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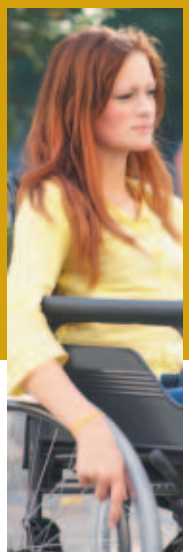
VCH Population Health Report 2008

Reducing Health Disparities in Vancouver Coastal Health Communities: Population Health Priorities



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Executive Summary

Although, as a whole, Vancouver Coastal Health (VCH) is one of the healthiest regions in Canada, this isn't true for everyone. Within VCH, there are some populations that have significantly worse health outcomes than others. The health status of a community is determined by such factors as the social, economic and physical environments in which we live, personal health practices, nutrition and physical activity levels, development during early childhood, and access to quality health services. These factors are often referred to as the social determinants of health and are the basis for a population health approach. VCH is committed to addressing the social determinants of health by providing its staff and the public with key population health data including information on disparities in health outcomes and opportunities for addressing these differences.

The purpose of the **VCH Population Health Report** is to facilitate an understanding of what determines the health of our populations through the presentation of population health data; to identify and describe current priority areas for VCH population health activities; and, to describe policy options for improving the health of our populations.

VCH has created a population health team to address the issues around the social determinants of health within a strategic population health framework. Addressing population health issues requires working with partners and approaching existing policies from a health standpoint. VCH strategy areas include:

Child Poverty and Early Child Development

1. **Awareness and Advocacy:** VCH is working with the BC Health Officer's Council and community partners to raise awareness of the health impacts of child and family poverty and advocate for healthy public policies.
2. **Surveillance and Programming:** VCH is working with the Human Early Learning Partnership (HELP) at UBC to monitor school readiness levels across our region. Programming targeted at our most vulnerable populations is being developed.
3. **Partnership Development:** A variety of processes are in place for decision makers from public agencies (including VCH, Ministry of Child and Family Development, school districts and municipalities) to work in partnership in the interest of children's development.

Food Security

1. **Support Communities to Address Food Security:** The majority of food security work is done within local communities. Communities across VCH have completed food security assessments and action plans. VCH is currently supporting the implementation of these reports through resources, leadership, and advocacy.
2. **Align VCH Policies and Procedures:** VCH is working to ensure that our internal policies and procedures are consistent with VCH messaging around supporting a healthy food system.
3. **Build the Case for Food Security:** Through education, research and partnerships, VCH is maximizing opportunities to increase awareness of the importance and impact of food security as a public health issue.

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Introduction

Vancouver Coastal Health (VCH) provides a full range of health care services including public health, community-based care, mental health services and hospital treatment. As outlined in the VCH mission statement, this care goes beyond an individual level:

Support healthy lives in healthy communities with our partners through care, education and research.

To fully achieve this mission, it is important to think beyond traditional health services. It is necessary to understand the diversity of the communities and people within the VCH region, as well as the factors that contribute to their health. This is the essence of a population health approach to health improvement. In particular, a population health approach looks at the characteristics of a community (i.e., age, education, income, cultural background) and assesses the impact that these characteristics have on the health of the population. These characteristics are often referred to as the determinants of health *(see Figure 1)*.[1] Ultimately, the goal is to identify and support policies and programs that enable everyone in the community to achieve the highest possible levels of health and reduce inequities that may exist between the health status of different groups.

VCH serves a large geographic area and population. There are 1.1 million people residing in the VCH region in 12 municipalities and 15 First Nations. As seen in Figure 2, VCH communities are located in urban, semi-urban and rural settings. Population growth, the proportion of Aboriginal persons and those who speak English as an additional language all vary from area to area. Throughout this report, data showing the diversity in health factors and outcomes will be presented.

