra help with meals and personal care (i.e. bathing, grooming, dressing and medication management).

Physical and occupational therapy, also known as community rehabilitation services, provides assessment, consultation, treatment and education to clients and their families in home or community clinics to help clients improve or maintain physical and functional abilities.

People are eligible for home nursing if they have been released from hospital and need short-term care, have an ongoing or chronic health issue requiring more complex care, or have a worsening health issue and need help to continue living at home. Services provided by home care nurses include assessment, education, counselling, medical and post surgical care, and palliative care.

Home support provides care for those just released from hospital or as a means of prevention from going to the hospital by providing services such as personal grooming, special exercises, and support and relief for the primary caregiver to help people remain independent and safe in their own home as long as possible.

Residential care (RC) is for people who have complex care needs and can no longer remain safely in their own home. RC clients require 24 hour nursing care in a supervised and secure environment (Vancouver Coastal Health, 2011).

TABLE 17. Home and community care utilization rates per 1,000 people. Community Health Area 5 and Vancouver, 2010/11

	CHA 5	Vancouver
Adult Day Service	1.6	1.4
Assisted Living Service	0.7	1.0
Case Management Services	6.6	8.3
Community Rehabilitation Services	8.1	10.2
Home Nursing Services	7.2	8.6
Home Support Services	4.1	7.9
Home Support Services - Short Term	2.4	2.6
Residential Care Services	6.9	8.1

Source: Vancouver Coastal Health, June 28, 2012

People aged 65 years and over represent 10.2% of the CHA 5 population and this age group is projected to increase to 20.5% of the population over the next 25 years. One of the main goals of the health care system is to ensure that there is an adequate supply of home and community care services so that people do not have to resort to institutional care. The volume of clients receiving these services is determined both by the demand for the service (reflecting the proportion of the CHA that is elderly and their health status) and the resources available.

CHA 5 has lower utilization rates for all home and community care services than the Vancouver average, saving adult day service.

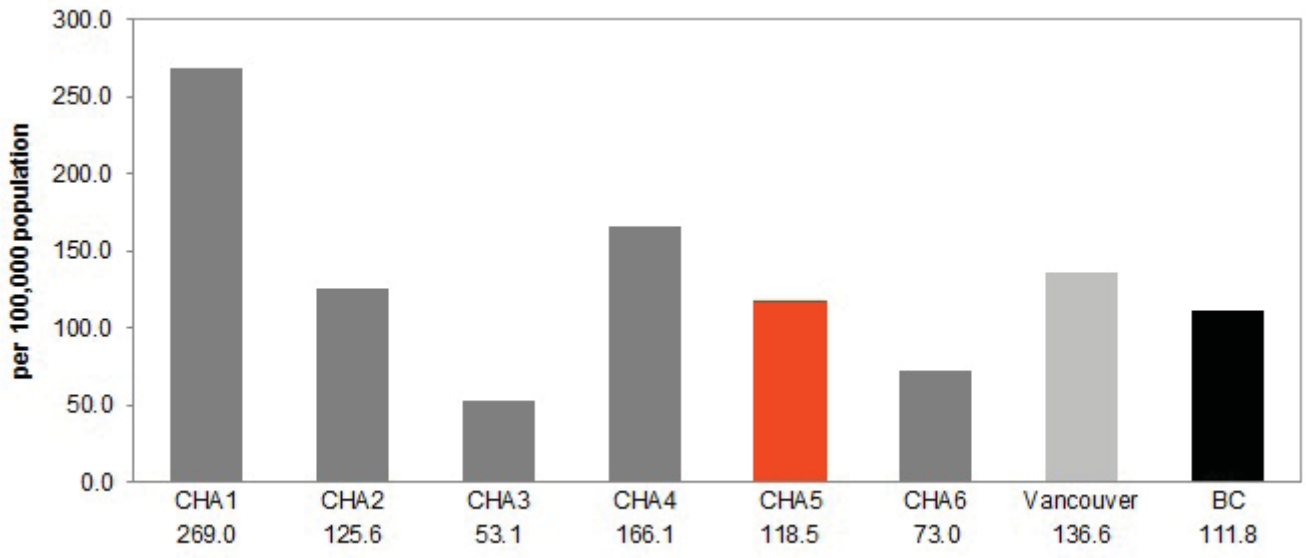
TABLE 18. The number of publicly funded assisted living, hospice, and residential care beds. Community Health Areas and Vancouver, 2010/2011

	Assisted Living	Hospice	Residential Care
CHA 1	113	12	917
CHA 2	105	6	185
CHA 3	96	10	474
CHA 4	15	0	888
CHA 5	75	0	387
CHA 6	199	0	1035
Vancouver	603	28	3886

Source: BC Ministry of Health Services Health Systems Planning Division, 2009

Note: Assisted living, hospice, and residential care facilities are open to all residents and do not just serve a community. Some residents in a community health area might access home and community health services outside their area of residence but most prefer to stay in their neighbourhood whenever possible.

