

When we think of “health” we often think of health conditions like diabetes or cancer, visits to the doctor’s office, or wait times for medical services. But evidence shows that, long before illness, health starts in our homes, schools and jobs. Our health is affected by access to clean water and healthy food, affordable recreational activities, and education and employment opportunities.

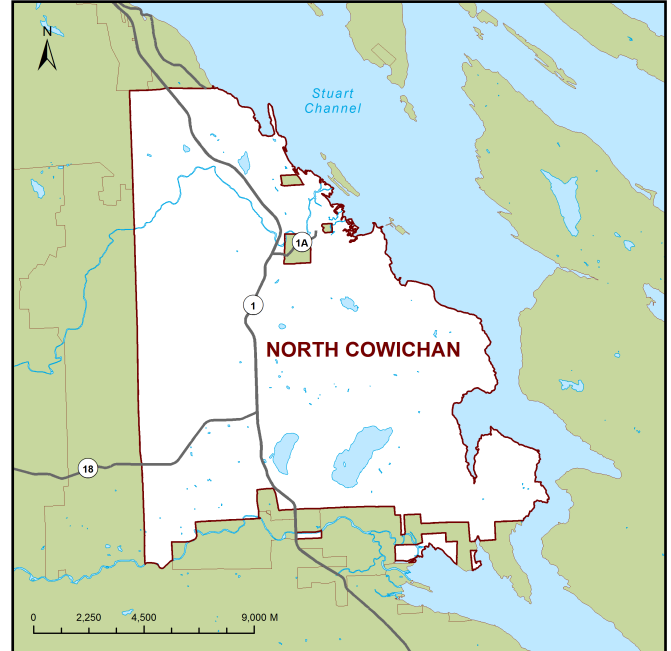
Health starts here – where we live, work, learn, and play.

The provincial government and health authorities are primarily responsible for health by providing health services and promoting healthy living. Local and First Nations governments and community organizations can also play a role in creating the conditions for citizens to make healthier choices and working with partners to promote community well-being. Together we can build healthy and vibrant communities that empower citizens to achieve their best physical and mental health.

The purpose of the *BC Community Health Profiles* is to provide data that facilitates dialogue about community health.

What's inside:

- Demographics and health statistics
- Factors that influence community health and well-being
- Provincial comparisons



The first section of the profile reflects data for your community, as shown in the map above, unless otherwise stated.

Health authorities can support local governments by providing advice and expertise on health and interpreting community health data. If you would like to know more about how to apply the data in this profile, contact Island Health:

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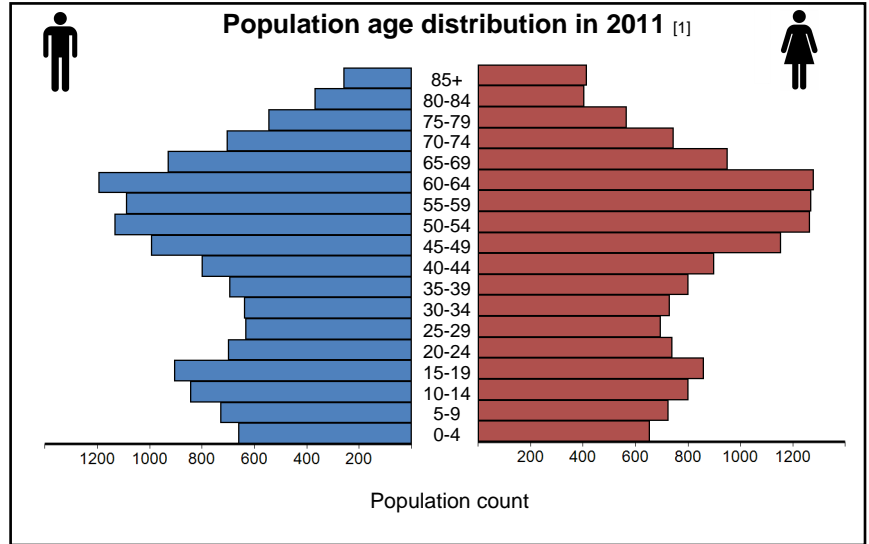
To learn more about how Island Health can work with your community visit:

<http://planh.ca/training-support/health-authority-support/island-health-authority>

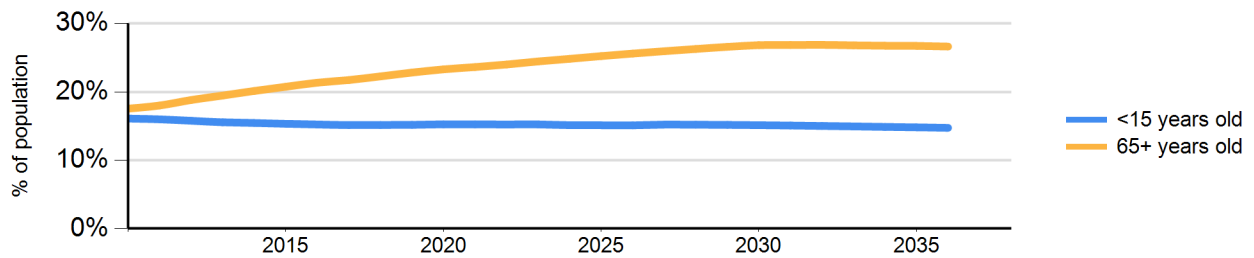
Who lives here?

