



Socio-demographic Profile of Rainy River District

Riverside Health Care Facilities

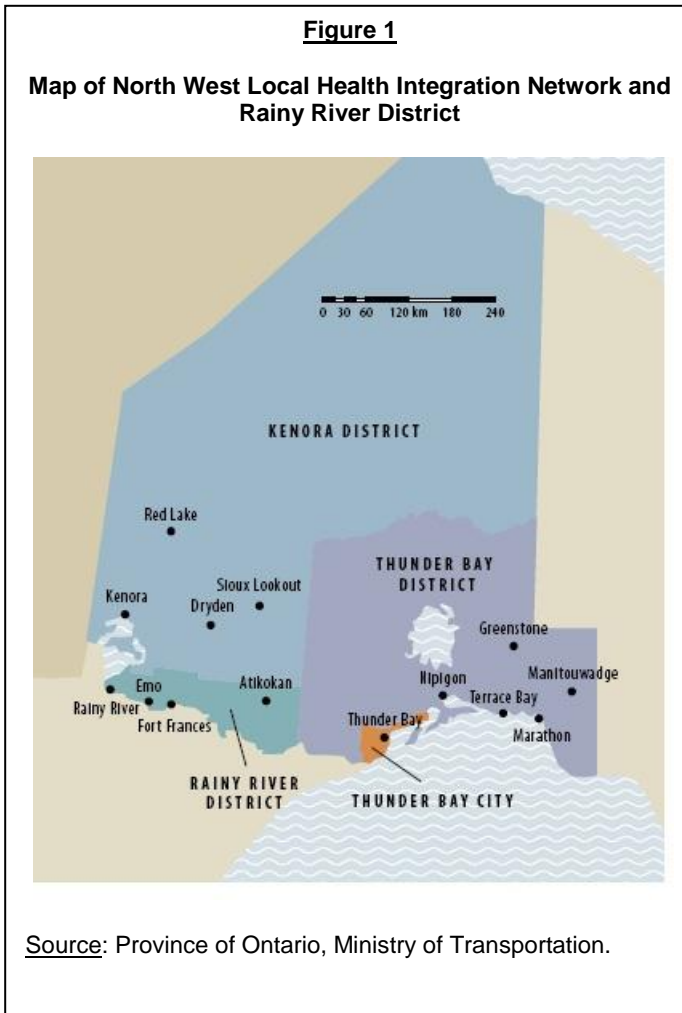
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1.0 SOCIO-DEMOGRAPHIC PROFILE OF RAINY RIVER DISTRICT

1.1 Geography

Covering the south-western corner of Northwestern Ontario, Rainy River District is bordered to the south by Rainy Lake and the American border with the State of Minnesota, to the north by Kenora District, to the west by the provincial border with Manitoba and to the East by Thunder Bay District (Figure 1).



Spanning some 15,485 square kilometres, from its Eastern (Shebandowan) to Western (Rainy River) border along Highway 11, the district stretches about 360 kilometres. By contrast, the distance between Windsor and Cornwall along Highway 401 is approximately 785 kilometres.

1.2 Population Distribution

Almost four in ten people living in Rainy River District live in Fort Frances. Most of the remainder of the population lives in smaller communities along the Highway 11 corridor (Table 1).

It is important to recognize that apart from the Couchiching First Nation, the overall population of Rainy River District decreased by almost 1,200 residents (5.5%) in the intercensal period (2006-2011).

This population change is consistent with the rest of the North West region of the province: Kenora District (-10.6%) and Thunder Bay District (-2%). The population count of the City of Thunder Bay remained relatively the same (-0.7%).

The District of Rainy River accounts for 9% of the population of Northwestern Ontario and about 0.2% of the Province of Ontario.

The population density of Rainy River District is sparse with 1.3 persons per square kilometre, with wide variation among its constituent municipalities ranging from Rainy River Unorganized (0.1 residents per km²) to the Town of Fort Frances (296.4 residents per km²).

This distribution presents a significant challenge to the provision of equitable access to health and social care services due to the remote and isolated nature of many of the district's small communities (Table 2).



The Riverside Health Care (RHC) catchment covers about 67% of the District's land mass and roughly 85% of the District's population.

Centre	Population, 2011	Population, 2006	Increase(Decrease)%
Rainy River, District	20,370	21,564	-5.5
Fort Frances, Town	7,952	8,103	-1.9
Atikokan, Township	2,787	3,293	-15.4
Rainy River, Unorganized	1,159	1,431	-19
Emo, Township	1,252	1,305	-4.1
La Vallee, Township	988	1,067	-7.4
Alberton, Township	864	958	-9.8
Rainy River, Town	842	909	-7.4
Chapple, Township	741	856	-13.4
Couchiching, First Nation	796	691	15.2
Dawson, Township	563	620	-9.2
Morley, Township	474	492	-3.7
Lake of the Woods, Township	296	323	-8.4

Source: Statistics Canada, Census 2011.

