

Healthy Northern Communities 2011

City of Dawson Creek

Revised
October, 2011



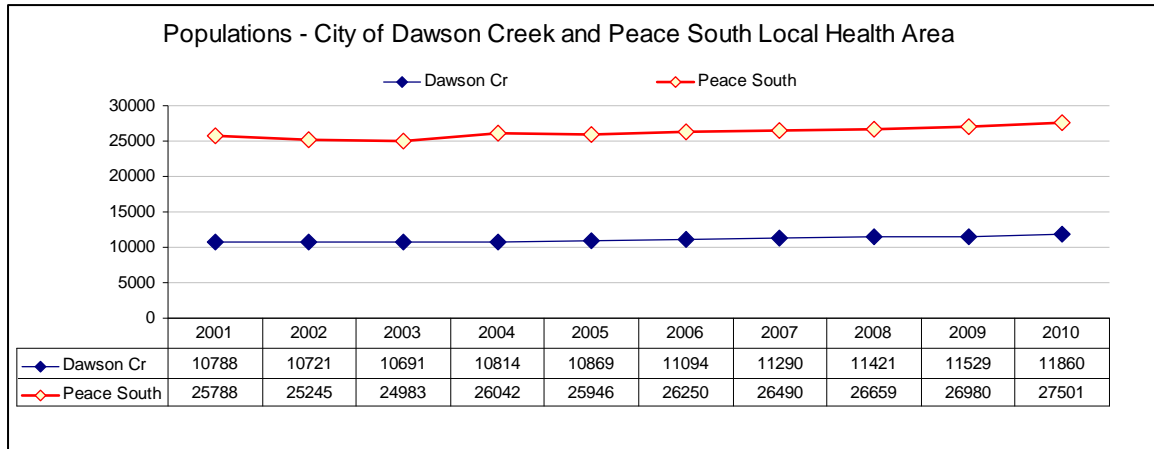
northern health
the northern way of caring

City of Dawson Creek

The City of Dawson Creek was incorporated in 1936. Dawson Creek is located 412 km northeast of Prince George and 73 km southeast of Fort St. John. ¹

Dawson Creek is also situated within the Peace River Regional District, within the Peace River South Local Health Area (LHA 059) and within the Northeast Health Service Delivery Area of Northern Health. Dawson Creek is served by School District No. 59.

The area of Dawson Creek is the traditional territories of the Dane-zaa (Beaver), Cree and Saulteau speaking peoples. The Saulteau First Nations and West Moberly First Nations, as well as many people of Metis heritage, call this area home. ^{2, 3, 4}



The 11,860 people living in the City of Dawson Creek account for approximately 44 % of the Peace River South LHA population (11,860 / 27,230 persons) and 18.6 % of the Peace River Regional District population (11,860 / 63,638 persons). The magnitude of the population attributable to local industrial work camps is uncertain. ^{5, 6, 7}

During the 2009 calendar year, there were 180 births, 93 deaths and 72 marriages to the residents of Dawson Creek. The average life expectancy for Dawson Creek residents was 78.7 years. This was less than the BC average life expectancy of 81.4 years. ⁸

Community Information

City of Dawson Creek: <http://www.dawsoncreek.ca/home.asp>

Dawson Creek Community Profile: <http://www.dawsoncreek.ca/news/publications.asp>

Saulteau First Nations: <http://www.saulteau.com/>

West Moberly First Nations: <http://www.treaty8.bc.ca/communities/westmoberly.php>