The **age distribution** of your community impacts the supports and services needed in your community. For example, older adults and young families benefit from age-friendly public spaces, like well-maintained sidewalks and rest areas.

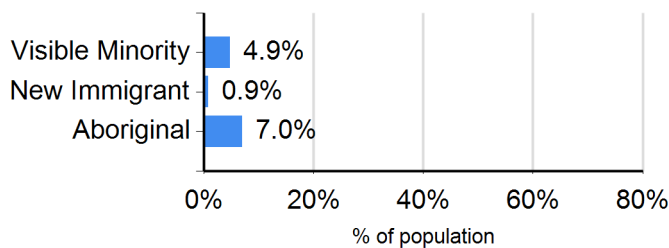
Knowing how your population is expected to change in the upcoming years can help you plan ahead to meet the changing needs of your community.



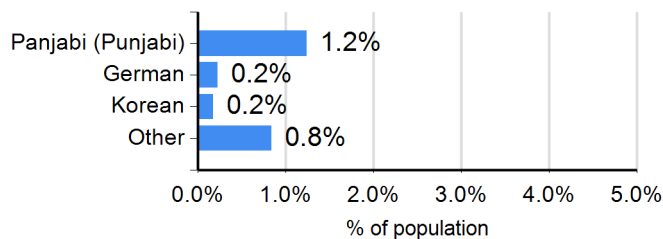
Current and projected youth and seniors populations (2010 to 2036) for your Local Health Area [2]



Population demographics in 2011 [3]



Non-official languages spoken at home in 2011 [1]



A **diverse community** is a vibrant community. Different population groups often have different opportunities and challenges in maintaining or improving their health. For example, Aboriginal people and new immigrants often face barriers to good health and access to health services.

Understanding the unique needs of various cultural groups and people who speak other languages is important for improving the overall health in your community.

What determines our health?

The following section describes some of the factors that influence the health and well-being of our communities. It is important to note that, although these factors impact health in their own right, they are interrelated and work together to contribute towards the health of our communities.

Income greatly impacts health by affecting our living conditions (e.g., adequate housing and transportation options), access to healthy choices (e.g., healthy food options and recreational activities), and stress levels.

Those with the lowest levels of income experience the poorest health and with each step up in income, health improves. This means all segments of the population experience the effect of income on health, not just those living in poverty.

Considering a range of incomes when designing community programs and services can improve access for all.



Average family income after-tax in 2010 [3]

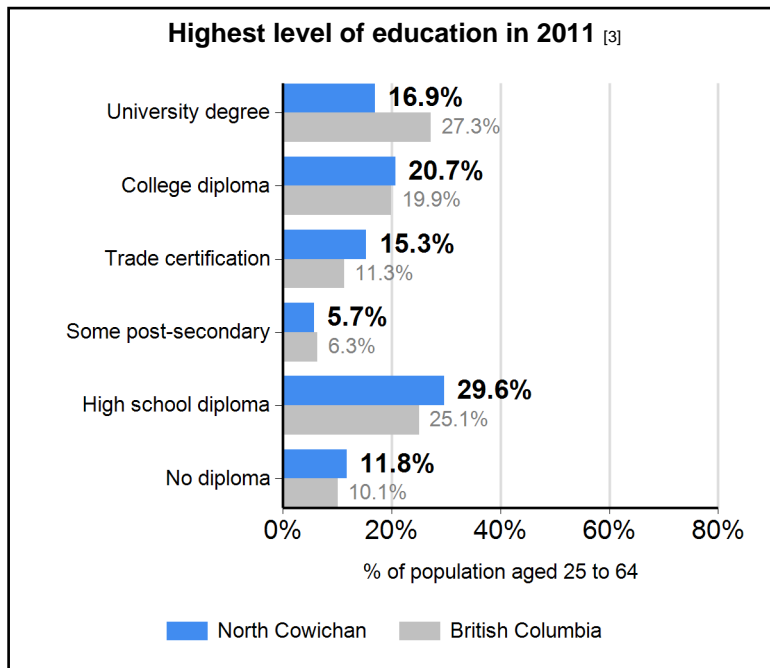
North Cowichan: \$70,669

BC average: \$78,580

Individuals that are low-income after-tax in 2010 [3]

North Cowichan: 16.1%

BC average: 16.4%



People with higher levels of **education** tend to be healthier than those with less formal education. Education impacts our job opportunities, working conditions, and income level. In addition, education equips us to better understand our health options and make informed choices about our health.

