

Healthy Northern Communities 2011

*District Municipality of
Tumbler Ridge*

Revised
October 2011

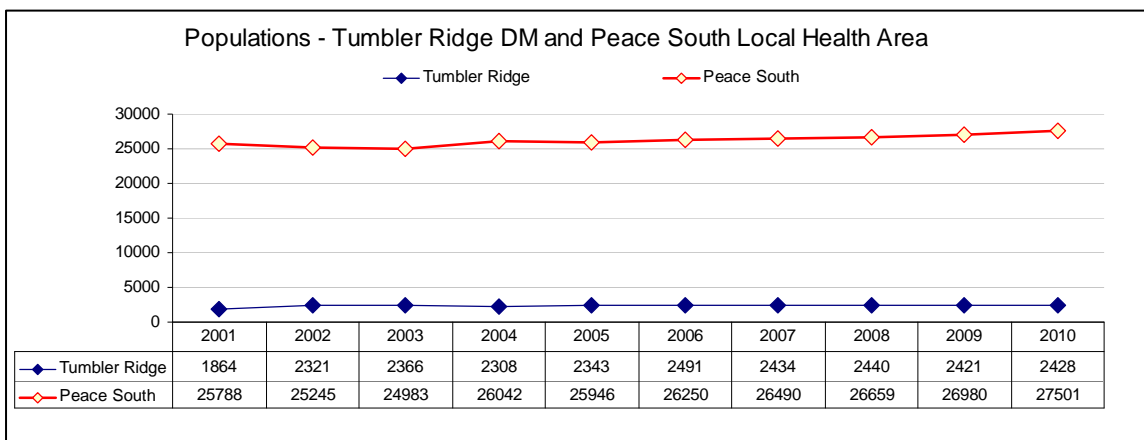


northern health
the northern way of caring

District Municipality of Tumbler Ridge

The District Municipality of Tumbler Ridge was incorporated in 1981. Tumbler Ridge is located approximately 105 km southeast of the District Municipality of Chetwynd. ¹

Tumbler Ridge 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. Tumbler Ridge is served by School District No. 59.



The estimated 2,428 people living within Tumbler Ridge account for approximately 9 % of the Peace River South LHA population (2,428 / 27,230 persons) and for 3.8 % of the Peace River Regional District population (2,428 / 63,368 persons). The magnitude of the population that may be attributable to industrial work camps is uncertain. ^{2, 3, 4}

During the 2009 calendar year, there were 30 births, 11 deaths and 14 marriages to the residents of Tumbler Ridge. The average life expectancy for Tumbler Ridge residents was 78.7 years. This was less than the BC average life expectancy of 81.4 years. ⁵

Community Information

District Municipality of Tumbler Ridge: <http://www.tumblerridge.ca/>

District Municipality of Tumbler Ridge Official Community Plan
<http://www.tumblerridge.ca/Portals/0/pdfs/development/OCP.pdf>

District Municipality of Tumbler Ridge Community Profile
<http://www.tumblerridge.ca/LinkClick.aspx?fileticket=lpPx4QY5HrM%3d&tabid=151>

