

Healthy Northern Communities 2011

City of Fort St. John

Revised
October 2011



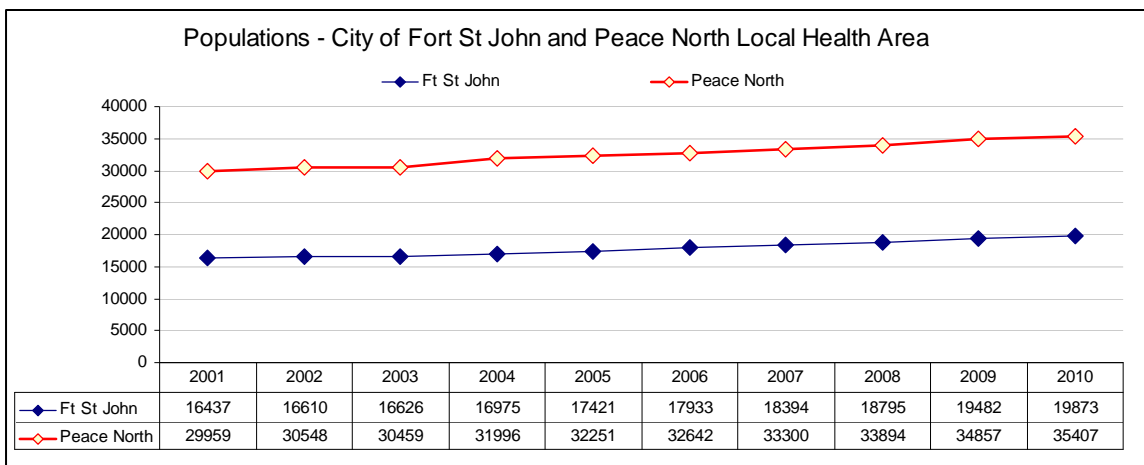
northern health
the northern way of caring

City of Fort St. John

The City of Fort St. John was incorporated in 1947. The City is located 464 km north of Prince George via Hudson's Hope, and 408 km south of Fort Nelson. ¹

Fort St. John is also situated within the Peace River Regional District, within the Peace River North Local Health Area (LHA 060) and within the Northeast Health Service Delivery Area of Northern Health. Ft. St. John is served by School District No. 60.

The area surrounding Fort St. John is the traditional territories of the Dane-zaa (Beaver) and Cree speaking peoples. Local First Nations include Halfway River (Choonache), Blueberry River and Doig River First Nations (Taahche Wadane). As well, there are many people of Metis heritage that call this area home. ^{2, 3, 4}



The estimated 19,873 people living in Fort St. John account for approximately 56 % of the Peace River North LHA population (19,873 / 35,369 persons) and for 31.4 % of the overall Peace River Regional District population (19,873 / 63,368 persons). The local area population that is attributable to industrial work camps is uncertain. ^{5, 6, 7}

During the 2009 calendar year, there were 375 births, 96 deaths and 279 marriages to the residents of Ft. St. John. The average life expectancy for Ft. St. John residents was 79.5 years. This was less than the BC average life expectancy of 81.4 years. ⁸

Community Information

City of Fort St. John: <http://www.fortstjohn.ca/>

City of Fort St. John, Official Community Plan: (bylaws). <http://www.fortstjohn.ca/>

Doig River First Nation (Taahche Wadane): <http://www.doigriverfn.com/>

Halfway River First Nation: <http://www.treaty8.bc.ca/communities/halfway.php>

Blueberry River First Nation: <http://www.treaty8.bc.ca/communities/blueberry.php>