Determinants of Health

Figure 1

Local Health Areas (LHA) of Vancouver Coastal Health

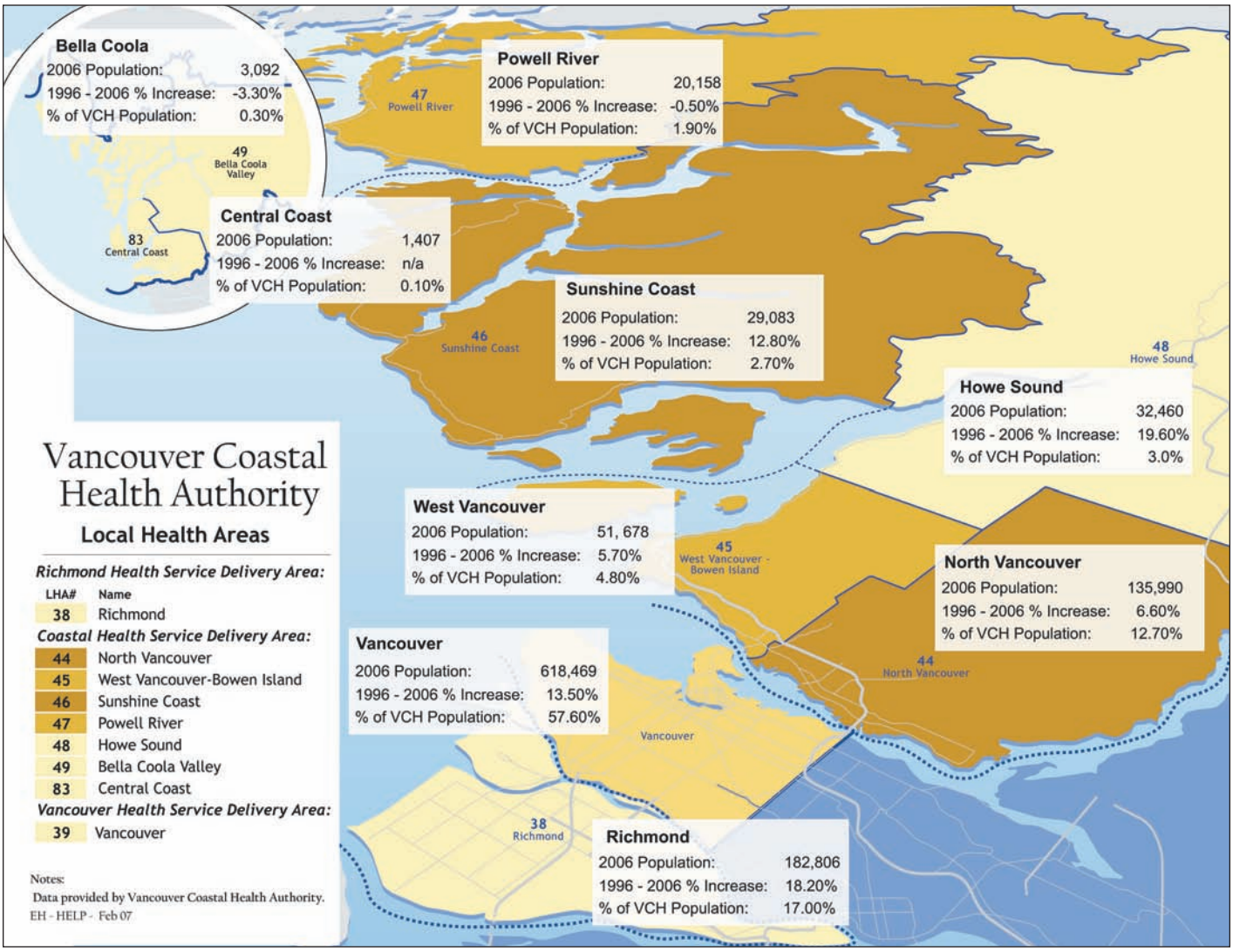

Figure 2

2

Purpose

VCH is committed to providing its staff and the public with key population health data including information on disparities in health outcomes and opportunities for addressing these differences.

The purposes of the *VCH Population Health Report* are to:

1. Facilitate an understanding of what determines the health of our populations.
2. Share population level health data and identify differences in health outcomes that exist between VCH communities.
3. Identify and describe current priority areas for VCH population health activities.
4. Describe policy options for improving the health of our population and reducing differences in the health status of different population groups.

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The Health of People in Vancouver Coastal Health—A Population Health Perspective

When it Comes to Health – Everyone is Not Equal

Within the Vancouver Coastal Health region, we pride ourselves as being among the healthiest people on the planet. We have a healthy environment, a population that pursues active and healthy lifestyles, a strong social support system and a world-class health care system.

However, there are some populations in VCH that have significantly worse health outcomes than others.

Many people are trapped in an environment – physical and social – that prevents them from achieving the same levels of health and well being as other British Columbians.

In VCH from 2002-06, the average life expectancy was 82.4 years, higher than the BC average of 80.92. However, consider that in some areas of VCH, people live – on average – a full ten years longer than in other areas *(see Table 1)*.

There are additional indicators of these health outcome disparities in VCH. Potential Years of Life Lost (PYLL) gives an indication of "premature" death by totalling the number of years residents lose if they die prior to age 75 years. PYLL indicates the importance of the various causes of premature death by giving more weight to deaths that occurred at younger ages than those that occurred later in life. As seen in *Figure 4*, on page 6, there are dramatic differences in this statistic between VCH communities.

Life Expectancy by Local Health Area 2002–2006	
Richmond	84.81
West Vancouver & Bowen Island	84.06
Vancouver–West Side	84.06
South Vancouver	83.45
North Vancouver	82.55
Vancouver–North East	82.47
Vancouver–Midtown	81.82
Howe Sound	81.03
Sunshine Coast	81.01
Vancouver–City Centre	80.98
Powell River	79.09
Bella Coola Valley	76.44
Vancouver–Downtown Eastside	75.01
BC Average	**80.92**
Vancouver Coastal Health Region	**82.40**

Table 1

Potential Years of Life Lost Due to Natural Causes per 1,000 Population, 2001-2005

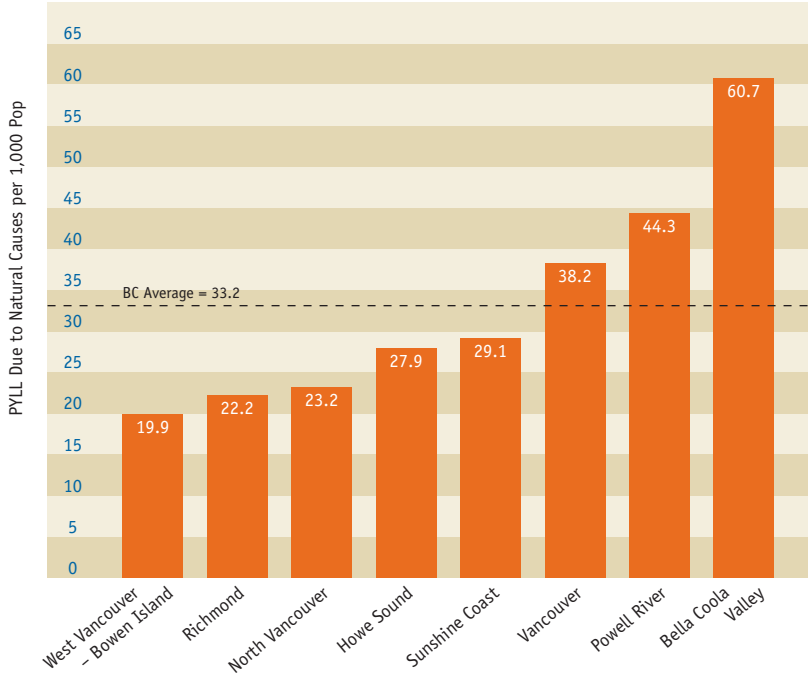

Figure 4

What Causes This Disparity?

To better understand the causes of these disparities, it is first important to know that there is a gradient in health that correlates with a person's social and economic position in society. We know that people with lower incomes die earlier and experience more sickness than people above them on the income ladder. This occurs regardless of age, sex, race and place of residence[2] and it is not only the poorest groups who have poorer health. These differences in health outcomes occur across the income gradient. As a recent US report states:[3]

It turns out that the more advantaged our lives are, the longer we live and the healthier we are from birth to old age. People who grow up on the bottom die younger and are sicker throughout their lifetimes than those who are born to the rungs above them… Yet excess death is not just a problem for the very poor. More than half of America's excess deaths occur in middle class families. What this tells us is that the power of social status to impact the most precious resource we have – life itself – is enormous and pervasive.