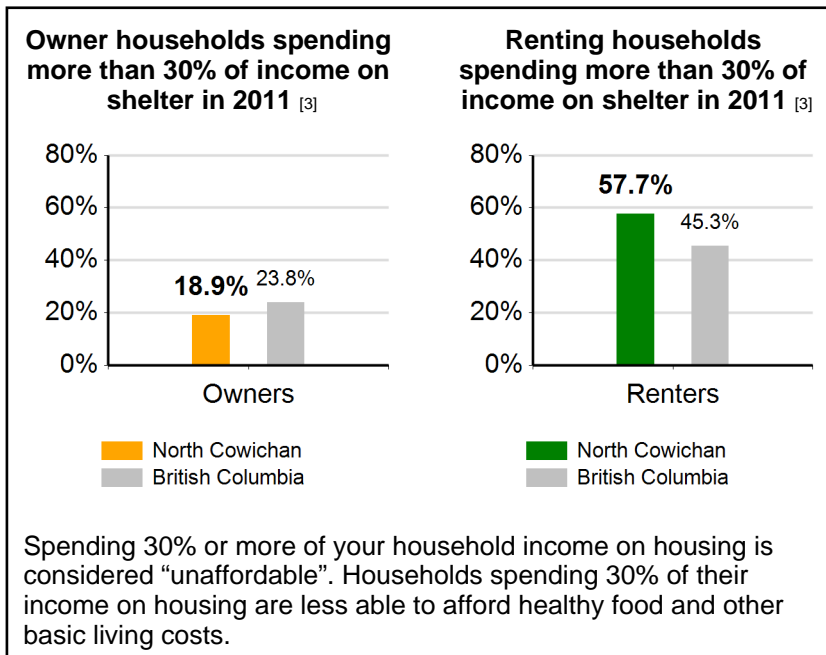
Offering or partnering with other organizations to deliver informal education, such as skill-building workshops (e.g., literacy training), can contribute towards improved individual and community health.

What determines our health?

Employment provides income and a sense of security for individuals. Underemployment or unemployment can lead to poorer physical and mental well-being due to reduced income, lack of employment benefits and elevated stress levels. Employment conditions such as workplace safety and hours of work can also impact our health.

Unemployment rate in 2011 [3]
North Cowichan: 6.6%
 BC average: 7.8%

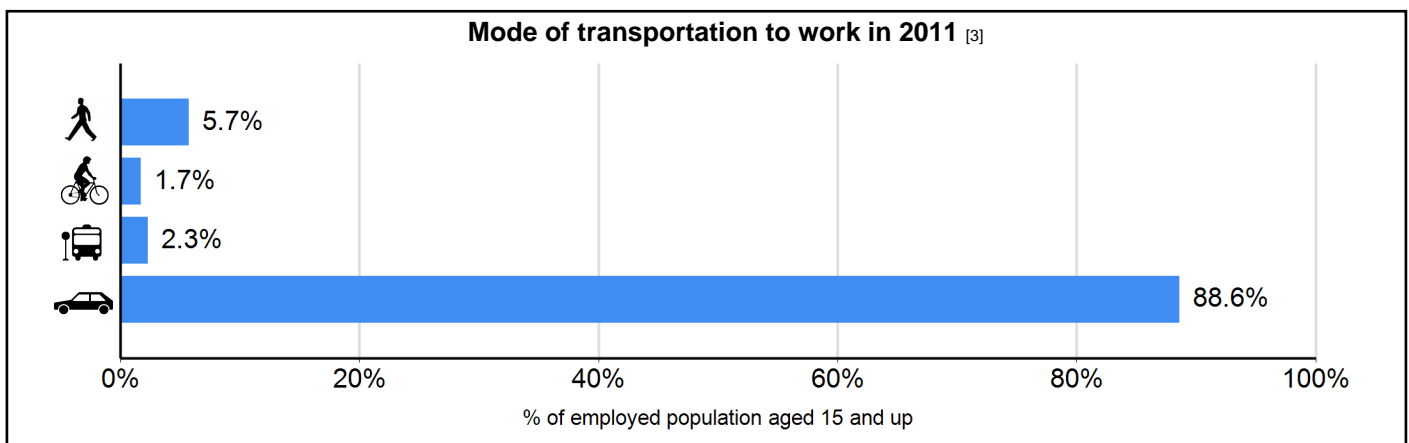
Offering fair compensation and safe working conditions and asking your contractors to do so as well can improve health in your community.



Physical environments can promote healthy behaviours by increasing access to healthy food outlets, affordable housing, walking or biking paths, and smoke-free environments.

How we plan and build our communities can make healthy options, like active transportation, more available, affordable, and accessible for everyone.

By keeping health and physical accessibility in mind when drafting policy and designing physical spaces, communities can help create healthier environments for citizens.



What determines our health?

The remainder of this profile reflects regional-level data (local health area [LHA]), unless stated otherwise. This is the most detailed information available for these topics.



Available health practitioners in 2009-2010^[5]

Physicians per capita: 117 per 100,000
BC average: 110 per 100,000

Specialists per capita: 84 per 100,000
BC average: 94 per 100,000

**Supplementary practitioners
per capita: 140 per 100,000**
BC average: 133 per 100,000

Access to **health services** is essential for maintaining and improving your health. Health authorities and the Ministry of Health are responsible for providing quality services that meet the health needs of communities by preventing, diagnosing, and treating illnesses.