Peace River Regional District: <http://prrd.bc.ca/home.php>

BC 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.^{9, 10}

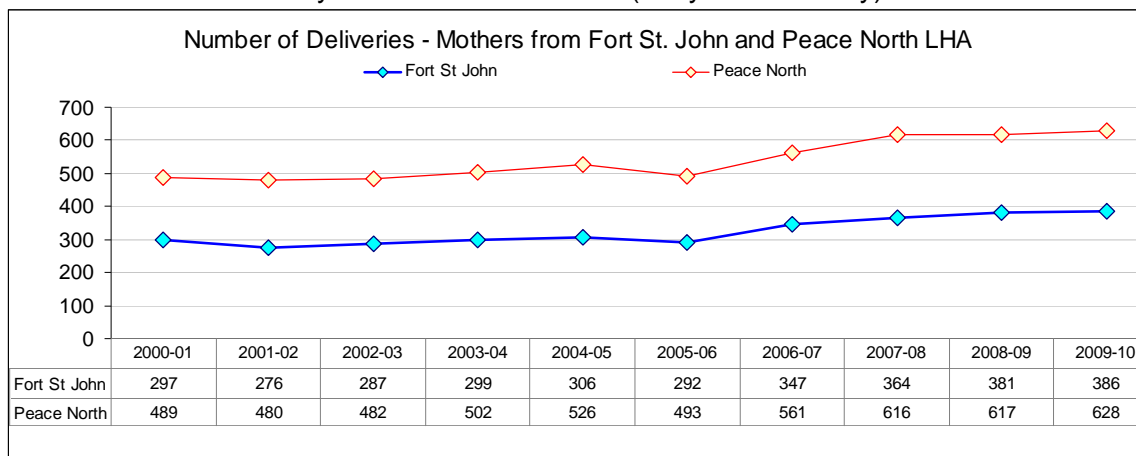
Selected Determinants of Health			
Demographics	Ft St John ¹¹	LHA ¹²	BC ¹³
Percent of population who are 0 – 19 yrs old	29.1	29.8	23.2
Percent of population who are ages 65+	6.2	7.2	15.0
Percent of population who are Visible Minorities	4.0	3.5	24.5
Percent of population who are Aboriginal Identity	10.0	22.1	4.8
Income			
Percent of families earning < \$20,000 per year	5.4	11.4	8.0
Percent of families earning from \$20,000 - \$80,000 per year	44.6	50.8	53.8
Percent of families earning > \$80,000 per year	49.6	37.7	38.1
* Percent of population receiving Income Assistance > 1 yr.	nca	0.4	1.0
Early Development and Educational Achievement			
Percent of kindergarten children vulnerable :1 or more EDI scales ¹⁴	27.1 - 46.6	32.3	28.6
† Percent of Grade 4 & 7 students below standard on FSA - Reading	nca	21.1	20.7
† Percent of Grade 4 & 7 students below standard on FSA - Writing	nca	12.5	17.9
† Percent of Grade 4 & 7 students below standard on FSA - Math	nca	27.6	23.4
† Grade 10 Provincial-exam non-completion rate - English	nca	23.5	15.9
† Percent of 18 yr olds who did not graduate	nca	40.1	29.0
Percent of persons ages 25 to 54: without high school completion	nca	21.2	11.1
Percent of persons ages 25 to 64: with university degree or above	12.3	10.9	24.1
Housing			
Percent of households that are renting	37	20.3	30.4
Percent of tenants paying 30 % or more of income towards housing	32	29.7	43.4
Percent of owners paying 30 % or more of income towards housing	16	12.1	22.7
Children and Youth at Risk			
* Children (ages <15) receiving Income Assistance > 1 year	nca	0.6	1.7
* Youth (ages 15 - 24) receiving Income Assistance > 1 yr	nca	0.4	0.9
Children in care rate per 1,000 population, ages 0 – 18	nca	4.9	9.2
Teen pregnancies per 1,000 women ages 15 – 19 (2007-2009)	nca	51.4	26.3
Other Indicators			
Alcohol sales per capita in 2010 (Dollars Spent)	nca	890	790
Alcohol sales per capita in 2010 (Litres Consumed)	nca	134	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 Peace River North Local Health Area (LHA - 060).			
* 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 Fort St. John mothers (ten year summary).¹⁵



Delivery locations for Fort St. John mothers (five year summary).¹⁶

Mother's community or Regional District area	Delivery Location: 2005/06 – 2009/10				
	Ft St John Hospital	Dawson Creek	Prince George	Other BC Location	Total Deliveries
Ft St John (City)	1,738	9	16	31	1,770 *
Hudson's Hope (DM)	40	1	2	0	43
Peace River R/D (B)	355	7	2	7	371
Peace River R/D (C)	527	1	5	10	543
Taylor (DM)	153	7	0	4	164
Total Deliveries	2,813	25	25	52	2,915

Note: Fort St. John figures also include 24 deliveries attributed to residents of the Blueberry River First Nations.