Recent analysis of health and income levels shows that this same gradient exists here in BC. For example, the average life expectancy is higher among individuals with higher family incomes.[4] British Columbians in the lowest income quartile are four and a half times more likely than those in the highest quartile to rate their health as poor or fair, and the percentage decreases with each ascending income quartile.[5]

BC Heart Disease Prevalance by Income Level

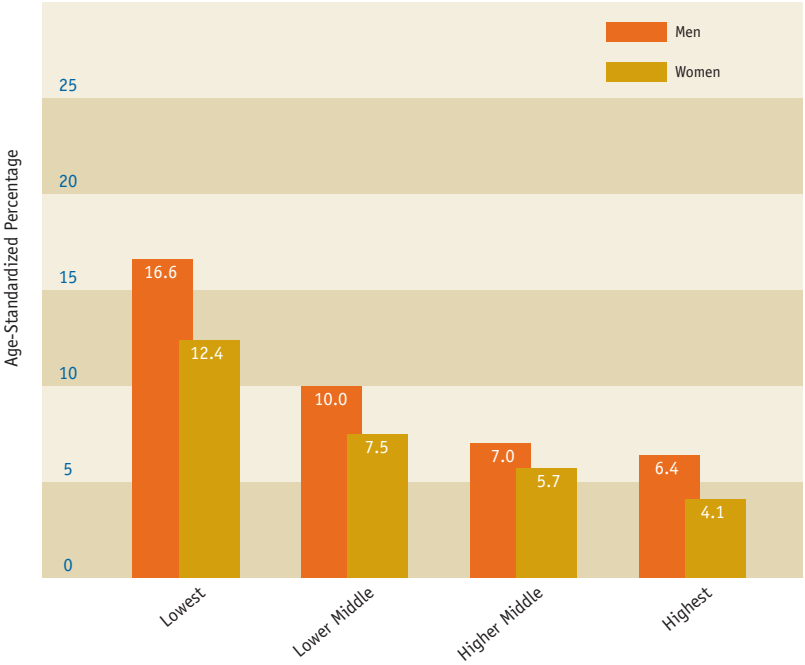

Figure 5

Chronic diseases like diabetes, heart disease, and many forms of cancer *(see Figure 5)* also follow the same pattern of inequality.

What has also been shown about this health gradient is that countries, regions and cities that have greater equality among their citizens, and thus less of a gap between the rich and the poor, enjoy a higher standard of health.[6]

The Multiple Dimensions of Health

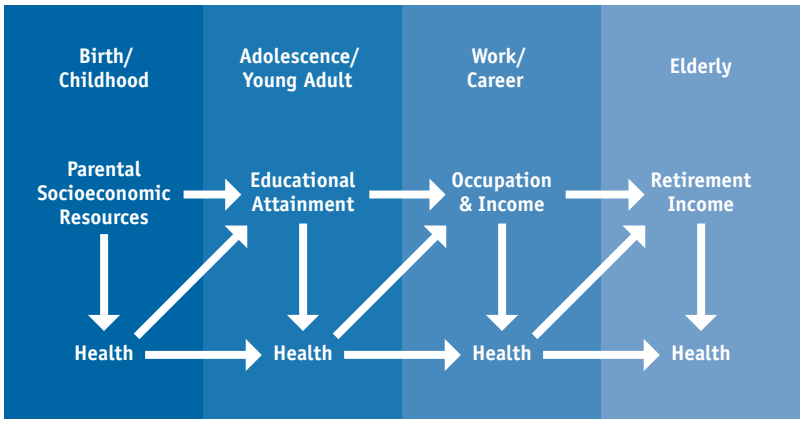

Figure 6

Income allows people to achieve greater control over their lives and exercise more discretion in their life style choices and living conditions.

The Complex Determinants of Health

The fact that middle income people also experience worse health outcomes than those above them helps us understand that the poorer health status of lower income individuals and families cannot simply be blamed on personal health/lifestyle choices, access to the health care system or genetic makeup – it is much more complex than that. As seen in *Figure 6*,[3] the social condition and resources of families affect health throughout the lifecycle.

Beyond Income: Additional Determinants of Population Health

Education and Literacy

Education and literacy contribute to health in a variety of ways. The ability to read and understand instructions is necessary to comply with medical directions and safety regulations. A higher level of education is related to healthy lifestyle practices.[7] In addition, education and literacy are prerequisites for most types of employment. People with limited education and literacy skills tend to experience high levels of stress and exhibit less adaptability and flexibility in being able to cope with change.

Compelling linkages have been established between education and literacy and health outcomes:

- Canadians with post-secondary education are in better health (as measured by body mass index[8] and self-rated health[9]) compared with those with less education.
- Rates of chronic disease are higher among adults with less than a high school education.[10]
- Life expectancy is higher in more educated populations.[11]

How Do Education and Literacy Rates Vary in VCH?

Overall, the Vancouver Coastal Health Region has one of the most highly educated populations in Canada.

- In 2006, 59% of the population in Metro Vancouver had some level of post secondary education.
- In 2005/06, the proportion of students graduating within six years of starting high school ranged from 60% to 90% in the different local health areas in the region *(see Figure 7)*.
- In most LHAs, high school graduation rates are increasing, yet in the communities in and around Powell River and the Sunshine Coast, high school completion rates have dropped since 2001/02.

High School Completion Rates 2001/02 & 2005/06

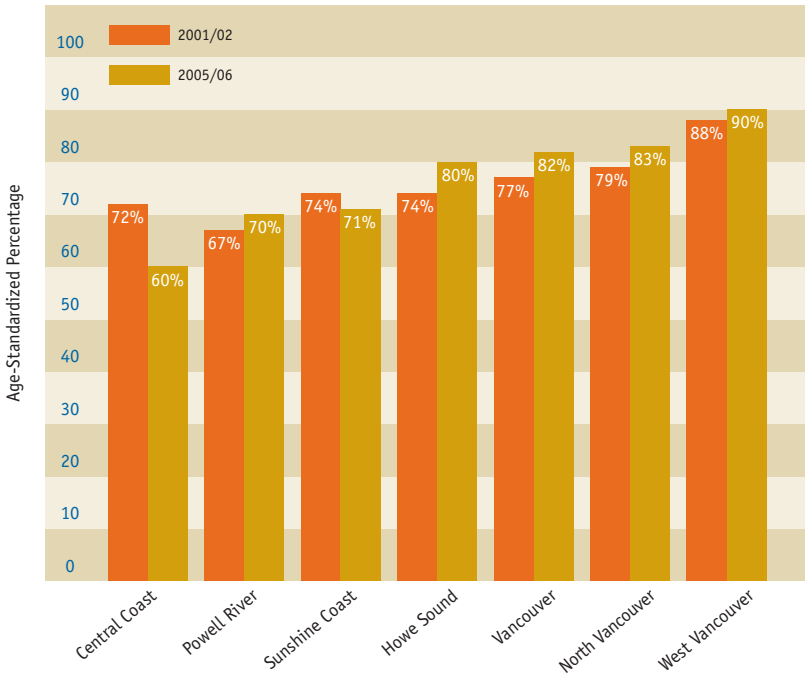

Figure 7

Health Literacy

Health literacy is the ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course.[12] As seen in *Table 2*, health literacy rates vary across Vancouver Coastal Health. Yet, in every region, over half of residents still have heath literacy levels below level 3. Health literacy data are derived from health-related literacy tasks that were included in the International Adult Literacy and Life Skills Survey (IALSS). Individuals scoring below Level 3 can best be characterized as possessing very limited to restricted literacy proficiencies.[13] Level 3 is considered the minimum level of proficiency required to meet the demands of modern day life.