Local and First Nations governments, community organizations, and health authorities can work in partnership to help ensure that their communities' health needs are addressed.

Health practitioners are one part of a larger health system that includes many people, facilities, and services that aim to improve health in your community through health care services and health promotion.

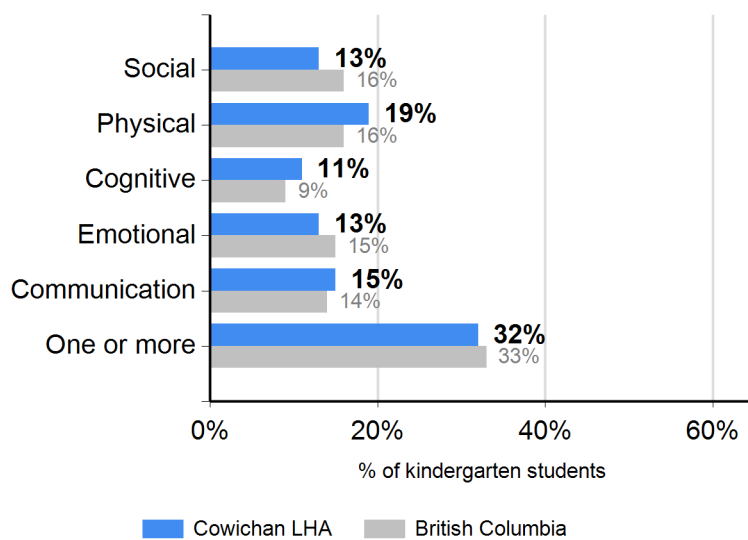
What determines our health?

Social support from family, friends and communities is associated with better health. Having someone to turn to during times of financial or emotional hardship can help to alleviate stress, and caring relationships can protect against health problems. Beyond our immediate social support network, our health is also affected by our sense of community support and connectedness. Community connectedness reflects our commitment to shared resources and systems – for example, our community centres and programs, transportation system, and social safety net.

Through support and provision of social programming, local and First Nations governments, community organizations, and health authorities can increase social support and connectedness in their communities.

In 2011-2012, 68.3% of British Columbians (aged 12 and up) reported a somewhat strong or very strong sense of belonging to their local community. [4]

Vulnerability in early childhood (Early Development Instrument) in 2011-2013 [6]



The Early Development Instrument (EDI) is one method of healthy childhood development, which measures children in kindergarten in five core areas that are known to be good predictors of adult health, education, and social outcomes: social competence; physical health and well-being; language and cognitive development; emotional maturity; communication skills and general knowledge. The EDI highlights the percentage of children in kindergarten who may be considered vulnerable in one or more of these core areas.

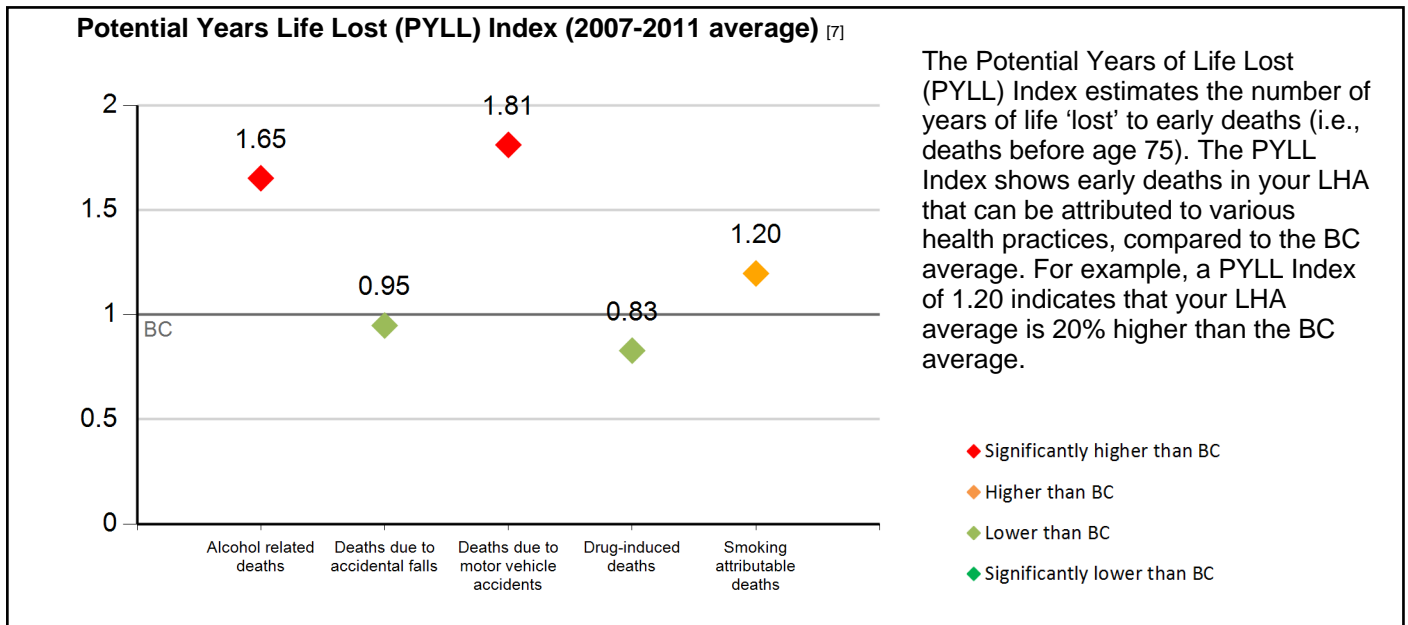
Early childhood development has a profound impact on emotional and physical health in later years. Early experiences help children to develop skills in emotional control, relationship building, self-esteem, and health practices that last throughout their lives.

