

# Healthy Northern Communities 2013

Upper Skeena  
(Hazeltons)

Revised  
September 24, 2013



**northern health**  
*the northern way of caring*

## What Determines Health?

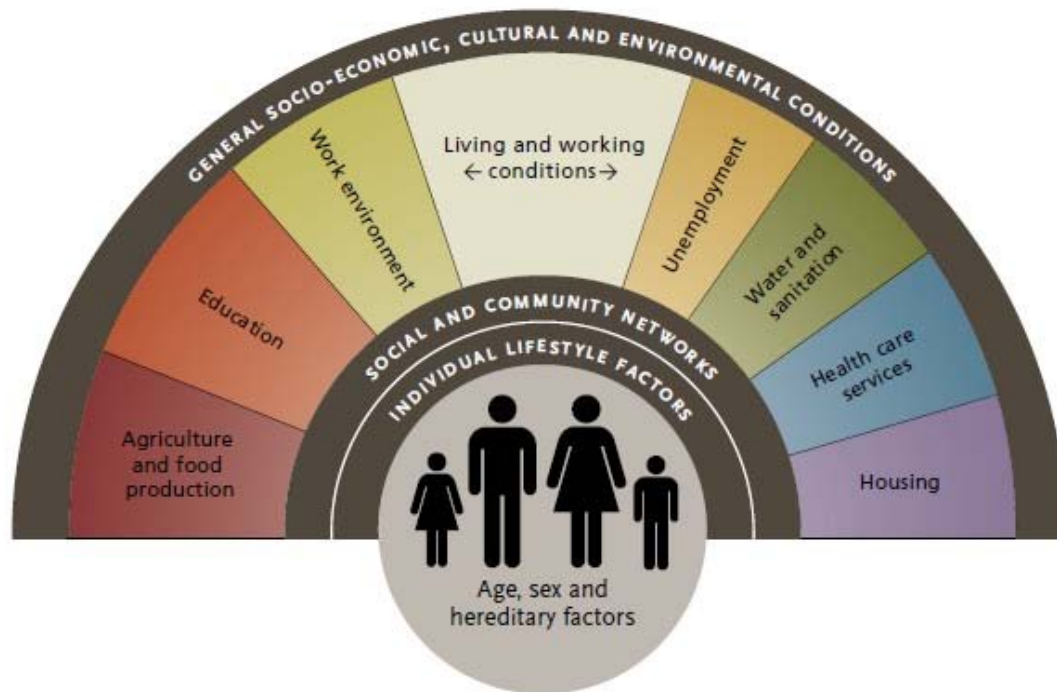


Figure: Health Council of Canada, 2010.

Broadly speaking: a good strong start in life; early and enriching experiences; educational opportunities; a sufficient and equitable distribution of employment, income, housing and food; water and sanitation; our interactions with the environment; our choices towards certain lifestyles and risks; our age and sex; genetics; as well as access to appropriate high quality health care are some of the many factors that are known to influence our health.

### **Additional Information** (text below is hyperlinked)

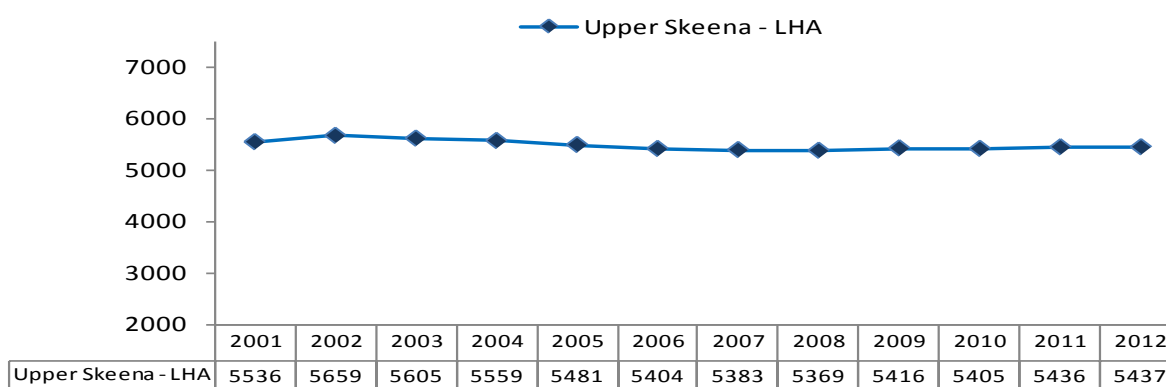
- [World Health Organization: Social Determinants of Health](#)
- [Public Health Agency of Canada: Best Practices Portal](#)
- [Canadian Institute for Health Information: Factors Affecting Health](#)
- [Canadian Institute for Health Information: Health System Performance](#)
- [Health Council of Canada: Stepping it Up to a Healthier Canada.](#)
- [National Collaborating Centre for Aboriginal Health: Social Determinants of Health](#)
- [Northern Health: Community Health Information Portal](#)

The Upper Skeena Local Health Area (LHA 053) is located in Northwest BC. It covers just over 4,800 square kilometers and is home to approximately 5,437 people.<sup>1,2</sup>

The Upper Skeena LHA is situated within the Kitimat-Stikine Regional District, and also within the Northwest Health Service Delivery Area of Northern Health. The Upper Skeena / Hazeltons area is served by Coast Mountains School District No. 82.