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

Peace River Rural Official Community Plan: <http://ruralocp.ca/>

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}

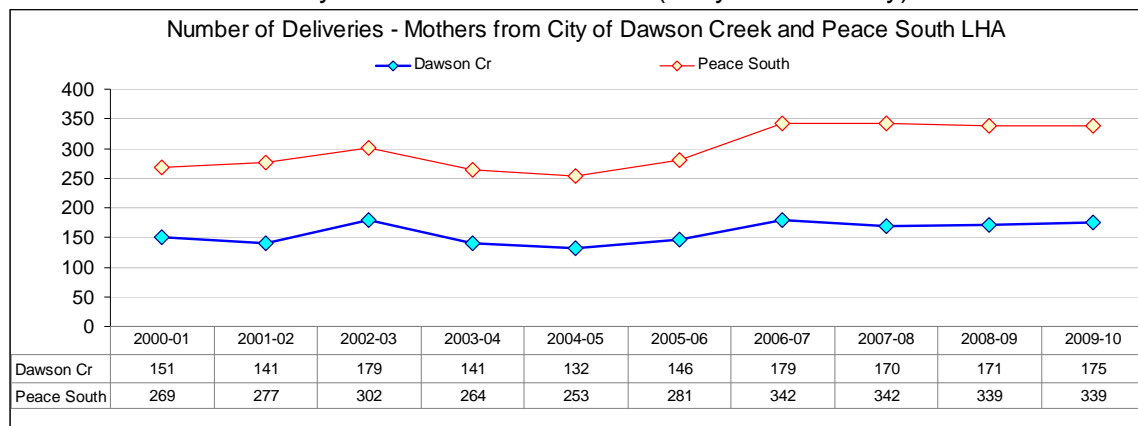
Selected Determinants of Health			
Demographics	Dawson Cr ¹¹	LHA ¹²	BC ¹³
Percent of population who are 0 – 19 yrs old	28.0	26.1	23.2
Percent of population who are ages 65+	11.8	11.6	15.0
Percent of population who are Visible Minorities	3.0	2.0	24.5
Percent of population who are Aboriginal Identity	13.0	13.8	4.8
Income			
Percent of families earning < \$20,000 per year	5.5	5.0	8.0
Percent of families earning from \$20,000 - \$80,000 per year	55.3	53.9	53.8
Percent of families earning > \$80,000 per year	39.2	41.0	38.1
* Percent of population receiving Income Assistance > 1 yr.	nca	1.1	1.0
Early Development and Educational Achievement			
Percent of kindergarten children vulnerable: 1 or more EDI scales ¹⁴	38.2 – 43.4	33.9	28.6
† Percent of Grade 4 & 7 students below standard on FSA - Reading	nca	33.2	20.7
† Percent of Grade 4 & 7 students below standard on FSA - Writing	nca	28.6	17.9
† Percent of Grade 4 & 7 students below standard on FSA - Math	nca	42.0	23.4
† Grade 10 Provincial-exam non-completion rate - English	nca	32.8	15.9
† Percent of 18 yr olds who did not graduate	nca	41.9	29.0
Percent of persons ages 25 to 54: without high school completion	nca	20.0	11.1
Percent of persons ages 25 to 64: with university degree or above	13.3	9.4	24.1
Housing			
Percent of households that are renting	34.2	25.1	30.4
Percent of tenants paying 30 % or more of income towards housing	43	36.5	43.4
Percent of owners paying 30 % or more of income towards housing	15	11.1	22.7
Children and Youth at Risk			
* Children (ages <15) receiving Income Assistance > 1 year	nca	2.1	1.7
* Youth (ages 15 - 24) receiving Income Assistance > 1 yr	nca	0.8	0.9
Children in care rate per 1,000 population, ages 0 – 18	nca	8.7	9.2
Teen pregnancies per 1,000 women ages 15 – 19 (2007-2009)	nca	40.2	26.3
Other Indicators			
Alcohol sales per capita in 2010 (Dollars Spent)	nca	977	790
Alcohol sales per capita in 2010 (Litres Consumed)	nca	154	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 South Local Health Area (LHA - 059).			
* 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 strong start in life seems 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 information informs services such as prenatal education, parenting skill programs, post delivery follow-ups, immunizations, as well as the screening services intended to detect and address vision, hearing and dental health concerns.

Number of deliveries by Dawson Creek mothers (ten year summary).¹⁵



Delivery locations for Dawson Creek mothers (five year summary).¹⁶

Mother's community or Regional District area	Delivery Location: 2005/06 – 2009/10				
	Ft St John	Dawson Creek	Chetwynd	Other BC Location	Total Deliveries
Chetwynd (DM)	25	240	54	13	332
Dawson Creek (City)	4	827	0	10	841 *
Peace River R/D (D)	31	137	0	6	174
Peace River R/D (E)	10	75	7	0	92
Pouce Coupe (VL)	0	63	0	1	64
Tumbler Ridge (DM)	4	130	0	6	140
Total Deliveries	74	1,472	61	36	1,643