Proportion of Population with Low Health Literacy Scores	
Richmond	61%
Vancouver	56%
North Shore/Coast Garibaldi	53%
British Columbia	**54%**

Table 2

Lower levels of health literacy appear to be related to poorer health outcomes.[12] Increasing rates of chronic disease are a key issue and will likely increase the need for literacy and health literacy skills. Further, lower health literacy levels appear to be related to higher healthcare costs.

Housing and Homelessness

Having access to safe and affordable housing is associated with a higher standard of physical and mental well-being. The World Health Organization (WHO) affirms that improvements in both physical and mental health are achieved when housing environments are improved.[14] As with all health determinants, the relationship between health and housing is complex and multifaceted. Many of the risk factors associated with inadequate housing, such as poverty, unemployment and substance abuse, have their own negative health impacts. There are a number of findings from studies on the relationship between housing and health:

- There are higher rates of hospital use among the homeless.
- Having a home is often necessary to access and follow treatment, particularly with conditions, such as HIV-AIDS that require a complex and strict regimen of medications.
- Individuals without adequate housing are at greater risk for a wide range of physical health problems, including chronic obstructive pulmonary disease and respiratory tract infections, musculoskeletal conditions (for example, arthritis), infectious diseases (for example, tuberculosis, HIV), poor oral and dental health, skin and foot problems;[15] poor management of chronic conditions (for example, diabetes);[16] and other injuries.[15]

% Tenants and Owners in Core Housing Need, 2001

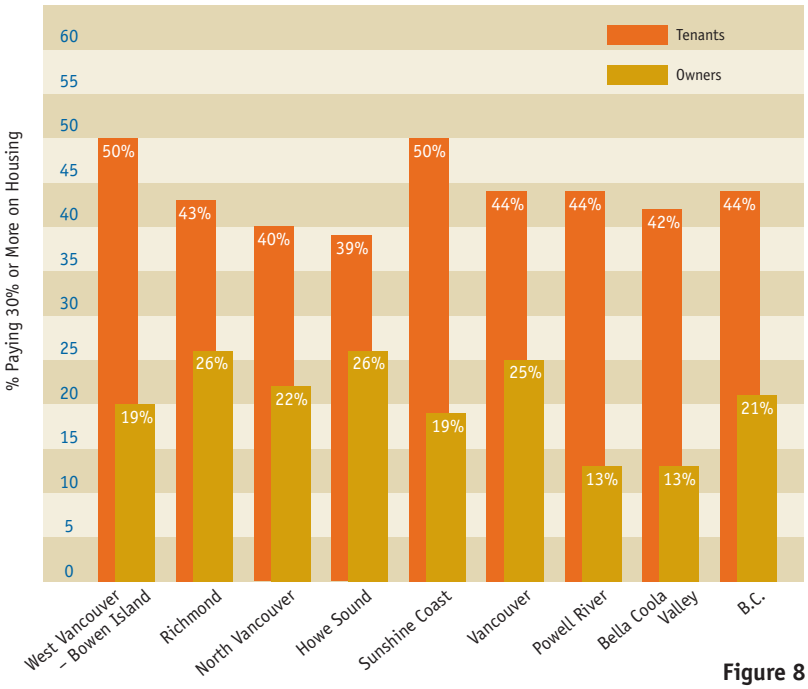

Figure 8

What is the extent of the problem in VCH?

Housing Costs

Rates of homelessness and the challenges associated with affordable housing are an issue for many Canadian urban centres. In 2001, more than one third of residents in some communities of the Vancouver Coastal Health Region were in "core housing need," meaning that they were paying 30% or more of their income on housing. As seen in *Figure 8*, more than 39% of tenants were paying 30% or more on rent in 2001; and in some communities such as West Vancouver and the Sunshine Coast, half of tenants were in this situation.

Homelessness

Between 2002 and 2005, the number of homeless people living in Vancouver and the North Shore areas of the region more than doubled (*see Figure 9*).[17] While data for the Vancouver Coastal Region are not available, the count of homeless individuals for Metro Vancouver revealed:

- Men made up a larger share of the region's homeless population in 2005 compared to 2002; the number of women increased by 60% in this time and the number of men increased by 112%.
- Three quarters of the region's homeless (76%) are between the ages of 25 and 54 years. However, it is the older population that is growing fastest.
- Three quarters of homeless people participating in the survey indicated that they had at least one health condition; 35% of respondents indicated that they had more than one.

Culture

Culture and ethnicity are also key determinants of the health of populations. Cultural background influences how people view health and illness, access and interact with the health system, obtain health information, exercise lifestyle choices, and make decisions about care. In some cases, dominant cultural values can contribute to marginalization of smaller populations, loss or devaluation of language and culture, and lack of access to culturally appropriate health care and services.

Aboriginal Populations in VCH

Approximately 23,000 Aboriginal persons live within the Vancouver Coastal Health region.[18] About 49% of the VCH Aboriginal population live in Vancouver, 4% live in Richmond and 46% live in the Coastal HSDA. Vancouver has the largest urban off reserve population in the province.

Homeless Count 2002, 2005

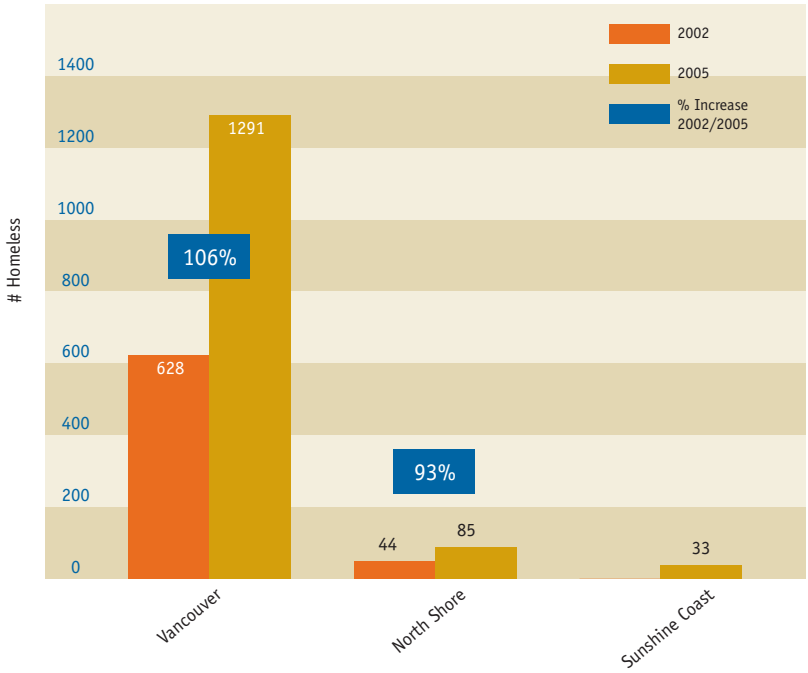

Figure 9

There are numerous disparities in health and socioeconomic status between Aboriginals and other British Columbians. Efforts to close these gaps are inextricably linked to recognizing the historical struggles faced by Aboriginal persons. These include the legacy of colonialism and loss of autonomy, marginalization and poverty, and the ongoing effects of residential schools. Examples of these disparities include:

- **Poverty Levels:** There is a very high rate of Aboriginal families living in poverty within VCH. The rate of off-reserve Aboriginal families living below the low-income cut-off scale (LICO) in VCH is 32.5%, almost twice as high as that for the non-Aboriginal population (17.6%).[19]
- **Employment:** Aboriginals in VCH have lower rates of participation in the labour force (69.8%) both when compared with non-Aboriginals in VCH (82.5%) and with Aboriginals in the rest of the province (74.6%).[20] This is particularly pronounced for Aboriginals in Vancouver, where labour force participation is only 63.3%.
- **Homelessness:** Aboriginal and First Nations people comprise only 2% of the general population in Greater Vancouver, but 30% of the homeless population.[18]

Population health strategies are congruent with recommendations made by First Nations communities and evidence that health outcomes can be improved through greater control of community assets.

Immigration in VCH

Our population is greatly affected by immigration. In fact, British Columbia has the second-highest proportion of foreign-born individuals of all the provinces. Approximately 27.5% of British Columbia's population is foreign-born, and approximately half of both Richmond (57.4%) and Vancouver's (45.6%) populations were born outside of Canada.[20] As Greater Vancouver continues to be a draw for immigrants from around the world, there is a need for awareness of the health needs and impacts of these groups.

Generally, new immigrants are considered to be in as good, or better health, than the average population – often referred to as the *healthy immigrant effect*. However, there are also research findings that report that immigrants who have been in Canada longer experience poorer health outcomes than the general population.[21] Refugees from conflict-torn areas of the globe face additional challenges. Many live with the long term consequences of experiencing and witnessing violence, hunger, forced dislocation, and other trauma associated with war.

Adjustments to a new country can pose challenges such as accessing health services, changes in diet and learning new language skills. However, as with the overall Canadian population, there are substantial variances in the levels of vulnerability of the immigrant and refugee populations. Interaction with other determinants of health such as income adequacy, age and gender can all provide a mitigating factor against negative health outcomes. Understanding the experiences of different immigrant and refugee groups are necessary to respond to the emerging health needs of the diverse communities in VCH.

4

Population Health Priorities

VCH has created a population health promotion strategy that supports a range of programs and activities. This includes the development of a strategic framework and the identification of priority areas including: child and family poverty, early child development, and food security. VCH perspectives on these issues are described, along with policy options that have been proposed to address these health problems.

Implementing a Population Health Approach in VCH

Vancouver Coastal Health (VCH) has created a population health promotion framework to outline a strategy and vision for addressing the social determinants of health. This strategy acknowledges that health status is largely determined by the social, economic and physical environments in which we live, personal health practices, nutrition and physical activity, development during early childhood, and access to quality health services, to name a few examples. A population health team has been created to support the implementation of this strategy.

The goals of the population health strategy are to:

- maintain and improve the health status not just of individuals but of the entire population; and
- reduce differences (often referred to as inequities) in the health status between population groups.

Population health strategies can identify systematic variations and discrepancies in health and illness within the population. For example, persons living in a low-income neighborhood might have higher rates of illness. Using this information, the Health Authority can work with partners to develop and implement policies and actions to improve the health and well being of those populations. VCH has outlined four strategy areas:

1. **Leadership:** Recognizing the existence of a health problem or health disparity and assuming a responsibility to redress it.
2. **Policy Development:** Healthy public policies are characterized by an explicit concern for health and equity, and by an accountability for health impact.
3. **Partnership Development:** Partnerships are essential to facilitate the creation of health promoting environments and conditions for communities.
4. **Advocacy:** Advocacy represents the strategies devised, actions taken and solutions proposed to influence decision-making on a particular cause/issue. The purpose being to create positive change for people and their environments.

Population health promotion has the potential to improve both the health of the people served by VCH and the sustainability of the health care system. It requires leadership, commitment, a clear mandate, and resources to sustain a comprehensive range of strategies. *The Vancouver Coastal Health Population Health Framework* is available at: *www.vch.ca/professionals/docs/population_health_approach.pdf*

Population Health Priority: Child and Family Poverty

Many of British Columbia's children do not have the same opportunities as their wealthier counterparts. Family poverty affects the ability of families to provide food, shelter and a stimulating learning environment for their children. In addition, there is a heavy impact of child poverty on health status and long-term health and well-being outcomes. Researchers note that:

- Children and youth who live in poverty are at greater risk in terms of health, do less well in school, have to cope with a dangerous or unhealthy physical environment are less likely to graduate from secondary school and then as adults, suffer from job insecurity, underemployment and poor working conditions.[22,23]
- Poor health has also been identified as a mechanism for the intergenerational transmission of poverty. Children born into poor families have poorer health as children, receive lower investments in human capital, and have poorer health as adults.[24]

As seen in *Figure 10*, British Columbia has the highest child poverty rate in Canada.[25] Approximately one in five children live in poverty, with evidence indicating that the depth of poverty is increasing. There is a critical need to reduce family and child poverty in VCH and British Columbia.