Centre	Population, 2011	Land mass (km ²)	Population Density (residents/km ²)
Rainy River, District	20,370	15,484.9	1.3
Fort Frances, Town	7,952	26.9	296.2
Atikokan, Township	2,787	319.3	8.7
Rainy River, Unorganized	1,159	12,256.2	0.1
Emo, Township	1,252	203.5	6.2
La Vallee, Township	988	237.5	4.2
Alberton, Township	864	115.4	7.5
Rainy River, Town	842	3.0	281.5
Chapple, Township	741	529.0	1.4
Couchiching, First Nation	796	65.0	12.2
Dawson, Township	563	338.4	1.7
Morley, Township	474	375.6	1.3
Lake of the Woods, Township	296	752.0	0.4

Source: Statistics Canada, Census 2011.



1.3 Age of the Population

According to the 2011 Census, there is a greater proportion of the population over 65 years of age in Rainy River District (17.3%) than the North West Local Health Integration Network (LHIN) area (15.8%), the province (14.6%) and the nation (14.7%). This rate increases when the population over the age of 75 is selected: 8.6% of Rainy River District residents are over this age. This is higher than the North West LHIN (7.5%) and the province and nation (6.8%). This is highlighted in Table 3 and Figure 2. Table 4 compares the ratio of the population over 65 years or age and over 75 years of age of Rainy River District with the entire North West LHIN, the province and the nation.