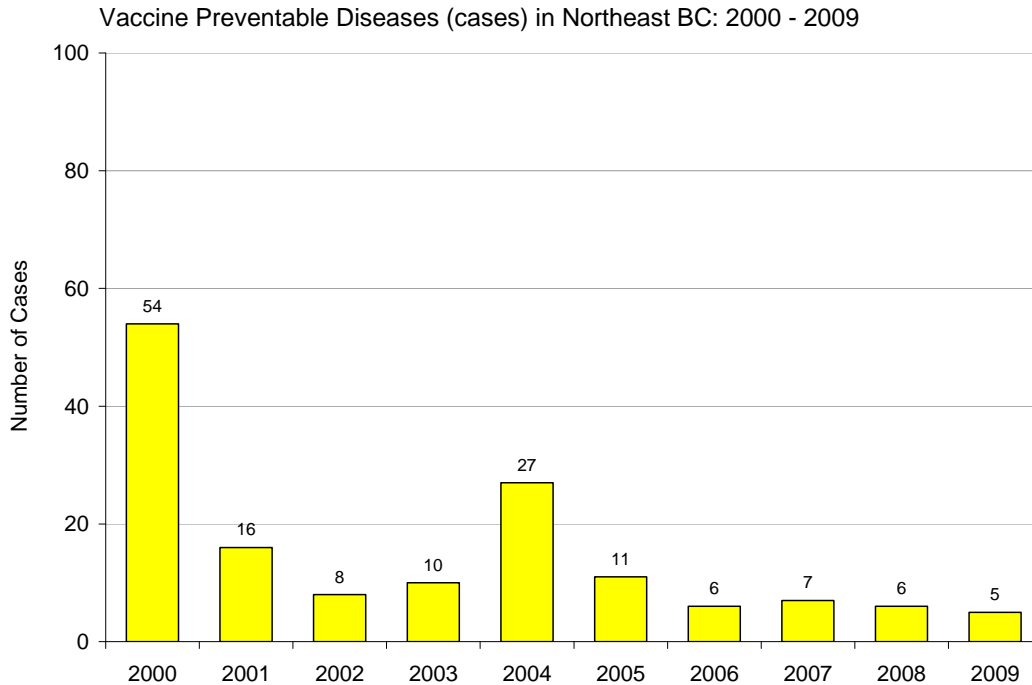
* There were an additional 5 deliveries in Alberta by mothers from Dawson Creek.¹⁷

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 Dawson Creek area, who are fully immunized, is 56.2%.²⁰

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



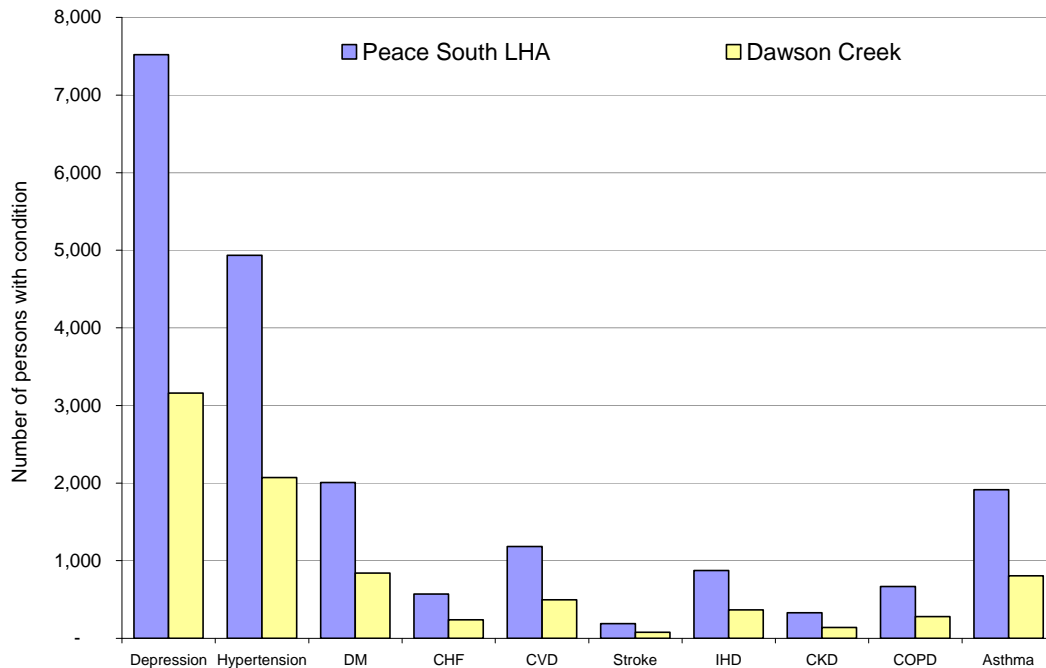
Vaccine Preventable Diseases (cases) in Northeast BC: 2000 - 2009 ²¹											
Community	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Chetwynd	1	4	2	1	2	1	1	0	1	1	14
Dawson Cr.	7	10	3	2	21	3	1	3	2	1	53
Fort Nelson	3	0	1	0	1	1	0	3	0	2	11
Fort St John	43	2	1	7	3	5	4	1	2	1	69
Hudson's Hope	0	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 South LHA and Dawson Creek residents: 2009 - 2010