Child Poverty Rates by Province, 2005 (Before Tax)

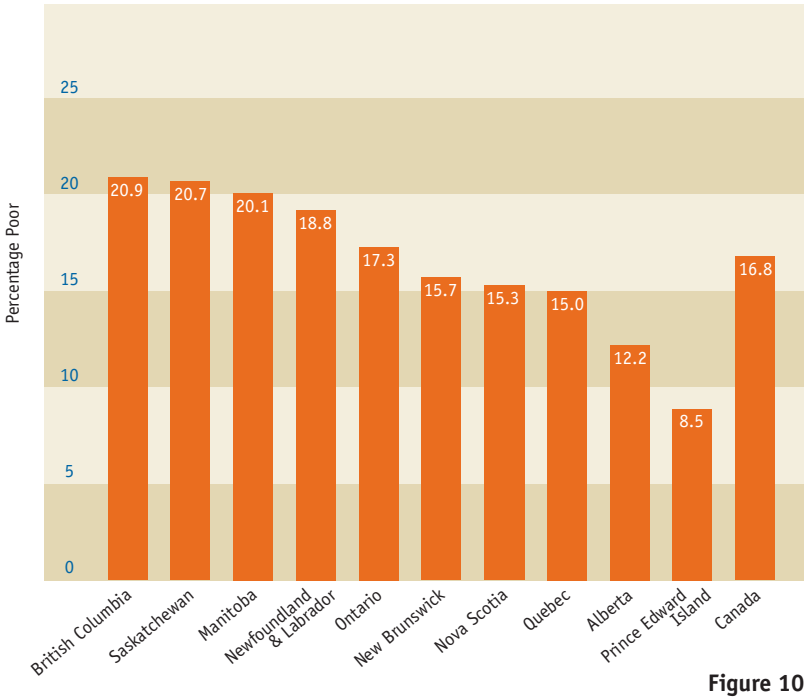

Figure 10

Child and Family Poverty: What Are Healthy Public Policies?

Researchers, communities and advocacy groups have identified a set of healthy public policy options that would begin to address child and family poverty. These include:

Create a Child Poverty Reduction Strategy for British Columbia

- Evidence indicates that there are benefits in the selection of child poverty rates as health targets. This allows the coordination of program resources and an opportunity to monitor and evaluate specific indicators. Quebec and Newfoundland have both created targets and strategies for child poverty reduction.
- A child poverty reduction strategy would provide accountability and an opportunity to reduce child poverty in our health region and province.

Ensure adequate income to support families

- Reduce the 'employable' age for receiving income assistance. Parents whose youngest child is age three years or over were recently re-categorized as employable. Previously these parents were "temporarily excused" from job seeking and participating in mandatory training until their youngest child was seven years of age. In the absence of adequately subsidized childcare, reducing income assistance for parents of preschool children will increase child poverty.
- Raise the minimum wage and index to the cost of living.

Ensure access to school programs by removing financial barriers

- Eliminate school program fees to families with low incomes.

Develop a provincial childcare plan that commits BC to building a quality, accessible and publicly funded childcare system

- High quality and accessible childcare and early learning is critical to reducing the level of child poverty in the province. Public investment in quality child-care also provides benefits in areas such as early child development, women's equality, work-life balance, community-building and children's rights.

Population Health Priority: Early Childhood Development

There is overwhelming evidence that the early years of a child's life, from conception through school entry, are a crucial determinant of adult health and well-being outcomes.[26] Early experiences and exposures affect brain structure and function and so have enduring implications.

The first six years of life are characterized by rapid brain development that is modified by interactions with people and the physical environment. These early experiences shape brain structures that influence the ability to resist and recover from illness, the ability to learn social skills and self-discipline, and the acquisition of a variety of cognitive and non-cognitive skills that are known to determine success in life. There is a need to safeguard the health of our children through strategic investment in child development.

Understanding Early Child Development: Measuring School Readiness

There are numerous factors contributing to the early development of children. VCH works in partnership with the Human Early Learning Partnership (HELP) to assess *school readiness* on key developmental indicators. School readiness is a term that generally denotes a set of cognitive, behavioural and social skills deemed necessary to lay the foundations of scholastic achievement and adult success in all aspects of life.[27] School readiness is measured in kindergarten students across BC through the Early Development Instrument (EDI). The EDI measures five indicators of child development:

1. **Physical health and well-being:** Child is healthy, independent, ready each day, etc.
2. **Social competence:** Child plays, gets along with others and shares, is self-confident, etc.

3. **Emotional maturity:** Child is able to concentrate, help others, is patient, not aggressive or angry, etc.
4. **Language and cognitive development:** Child is interested in reading and writing, can count and recognize numbers, shapes, etc.
5. **Communication skills and general knowledge:** Child can tell a story, communicate with adults and children, articulate themselves, etc.

Understanding Who is at Risk

For each EDI scale there is a score that serves as a "vulnerability threshold." Children who fall in the bottom 10% of scores on an indicator are said to be vulnerable in that aspect of their development. The appropriate interpretation of vulnerability is that the child is, on average, more likely to be limited in his or her development on the identified EDI scale than a child who receives scores above the cut-off.

Vulnerability levels vary substantially by neighborhood and local health area. For example, in Vancouver's Westside, only 2.5% of children are considered vulnerable on the physical health and well–being indicator. Conversely, in Vancouver's Downtown Eastside, 18.5% of children are considered vulnerable on this scale. EDI maps provide an opportunity to assess differences and identify

Proportion of Children Vulnerable on at Least One Developmental Scale by Local Health Area