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. ^{6, 7}

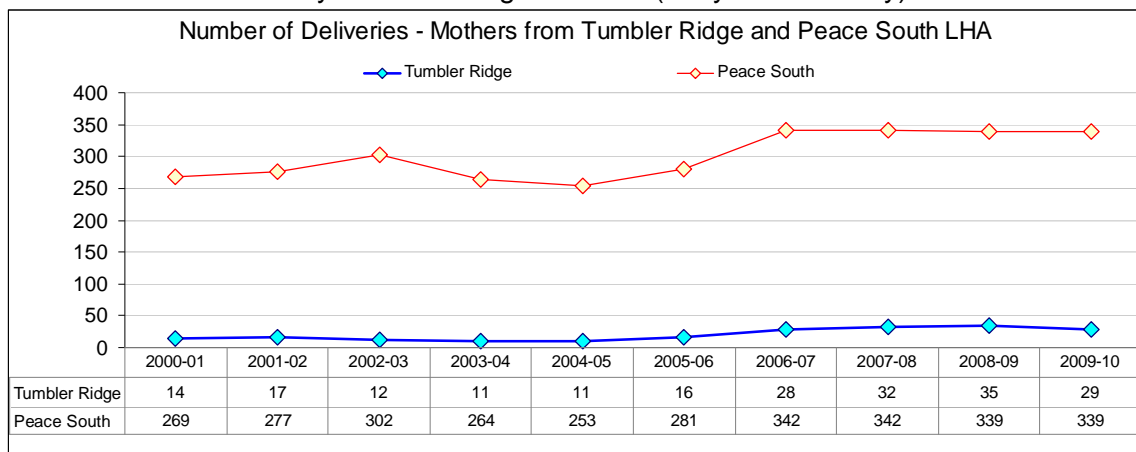
Selected Determinants of Health			
Demographics	Tumbler Ridge ⁸	LHA ⁹	BC ¹⁰
Percent of population who are 0 – 19 yrs old	24.3	26.1	23.2
Percent of population who are ages 65+	11.0	11.6	15.0
Percent of population who are Visible Minorities	1.0	2.0	24.5
Percent of population who are Aboriginal Identity	9.0	13.8	4.8
Income			
Percent of families earning < \$20,000 per year	3	5.0	8.0
Percent of families earning from \$20,000 - \$80,000 per year	52	53.9	53.8
Percent of families earning > \$80,000 per year	45	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 ¹¹	24.3	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	5.3	9.4	24.1
Housing			
Percent of households that are renting	19	25.1	30.4
Percent of tenants paying 30 % or more of income towards housing	25	36.5	43.4
Percent of owners paying 30 % or more of income towards housing	8	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 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 Tumbler Ridge mothers (ten year summary).¹²



Delivery locations for Tumbler Ridge mothers (five year summary).¹³

Mother's Home Community	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

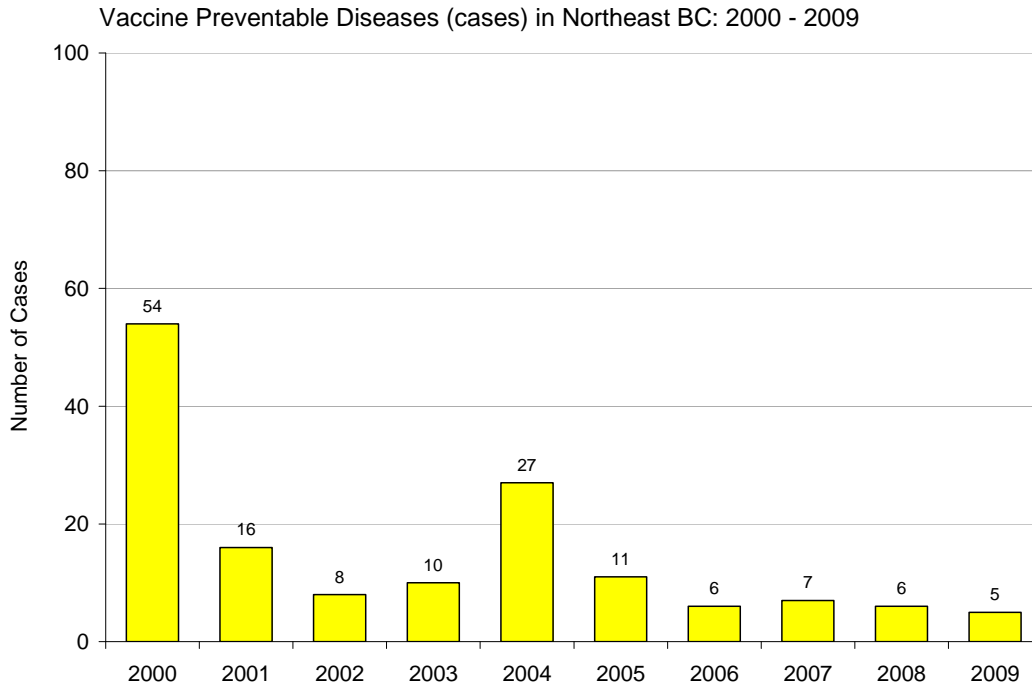
* There were an additional 4 deliveries in Alberta by mothers from Tumbler Ridge.¹⁴

