

Healthy Northern Communities 2011

Quesnel

Revised
September 6, 2011



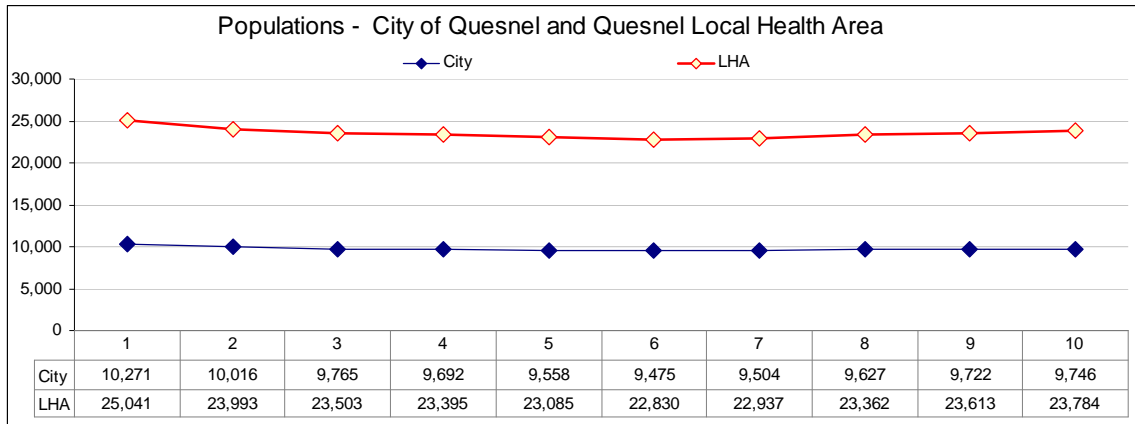
northern health
the northern way of caring

Quesnel

The Quesnel Local Health Area (LHA 028) is located in north-central BC. It covers just over 22,365 square kilometers and is home to approximately 23,784 people. The City of Quesnel, which is within the Quesnel LHA, is home to approximately 9,746 persons.^{1, 2}

Both the Quesnel LHA and the City of Quesnel are situated within the Cariboo Regional District and within the Northern Interior Health Service Delivery Area of Northern Health. Both the Quesnel LHA and the City of Quesnel are served by School District No. 28.

Several First Nations call this area home, including the Lhatko-Dene (Red Bluff), Nazko, Esdilahg (Alexandria), Lh'oosk'uz Dene (Kluskus) and the Ulkatchot'en (Ulkatcho).^{3, 4}



The estimated 9,746 people residing within the City of Quesnel and the 23,784 people living within the Quesnel LHA, respectively account for 15 % and 36 % of the overall Cariboo Regional District population of 65,471 persons.^{5, 6}

During the 2009 calendar year, there were 258 live births, 169 deaths and 88 marriages attributed to Quesnel LHA residents. Of these, 147 births, 88 deaths and 34 marriages were attributed to residents of the City of Quesnel. The average life expectancy for both populations was 79.0 years; slightly less than the BC life expectancy of 81.4 years.⁷

Community Information

City of Quesnel: <http://www.quesnel.ca>

City of Quesnel OCP <http://www.quesnel.ca/OfficialComm-Plan.html>

District of Wells (includes Barkerville): <http://www.district.wells.bc.ca/>

Cariboo Regional District: <http://www.cariboord.bc.ca/>

Carrier Chilcotin Tribal Council <http://www.carrierchilcotin.org>

Quesnel Museum Footprints in Stone: Nazko; Lh'oosk'uz Dene; Ulkatcho; Lhtako Dene.
<http://www.quesnelmuseum.ca/FootprintsInStone/index.html>

BC Stats Community Facts: <http://www.bcstats.gov.bc.ca/data/dd/facsheet/facsheet.asp>

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

What Determines Health?