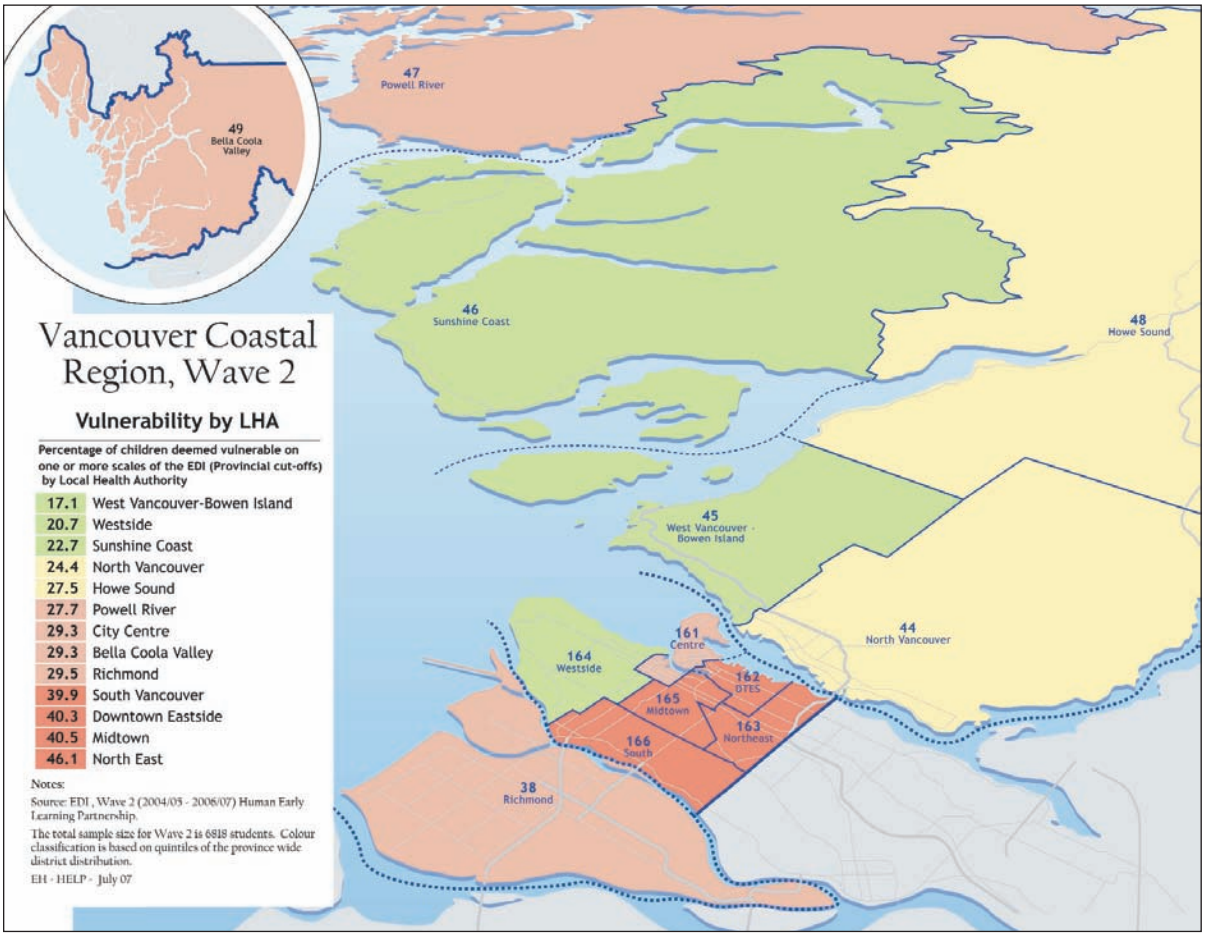

Figure 11

areas of greater need. As such, programs and policies from the community, government and health sectors can be targeted to those areas most in need.

Figure 11 shows the proportion of children for each LHA who were identified as vulnerable on at least one of the five developmental scales. West Vancouver-Bowen Island has the lowest proportion of children with vulnerability on one or more scales at 17.1%. Conversely, the Downtown Eastside, Midtown and North East areas of Vancouver all have at least 40% of children who are vulnerable on one or more scales.

How does access to good early learning environments improve outcomes for children?

Childcare and education outside the family are two of several factors that influence a child's development in the early stages of life. Adequate income, good nutrition, a safe environment, family supports, decent housing and early childhood services all have long lasting impacts on children. However, research suggests that the services and care options for children (i.e. early childhood education and care (ECEC)) can play a particularly central role in healthy child development by providing intellectual and social stimulation, promoting cognitive development and social competence, and thus establishing a basis for success in later stages of life. Estimates of the return on investment in a public, universal child-care system are 2:1.[28]

Accessible childcare is also key to helping parents work, pursue an education, escape from poverty or maintain an adequate income. As the participation rate of mothers in the labour force has increased over time, the importance of having an adequate supply of high quality ECEC has gained wide acknowledgement. Despite this realization, the majority of young Canadian children with working mothers are cared for in private, unregulated arrangements of unknown quality.[29]

Early Child Development: What are healthy public policies?

Researchers and communities have identified a set of healthy public policies that would begin to address child and family poverty. These include:

Enhance universal access to services for the Early Years in all neighbourhoods

Most of the vulnerable children (80%) in VCH do not live in at-risk or poor neighbourhoods, thus targeted approaches to promoting healthy child development will miss many vulnerable children. The EDI outcomes demonstrate that there is room for improvement in the environments in which most children grow up, right across the socioeconomic spectrum. The needs and opportunities go beyond those communities traditionally considered high risk. A community-based "neighbourhood hub" approach with universal access to services that promote healthy child development will have the greatest impact on healthy child development for the largest number of children in VCH.

Ensure all policy decisions are evaluated by their effect on children

The question of "how does this policy affect our children?" needs to be asked at all levels of decision-making. A child health approach should include identifying ways to decrease the number of vulnerable children, acknowledging that vulnerable children live within and outside of our most at-risk neighbourhoods, and recognizing the diversity of our population including Aboriginal and multi-cultural groups.

Population Health Priority: Food Security

Introduction

Canada ranks as one of the richest countries in the UN Human Development Index and yet even here, food security is a concern. Community food security exists when "… all community residents obtain a safe, personally acceptable, nutritious diet through a sustainable food system that maximizes healthy choices, community self-reliance and equal access for everyone."[30] Community food security is both a goal and a method that embraces the full range of food chain activities: natural resources and agriculture, processing and distribution, nutrition and health, public policy—and promotes a systems approach to food problems.[31]

Improvements to food security require improvements in our food system. The larger economic, physical and social environment determines our food choices. Creating a supportive environment where people can easily make the 'healthy' choice is the long-term goal of community food security but the complexity of community food security poses a challenge. Many of the factors that impact food security lie outside the mandate of the health sector (social, economic and agricultural policies for example). This points to the importance of including food security within a population health context and the health sector leading, partnering and advocating in the food security arena.

Food Insecurity

A significant component of food security is food insecurity – when people are unable to have an adequate socially acceptable diet of sufficient quality, or the uncertainty that one will be able to do so.[32] Though there are many factors which impact vulnerability to food insecurity, the unifying factor across risk groups is income. Poverty is one of the root causes of food insecurity.

The importance of having a healthy, sustainable accessible food supply cannot be overstated. The social, health and economic costs of food insecurity are substantial and it is important to not only address the health impacts of an unhealthy diet but also to address the root causes that influence people's choices and behaviours. Consider that:

- More than 76 500 British Columbians, almost 27.3% of whom were children, used food banks in 2007[34]
- Individuals living in food insecure households experience a range of health issues including chronic illnesses (diabetes, heart disease, high blood pressure) obesity and major depression.

Who is at Risk for Food Insecurity?

There are many groups whom are more vulnerable to being food insecure and the underlying unifying feature that they share is poverty. Female single parent families, Aboriginals, children, seniors, people living with disabilities and people on welfare are all more likely to be food insecure. Individuals and families living on low incomes in BC cannot afford both shelter and nutritious food.[34] A family on income assistance would need to spend 44% of their money to buy nutritious food compared to only 15% for a family that earns an average income. The cheapest foods in the grocery store are also most often the least healthy: high in fat and high in sugar.[35] Thus the modern paradox exists between increasing poverty and increasing obesity.

Geography also plays an important role in people's ability to access healthy food. In cities, it is often the case that the poorest neighbourhoods have the least access to supermarkets. One study found that the further the distance people lived to a supermarket, the lower their vegetable and fruit intake.[36] In the remote communities of Powell River, Bella Bella and Bella Coola whatever food is not produced locally must be imported into the community. This makes food costs significantly higher compared to other parts of the province. Dairy products and fresh produce are simply not affordable for people who live on fixed incomes in these communities. The monthly provincial average for feeding a family of four is $655 and in Bella Coola it is $785.