Chronic Disease Estimates for Dawson Creek and Peace South LHA residents: 2009 - 10 ²⁶					
Selected Chronic Conditions	Existing or treated cases		New cases / yr		Cost per patient / yr
	Dawson	LHA	Dawson	LHA	
Depression	3158	7520	221	526	\$2,481
Hypertension	2073	4936	181	432	\$3,852
Diabetes	843	2006	76	180	\$4,931
Congestive Heart Failure (CHF)	239	569	39	93	\$11,850
Cardiovascular Disease (CVD)	497	1184	44	104	\$8,486
Stroke	79	188	9	22	\$13,479
Ischemic Heart Disease (IHD)	367	873	25	60	\$8,091
Chronic Kidney Disease (CKD)	138	329	26	61	\$13,036
COPD	280	666	70	167	\$9,069
Asthma	805	1916	48	115	\$1,504

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 %

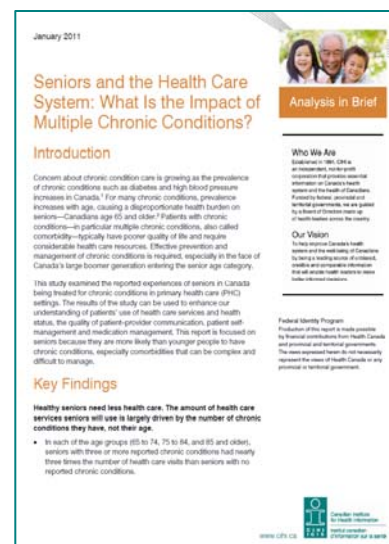
How do we compare to the rest of Canada?

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.