FIGURE 39. General physicians per 100,000 people. Community Health Areas, Vancouver, and British Columbia, 2009



Source: BC Ministry of Health Services Health System Planning Division, Medical Services Plan Information Resource Manual, 2008/2009

CHA 5 has the fourth highest number of general practitioners at 118.5 per 100,000 population; however, this is 15.3% less than Vancouver overall.

Neighbourhoods within CHA 5

Mount Pleasant

Boundaries: stretching from Cambie Street to Clark Drive and from Terminal Avenue and 2nd, to 16th and Kingsway.

Area (hectares): 364

Population: 23,615

Mount Pleasant is home to a mix of new and old homes, residential and commercial zones, artist/live work studios, a light industrial zone, and 3 post-secondary institutions (Vancouver Community College (VCC), the Centre for Digital Media, and the Native Education College). It is a neighbourhood in transition, balancing the needs of its long term residents and newcomers with increasing development around Southeast False Creek and Main Street.

Within CHA 5, Mount Pleasant has the highest percentage of persons aged 20-39 years (44.8%) and the smallest aged 65 years and over (8.2%). While the majority report English (62.0%) as their mother tongue, a minority report Chinese (10.0%), Tagalog (5.1%), and Vietnamese (2.8%).

The median household income, after-tax is $37,782, the lowest amongst all the CHA 5 neighbourhoods. About half of all households (50.9%) are one-person households. Rentals make 67.2% of the dwellings at an average gross rent of $772, the lowest amongst the Midtown neighbourhoods. Renters tend to move a lot so it is unsurprising that Mount Pleasant is home to the highest percentage of people who have moved between 2001 and 2006 (59.5%) (City of Vancouver, 2009).

Riley Park

Boundaries: located atop Vancouver's highest point, stretching from 16th Avenue to 41st Avenue and from Cambie Street to Fraser Street.

Area (hectares): 492

Population: 21,815

Riley Park is a mixed residential and commercial neighbourhood with homes ranging from mini-estates near Queen Elizabeth Park to modest single-family dwellings east of Main Street. It is also home to Antique Row, located on Main Street between 16th and King Edward Avenues, an interesting shopping area filled with antique shops, second-hand stores, and curio shops.

Riley Park has the highest percentage of people aged 40-64 years. Within CHA5, 54.6% report English as their mother tongue, while 20.6% report Chinese, and 4.6% report Tagalog. The median household income, after-tax is $56,973, second highest amongst the CHA 5 neighbourhoods. Rentals make up 41.4% of dwellings at an average gross rent of $885.

As part of the City of Vancouver's Community Vision Program, the Riley Park and South Cambie (RPSC) Community Vision was approved by City Council on November 1, 2005. The Vision will be used at City Hall to guide decision-making affecting RPSC through to 2021, and to set priorities for funding, programs, and services. (City of Vancouver, 2009).

South Cambie

Boundaries: stretching from 16th to 41st Avenue and from Oak to Cambie Street, sandwiched between Shaughnessy and Queen Elizabeth Park

Area (hectares): 217

Population: 7,070

South Cambie's geographic size and population make it one of Vancouver's smallest neighbourhoods. Composed primarily of low density, residential areas, it does not have the same number of social and recreational services as Mount Pleasant and Riley Park.

Within CHA 5, South Cambie has the highest percentage of persons aged 65 years and over (14.4%). 61.6% report English and 20% report Chinese as their mother tongue.1

South Cambie shares its western border with Shaughnessy, one of Vancouver's wealthiest communities. In many ways South Cambie is more similar to Shaughnessy than to other Midtown neighbourhoods. South Cambie has the highest median household income, after-tax within CHA 5 at $61,524. South Cambie is home to a stable community with only 44.3% of its population having moved within 2001 to 2006. The average gross rent is $1,077, the highest amongst the Midtown neighbourhoods (City of Vancouver, 2009).