A good strong start in life, early and enriching experiences, educational opportunities and achievement, a sufficient and equitable distribution of employment and income, housing, food, interactions with the natural and human built environments, our choices towards certain risk factors and lifestyles, as well as access to high quality health services, are just a few of the many determinants of health and wellbeing.^{8, 9}

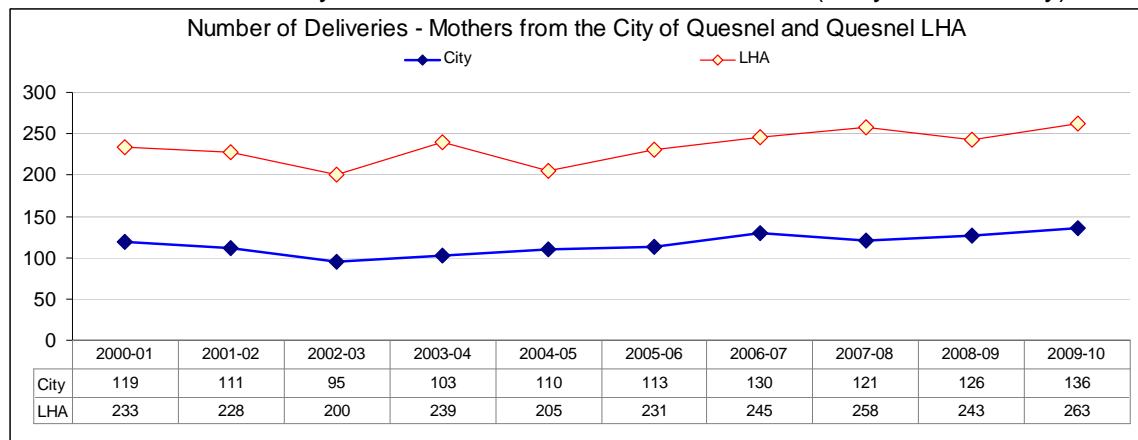
Selected Determinants of Health: City of Quesnel and Quesnel Local Health Area			
Demographics	Quesnel ¹⁰	LHA ¹¹	BC ¹²
Percent of population who are 0 – 19 yrs old	25.6	23.3	23.2
Percent of population who are ages 65+	15.2	14.9	15.0
Percent of population who are Visible Minorities	9.0	4.6	24.5
Percent of population who are Aboriginal Identity	11.0	11.6	4.8
Income			
Percent of families earning < \$20,000 per year	9.0	8.1	8.0
Percent of families earning from \$20,000 - \$80,000 per year	51.2	54.7	53.8
Percent of families earning > \$80,000 per year	39.8	37.1	38.1
* Percent of population receiving Income Assistance > 1 yr.	nca	1.4	1.0
Early Development and Educational Achievement			
Percent of kindergarten children vulnerable: 1 or more EDI scales ¹³	28.9 – 32.1	32.3	28.6
† Percent of Grade 4 & 7 students below standard on FSA - Reading	nca	32.7	20.7
† Percent of Grade 4 & 7 students below standard on FSA - Writing	nca	44.3	17.9
† Percent of Grade 4 & 7 students below standard on FSA - Math	nca	42.9	23.4
† Grade 10 Provincial-exam non-completion rate - English	nca	26.0	15.9
† Percent of 18 yr olds who did not graduate	nca	29.5	29.0
Percent of persons ages 25 to 54: without high school completion	nca	19.4	11.1
Percent of persons ages 25 to 64: with university degree or above	13.3	9.8	24.1
Housing			
Percent of households that are renting	29.6	21.3	30.4
Percent of tenants paying 30 % or more of income towards housing	50.0	41.8	43.4
Percent of owners paying 30 % or more of income towards housing	9.0	11.1	22.7
Children and Youth at Risk			
* Children (ages <15) receiving Income Assistance > 1 year	nca	2.8	1.7
* Youth (ages 15 - 24) receiving Income Assistance > 1 yr	nca	1.5	0.9
Children in care rate per 1,000 population, ages 0 – 18	nca	11.6	9.2
Teen pregnancies per 1,000 women ages 15 – 19 (2007-2009)	nca	55.8	26.3
Other Indicators			
Alcohol sales per capita in 2010 (Dollars Spent)	nca	784	790
Alcohol sales per capita in 2010 (Litres Consumed)	nca	123	107
nca = means this level of data detail or data aggregation is "not currently available."			
EDI = the Early Development Index is an early child development assessment tool. http://www.earlylearning.ubc.ca			
LHA = Local Health Area. In this table we are referring to the Quesnel Local Health Area (LHA - 028).			
* Income Assistance figures may be understated as they do not include Aboriginal people who are living on reserve.			
† education measures shown are an average for the period 2007/08 - 2009 /10. The LHA and BC figures were obtained from BC Stats Socio-economic profiles . Please also see BC Ministry of Education http://www.bced.gov.bc.ca/reporting/			

Promoting Health and Delivering High Quality Services

A good strong start in life is more likely if infants, children and family members are healthy. Towards this, we consider community characteristics (Determinants of Health), the number of mothers delivering infants and where these infants are being delivered.