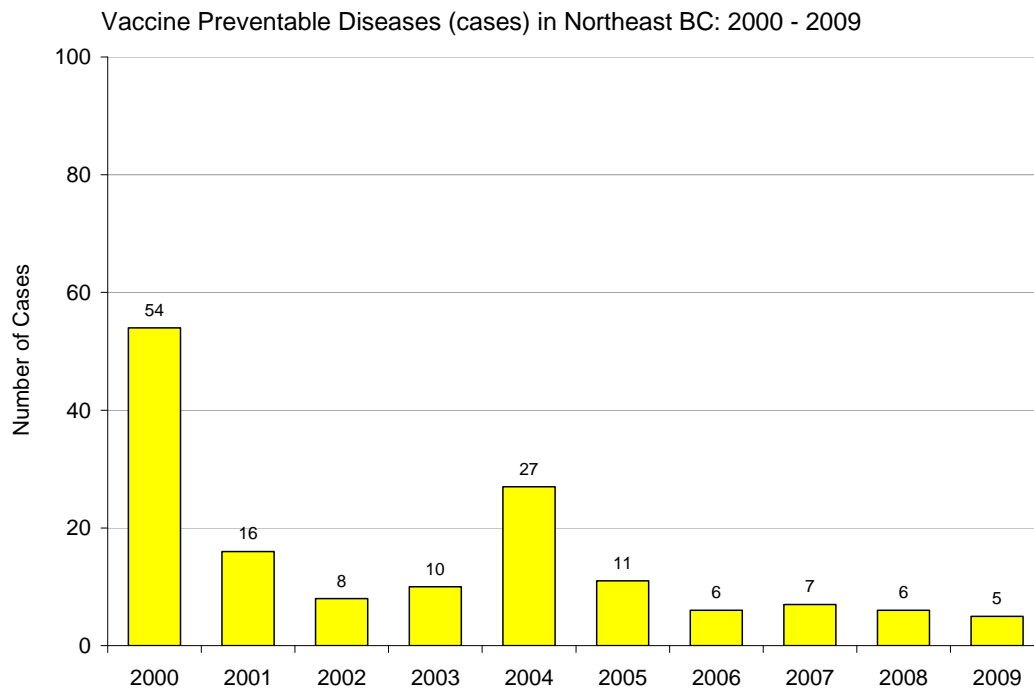
* There were an additional 10 deliveries in Alberta, by mothers from Fort St. John. ¹⁷

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.^{18, 19}

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 in the Fort St. John area, who are fully immunized, is 63.8%.²⁰

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



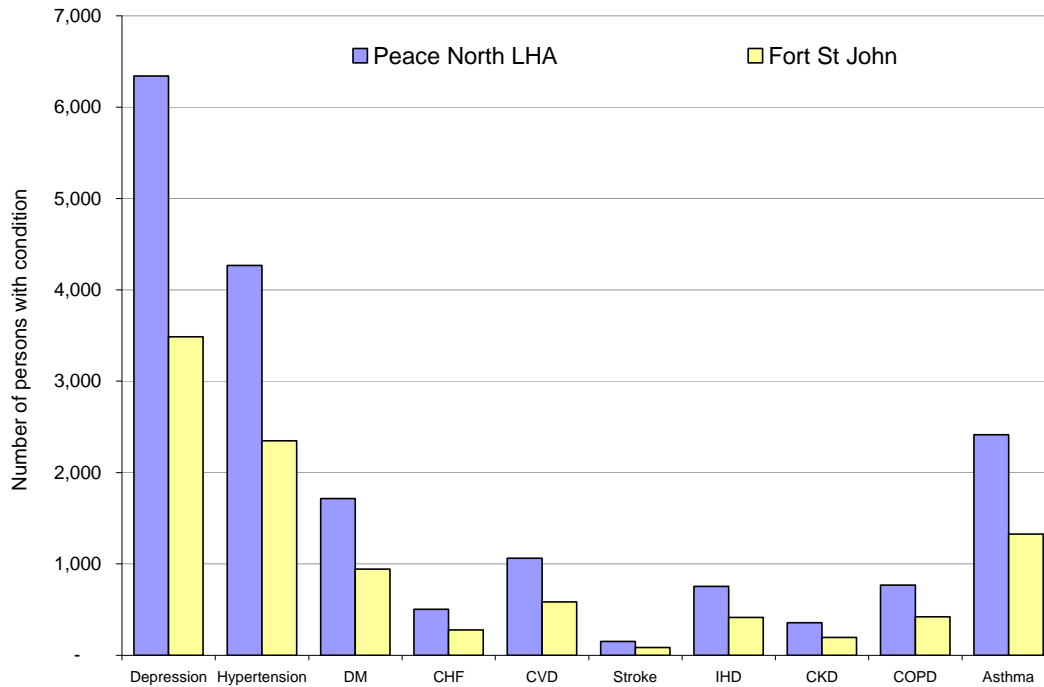
Vaccine Preventable Diseases (cases) in Northeast BC: 2000 - 2009 ²¹											
Community	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Chetwynd	1	4	2	1	2	1	1	0	1	1	14
Dawson Cr.	7	10	3	2	21	3	1	3	2	1	53
Fort Nelson	3	0	1	0	1	1	0	3	0	2	11
Fort St John	43	2	1	7	3	5	4	1	2	1	69
Hudson's Hope	0	0	1	0	0	0	0	0	1	0	2
Tumbler Ridge	0	0	0	0	0	1	0	0	0	0	1
Total	54	16	8	10	27	11	6	7	6	5	150