Similar to Riley Park, South Cambie also underwent a community visioning process through the City of Vancouver's Community Vision Program. This created a long-term plan for the development of the neighbourhood including the Cambie Corridor. (City of Vancouver, 2009).

Kensington

Boundaries: stretching from 16th Avenue/Kingsway to 41st Avenue and from Fraser Street to Kingsway/Nanaimo.

Population: 44,665

Often referred to as "Kensington-Cedar Cottage" (KCC), this area is composed of two historic neighbourhoods that fall into two different Community Health Areas: Cedar Cottage - just north of Kingsway (Northeast CHA 3) - and Kensington to the south (Midtown CHA 5).

Property use in Kensington is mostly residential with two commercial zones (Knight and Kingsway and Victoria and 41st). KCC has the highest percentage of persons aged 19 years and under (21.9%) and is ethnically diverse with 34.5% reporting English, 33.3% reporting Chinese, 6.4% reporting Tagalog, 5.3% reporting Vietnamese, and 3.1% reporting Punjabi as their mother tongue. The median household income, after-tax is $49,484. KCC is home to mostly single detached houses (25.2%), detached duplexes (44.7%), and low-rise apartments (26.5%). Rentals make up 40.5% of dwellings at an average gross rent of $790 (City of Vancouver, 2009).

NOTE: neighbourhood socio-demographic statistics uniquely related to Cedar Cottage or Kensington are not available as the city neighbourhood boundaries combines Cedar Cottage with Kensington.

CHA 5 community resources

Public elementary schools

14 in total

3 in Mount Pleasant (Mount Pleasant, Florence Nightingale and Simon Fraser)

3 in Riley Park (General Brock, David Livingstone and General Wolfe)

2 in South Cambie (Emily Carr and Edith Cavell)

6 in Kensington (Sir Alexander Mackenzie, Sir Richard McBride, Charles Dickens Annex, McBride Annex, Lord Selkirk Annex and Tecumseh Annex)

Public secondary schools

2 in total

1 in Riley Park (Sir Charles Tupper)

1 in South Cambie (Eric Hamber)

Post secondary schools and colleges

Vancouver Community College

Centre for Digital Media

Native Education College

Family resource programs

Mount Pleasant Family Place

Three Strong Start Programs (Mount Pleasant, Nightingale and Mackenzie)

Several family resource programs operated by community centres and neighbourhood houses

Note: Family Places / family resource programs are parent / child interactive programs for families with children 0-6 years. Family resource programs are unique from other early childhood development programs in that parent and child attend together. Family resource programs have five core areas of service which include: family support, play-based learning, early literacy, learning and care, parent education, and information and referrals. They are low cost or free with subsidies readily available. Family Places may be independent stand-alone organizations or embedded in a multi-service agency such as a neighbourhood house.

Non-market housing complexes

38 in total

13 in Mount Pleasant: 9 housing co-operative, 4 are for Aboriginal people, 3 are for seniors, and 3 are for low income families or singles. Two more complexes are planned with one just opening

4 in Riley Park: two BC Housing, one housing co-operative, and one for people with disabilities

3 in South Cambie: 1 housing co-operative, 1 for the physically disabled, and 1 for seniors

1 in Kensington: borders with Cedar Cottage supporting Aboriginal women and their children

Seniors Centres and Adult Day Centres

411 Seniors Centre Society

Adult homeless shelters

St. Elizabeth Home Emergency Shelter - St. James Community Service Society

Yukon Shelter- Lookout Society

Publicly funded VCH assisted living facilities

Honoria Conway at St. Vincent's Heather

Publicly funded VCH residential care facilities

Little Mountain Place

St. Jude's Anglican Home

St. Vincent's Hospital-Brock Fahrni Pavillion

Youville Residence

Public parks

29 public parks including Queen Elizabeth Park and Nat Bailey Stadium

Libraries

- Mount Pleasant Branch Library
- Riley Park Branch Library
- Oakridge Branch Library
- Kensington Branch Library
- Terry Salmon Branch Library

Community centres

- Mount Pleasant Community Centre
- Creekside Community Recreation Centre
- Hillcrest Community Centre
- Douglas Park Community Centre
- Kensington Community Centre