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

Number of deliveries by Quesnel Local Health Area mothers (ten year summary) ¹⁴



Delivery locations for Quesnel Local Health Area mothers (five year summary).¹⁵

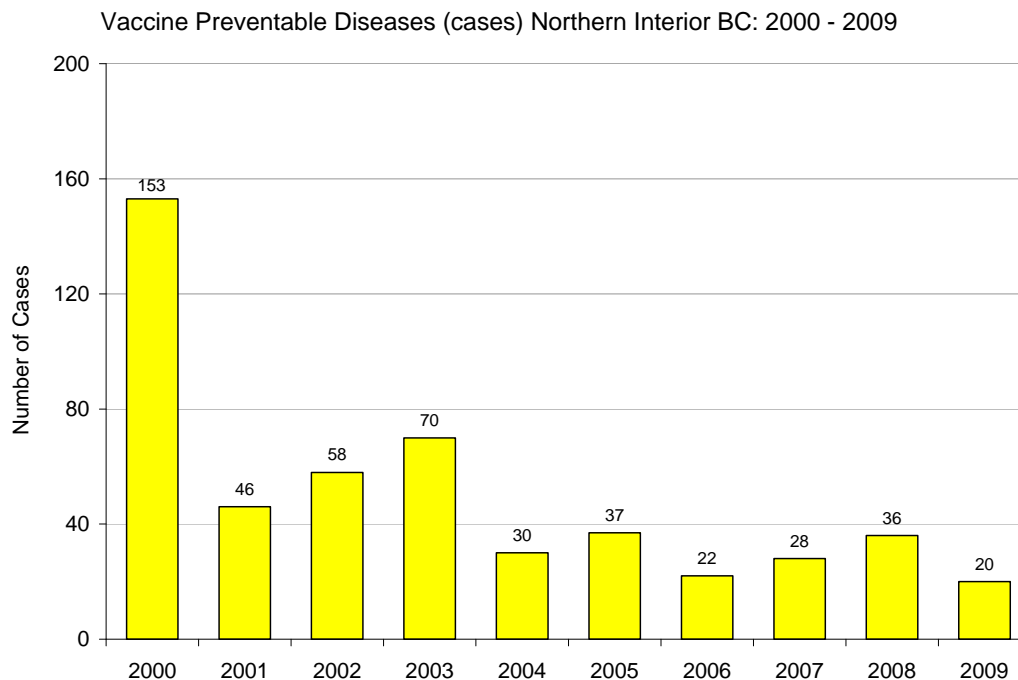
Mother's community or Regional District area within the Quesnel LHA	Delivery Location: 2005/06 – 2009/10					Total Deliveries
	Quesnel	Prince George	Williams Lake	Other BC Location	Home Births	
Cariboo R/D (A)	264	16	6	4	1	291
Cariboo R/D (B)	152	12	5	3	2	174
Cariboo R/D (C)	40	5	0	0	0	45
Cariboo R/D (D)	1	0	1	0	0	2
Cariboo R/D (I)	70	7	5	2	1	85
Quesnel (City)	554	46	11	20	0	631
Wells (DM)	10	2	0	0	0	12
Total Deliveries	1,091	88	28	29	4	1,240

Promoting Health and Delivering High Quality Services

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.^{16, 17}

Because they 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 within the Quesnel Local Health Area, who are fully immunized, is 84%.¹⁸

Vaccine Preventable Diseases are illnesses that may have been avoided if individuals and communities were sufficiently immunized. These are summarized below.