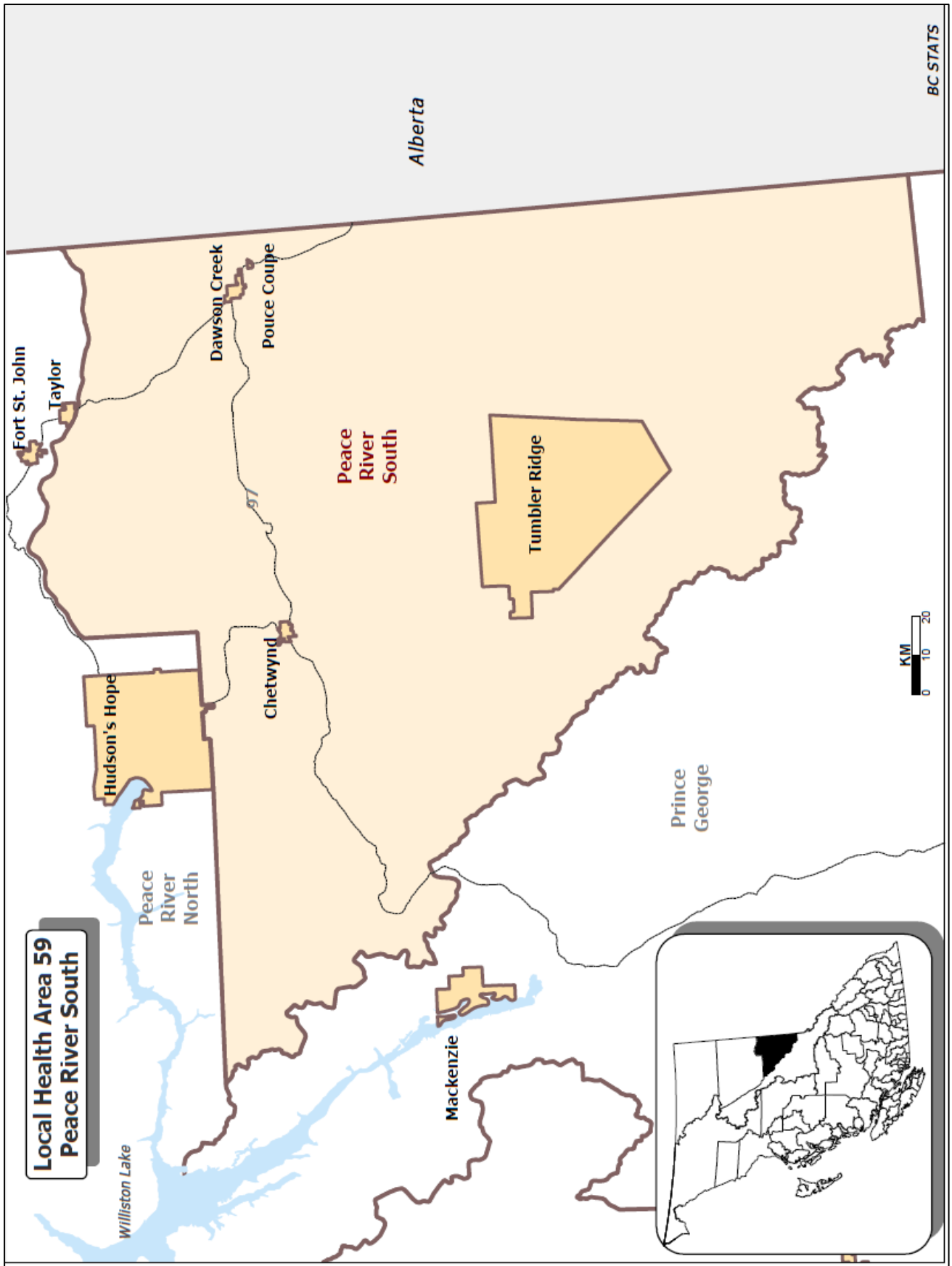
Location: where inpatient hospital services were received.²⁹

For Dawson Creek residents during the five year period: 2005/06 - 2009/10.							
Number of Cases and Days	Location of Hospital Care						
	Dawson Creek	Fort St. John	Chetwynd	Other NH	Other BC	OOP	Total
Cases	5,887	111	16	205	471	742	7,432
Days	32,571	365	61	1,594	4,426	6,279	45,296