Offering accessible and affordable programs and services for a diverse spectrum of children and families can help support healthy childhood development in your community.

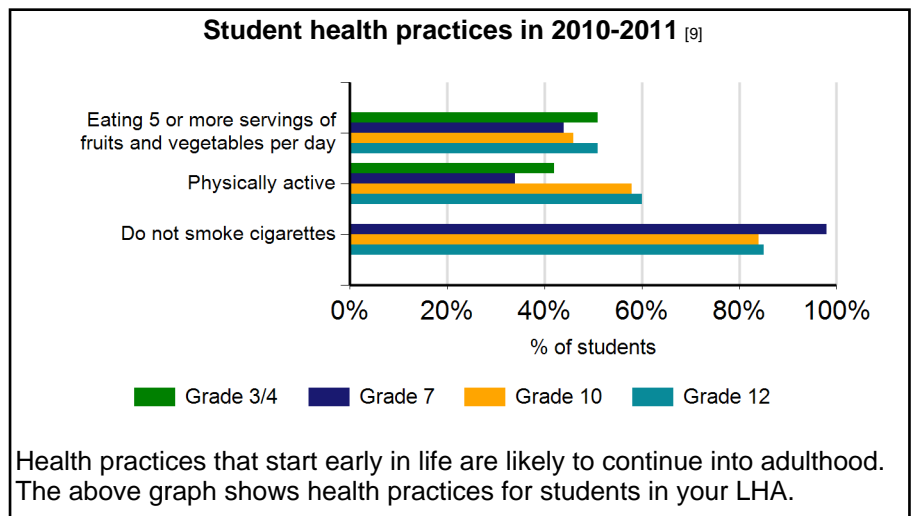
What determines our health?

Personal health practices such as what we eat, how much we drink, how physically active we are, and whether or not we smoke are factors that impact our health. For example, alcohol consumption has been linked to diseases like cancer and kidney disease, and smoking is still a leading cause of death in BC. Health practices are highly influenced by our knowledge of and ability to afford or adopt healthier options.

Supportive social and physical environments can improve everyone’s personal health practices. Communities offer programs and services that increase awareness, build skills, and positively influence personal health practices. Local governments have also had success in improving community health by implementing bylaw and zoning restrictions, such as for tobacco.



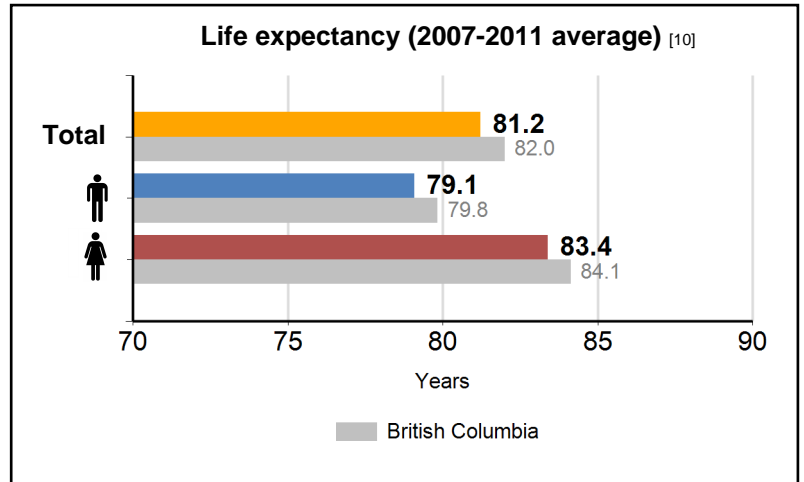
Consumption of standard alcoholic drinks per capita in your LHA in 2011: [8]
1.5/day
 BC average: 1.3/day



How healthy are we?

We have mentioned some of the factors that contribute to health and well-being in our communities, but how healthy are we? One of the biggest challenges to achieving healthy communities is preventing and managing chronic conditions that develop over time, such as respiratory illnesses, high blood pressure, and heart disease. Chronic conditions result from a complex combination of our genetics, health practices, and environments. Understanding community health concerns can help local governments and community organizations, in partnership with health authorities, set priorities for better community health.