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.^{15, 16}

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 Tumbler Ridge area, who are fully immunized, is 51.2%.¹⁷

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



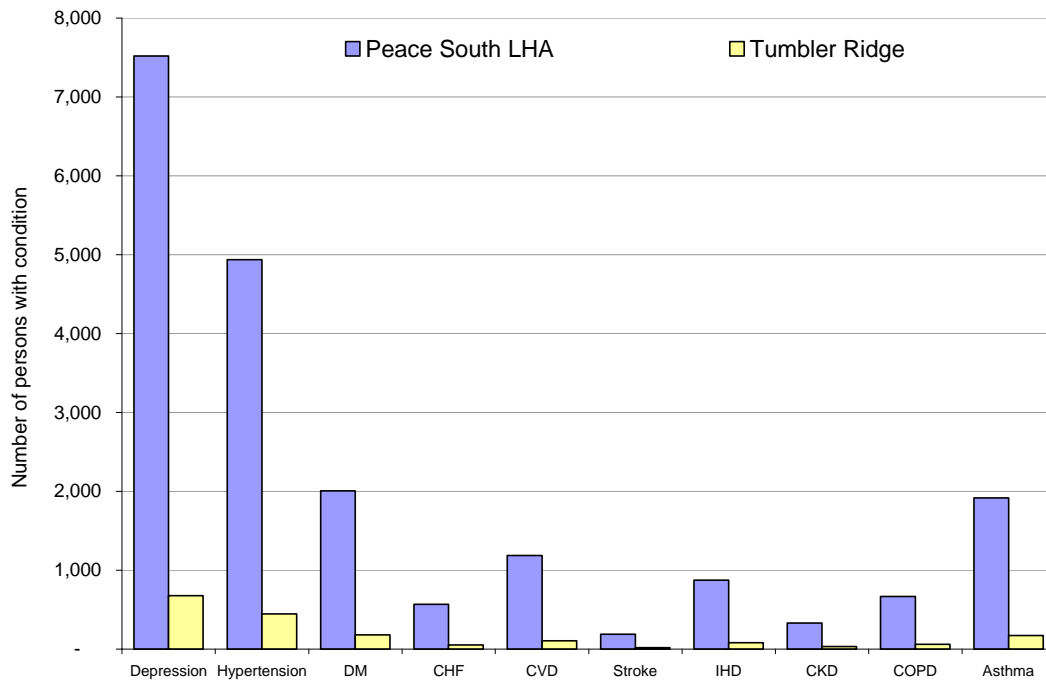
Vaccine Preventable Diseases (cases) in Northeast BC: 2000 - 2009 ¹⁸											
Community	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
Chetwynd	1	4	2	1	2	1	1	0	1	1	14
Dawson Cr.	7	10	3	2	21	3	1	3	2	1	53
Fort Nelson	3	0	1	0	1	1	0	3	0	2	11
Fort St John	43	2	1	7	3	5	4	1	2	1	69
Hudson's Hope	0	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. ^{19, 20, 21, 22}

Chronic Disease Estimates

Estimated number of existing or treated cases of selected chronic conditions
Peace South LHA and Tumbler Ridge residents: 2009 - 2010



Selected Chronic Conditions	Existing or treated cases		New cases / yr		Cost per patient / yr
	Tumbler	LHA	Tumbler	LHA	
Depression	677	7520	47	526	\$2,481
Hypertension	444	4936	39	432	\$3,852
Diabetes	181	2006	16	180	\$4,931
Congestive Heart Failure (CHF)	51	569	8	93	\$11,850
Cardiovascular Disease (CVD)	107	1184	9	104	\$8,486
Stroke	17	188	2	22	\$13,479
Ischemic Heart Disease (IHD)	79	873	5	60	\$8,091
Chronic Kidney Disease (CKD)	30	329	5	61	\$13,036
COPD	60	666	15	167	\$9,069
Asthma	172	1916	10	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.²⁴

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 %

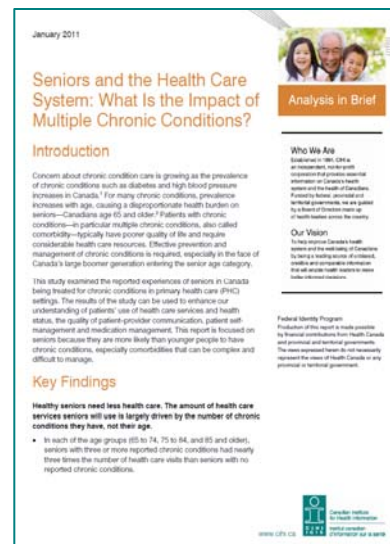
How do we compare to the rest of Canada?