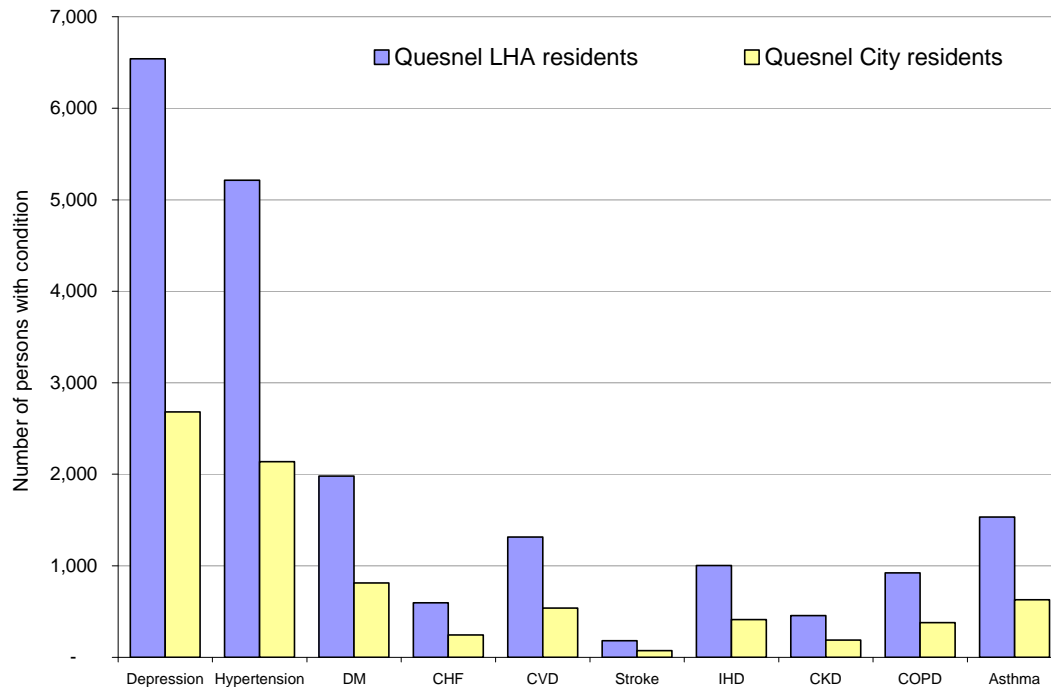
Vaccine Preventable Diseases (cases) in Northern Interior HSDA: 2000 - 2009 ¹⁹											
Community	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Burns Lake	0	1	26	1	0	4	0	0	1	2	35
Ft. St. James	3	2	2	0	0	1	3	2	2	0	15
Fraser Lake	0	0	0	5	0	1	0	0	1	0	7
Mackenzie	1	0	0	1	0	0	1	0	0	1	4
McBride	0	1	0	0	0	0	0	0	0	0	1
Prince George	129	35	26	52	26	22	17	19	31	13	370
Quesnel	18	6	1	5	4	9	1	4	1	4	53
Valemount	0	0	0	4	0	0	0	0	0	0	4
Vanderhoof	2	1	3	2	0	0	0	3	0	0	11
HSDA Total	153	46	58	70	30	37	22	28	36	20	500

Promoting Health and Delivering High Quality Services

We know that many factors influence our health. Our choices in lifestyle and 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 whether we remain healthy and free from certain types of cancers and other chronic illnesses.^{20, 21, 22, 23}

Chronic Disease Estimates

Estimated number of existing or treated cases of selected chronic conditions
Quesnel area residents: 2009 - 2010



Chronic Disease Estimates for Quesnel LHA and Quesnel City residents: 2009 - 10 ²⁴					
Selected Chronic Conditions	Existing or treated cases		New cases / yr		Cost / patient per year
	City	LHA	City	LHA	
Depression	2,682	6,542	107	260	\$2,797
Hypertension	2,137	5,213	144	350	\$4,014
Diabetes	813	1,982	62	151	\$5,078
Congestive Heart Failure (CHF)	244	595	31	75	\$11,171
Cardiovascular Disease (CVD)	539	1,314	44	107	\$8,257
Stroke	74	181	10	25	\$10,209
Ischemic Heart Disease (IHD)	411	1,003	26	63	\$7,194
Chronic Kidney Disease (CKD)	187	457	35	86	\$11,046
COPD	378	922	56	136	\$6,800
Asthma	629	1,533	41	99	\$1,655

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, given the known experience of the larger LHA.

Promoting Health and Delivering High Quality Services

Healthy and independent northerners is what we want to see when we look around northern BC communities. Indeed, that is a large part of what we do see. However, we know that our population is aging very quickly and that with increasing age there often comes an accumulation of chronic health conditions that inhibit independence.