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. ^{22, 23, 24, 25}

Chronic Disease Estimates

Estimated number of existing or treated cases of selected chronic conditions
Peace North LHA and City of Fort St. John residents: 2009 - 2010



Chronic Disease Estimates for Ft St John and Peace North LHA residents: 2009 - 10 ²⁶					
Selected Chronic Conditions	Existing or treated cases		New cases / yr		Cost per patient / yr
	Ft St John	LHA	Ft St John	LHA	
Depression	3488	6341	235	428	\$2,362
Hypertension	2348	4269	170	309	\$3,853
Diabetes	944	1716	93	169	\$4,794
Congestive Heart Failure (CHF)	277	504	48	87	\$9,908
Cardiovascular Disease (CVD)	584	1062	68	123	\$7,602
Stroke	84	152	7	12	\$8,339
Ischemic Heart Disease (IHD)	415	755	33	60	\$6,603
Chronic Kidney Disease (CKD)	196	357	35	63	\$10,373
COPD	422	767	87	158	\$8,448
Asthma	1328	2415	75	136	\$1,253

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 379 residents of northeast BC receiving home-support services. Here is a clinical profile of these residents.²⁷

Male	32.5%	Married	31 %	Aged 75+	68 %
Female	67.5%	Widowed	44 %	Aboriginal	7 %
Frequently Noted Health Conditions					
Hypertension	57 %	Depression	42 %	Chronic Arterial	22%
Arthritis	51 %	Diabetes	24 %	Congestive Heart	20 %
Clients with Multiple Health Conditions					
≤ 3 Conditions	27 %	3 - 5 Conditions	37 %	≥5 Conditions	36 %
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	30 %	Some difficulty	25 %	Great difficulty	45 %

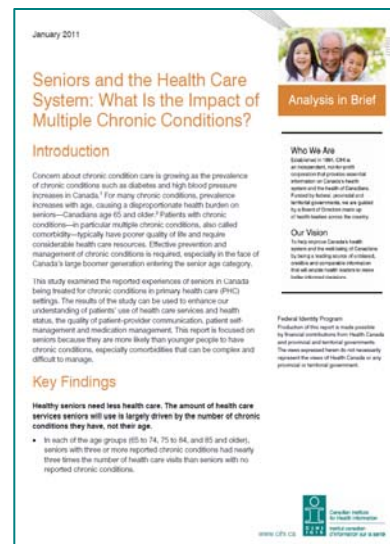
How do we compare to the rest of Canada?

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.²⁸

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.