Located in the Upper Skeena LHA are the Village of Hazelton and the District Municipality of New Hazelton. Consequently, the Upper Skeena LHA is often referred to somewhat incorrectly, as the Hazeltons. There are several First Nations in this area. Gitxsan communities include Sik-e-Dakh / Glen Vowel, Anspayawx / Kispiox, Git'segukla and Git'anmaax. The communities of Tse-kya / Hagwilget and Moricetown / Ky'ah Wiget are Wet'suwet'en.<sup>3,4</sup>

Local Area Populations 2001 to 2012



During the 2011 calendar year, there were 68 births, 31 deaths and 18 marriages attributed to Upper Skeena LHA residents. The average life expectancy for these Upper Skeena residents was 81.6 years: less than the British Columbia (BC) average of 82 years.<sup>5</sup>

### Additional Community Information

Village of Hazelton <http://www.village.hazelton.bc.ca/>

District of New Hazelton <http://www.newhazelton.ca/>

Sik-e-Dakh <http://www.sik-e-dakh.com/>

Gitxsan Chiefs Office <http://www.gitxsan.com/>

Moricetown <http://www.moricetown.ca/index.html>

Hagwilget Village Council <http://www.hagwilget.com/>

Kitimat Stikine Regional District: <http://www.rdks.bc.ca/>

First Nations Community Profiles: Aboriginal Affairs & Northern Development Canada  
<http://pse5-esd5.ainc-inac.gc.ca/fnp/Main/Search/SearchFN.aspx?lang=eng>

Northern Health: Community Health Information Portal <http://chip.northernhealth.ca>

## Selected Community Indicators

Demographics	LHA	BC
Percent of population 0 – 19 yrs old (Census 2011 / PEOPLE 2013)	30	21
Percent of population ages 65+ (Census 2011 / PEOPLE 2013)	11	15
Percent of population Visible Minorities	1.0	24.5
Percent of population Aboriginal Identity	69.2	4.8
<b>Income</b>		
Percent of families earning < \$20,000 per year	27.8	8.0
Percent of families earning from \$20,000 - \$80,000 per year	59.2	53.8
Percent of families earning > \$80,000 per year	13.0	38.1
* Percent of population receiving Income Assistance > 1 yr.	3.4	1.0
<b>Early Development and Educational Achievement</b>		
Percent of kindergarten children vulnerable:1 or more EDI scales	41.7	28.6
† Percent of Grade 4 & 7 students below standard on FSA - Reading	50.2	20.7
† Percent of Grade 4 & 7 students below standard on FSA - Writing	36.2	17.9
† Percent of Grade 4 & 7 students below standard on FSA - Math	54.1	23.4
† Percent of 18 yr olds who did not graduate	70.3	29.0
Percent of persons ages 25 to 54: without high school completion	34.9	11.1
Percent of persons ages 25 to 64: with university degree or above	7.8	24.1
<b>Housing</b>		
Percent of households that are renting	28.1	30.4
Percent of tenants paying 30 % or more of income towards housing	40.4	43.4
Percent of owners paying 30 % or more of income towards housing	22.6	22.7
<b>Children and Youth at Risk</b>		
* Children (ages <15) receiving Income Assistance > 1 year	7.5	1.7
* Youth (ages 15 - 24) receiving Income Assistance > 1 yr	3.2	0.9
Children in care rate per 1,000 population, ages 0 – 18	19.0	9.2
Teen pregnancies per 1,000 women ages 15 – 19 (2007-2009)	70.5	26.3
<b>Other Indicators</b>		
Alcohol sales per capita in 2010 (Dollars Spent)	660	790
Alcohol sales per capita in 2010 (Litres Consumed)	126	107
nca = means this level of data detail or data aggregation is "not currently available."		
* Income Assistance figures may be understated as they do not include Aboriginal people who are living on reserve.		

### Sources of the above information:

BC Stats Socio-economic Profiles

<http://www.bcstats.gov.bc.ca/StatisticsBySubject/SocialStatistics/SocioEconomicProfilesIndices.aspx>

Census 2011: Statistics Canada

<http://www12.statcan.ca/census-recensement/2011/dp-pd/prof/index.cfm?Lang=E>

BC Ministry of Education K -12 Reporting

<http://www.bced.gov.bc.ca/reporting/province.php>

Human Early Learning Partnership: Early Development Instrument

<http://earlylearning.ubc.ca/edi/>

## Population Forecasts (with a focus on seniors)

Although the percentage of seniors in northern BC is the smallest of all the health regions, this group is expected to grow quickly over the next 15 years. From 2015 to 2030, the 65+, 75+ and 85+ populations in northern BC are expected to grow by 78 %, 111 % and 106 % respectively: the highest overall seniors' growth rates in BC's health authorities. <sup>6</sup>

Below is a forecast of what we might expect at the local health service delivery levels.

<b>Upper Skeena Local Health Area: Population Projection</b>						Population Change 2015 - 2030	
Broad Age Groups	2010	2015	2020	2025	2030	number	%
<20	1,624	1,539	1,451	1,345	1,255	-284	-18.5
20-44	1,600	1,617	1,653	1,751	1,813	196	12.1
45-64	1,567	1,561	1,499	1,371	1,232	-329	-21.1
65+	611	766	932	1,076	1,255	489	63.8
Total Population	5,402	5,483	5,535	5,543	5,555	72	1.3
Focus on Seniors	2010	2015	2020	2025	2030	number	%
65+	611	766	932	1076	1255	489	63.8
75+	242	285	370	453	540	255	89.5
85+	51	80	103	116	140	60	75.0
90+	24	28	50	53	58	30	107.1