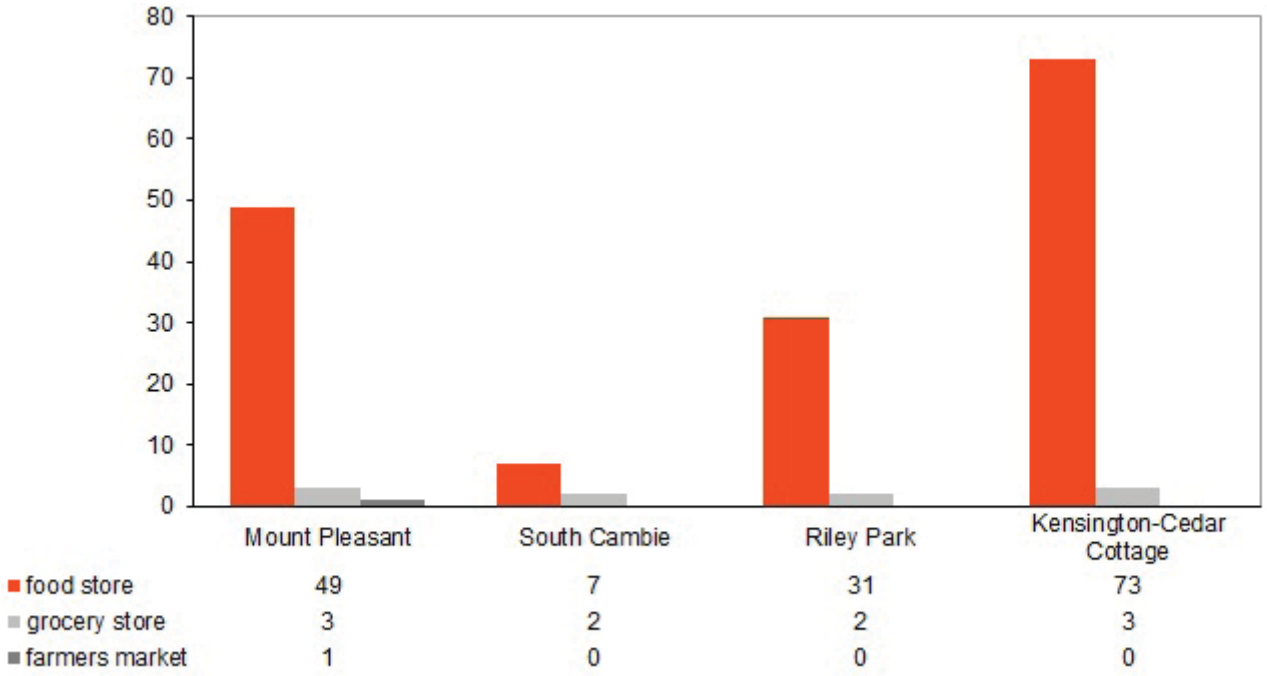
Neighbourhood houses

- Mount Pleasant Neighbourhood House
- Little Mountain Neighbourhood House

Business improvement areas

- 3 (Cambie Village, Mount Pleasant, and Victoria Drive)

FIGURE A. Number of food stores by type, Community Health Area 5, 2009



Source: Food Secure Vancouver, 2009

Food stores (pre-package foods) include stores identified by subtypes including "convenience store," "vitamins/health food," "pharmacy", and "other", and includes non-food stores that may have some food.

Vancouver Coastal Health Community Resources

Raven Song Community Health Centre
2450 Ontario Street
Vancouver, B.C. V5T 4T7
Tel: 604-709-6400

Midtown Mental Health Team
2450 Ontario Street
Vancouver, B.C. V5T 4T7
Tel: 604-872-8441

For mental health services, youth clinics, and other health related information, please contact your local community health centre.