Food Production

An inherent part of food security is the ability of a community to grow the food that it needs. In BC, farmers produce 48% of food that is consumed in our province. Only 5% of BC's land is suitable for farming. And only 1% of that land has soil of high quality with the best capability of growing crops. Whereas the number of farms in Richmond has been declining significantly (from 247 farms in 1996 to 182 in 2001), agricultural activity in Bella Coola Valley has been increasing. Between 1991 and 2001 farm usage increased from 1829 acres to 3671 acres. Fresh produce, however, was limited to seven acres.

The importance of retaining agricultural lands in the Agricultural Land Reserve (ALR) is clear in light of the scarcity of fertile land in the province. Richmond, Vancouver and Powell River food security assessments all refer to the pressure of new development on available agricultural land.

Approaches to Healthy Food Production: Urban agriculture

In urban areas such as Vancouver Richmond and the North Shore, where land costs are high, there are unique challenges as well as opportunities for urban agriculture. There are several examples of successful community and rooftop gardens in VCH where people grow their own food. Strathcona neighbourhood in Vancouver has one of the oldest community gardens in the city. However, the size and capacity of community gardens is not universally measured nor do we know how much food they produce. There can also be long wait lists for plots.

Approaches to Healthy Food Production: Food Distribution

The global nature of food production today means that it is often easier in your local supermarket to buy produce from China or the United States than from a local farm. This is also the case in VCH. Local farmers have trouble selling their produce to local stores in communities across VCH including Powell River, the Sea to Sky Corridor, Sunshine Coast and Richmond. The reasons for this are multiple but include food distribution systems, which favour large commercial farms and food distributors. In fact, in terms of generating greenhouse gas emissions, the mode of transportation and the method in which a product is grown are also critical. The BC Ministry of Agriculture and Lands has released an argicultural plan that includes a "food miles" initiative to inform consumers how far products have been transported and to reduce greenhouse gas emissions.

There are thus many reasons to strive for viable, sustainable, local agriculture including: **nutrition** (food that has traveled less is of better quality), **economic** (by buying local

you are sustaining the livelihoods of local farmers and promoting local self sufficiency), and **environmental** (fewer greenhouse gases are produced if the food has to travel less far). Local food may also have lower levels of pesticides and chemicals than food that is imported.

Food Security: What are healthy public policies?

Researchers, communities and advocacy groups have identified a set of healthy public policy options around food security. Action taken in food security generally falls along a continuum from meeting emergency food needs to capacity building to systems change. While action is required in all three stages, as a population health approach we aim to ensure that a systems change approach is included to support any actions required to meet immediate needs or to build community capacity.

Increase access to affordable fruits, vegetables and healthy food

There is a need to ensure that people have access to healthy foods in their neighbourhoods, workplaces and schools, and are linked to local farmers/producers. For example, adopting price reductions on healthy foods in government institutions where food is served, such as in schools, universities, hospitals and government offices. Another option is paying farmers for surplus produce and distributing it to social service agencies and food banks. Regulatory policies such as those to eliminate trans fats and lowering sodium levels in foods have been adopted by other regions/cities across North America.

Protecting agricultural lands

Working to ensure our region and province have adequate agricultural capacity to supply the food needed for our population. The Agricultural Land Reserve (ALR) is a strategy to protect our most viable farmlands against the pressure of urban development. Another option is to promote the sustainability of local farms by providing farmers with a reliable market to distribute their produce year round.

Supporting urban food production through community and rooftop gardens

Develop land use policies and joint use agreements that support the creation of community gardens, particularly in areas lacking in supermarkets. Facilitate policies that promote access to public land for food cultivation for community members.

Regulatory framework that supports small scale farming, organic and/or family farms

Supporting small scale farmers' access to markets to ensure an adequate farm income. Policy options include programs to support farmers' markets and promoting farm to school/hospital/government programs. Policies and programs that help small farm owners create viable marketing and business plans are also needed.

5

Moving Forward: VCH Population Health Strategies

There is a clear role for the health sector in addressing the social determinants of health. The health impacts of population issues such as homelessness, access to education and early child development are well documented in existing research. Addressing Population Health issues requires working with partners and approaching existing policies from a health framework. Vancouver Coastal Health is responding to these issues through a number of activities. These include:

VCH Strategies

Child Poverty and Early Child Development

1. **Awareness and Advocacy:** VCH is working with the BC Health Officer's Council and community partners to raise awareness of the health impacts of child and family poverty and advocate for healthy public policies.
2. **Surveillance and Programming:** VCH is working with the Human Early Learning Partnership (HELP) at UBC to monitor school readiness levels across our region. Programming targeted at our most vulnerable populations is being developed.
3. **Partnership Development:** A variety of processes are in place for decision makers from public agencies (including VCH, Ministry of Children and Family Development, school districts and municipalities) to work in partnerships in the interest of children's development. A result of the Vancouver process, for example, is the signing of the Vancouver ECD Agreement between VCH, MCFD, and Vancouver School Board and the City of Vancouver. As well, VCH staff are very active participants in the BC Children's First initiatives found in communities across BC.

For more information and to view early child development information and reports, visit: *www.vch.ca/population/child.htm*

Food Security

1. **Support Communities to Address Food Security:** The majority of food security work is done within local communities. Communities across VCH have completed food security assessments and action plans. VCH is currently supporting the implementation of these reports through resources, leadership, and advocacy.
2. **Align VCH Policies and Procedures:** VCH is working to ensure that our internal policies and procedures are consistent with VCH messaging around supporting a healthy food system.
3. **Build the Case for Food Security:** Through education, research and partnerships, VCH is maximizing opportunities to increase awareness of the importance and impact of food security as a public health issue.

For more information and to view community food security reports from around the region, visit: *www.vch.ca/population/food.htm*

Additional Priorities

Emerging areas of focus for the team will include efforts to build healthy communities. Key issues will include housing and homelessness, the role of health in the built environment, arts and health and building partnerships with municipal governments. VCH invites you to learn more about the work being undertaken across our region on our website: *www.vch.ca/population.*

6

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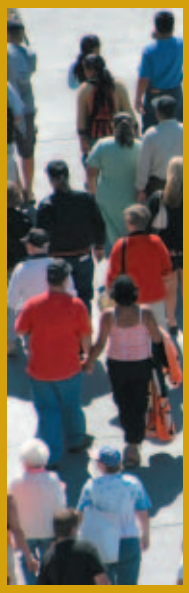

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