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.²⁵

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.

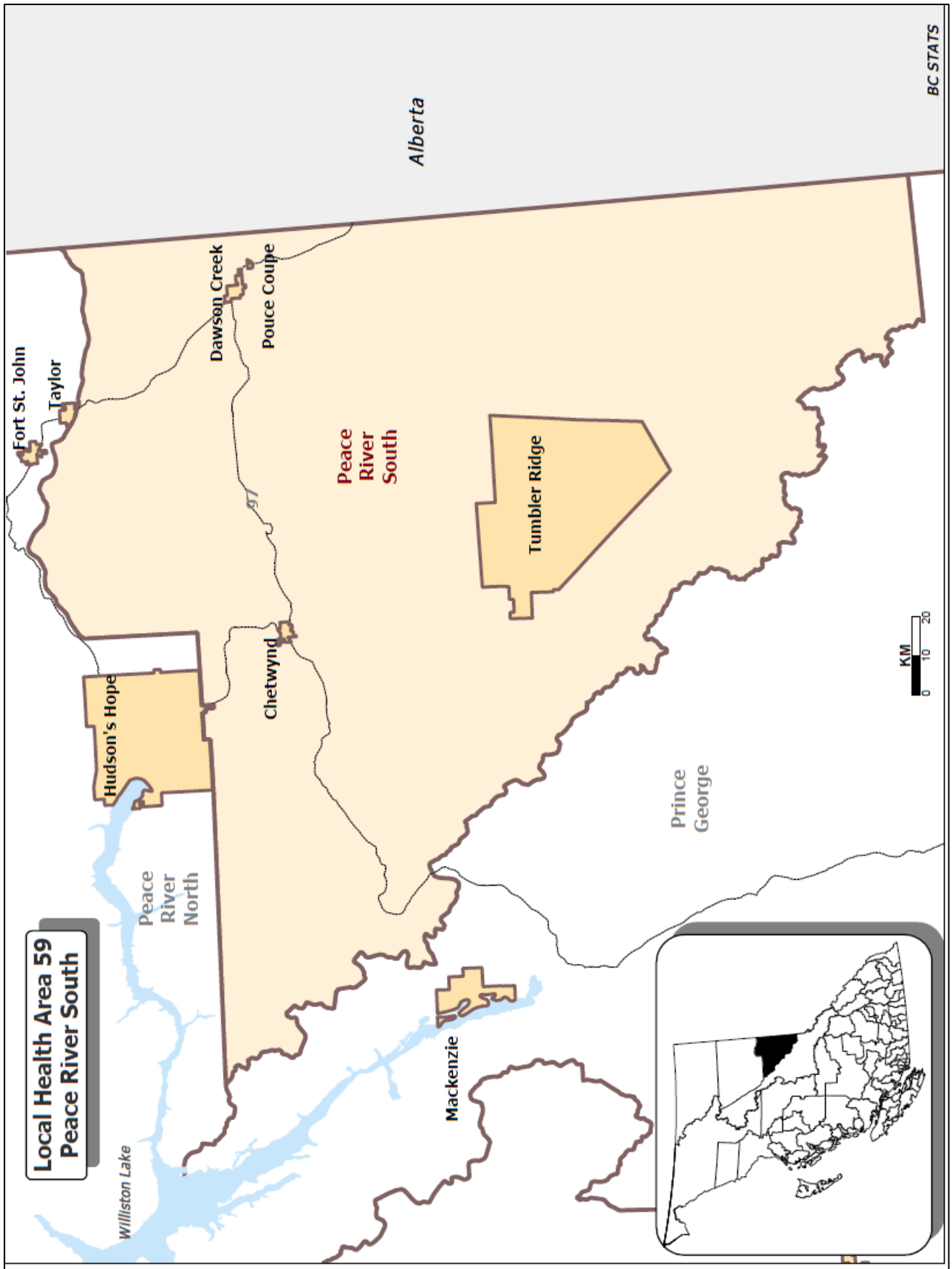
Location: where inpatient hospital services were received.²⁶