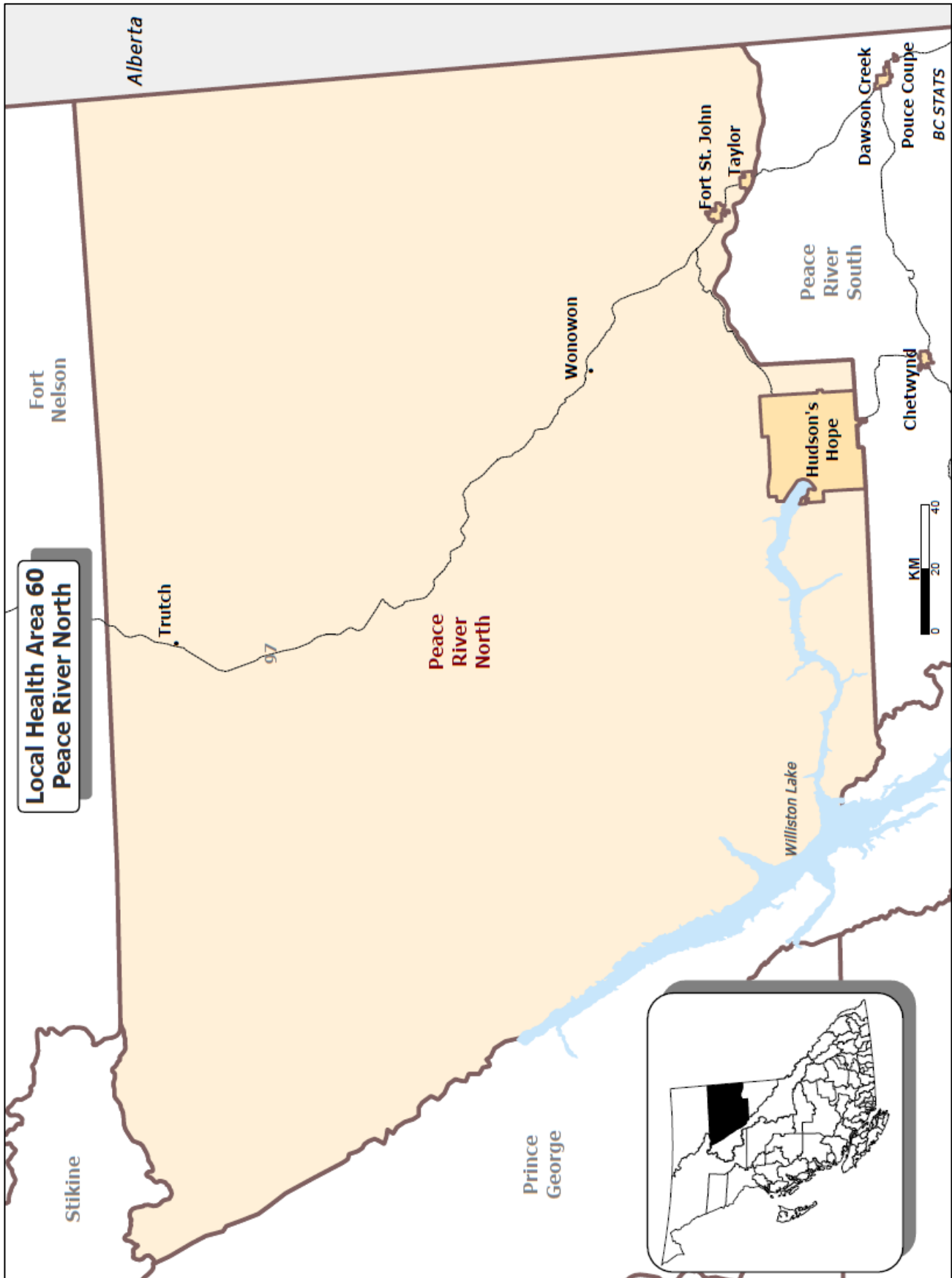
Location: where inpatient hospital services were received.²⁹

For Fort St. John residents during the five year period: 2005/06 - 2009/10.							
Number of Cases and Days	Location of Hospital Care						
	Fort St. John	Dawson Creek	Chetwynd	Other NH	Other BC	OOP	Total
Cases	9,592	796	10	363	799	1,065	12,625
Days	34,459	5,302	36	2,771	7,398	6,971	56,937