- 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

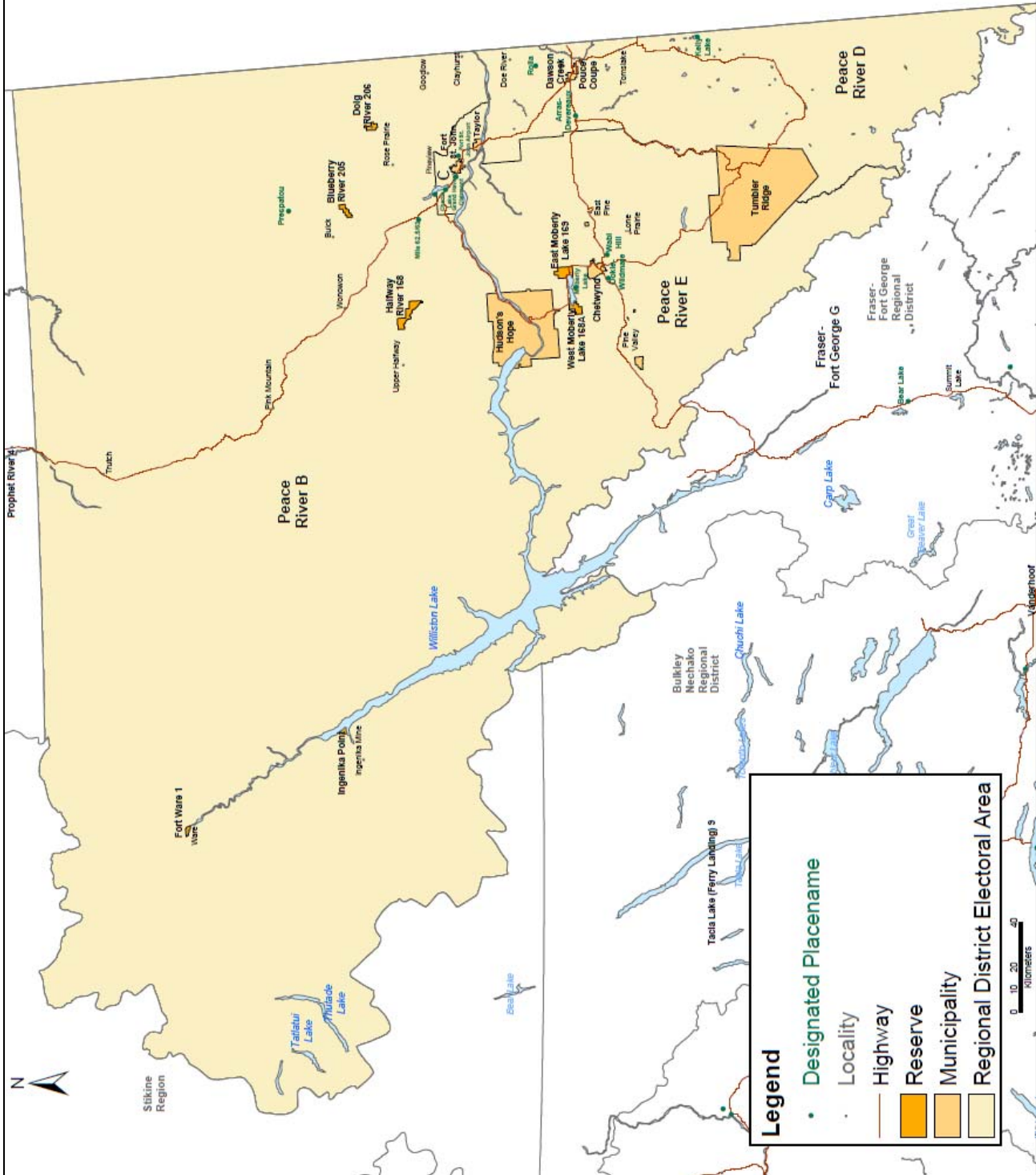
No. 704 - Dawson Creek and District Hospital					
Selected Measures	2006/07	2007/08	2008/09	2009/10	2010/11
Acute discharges/deaths total	2,464	2,439	2,256	2,034	2,087
Acute in-patient admissions total	2,386	2,363	2,195	1,729	2,088
Acute in-patient days (excl. ALC)	12,178	12,600	12,235	10,780	11,759
ALC days total	2,585	1,832	3,804	3,426	3,704
Ambulatory visits (excl. E/R).	5,713	6,480	9,061	9,078	8,147
Emergency visits (excl. Ambul)	25,723	25,125	25,777	26,200	26,740
In-patient surgical cases total	722	655	667	658	635
Surgical day care cases total	2,553	1,998	2,081	1,866	2,014
Psychiatry/addiction admissions	307	295	244	191	214
Psychiatry/addiction I/P days	3,435	3,597	3,926	3,588	3,534
Medical Imaging Tests	24,225	23,988	23,690	21,584	20,501
Lab Tests (excludes respiratory)	504,326	539,581	575,859	419,541	446,698



**Local Health Area 59
Peace River South**

Peace River Regional District

Prepared by BC Stats
Source: 2006 Census
Statistics Canada



References

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- 3 BC Ministry of Aboriginal Relations & Reconciliation: First Nations by Region. <http://www.gov.bc.ca/arr/treaty/regional.html>
- 4 Metis Nation of British Columbia: BC Metis Places. http://www.bcmets.ca/manage_metsplace_display.php
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- 6 Population Estimates for Municipalities: BC Stats; 1996-2006, 2006-2010. <http://www.bcstats.gov.bc.ca/data/pop/pop/estspop.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.
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- 14 Human Early Learning Partnership; the Early Development Index: Wave 3. <http://www.earlylearning.ubc.ca/research/initiatives/early-development-instrument/>
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- 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.
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- 24 Prevention: British Columbia Cancer Agency. 2009. <http://www.bccancer.bc.ca/PPI/Prevention/default.htm>
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