Life expectancy at birth is the average number of years a newborn can be expected to live, and is a reliable indicator of overall health for populations. Life expectancy can approximate length of life, but does not account for quality of life, which is influenced by health and well-being.



In 2011-2012, 68.7% of British Columbians (aged 12 and up) reported very good or excellent mental health. [4]

Positive mental health and well-being is a resource for everyday living, just like our physical health. Having good mental health allows us to stay balanced, enjoy life, cope with stress, and bounce back from major setbacks.

Mental illness refers to diagnosable conditions such as depression, anxiety, and bipolar disorder. People with mental illness can thrive with access to appropriate services and support.

Number of people newly diagnosed with depression or anxiety in your LHA in one year (2012-2013): 605 [11]

The information available on mental health shows the number of people who have been diagnosed for the first time with depression or anxiety, which only captures one aspect of mental health in your community. Because these figures are based on diagnosis, they do not capture those individuals who have not sought medical help.

How healthy are we?

Respiratory illness

Asthma often occurs in those with a genetic predisposition to the illness and can be caused by allergens in the environment, tobacco smoke, chemical exposure in the workplace, or air pollution. Chronic obstructive pulmonary disease (COPD) is a long-term lung disease (including chronic bronchitis and emphysema) that is often caused by smoking.

Heart and circulatory illness

Cardiovascular disease is the leading cause of death among Canadian adults, and includes heart attacks, strokes, heart failure, and heart disease. High blood pressure, also called hypertension, contributes to increased risk of cardiovascular diseases as well as chronic kidney disease. High blood pressure can be caused by an unhealthy diet, harmful amounts of alcohol, physical inactivity, or stress.

Diabetes

Type 2 diabetes is the most common type of diabetes (90% of all cases) and usually occurs in adults although rates among children are rising. Some people are at higher risk of developing type 2 diabetes, including those who are overweight and those who are Aboriginal, Hispanic, Asian, South Asian or African.

Cancer

Cancer is one of the leading causes of death in Canada. Over half of all cancers may be prevented through personal health practices such as healthy eating, physical activity, non-smoking, and reduced sun exposure.

In one year (2012-2013), the number of people in your LHA newly diagnosed with: ^[11]