References

BC Ministry of Children and Family Development. (2011). Children and youth needing care. Retrieved from http://www.mcf.gov.bc.ca/foster/inneed.htm

BC Ministry of Education. (n.d.). Foundation skills assessment. Retrieved from http://www.bced.gov.bc.ca/assessment/fsa/

BC Ministry of Education (2011). District reports. Retrieved from http://www.bced.gov.bc.ca/reporting/district_data_summary.php

BC Ministry of Health Services, Health System Planning Division (Medical Services Plan Information Resource Manual) 2009

BC Ministry of Health Services, Management Information Branch (Discharge Abstract Database), December 2008

BC Ministry of Social Development. (2012, May 28). Applying for BC Employment and Assistance (BCEA). Retrieved from http://www.eia.gov.bc.ca/bcea.htm

BC Primary Health Care (Cardiovascular Disease Registry, Chronic Obstructive Pulmonary Disease Registry and Diabetes Registry), November 2011

British Columbia. Provincial Health Officer. (2003). A Review of Infant Mortality In British Columbia: Opportunities for Prevention. Victoria, B.C.: Ministry of Health Planning.

BC Stats. (n.d.). Basic income assistance recipients. Retrieved from http://www.bcstats.gov.bc.ca/Files/ae995933-4584-4ad5-9176-b0e407680d16/IncomeAssistanceRecipientsNotes.pdf

BC Stats. (2012, March). Adults receiving basic income assistance regional district report. Retrieved from http://www.bcstats.gov.bc.ca/Files/eb265156-ef82-44b0-b7d1-68316244e8e3/IncomeAssistanceRecipientsbyRDandMunicipality2012Q1.pdf

BC Stats. (2012, March). Population estimates for B.C. census metropolitan areas and census agglomerations. Retrieved from http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx

BC Stats (2011). Local health area 161 – Vancouver City Centre statistical profile. Retrieved from http://www.bcstats.gov.bc.ca/StatisticsBySubject/SocialStatistics/SocioEconomicProfilesIndices/Profiles.aspx

BC Stats (2011). Local health area 162 – Vancouver Downtown Eastside statistical profile. Retrieved from http://www.bcstats.gov.bc.ca/StatisticsBySubject/SocialStatistics/SocioEconomicProfilesIndices/Profiles.aspx

BC Stats (2011). Local health area 163 – Vancouver North East statistical profile. Retrieved from http://www.bcstats.gov.bc.ca/StatisticsBySubject/SocialStatistics/SocioEconomicProfilesIndices/Profiles.aspx

BC Stats (2011). Local health area 164 – Vancouver Westside statistical profile. Retrieved from http://www.bcstats.gov.bc.ca/StatisticsBySubject/SocialStatistics/SocioEconomicProfilesIndices/Profiles.aspx

BC Stats (2011). Local health area 165 – Vancouver Midtown statistical profile. Retrieved from http://www.bcstats.gov.bc.ca/StatisticsBySubject/SocialStatistics/SocioEconomicProfilesIndices/Profiles.aspx

BC Stats (2011). Local health area 166 – Vancouver South statistical profile. Retrieved from http://www.bcstats.gov.bc.ca/StatisticsBySubject/SocialStatistics/SocioEconomicProfilesIndices/Profiles.aspx

BC Stats. (2011, June). HSDA 32 – Vancouver statistical profile. Retrieved from http://www.bcstats.gov.bc.ca/StatisticsBySubject/SocialStatistics/SocioEconomicProfilesIndices/Profiles.aspx

BC Stats. (2011, July). British Columbia population 1867 – 2010 [Data file]. Retrieved from http://www.bcstats.gov.bc.ca/

StatisticsBySubject/Demography/PopulationEstimates.aspx

BC Vital Statistics Agency. (2009). Glossary. In Selected vital statistics and health status indicators: One-hundred and thirty eighth annual report 2009. Retrieved from http://www.vs.gov.bc.ca/stats/annual/2009/pdf/glossary.pdf

BC Vital Statistics Agency (VISTA Database), June 2012.

British Columbia Centre for Disease Control. (2011). Diseases and Vaccinations. Retrieved from http://immunizebc.ca/diseases-vaccinations

British Columbia Centre for Disease Control. (2012, June 28). British Columbia annual summary of reportable diseases 2010. Retrieved from http://www.bccdc.ca/NR/rdonlyres/6F0D23A6-18E8-4983-AE53-A7F0C7F0D91B/0/2010CDAnnualReportFinal.pdf

British Columbia Centre for Disease Control. (HIV/AIDS Information System), June 2012.