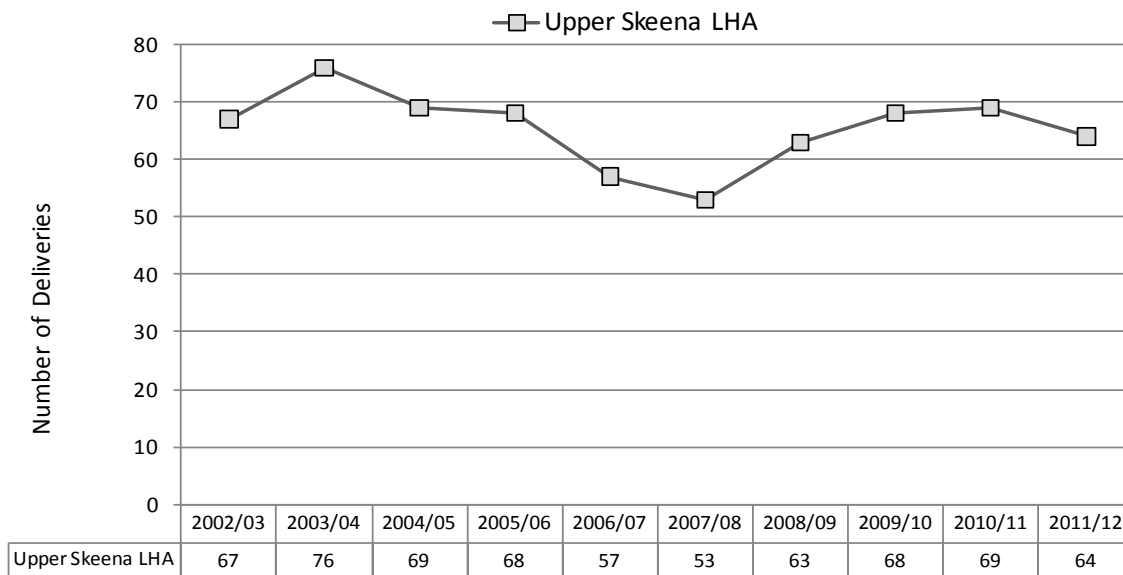
<b>Northwest Health Service Delivery Area: Population Projection</b>						Population Change 2015 - 2030	
Broad Age Groups	2010	2015	2020	2025	2030	number	%
<20	20,042	18,491	17,763	17,227	16,745	-1,746	-9.4
20-44	23,639	23,426	23,271	23,475	23,786	360	1.5
45-64	23,018	23,064	22,078	20,082	18,432	-4,632	-20.1
65+	8,798	11,205	14,285	17,477	19,898	8,693	77.6
Total Population	75,497	76,186	77,397	78,261	78,861	2,675	3.5
Focus on Seniors	2010	2015	2020	2025	2030	number	%
65+	8,798	11,205	14,285	17,477	19,898	8,693	77.6
75+	3,405	4,110	5,397	7,068	8,940	4,830	117.5
85+	837	1,207	1,548	1,821	2,384	1,177	97.5
90+	307	435	706	820	939	504	115.9

**About these Population Forecasts:** These projections incorporate the known trends in terms of births, deaths, migration, fertility, age-group (cohort) survival etc. The extra populations that "might" result from the many anticipated projects in the north are not yet explicitly considered. At best, these projections reflect a base-case of what our future population might look like if currently known trends continue into the future. For methodological reasons, these forecasts are not produced at the community level.

**A Good Strong Start in Life** is more likely if infants, children and all family members are as healthy as possible. In thinking about this we consider many factors including trends in the number of mothers delivering babies and the locations where the infants are delivered.

This type of information informs services such as prenatal education, parenting skills programs, post delivery follow-ups for moms, immunizations, and the many childhood screening services that are intended to detect and address vision, hearing and dental health concerns.

**Deliveries per year by Upper Skeena (Hazelton area) mothers:** <sup>7</sup>



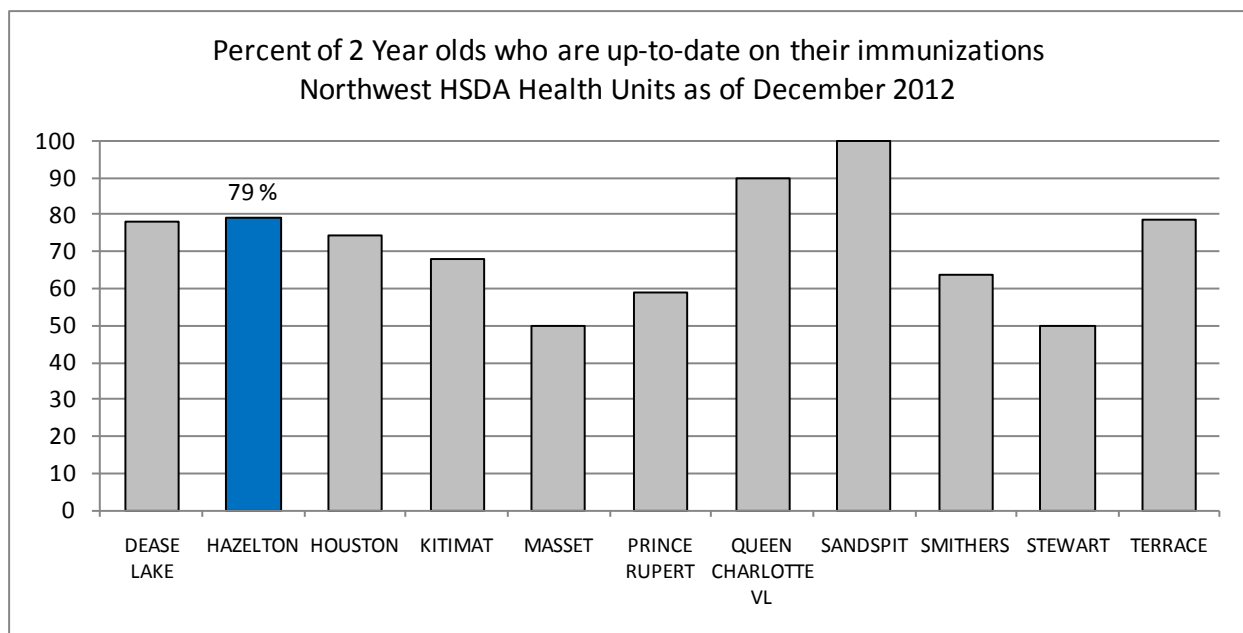
**Delivery locations for Upper Skeena mothers (five year summary).** <sup>8</sup>