- 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.³⁰

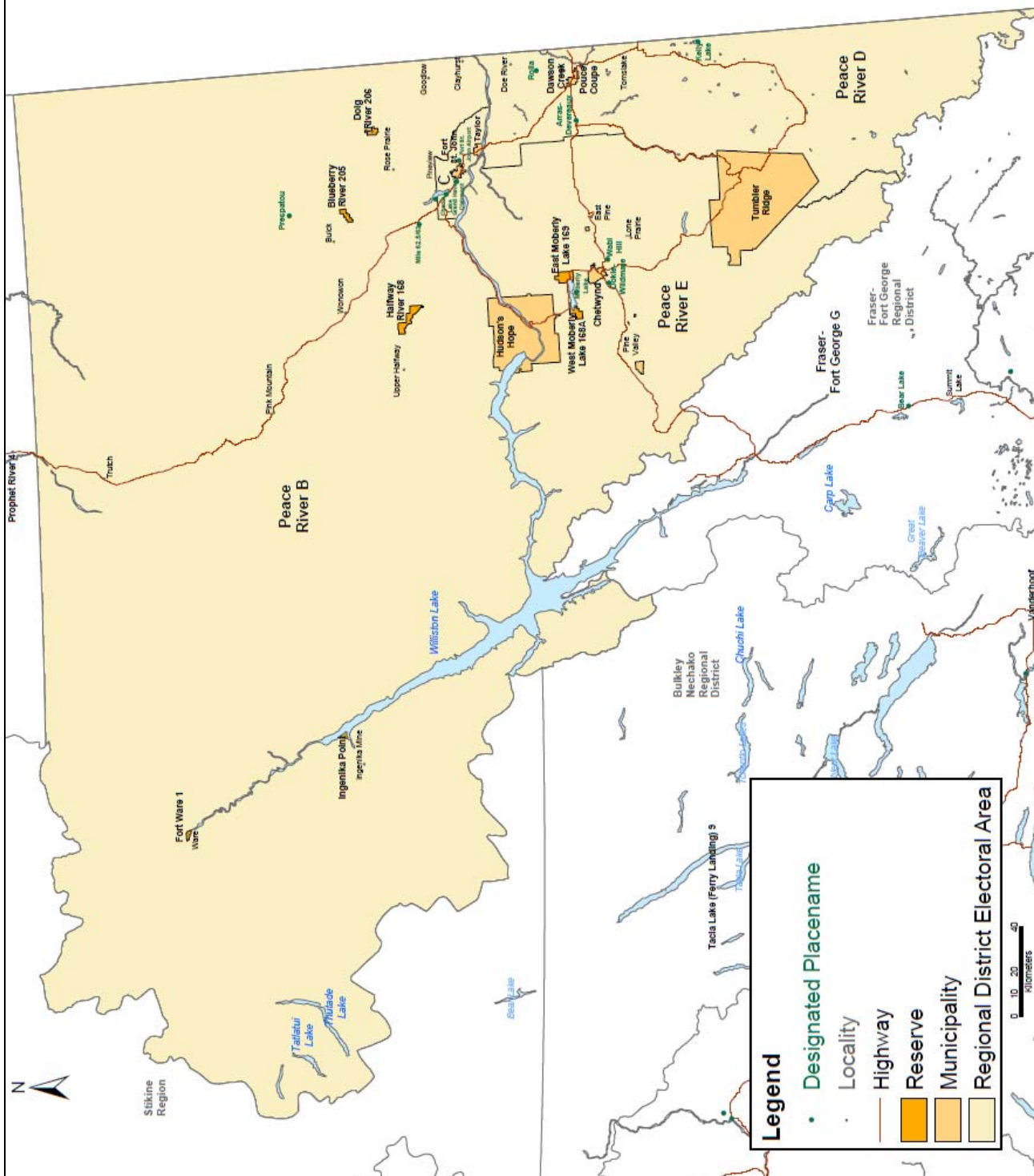
Facility and Patient Activity (selected measures).³¹

No. 701 - Fort St John Hospital and Health Centre					
Selected Measures	2006/07	2007/08	2008/09	2009/10	2010/11
Acute discharges/deaths total	3,402	3,685	3,601	3,025	2,854
Acute in-patient admissions total	11,242	3,737	3,585	3,010	2,851
Acute in-patient days (excl. ALC)	3,485	11,252	10,672	10,292	10,090
ALC days total	10,318	3,334	4,272	4,090	3,436
Ambulatory visits (excl. E/R).	27,527	10,406	12,819	13,609	13,558
Emergency visits (excl. Ambul)	n/a	25,977	24,787	21,458	22,860
In-patient surgical cases total	1,950	549	535	518	452
Surgical day care cases total	n/a	2,415	2,860	2,468	2,633
Psychiatry/addiction admissions	n/a	n/a	n/a	n/a	n/a
Psychiatry/addiction I/P days	n/a	n/a	n/a	n/a	n/a
Medical Imaging Tests	28,117	28,053	28,654	28,982	30,232
Lab Tests (excludes respiratory)	470,731	543,158	552,465	561,959	610,141