Long-term home support and other services provided by northern health intend to keep people healthy and independent. During 2011, there were 856 residents in the northern interior receiving home-support services. Here is a clinical profile of these residents.²⁵

Male	36 %	Married	28 %	Aged 75+	72 %
Female	64 %	Widowed	44 %	Aboriginal	6 %
Frequently Noted Health Conditions					
Hypertension	56 %	Depression	27 %	Osteoporosis	22%
Arthritis	46 %	Diabetes	24 %	Chronic Arterial	20 %
Clients with Multiple Health Conditions					
≤ 3 Conditions	28 %	3 - 5 Conditions	37 %	≥5 Conditions	34 %
Clients with Cognitive Impairment (Cognitive Performance Score)					
No impairment	39 %	Borderline /mild	49 %	Mod - Very Severe	12 %
Clients with independence difficulty in 1- 3 daily activities (IADL Difficulty Scale)					
No difficulty	28 %	Some difficulty	22 %	Great difficulty	50 %

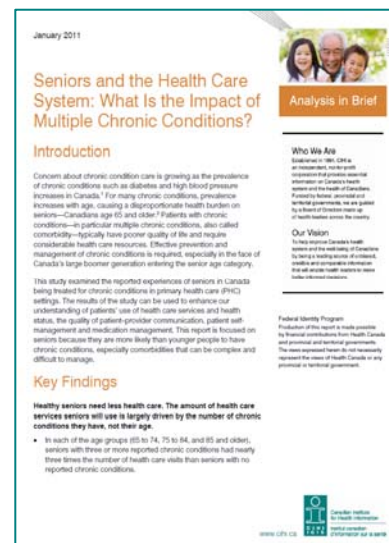
How do we compare to the rest of Canada?

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.²⁶

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?*



Promoting Health and Delivering High Quality Services

We employ the best available information related to community characteristics and the determinants of health, population trends, disease occurrences, health needs and health services utilization when assessing services and when planning for the future.

These tables provide a glimpse into some of the inpatient and facility activity.

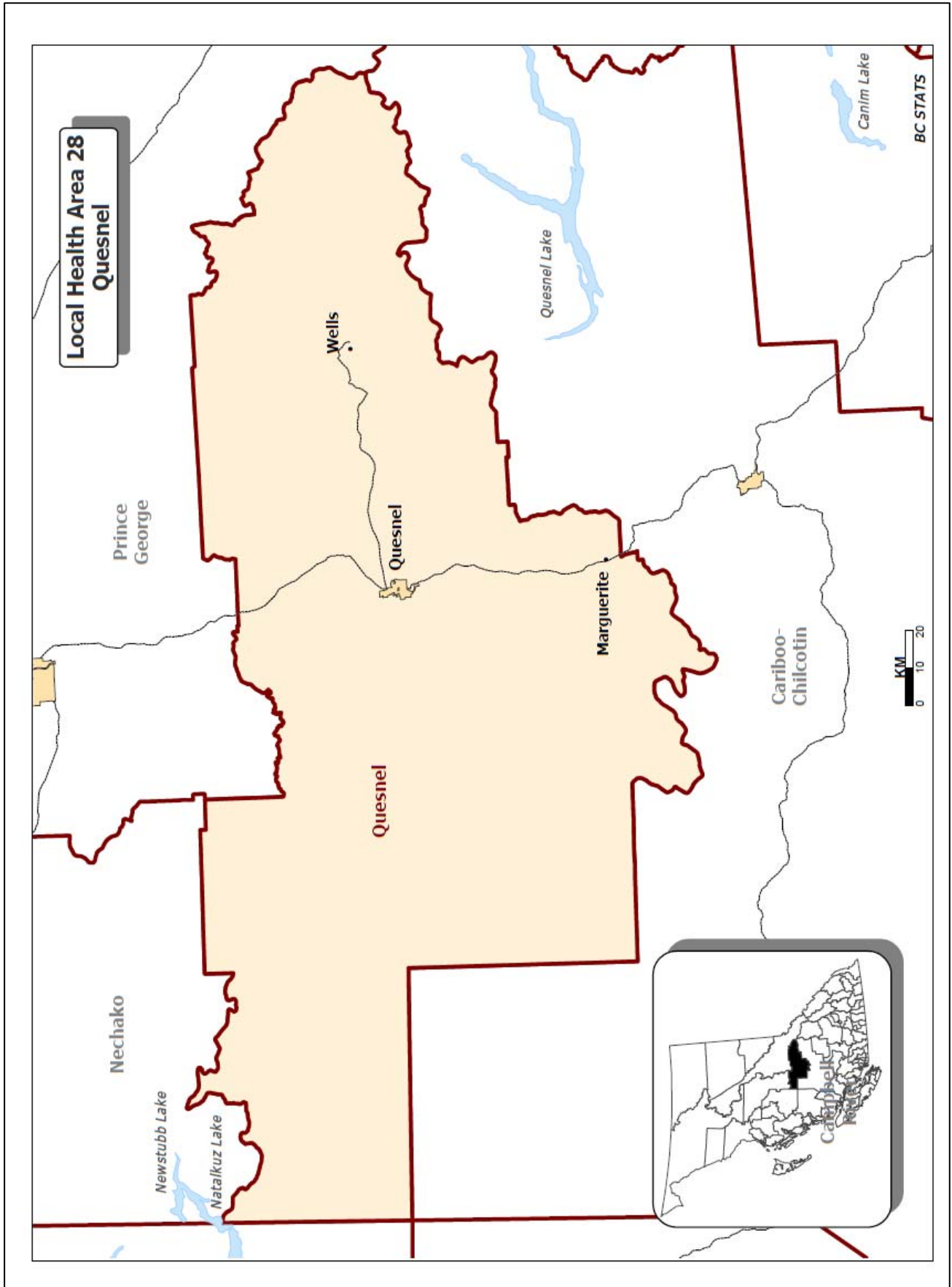
Location: where inpatient hospital services were received.²⁷