Moms Home Community	Delivery Location: 2007/08 – 2011/12 <sup>^</sup>						Total Deliveries
	Wrinch Memorial	Bulkley Valley	Mills Memorial	UHNBC	Prince Rupert	Other BC Location	
Hazelton*	129	88	38	3	1	10	266
Kitimat-Stikine (B)	18	8	23	0	1	1	51
<b>Total Deliveries</b>	<b>147</b>	<b>96</b>	<b>61</b>	<b>3</b>	<b>2</b>	<b>11</b>	<b>317</b>

\* Hazelton data is an aggregate of New Hazelton DM, Hazelton Village and South Hazelton.

**Immunizations** are some of the best health investments that we can make. Along with better sanitation and clean drinking water, immunizations have been responsible for the huge increases in life expectancy that we have seen around the world. <sup>9, 10</sup>

Because immunizations are such a good investment and the protection they provide to individuals and communities as a whole is so important, we actively monitor whether certain target populations are fully immunized. For example, we know that the percent of 2 year old children in the Hazelton area, who are up-to-date with their immunizations, is 79 %. <sup>11</sup>



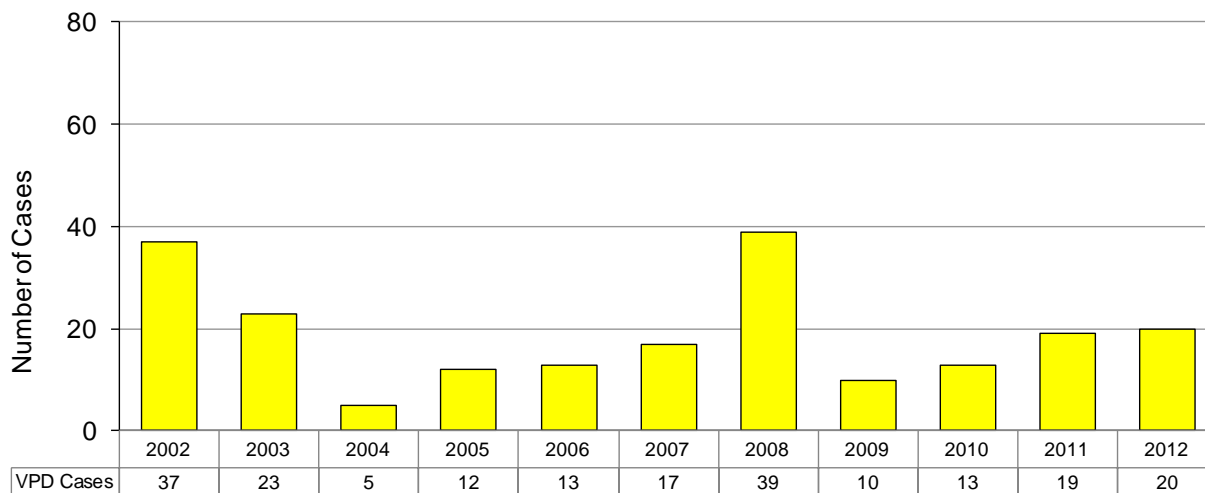
The above graph represents children who were born during the year 2010 and who were two years of age as of Dec 31<sup>st</sup>, 2012. To be considered as up-to-date for their age, two year old children must have completed the following immunizations by their second birthday:

- 4 doses of DTP vaccine
  - 3 doses of Polio vaccine
  - 3 doses of Hepatitis B vaccine
  - 1 dose each of Measles, Mumps and Rubella vaccines
  - at least 2 doses of Pneumococcal conjugate vaccine
  - at least 1 dose of Meningococcal conjugate vaccine
  - at least 1 dose of Haemophilus Influenza B vaccine after month 15
  - 1 dose of Varicella (chicken-pox) vaccine or past disease by the 2nd birthday.
- Note: DTP = Diphtheria, Tetanus and Pertussis (whooping cough).

**Vaccine Preventable Diseases (VPD)** are illnesses that may have been avoided if individuals and communities were sufficiently immunized. Many of these diseases have lifelong impacts.

This page presents a summary of the most frequently reported Vaccine Preventable Diseases for the Northwest Health Service Delivery Area.