Peace River Regional District

Prepared by BC Stats
Source: 2006 Census
Statistics Canada



References

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- ² University of Alberta Libraries: The Making of Treaty 8. <http://www.albertasource.ca/treaty8/eng/default.htm>
- ³ BC Treaty Commission Statement of Intent Maps: GEO BC. <http://ilmbwww.gov.bc.ca/cis/initiatives/treaty/>
- ⁴ Metis Nation of British Columbia: BC Metis Places. http://www.bcmets.ca/manage_metsiplace_display.php
- ⁵ BC Stats: Population Estimates for Local Health Areas: PEOPLE 35. <http://www.bcstats.gov.bc.ca/data/pop/popstart.asp>
- ⁶ Population Estimates for Municipalities: BC Stats; 1996-2006, 2006-2010. <http://www.bcstats.gov.bc.ca/data/pop/pop/estpop.asp#totpop>
- ⁷ BC Stats: Population Estimates for Regional Districts: PEOPLE 35. <http://www.bcstats.gov.bc.ca/data/pop/popstart.asp>
- ⁸ 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.
- ⁹ What Determines Health: Public Health Agency of Canada <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php>
- ¹⁰ 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>
- ¹¹ Census 2006 Profiles: BC Stats. http://www.bcstats.gov.bc.ca/data/cen06/profiles/detailed/ch_alpha.asp
- ¹² BC Socio-economic profiles; BC Stats: June 2011. <http://www.bcstats.gov.bc.ca/data/sep/index.asp>
- ¹³ BC figures from BC Stats: [BC Socio-economic profiles](#), [Census 2006 Profiles](#) and / or [PEOPLE 35](#).
- ¹⁴ Human Early Learning Partnership; the Early Development Index: Wave 3. <http://www.earlylearning.ubc.ca/research/initiatives/early-development-instrument/>
- ¹⁵ Northern Health Resident Mothers that Delivered a Baby in British Columbia, by Resident Municipality. Prepared for Northern Health by Perinatal Services BC. Request 211011: June 16, 2011.
- ¹⁶ Northern Health Resident Mothers that Delivered a Baby in British Columbia, by Resident Municipality. Prepared for Northern Health by Perinatal Services BC. Request 211011: June 16, 2011.
- ¹⁷ Alberta Perinatal Health Program. June 2011. Figures are for 2004/05 – 2008/09.
- ¹⁸ 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>
- ¹⁹ Technical Assumptions for Population Forecasting in BC: Page 7. BC Stats, July 2009. <http://www.bcstats.gov.bc.ca/data/pop/pop/popproj.asp>
- ²⁰ 2008 Cohort (2 year olds) Date of Birth Jan 01, 2008 to Dec 30, 2008. Up-to-date for all vaccines: (new definitions). Data extracted Jan 17, 2011: MMP for JMH: Northern Health-Public and Preventive Health: June 2011.
- ²¹ Vaccine Preventable Disease: Northern Health-Public Health / Preventive Public Health: May 2010.
- ²² Population Patterns of Chronic Health Conditions in Canada: Health Council of Canada. <http://healthcouncilcanada.ca>
- ²³ The Cost of Chronic Disease in Canada: GPI Atlantic. 2004. <http://gpiatlantic.org/pdf/health/chroniccanada.pdf>
- ²⁴ Prevention: British Columbia Cancer Agency. 2009. <http://www.bccancer.bc.ca/PPI/Prevention/default.htm>
- ²⁵ 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>
- ²⁶ BC Ministry of Health Services: Chronic Conditions according to LHA. Project 2011_005_PHC
- ²⁷ InterRAI Client Assessment Summary: Northern Health. Summary as of March 31, 2011. Data extracted May 28, 2011. Northern Health Home and Community Care Services.
- ²⁸ Seniors and the Health Care System: What is the Impact of Multiple Chronic Conditions? CIHI, January 2011. http://secure.cihi.ca/cihiweb/products/air-chronic_disease_aib_en.pdf
- ²⁹ Hospitalizations by patient's home community 2003/ 04 to 2009/ 10: Special Analysis by the BC Ministry of Health for Northern Health. Project No. 2010_0289. Revised and Updated: July, 2011.
- ³⁰ Alternate Level of Care in Canada: CIH. <https://secure.cihi.ca/estore/productSeries.htm?pc=PCC456>
- ³¹ Northern Facility Activity Summaries from Northern Health Finance: Executive Summary Reports (ESR). Figures are P13 for previous year. Lab and Medical Imaging prepared separately: July 2011.