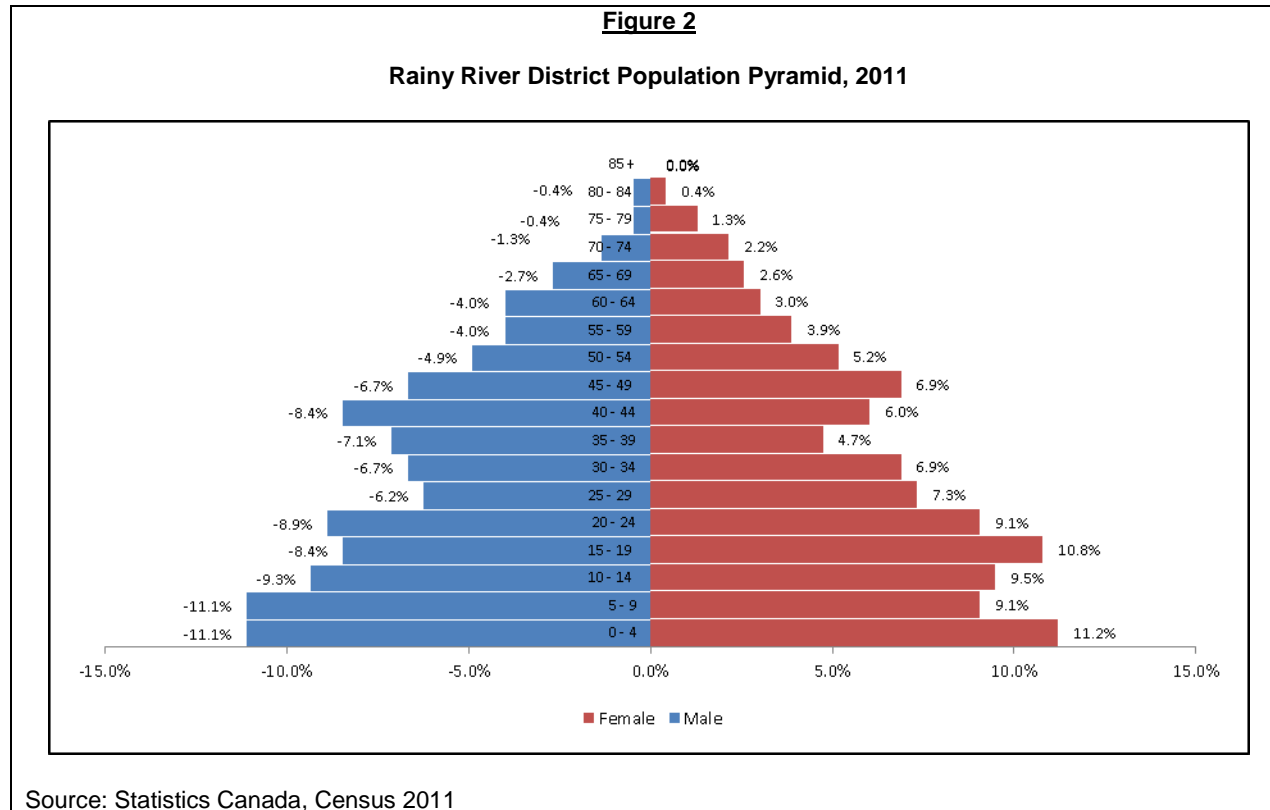




Table 3

Population Distribution by Gender and Age Cohort, Rainy River District, 2011¹

Age	Males		Female		Total	
	N	%	n	%	N	%
0 – 4	595	5.9	550	5.3	1145	5.6
4 – 9	625	6.2	605	5.8	1230	6.0
10 – 14	685	5.8	680	6.6	1365	6.7
15 – 19	750	7.5	720	6.9	1470	7.2
20 – 24	575	5.7	515	5.0	1090	5.3
25 – 29	450	4.5	515	5.0	965	4.7
30 – 34	480	4.8	520	5.0	1000	4.9
35 – 39	560	5.6	580	5.6	1140	5.6
40 – 44	575	5.7	665	6.4	1240	6.1
45 – 49	755	7.5	780	7.5	1535	7.5
50 – 54	880	8.8	875	8.4	1755	8.6
55 – 59	780	7.8	745	7.2	1525	7.5
60 – 64	720	7.2	670	6.5	1395	6.8
65 – 69	470	4.7	500	4.8	970	4.8
70 – 74	365	3.6	440	4.2	805	3.9
75 – 79	315	3.1	355	3.4	670	3.3
80 – 84	250	2.5	300	2.9	545	2.7
85 and over	190	1.9	345	3.3	535	2.6
Total	10,010	100	10,360	100	20,370	100

Notes.

- Errors may occur due to rounding.
- Source: Statistics Canada, Census 2011

Table 4

Rainy River District Comparisons of 65+ and 75+ Population to Other Selected Jurisdictions, 2011

Jurisdiction	Population 65 years and over		Population 75 years and over	
	Percentage	Ratio	Percentage	Ratio
Rainy River District	17.3	-	8.6	-
North West LHIN	15.8	9.4	7.5	14.7
Ontario	14.6	18.5	6.8	26.4
Canada	14.8	16.9	6.8	26.4

Source: Statistics Canada, Census 2011



Noteworthy is the fact that Rainy River District has much higher rates of its population over 65 and 75 years of age compared to the North West LHIN, the province and the nation. Statistics Canada lists 15 First Nations in Rainy River District with a population of 2,453 (12% of the total population) according to the 2011 Census, displaying a much younger demographic profile (Tables 5).

First Nation	Males		Females		Total	
	n	%	N	%	n	%
Agency 1	-	-	-	-	0	-
Big Grassy 35G	120	50	120	50	250	100
Big Mainland 93	-	-	-	-	0	-
Couchiching 16A	370	46.3	425	53.1	800	99.4
Long Sault 12	-	-	-	-	39	100
Manitou Rapids 11	155	49.2	165	52.4	315	101
Neguaguon Lake 25D	110	57.9	80	42.1	190	100
Rainy Lake 17A	100	46.5	115	53.5	215	100
Rainy Lake 17B	-	-	-	-	5	100
Rainy Lake 18C	55	61.1	35	38.9	90	100
Rainy Lake 26A	85	53.1	75	46.9	160	100
Saug-A-Gaw-Sing 1	-	-	-	-	119	100
Seine River 23A	130	48.1	145	53.7	270	101
Seine River 23B	-	-	-	-	-	-
Sabaskong Bay (Part) 35C	-	-	-	-	-	-
Total	1,125		1,160		2,453	

Notes:
 1. It is not mandatory for First Nations to complete Census surveys.
 2. Errors may occur due to rounding or absence of gender data.
 3. Source: Statistics Canada, Census 2011

Table 6 and Figure 3 represent the total aboriginal population for Rainy River District in 2006 (most recent available year). The total aboriginal identity population is composed of those persons who reported identifying with at least one Aboriginal group, that is, North American Indian, Métis or Inuit, and/or those who reported being a Treaty Indian or a Registered Indian, as defined by the *Indian Act* of Canada, and/or those who reported they were members of an Indian band or First Nation. This population represented 21.6% of the District population at the time and (again) featured a strikingly younger demographic profile. There is no reason to believe that this has changed in recent years.

It is important to acknowledge that these data combine the self-reported First Nation 'on reserve' population and the self-reported Métis population that are incorporated into the general Census. Changes to the manner in which Statistics Canada managed the most recent Census does not allow for precise identification of population trends of the Métis people, however it is not unreasonable to infer that both aboriginal populations contribute to reducing the overall age profile of the Rainy River District population.