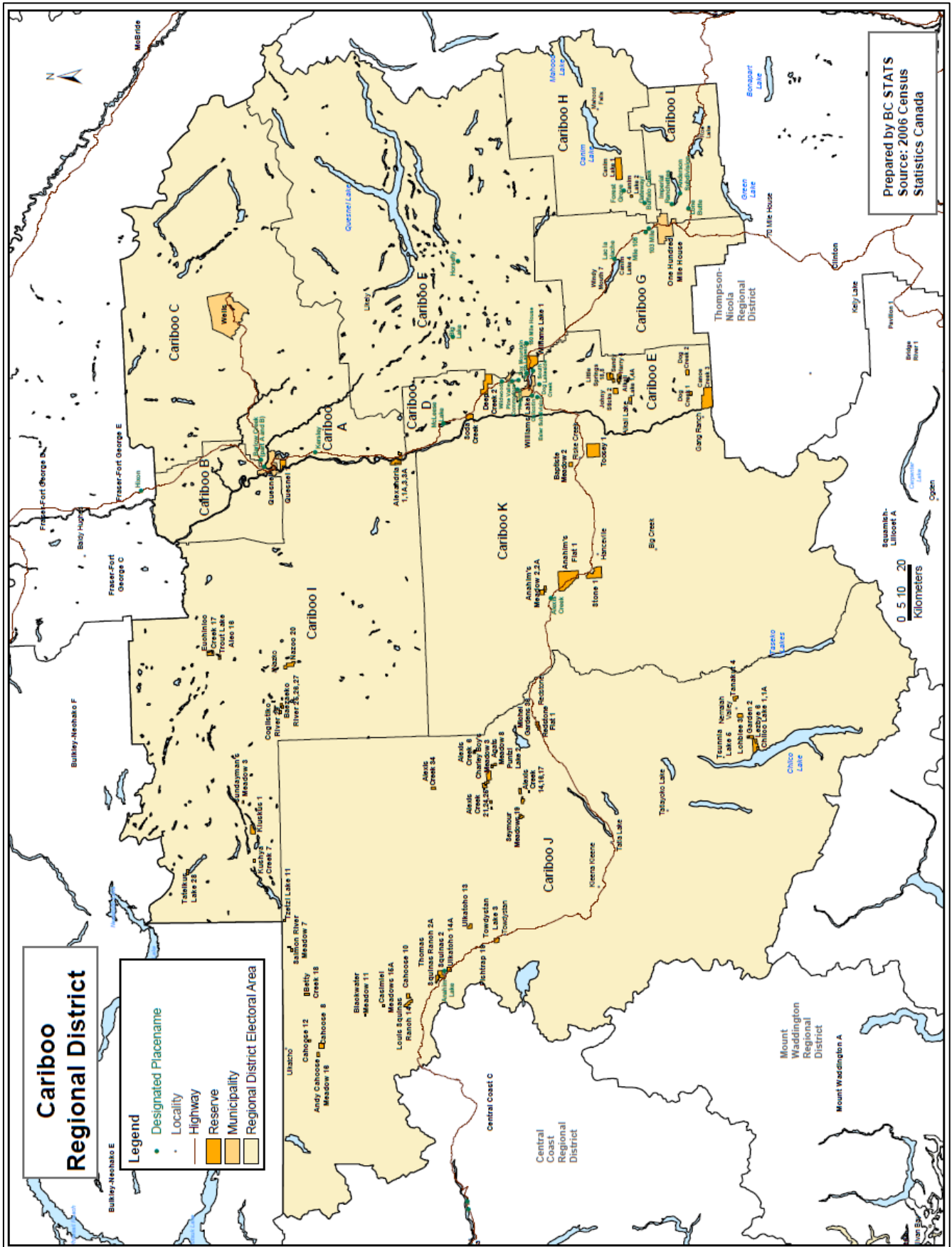
For Quesnel LHA residents during the five year period: 2005/06 - 2009/10.						
Number of Cases and Days	Location of Inpatient Hospital Care					
	Quesnel	Prince George	Other NH	Other BC	OOP	Total
Cases	10,601	1,844	47	2,447	94	15,033
Days	48,575	10,713	131	15,534	391	75,344