Asthma: 225

COPD: 404

High blood pressure: 619

Heart failure: 235

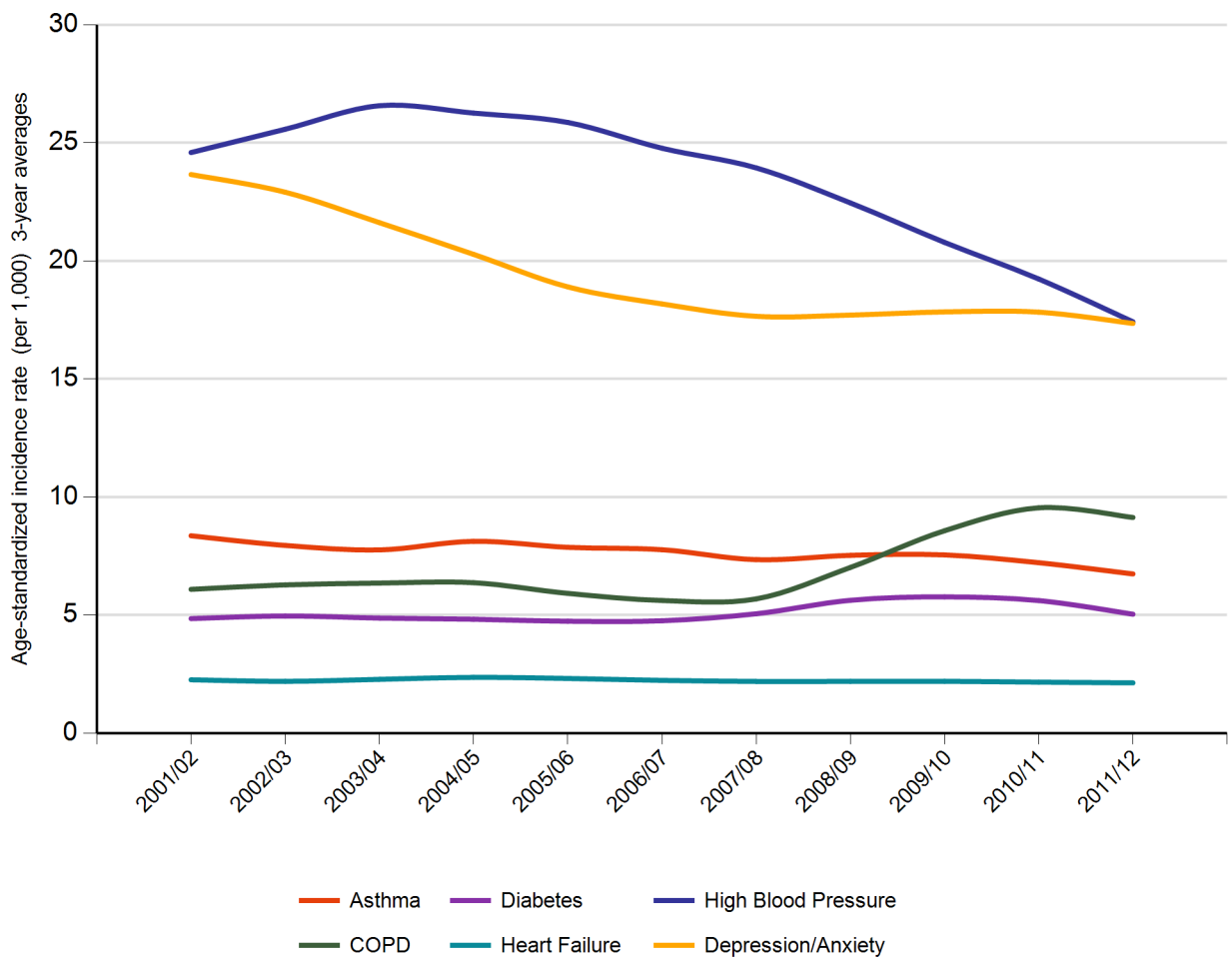
Diabetes (type 1 or 2): 365

Number of people newly diagnosed with cancer in BC in 2011: 23,829 ^[12]

How healthy are we?

The number of people newly diagnosed with a disease each year is called the *incidence*. Incidence is often presented as a rate - the number of people who get sick per 1,000 people in the community. The following graph displays how the incidence rates of various chronic conditions have changed over time in your health authority.

**Chronic disease incident rates for Island Health from 2001 to 2012
(3 year averages) [11]**



As a population ages, the incidence rate of chronic diseases is expected to rise. Age-standardized rates allow you to compare chronic disease rates over time, regardless of an aging population.

How do we compare to the province?

The summary below highlights how your community is doing compared to the provincial average. The graph displays the BC average as a black line and your community's data as a coloured bar on either side.

	Community Data		Difference from provincial average (%)	
	Community	BC		
Community Data	Income			
	Average Family Income (percent difference)	\$70669	\$78580	-10.1
	Percentage of low-income individuals (after-tax)	16.1%	16.4%	0.3
	Affordable housing			
	Owners spending >30% income on shelter	18.9%	23.8%	4.9
	Tenants spending >30% income on shelter	57.7%	45.3%	-12.4
	Education			
	High school diploma or higher education	88.2%	89.9%	-1.7
	Employment			
	Unemployment rate	6.6%	7.8%	1.2
	Active transportation			
	Population walk to work	5.7%	6.7%	-1.0
	Population bike to work	1.7%	2.1%	-0.4
LHA Data	Chronic disease (age-standardized prevalence rate) [9]	LHA	BC	
	COPD	7.0%	4.8%	-2.2
	Diabetes	4.7%	5.4%	0.7
	Heart failure	1.3%	1.4%	0.1
	High blood pressure	18.6%	18.0%	-0.6
	Students eating 5 or more servings of fruits and vegetables per day	LHA	BC	
	Grade 3/4	51%	52%	-1
	Grade 7	44%	49%	-5
	Grade 10	46%	44%	2
	Grade 12	51%	44%	7
	Students who are physically active	LHA	BC	
	Grade 3/4	42%	43%	-1
	Grade 7	34%	33%	1
	Grade 10	58%	45%	13
	Grade 12	60%	42%	18
	Students who do not smoke cigarettes	LHA	BC	
	Grade 7	98%	97%	1
	Grade 10	84%	86%	-2
	Grade 12	85%	82%	3
	Vulnerability in early childhood	LHA	BC	
	Social	13%	16%	3
	Physical	19%	16%	-3
	Cognitive	11%	9%	-2
	Emotional	13%	15%	2
	Communication	15%	14%	-1
	One or more	32%	33%	1

Difference from provincial average (%)

Difference from provincial average (%)

Glossary**Aboriginal:**

'Aboriginal' includes persons who reported being an Aboriginal person - that is, First Nations (North American Indian), Métis or Inuk (Inuit), and/or those who reported Registered or Treaty Indian status registered under the *Indian Act* of Canada, and/or those who reported membership in a First Nation or Indian band.

Age-standardization:

Age-standardized rates are rates that would have existed if the population had the same age distribution as the selected reference population. The BC Community Health Profiles use the 1991 Census of Canada estimates as the reference population, and chronic disease incidence and prevalence rates have been age-standardized using the direct standardization method with five-year age groups.

Alcohol-related deaths:

Alcohol-related deaths include deaths where alcohol was a contributing factor (indirectly related) as well as those due to alcohol (directly related).

Chinese, n.o.s.:

The Census of Canada reports eight different Chinese languages. If respondents do not specify which Chinese language they speak, the language is recorded as 'Chinese, n.o.s.' (not otherwise specified).