Vaccine Preventable Disease Cases in Northwest BC: 2002 - 2012



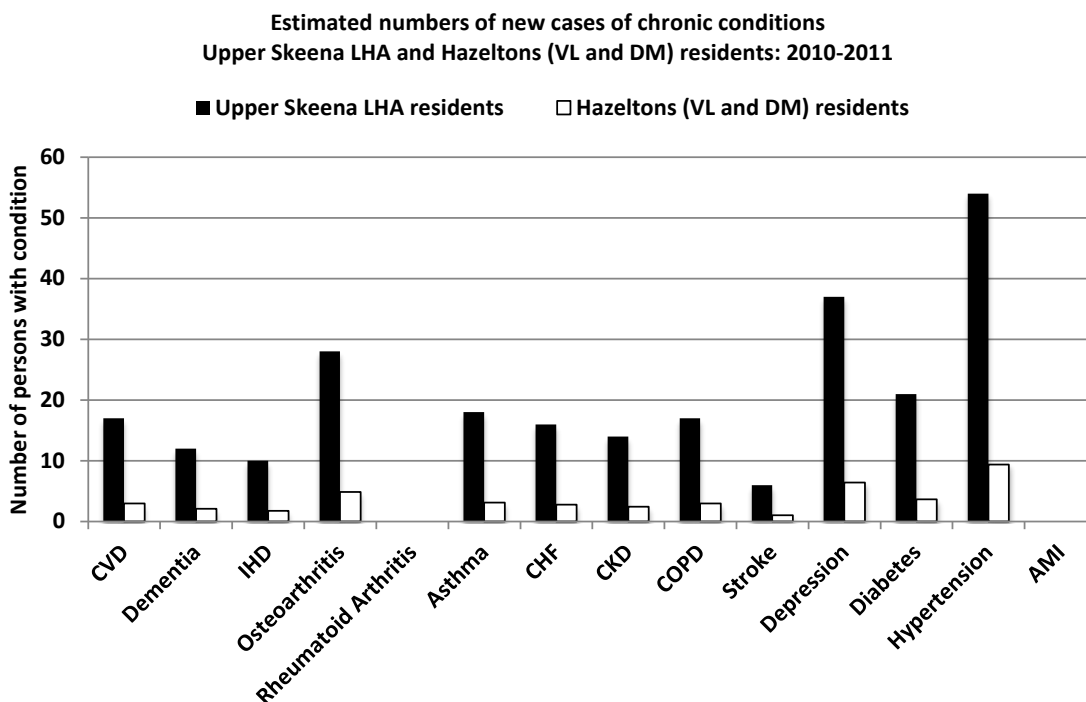
VPD in Northwest BC: Cases by Community 2002 - 2012 <sup>12</sup>												
Community	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Dease Lake	0	1	0	0	0	1	0	0	0	0	0	2
Hazelton	1	8	0	0	1	3	2	1	2	0	0	18
Houston	14	1	2	0	0	0	2	0	0	0	0	19
Kitimat	1	2	1	0	0	0	0	2	0	2	1	9
Masset	1	1	0	0	0	1	1	0	0	2	3	9
Prince Rupert	8	4	0	7	5	4	2	2	8	9	5	54
QC Village	0	0	1	0	0	2	2	0	0	0	0	5
Smithers	9	1	1	2	4	4	25	2	1	3	4	56
Stewart	0	0	0	0	0	0	1	0	0	0	0	1
Terrace	3	5	0	3	3	2	4	3	2	3	7	35
<b>Total</b>	<b>37</b>	<b>23</b>	<b>5</b>	<b>12</b>	<b>13</b>	<b>17</b>	<b>39</b>	<b>10</b>	<b>13</b>	<b>19</b>	<b>20</b>	<b>208</b>

From 2002 to 2012, the most frequently reported VPDs in the Northwest HSDA were:

- Hepatitis B - 75 cases
- Pertussis (whooping cough) - 68 cases.
- Invasive Pneumococcal Disease - 47 cases
- Invasive Meningococcal disease – 8 cases
- Haemophilus Influenza B – 7 cases.



**Chronic Diseases** tend to accumulate with age and limit our independence. Our personal choices towards a handful of well known risk factors: tobacco use; physical inactivity; poor dietary choices; obesity; inappropriate alcohol and drug use; certain sexual activities; and, excessive sun exposure can greatly determine how we age and whether we remain free from certain types of cancers and chronic illnesses. <sup>13, 14, 15, 16</sup>



Chronic Disease Estimates for Upper Skeena LHA and Hazeltons (VL and DM) residents: 2010 - 11					
Chronic Conditions	Existing or treated cases		New cases / yr		Cost per patient / year
	Hazeltons	LHA	Hazeltons	LHA	
Cardiovascular Disease (CVD)	46	266	3	17	\$8,358
Dementia	7	43	2	12	\$11,098
Ischemic Heart Diseases (IHD)	35	202	2	10	\$7,265
Osteoarthritis	72	415	5	28	\$4,968
Rheumatoid Arthritis	19	112	0	0	\$5,478
Asthma	48	273	3	18	\$1,724
Congestive Heart Failure (CHF)	21	122	3	16	\$13,258
Chronic Kidney Disease (CKD)	22	129	2	14	\$10,773
COPD	21	123	3	17	\$11,181
Stroke	12	70	1	6	\$8,304
Depression	137	788	6	37	\$3,642
Diabetes	51	294	4	21	\$5,134
Hypertension	128	738	9	54	\$5,291
AMI	14	81	0	0	\$9,368

Community level estimates are based upon each community's relative share of the total Local Health Area (LHA) population and reflect what "might be expected" at the community level.

**Healthy and independent seniors** are what we want to see when we look around the communities in northern BC. The population however is aging and with that often comes an accumulation of chronic health conditions that inhibit our independence.