For Tumbler Ridge 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	622	21	47	54	80	152	976
Days	2,555	66	223	566	837	1,097	5,344

- 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.²⁷

Facility and Patient Activity (selected measures).²⁸

No. 720 - Tumbler Ridge Health Centre					
Selected Measures	2006/07	2007/08	2008/09	2009/10	2010/11
Ambulatory visits (excl E/R).	n/a	n/a	n/a	n/a	n/a
Emergency visits (excl Ambul)	3,054	2,964	3,151	2,322	2,299
Medical Imaging Tests	1,907	1,948	2,220	1,838	1,646
Lab Tests (excludes respiratory)	29,647	24,275	24,117	24,866	37,562



References

- ¹ BC Stats, Community Fact Sheets: <http://www.bcstats.gov.bc.ca/data/dd/facsheet/facsheet.asp>
- ² BC Stats: Population Estimates for Local Health Areas: PEOPLE 35. <http://www.bcstats.gov.bc.ca/data/pop/popstart.asp>
- ³ Population Estimates for Municipalities: BC Stats; 1996-2006, 2006-2010. <http://www.bcstats.gov.bc.ca/data/pop/pop/estpop.asp#totpop>
- ⁴ BC Stats: Population Estimates for Regional Districts: PEOPLE 35. <http://www.bcstats.gov.bc.ca/data/pop/popstart.asp>
- ⁵ 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.
- ⁶ What Determines Health: Public Health Agency of Canada <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php>
- ⁷ 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>
- ⁸ Census 2006 Profiles: BC Stats. http://www.bcstats.gov.bc.ca/data/cen06/profiles/detailed/ch_alpha.asp
- ⁹ BC Socio-economic profiles; BC Stats: June 2011. <http://www.bcstats.gov.bc.ca/data/sep/index.asp>
- ¹⁰ BC figures from BC Stats: [BC Socio-economic profiles](#), [Census 2006 Profiles](#) and / or [PEOPLE 35](#).
- ¹¹ Human Early Learning Partnership; the Early Development Index: Wave 3. <http://www.earlylearning.ubc.ca/research/initiatives/early-development-instrument/>
- ¹² 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.
- ¹³ 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.
- ¹⁴ Alberta Perinatal Health Program. June 2011. Figures are for 2004/05 – 2008/09.
- ¹⁵ 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>
- ¹⁶ Technical Assumptions for Population Forecasting in BC: Page 7. BC Stats, July 2009. <http://www.bcstats.gov.bc.ca/data/pop/pop/popproj.asp>
- ¹⁷ 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.
- ¹⁸ Vaccine Preventable Disease: Northern Health-Public Health / Preventive Public Health: May 2010.
- ¹⁹ Population Patterns of Chronic Health Conditions in Canada: Health Council of Canada. <http://healthcouncilcanada.ca>
- ²⁰ The Cost of Chronic Disease in Canada: GPI Atlantic. 2004. <http://gpiatlantic.org/pdf/health/chroniccanada.pdf>
- ²¹ Prevention: British Columbia Cancer Agency. 2009. <http://www.bccancer.bc.ca/PPI/Prevention/default.htm>
- ²² 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>
- ²³ BC Ministry of Health Services: Chronic Conditions according to LHA. Project 2011_005_PHC
- ²⁴ InterRAI Client Assessment Summary: Northern Health. Summary as of March 31, 2011. Data extracted May 28, 2011. Northern Health Home and Community Care Services.
- ²⁵ 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
- ²⁶ 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.
- ²⁷ Alternate Level of Care in Canada: CIHI. <https://secure.cihi.ca/estore/productSeries.htm?pc=PCC456>
- ²⁸ 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.