- 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.
- 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.²⁸

Facility and Patient Activity (selected measures).²⁹

No. 705 - G.R. Baker Hospital (Quesnel)					
Selected Measures	2006/07	2007/08	2008/09	2009/10	2010/11
Acute discharges/deaths total	2,640	2,512	2,664	2,449	2,200
Acute in-patient admissions total	2,650	2,426	2,588	2,353	2,120
Acute in-patient days (excl. ALC)	11,072	10,852	11,905	11,439	10,168
ALC days total	3,947	4,113	4,185	3,165	2,706
Ambulatory visits (excl. E/R).	6,170	7,236	9,117	8,333	8,496
Emergency visits (excl. Ambul)	17,205	16,002	15,347	15,089	14,860
In-patient surgical cases total	372	450	415	319	295
Surgical day care cases total	1,996	2,147	1,952	1,992	2,131
Psychiatry/addiction admissions	n/a	0	277	263	164
Psychiatry/addiction I/P days	n/a	0	1,324	1,562	1,434
Medical Imaging Tests	23,458	25,707	28,344	27,709	29,135
Lab Tests (excludes respiratory)	488,997	547,926	590,687	647,218	515,128





References

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- 2 BC Stats: Population Estimates for LHAs: PEOPLE 35. <http://www.bcstats.gov.bc.ca/data/pop/popstart.asp>
- 3 Carrier Chilcotin Tribal Council: <http://www.carrierchilcotin.org/index.html>
- 4 BC Treaty Commission Statement of Intent Maps: GEO BC. <http://lmbwww.gov.bc.ca/cis/initiatives/treaty/>
- 5 BC Stats: Population Estimates for Local Health Areas: PEOPLE 35. <http://www.bcstats.gov.bc.ca/data/pop/popstart.asp>
- 6 BC Stats: Population Estimates for Regional Districts: PEOPLE 35. <http://www.bcstats.gov.bc.ca/data/pop/popstart.asp>
- 7 BC Vital Statistics Annual Report: 2009. <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.
- 8 What Determines Health: Public Health Agency of Canada <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php>
- 9 Healthy and Productive Canada: Determinants of Health Approach; Senate Committee on Health. <http://www.parl.gc.ca/40/2/parlbus/commbus/senate/Com-e/popu-e/rep-e/rephealthjun09-e.pdf>
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- 17 Technical Assumptions for Population Forecasting in BC: Page 7. BC Stats, July 2009. <http://www.bcstats.gov.bc.ca/data/pop/pop/popproj.asp>
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