Home support and other services provided by Northern Health intend to keep people healthy and independent. As of March 2013, there were 449 northwest BC residents receiving long-term home-support services. Here is an abbreviated profile of these residents.<sup>17</sup>

<b>Male</b>	36 %	<b>Married</b>	23 %	<b>Aged 75+</b>	67 %
<b>Female</b>	64 %	<b>Widowed</b>	46 %	<b>Aboriginal</b>	23 %
<b>Frequently Noted Health Conditions</b>					
Hypertension	61 %	Diabetes	26 %	Any Psychiatric Diagnosis	24%
Arthritis	51 %	Chronic Arterial	24 %	Osteoporosis / Cataract	22%
<b>Clients with Multiple Health Conditions</b>					
≤ 3 Conditions	25 %	3 - 5 Conditions	35 %	≥5 Conditions	40 %
<b>Clients with Cognitive Impairment (Cognitive Performance Score)</b>					
No impairment	48 %	Borderline /mild	42 %	Moderate	6 %
<b>Clients with independence difficulty in 1- 3 daily activities (IADL Difficulty Scale)</b>					
No difficulty	33 %	Some difficulty	50 %	Great difficulty	17 %

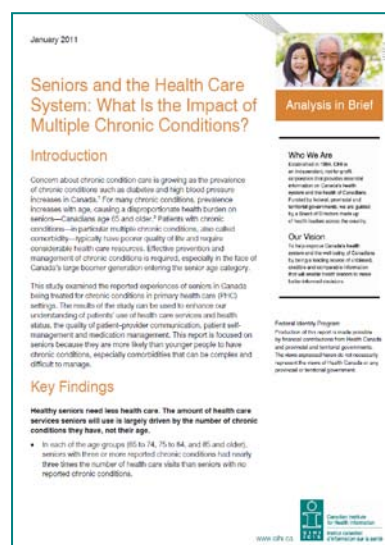
## How do we compare to the rest of Canada?

The most frequently reported chronic conditions affecting Canadian seniors overall are:

- Hypertension (47%)
- Arthritis (27%)
- Hypertension and arthritis (14%)
- Hypertension and heart disease (12%)
- Hypertension and diabetes (11%)

The amount of health care that Canadian seniors need as they age is largely driven by the number of chronic conditions that they have, not their age.<sup>18</sup>

These are just a few of the many findings contained in the report: *Seniors and the Health Care System: What is the Impact of Multiple Chronic Conditions?*



This publication is available from the Canadian Institute for Health Information: [https://secure.cihi.ca/free\\_products/air-chronic\\_disease\\_aib\\_en.pdf](https://secure.cihi.ca/free_products/air-chronic_disease_aib_en.pdf)

**Acute care (hospital)** services are an important part of the health care services continuum. This page provides a 5 year snap-shot of where residents received acute care services and a glimpse into the activities occurring at local facilities.

**Location where inpatient hospital services were received:** <sup>19</sup>

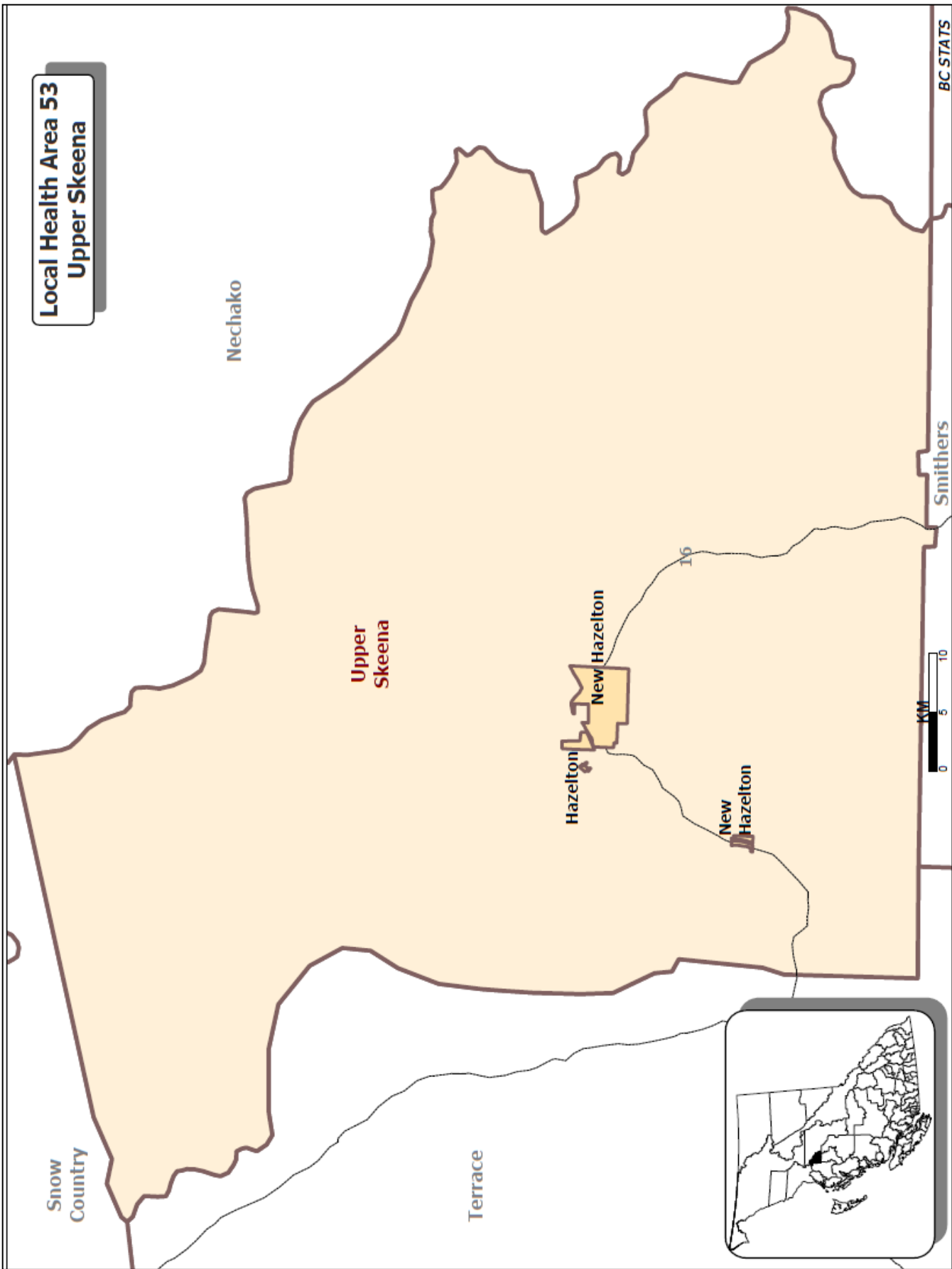
For Upper Skeena LHA residents during the five year period: 2008/09 - 2012/13.							
Number of Cases and Days	Location of Care						Total
	Hazelton	Terrace	Smithers	Other NH	Other BC	OOP	
Cases	2,598	495	324	421	438	11	4,287
Days	9,124	2,373	656	3,018	4,225	177	19,573