Chronic disease:

Chronic diseases, also known as non-communicable diseases, are diseases that are persistent and generally slow in progression, which can be treated but not cured. Chronic diseases often have common risk factors, such as tobacco use, unhealthy diet, and physical inactivity. Societal, economic, and physical conditions influence and shape these behaviours and affect chronic disease rates in communities.

Drug-induced deaths:

Deaths due to drug-induced causes. This category of deaths excludes unintentional injuries, homicides, and other causes that could be indirectly related to drug use. Deaths directly due to alcohol are also excluded.

Incidence:

The number of people newly diagnosed with a disease in a population during a specific time period is called the incidence. Incidence is often presented as a rate – the number of people who get sick per 1,000 people.

Low-income after-tax:

Low-income after-tax is a relative measure based on household after-tax income. There are no regional variations to account for prices or cost of living differences: all applicable households in Canada face the same line adjusted for household size. This line is set at half the median of adjusted household after-tax income. To account for potential economies of scale, the income of households with more than one member is divided by the square root of the size of the household. All household members are considered to share the household income and are attributed the same income status.

New Immigrant:

'Immigrant' refers to a person who is or has ever been a landed immigrant or permanent resident in Canada. In the BC Community Health Profiles 'new immigrants' are individuals who, at the time of the National Household Survey (2011), had immigrated to Canada within the past five years (2006 to 2011).

Not reportable:

Data is not reported when the release of the information could be used to identify respondents. This occurs most often in geographic areas with small populations. In addition, data is not released if the quality of the data is considered unsatisfactory. A low response rate is the most common concern that may affect the quality of the data.

Physically active:

The School Satisfaction Survey reports physical activity differently for younger students than older students to reflect the different requirements outlined in the Ministry of Education's Daily Physical Activity initiative. Students in grades 3/4 and 7 are physically active if they exercised or participated in physical activity in school for at least 30 minutes every day for the last five school days. Students in grade 10 and 12 are physically active if they exercised or participated in physical activity for more than 120 minutes in the past seven days.

Prevalence:

The total number of people with a disease in a population during a specific time period is called the prevalence. Prevalence differs from incidence in that it includes people who have been living with the disease for many years. (Incidence only includes people newly diagnosed with a disease in a given time period.) Prevalence is often presented as a rate – the number of people living with a disease per 1,000 people.

Smoking-attributable deaths:

Since death certifications lack complete and reliable data on smoking, estimation techniques are used to approximate the extent of smoking-attributable deaths. Smoking-attributable deaths are derived by multiplying a smoking-attributable mortality percentage by the number of deaths aged 35+ in specified cause of death categories. These categories are comprised of selected malignant neoplasms, circulatory system diseases, and respiratory system diseases.

Standard alcoholic drink:

A standard drink is a unit that is used to measure alcohol intake. In Canada, a standard drink is any drink that contains 13.6 grams of pure alcohol or the equivalent of 0.6 ounces of 100% alcohol. (E.g., one 12-ounce can of beer, containing 5% alcohol; one 5-ounce glass of wine, containing 12% alcohol; one and a half-ounce liquor or spirits, containing 40% alcohol.)

Supplementary practitioners:

Practitioners who provide services insured through the MSP Supplementary Benefits program or the Midwifery program and who are approved for licensure by their respective Colleges/Associations.

Visible minority:

Visible minority refers to whether a person belongs to a visible minority group as defined by the *Employment Equity Act*. The *Employment Equity Act* defines visible minorities as 'persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.'

References

- [1] Statistics Canada. (2013). *2011 Census of Population*.
- [2] BC Stats. (2013). *2013-2036 Sub-Provincial Population Projections – P.E.O.P.L.E.*
- [3] Statistics Canada. (2013). *2011 National Household Survey*.
- [4] Statistics Canada. (2013). *Canadian Community Health Survey: 2011-2012 cycle*.
- [5] Ministry of Health. (2011). *BC health - population, practitioners, services and expenditures by Local Health Area, from MSP: 2009-2010 fiscal year*.
- [6] Human Early Learning Partnership. (2013). *Early Development Instrument: 2011/12 - 2012/13*.
- [7] Vital Statistics. (2011). *Annual Report 2011*.
- [8] Centre for Addictions Research of BC. (2014). *BC Alcohol and Other Drug (AOD) Monitoring Project: Alcohol consumption*.
- [9] Provincial Health Services Authority. (2013). *BC Community Health Atlas*.
- [10] BC Stats. (2014). *Life expectancy: 2007-2011 average*.
- [11] Ministry of Health. (2014). *Chronic Disease Registry*.
- [12] BC Cancer Registry. (2013). *New cancer diagnoses for 2011*.

Acknowledgements

BC Community Health Profiles were developed by the Provincial Health Services Authority in support of Healthy Families BC in partnership with the Ministry of Health, regional health authorities, the Union of BC Municipalities, and PlanH. These profiles will help inform local government and community organizations on the health and well-being of their communities. Healthy Families BC is the Ministry's primary health prevention initiative and recognizes the importance of local interests in supporting the creation of environments that promote healthy living.



For additional BC Community Health Profiles, please visit www.phsa.ca/populationhealth