British Columbia Provincial Health Officer. (2008). An ounce of prevention revisited: A review of health promotion and selected outcomes for children and youth in BC schools. Retrieved from http://www.health.gov.bc.ca/pho/pdf/phoannual2006.pdf

Census Dictionary. (2006). Statistics Canada. Retrieved from http://www12.statcan.gc.ca/census-recensement/2006/ref/dict/pop045-eng.cfm

Citizenship and Immigration Canada. (2005). Recent Immigrants in Metropolitan Areas: Vancouver— A Comparative Profile Based on the 2001 Census. Retrieved from http://www.cic.gc.ca/english/resources/research/census2001/vancouver/partc.asp

City of Vancouver. (n.d.) List of all parks by neighbourhood. Retrieved from http://cfapp.vancouver.ca/parkfinder_wa/index.cfm?fuseaction=FAC.ParkList_Area#9

City of Vancouver. (2009a). Community pages. Retrieved from http://vancouver.ca/community_profiles/communitylist.htm

City of Vancouver. (2009b). The role of secondary suites: rental housing strategy- Study 4. Retrieved from http://vancouver.ca/commsvcs/housing/pdf/dec09secsuitesstudy.pdf

City of Vancouver. (2010a). City plan and community visions. Retrieved from http://vancouver.ca/commsvcs/planning/cityplan/visions/

City of Vancouver. (2010b). Rental housing strategy research and policy development synthesis report. Retrieved from http://vancouver.ca/commsvcs/housing/pdf/RentalHousingSynthesisReport.pdf

City of Vancouver. (2010c).What is non-market housing? Retrieved from http://vancouver.ca/commsvcs/housing/whatis.htm

City of Vancouver. (2012a). Non-market housing inventory. Retrieved from http://app.vancouver.ca/NonMarketHousing_Net/default.aspx

City of Vancouver. (2012b). Vancouver 2012 homeless count results. Retrieved from http://vancouver.ca/ctyclerk/cclerk/20120529/documents/rr1presentationrevised.pdf

Food Secure Vancouver. (2009). Accessibility. Retrieved from http://www.foodsecurevancouver.ca/accessibility/availability/foodaccess-stores

Human Resources and Skills Development Canada. (2012, July 17). Indicators of Well-Being in Canada. Retrieved from http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=4

Ohlsson A, Prakeshkumar Shah. (2008). Determinants and Prevention of Low Birth Weight: A Synopsis of the Evidence.

Alberta: Institute of Health Economics. Retrieved from http://www.ihe.ca/publications/library/2008/determinants-and-prevention-of-low/

Public Health Agency of Canada. (2012, February 22). Infectious Diseases. Retrieved from http://www.phac-aspc.gc.ca/id-mi/index-eng.php

Statistics Canada, 2001 Census of Population

Statistics Canada, 2006 Census of Population

Statistics Canada. (2007). Musqueam, British Columbia (Code630308) (table). Aboriginal Population Profile. 2006 Census. Statistics Canada Catalogue no. 92-594-XWE. Ottawa. Released January 15, 2008. Retrieved from http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-594/index.cfm?Lang=E

Statistics Canada. (2010, July 6). 2006 Census dictionary. Retrieved from http://www12.statcan.gc.ca/census-recensement/2006/ref/dict/index-eng.cfm

Statistics Canada. (2012, June 18). Low income cut offs. Retrieved from http://www.statcan.gc.ca/pub/75f0002m/2012002/lico-sfr-eng.htm

Statistics Canada. (2012, June 18). Table 1 – Low income cut offs (1992 base) after-tax. Retrieved from http://www.statcan.gc.ca/pub/75f0002m/2012002/tbl/tbl01-eng.htm

University of British Columbia, Human Early Learning Partnership. (2011, September 22). Early Development Instrument Data Tables. Retrieved from http://earlylearning.ubc.ca/maps/edi/data/

Vancouver Coastal Health. (2010, April). Bed Map. Retrieved July 18, 2012.

Vancouver Coastal Health, Care Cast (Richmond Hospital, UBC Hospital, and Vancouver General Hospital)and Eclipsys (Mount Saint Joseph Hospital, St. Paul's Hospital), October 2010.

Vancouver Coastal Health Home and Community Care Decision Support Cube, (June 28, 2012)

Vancouver Coastal Health. (2011). Home and Community Care. Retrieved from http://www.vch.ca/your_health/health_topics/home_and_community_care/home_and_community_care

Vancouver Coastal Health Public Health Surveillance Unit. (2011, August 18). Primary Access Regional Information System (PARIS) for Vancouver.

Vancouver Coastal Health. (2011, November 17). Adult Day Centre contacts- Vancouver.