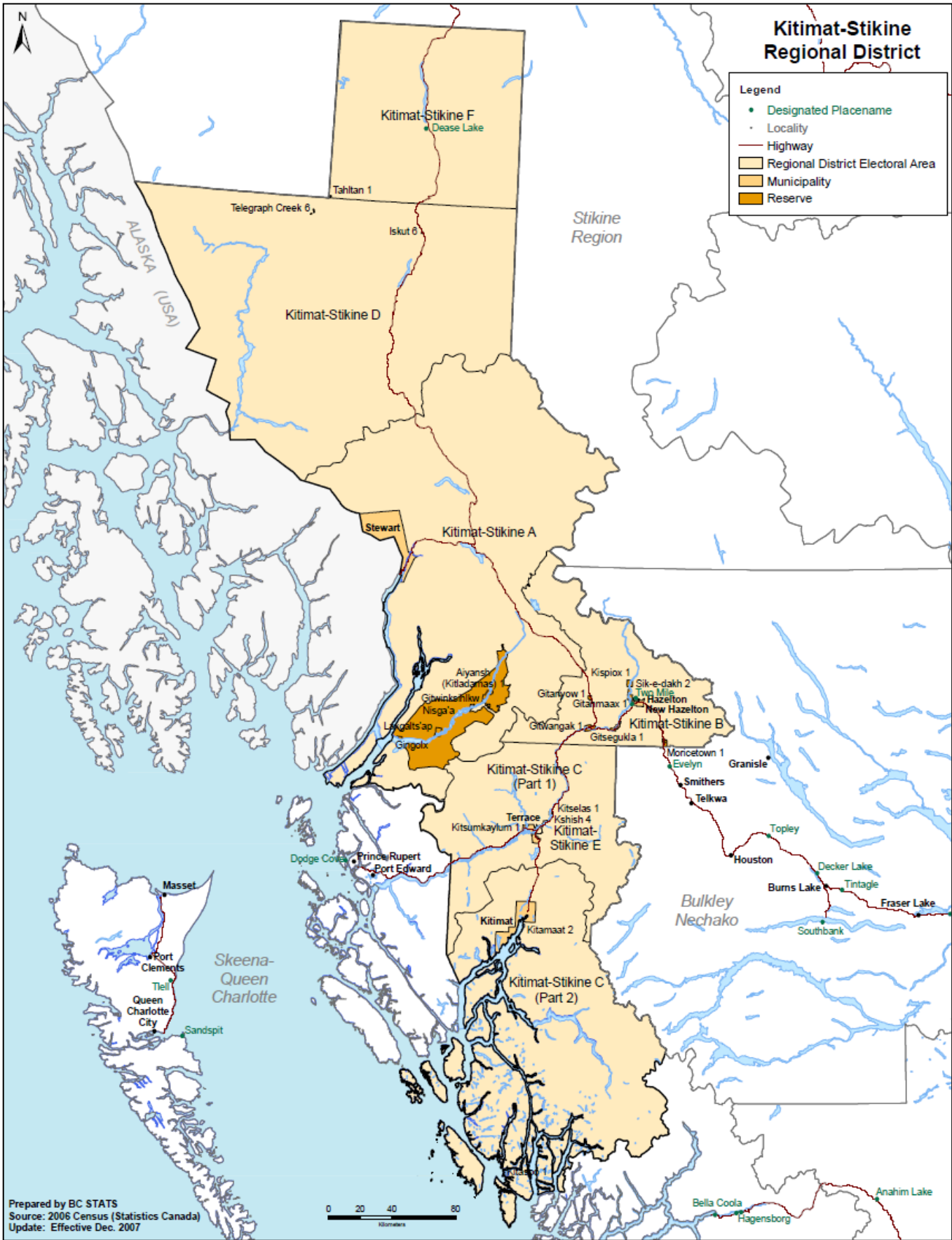
- ALC            Alternate Level of Care. Clients who no longer need acute services and who are waiting to be discharged to a setting more appropriate to their needs.<sup>20</sup>
- Cases        These are inpatient cases - client was admitted to the facility.
- Days        These are inpatient days - does not include days attributable to ALC.
- Other NH    Care was received at a Northern Health facility other than those shown.
- Other BC    Care was received at a non Northern Health facility in BC.
- OOP        Care was received Out of Province – in most cases this means Alberta.

**Facility Activities (selected measures).** <sup>21</sup>

No. 901 - Wrinch Memorial Hospital (Hazelton)					
Selected Measures	2008/09	2009/10	2010/11	2011/12	2012/13
Acute discharges/deaths total	768	746	696	537	464
Acute in-patient admissions total	764	729	714	535	465
Acute in-patient days (excl. ALC)	2,825	2,256	2,440	2,368	1,975
ALC days total	532	783	513	1,129	1,316
Psychiatry/addiction admissions	n/a	n/a	n/a	n/a	n/a
Ambulatory visits (excl. E/R).	294	332	145	371	3,199
Emergency visits (excl. Ambul)	8,266	7,900	7,150	7,480	7,646
In-patient surgical cases total	22	32	28	18	16
Surgical day care cases total	285	339	336	245	218
Lab Tests (excludes respiratory)	334,605	350,138	404,039	119,901	124,235
Medical Imaging Tests	4,137	3,850	4,060	3,858	3,924

**Local Health Area 53  
Upper Skeena**





## References

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- <sup>1</sup> BC Stats, Community Fact Sheets:  
<http://www.bcstats.gov.bc.ca/StatisticsBySubject/SocialStatistics/CommunityFacts.aspx>
- <sup>2</sup> BC Stats: Population Estimates for Local Health Areas: PEOPLE 2013.  
<http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationEstimates.aspx>
- <sup>3</sup> BC Treaty Commission Statement of Intent Maps: GEO BC.  
<http://archive.ilmb.gov.bc.ca/cis/initiatives/treaty/index.html>
- <sup>4</sup> BC Ministry of Aboriginal Relations & Reconciliation: First Nations by Region.  
<http://www.gov.bc.ca/arr/treaty/regional.html>
- <sup>5</sup> BC Vital Statistics Annual Report: 2011. <http://www.vs.gov.bc.ca/stats/annual/index.html>  
This is calendar year data (Jan - Dec). There will be a small mismatch with fiscal year data of Perinatal-Services-BC.
- <sup>6</sup> BC Stats: Population Projections: PEOPLE 2013:Published August 2013.
- <sup>7</sup> Northern Health Resident Mothers that Delivered a Baby in British Columbia, by Resident Municipality.  
Prepared for Northern Health by Perinatal Services BC. Request 211051: April 24, 2013..
- <sup>8</sup> Northern Health Resident Mothers that Delivered a Baby in British Columbia, by Resident Municipality.  
Prepared for Northern Health by Perinatal Services BC. Request 211051: April 24, 2013..
- <sup>9</sup> Immunization: A Report on the Health and Wellbeing of British Columbian. BC Provincial Health Officer, 1998.  
<http://www.health.gov.bc.ca/pho/pdf/phoannual1998.pdf>
- <sup>10</sup> Small Area Populations Projections (P.E.O.P.L.E.): Technical Paper. BC Stats, July 2009.( mortality: page 10)  
<http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/TechnicalPapers.aspx>
- <sup>11</sup> 2010 Cohort (2 year olds) Date of Birth Jan 01, 2010 to Dec 30, 2010. Up-to-date for age: (2010 definition).  
Data extracted Jan 15, 2013: Prepared by CM for JMH / MMP: Northern Health Public Health: August 2013.
- <sup>12</sup> Vaccine Preventable Disease: Northern Health-Public Health Internal Files: August 2013..
- <sup>13</sup> Population Patterns of Chronic Health Conditions in Canada: Health Council of Canada.  
<http://healthcouncilcanada.ca>
- <sup>14</sup> The Cost of Chronic Disease in Canada: GPI Atlantic. 2004. <http://gpiatlantic.org/pdf/health/chroniccanada.pdf>
- <sup>15</sup> Prevention: British Columbia Cancer Agency. 2009. <http://www.bccancer.bc.ca/PPI/Prevention/default.htm>
- <sup>16</sup> Hospitalizations: Counts and Rates Attributable to Alcohol, Tobacco, and Illicit Drugs for BC Health Authorities.  
BC Centre for Addictions Research: AOD project. March 2010. <http://carbc.ca/AODMonitoring/tabid/541/Default.aspx>
- <sup>17</sup> Inter-RAI Client Assessment Summary: Northern Health. Summary as of March 31, 2013.  
Data extracted July, 2013. Northern Health: Home and Community Care Services.
- <sup>18</sup> Seniors and the Health Care System: What is the Impact of Multiple Chronic Conditions?  
CIHI, January 2011. <https://secure.cihi.ca/estore/productFamily.htm?locale=en&pf=PFC1575>
- <sup>19</sup> Northern Health Resident Referral Pattern, 1991/92 – 2012/13: Special Analysis undertaken by the BC Ministry of Health for  
Northern Health. Project No. 2013\_00828: Updated: August 2013.
- <sup>20</sup> Alternate Level of Care in Canada: CIHI. <https://secure.cihi.ca/estore/productSeries.htm?pc=PCC456>
- <sup>21</sup> Northern Facility Activity Summaries from Northern Health Finance: Executive Summary Reports (ESR).  
Figures are P13 for previous year. Lab and Medical Imaging prepared separately: Updated September 4, 2013.