This has important health and social service delivery implications: first, that the services and programs offering must be reviewed to ensure that it addresses the population age dichotomy; second, that the appropriate array of services and programs must be delivered in a culturally sensitive manner and; finally, the services and programs be offered in close partnership with all appropriate community stakeholders.

Table 6

**Total Aboriginal Identity Population Distribution by Gender and Age Cohort,
Rainy River District where available, 2006¹**

Age	Males		Female		Total	
	n	%	n	%	N	%
0 – 4	255	11.3%	235	10.0%	495	10.7%
4 – 9	190	8.4%	240	10.2%	430	9.3%
10 – 14	205	9.1%	225	9.5%	430	9.3%
15 – 19	265	11.8%	210	8.9%	475	10.3%
20 – 24	125	5.5%	190	8.1%	315	6.8%
25 – 29	165	7.3%	175	7.4%	335	7.3%
30 – 34	185	8.2%	165	7.0%	350	7.6%
35 – 39	165	7.3%	145	6.1%	310	6.7%
40 – 44	125	5.5%	150	6.4%	270	5.9%
45 – 49	180	8.0%	190	8.1%	370	8.0%
50 – 54	75	3.3%	130	5.5%	210	4.6%
55 – 59	125	5.5%	100	4.2%	225	4.9%
60 – 64	75	3.3%	55	2.3%	130	2.8%
65 – 69	70	3.1%	55	2.3%	125	2.7%
70 – 74	30	1.3%	40	1.7%	70	1.5%
75 – 79	15	0.7%	30	1.3%	45	1.0%
80 – 84	10	0.4%	0	0.0%	10	0.2%
85 and over	10	0.4%	15	0.6%	20	0.4%
Total	4,615	100.0%	2,255	100.7%	2,360	99.6%

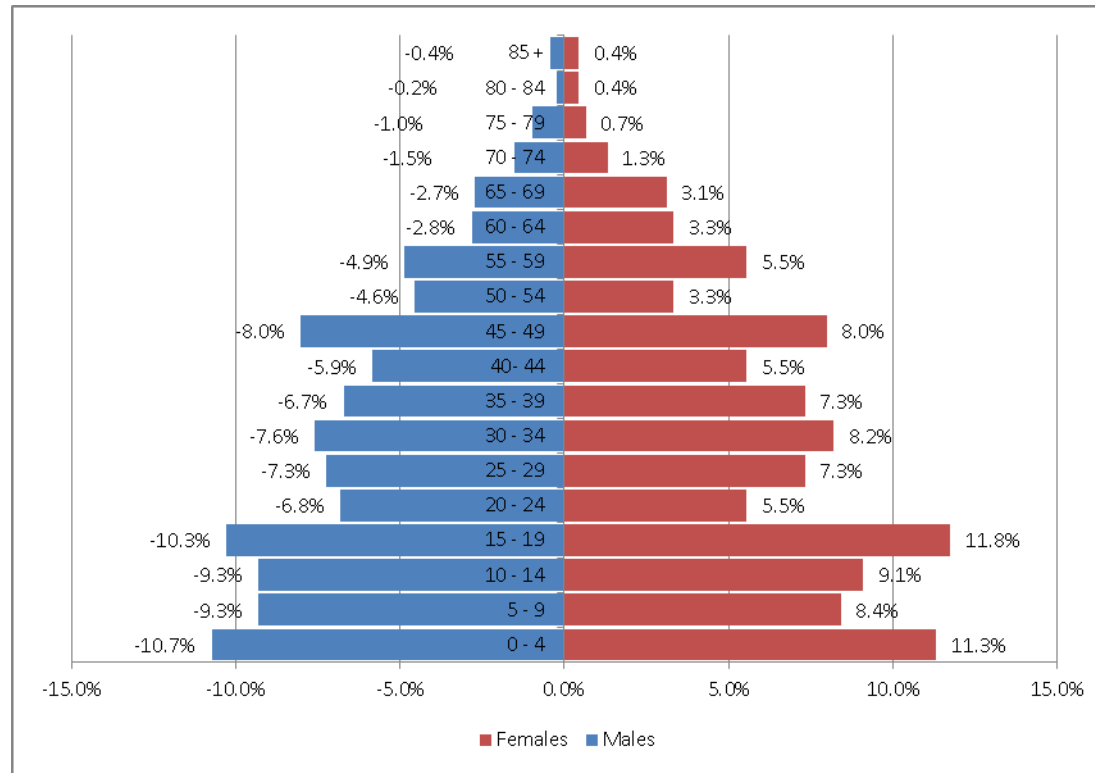
Notes.

- Errors may occur due to rounding
- Source: Statistics Canada. 2007. 2006 Aboriginal Population Profile. 2006 Census.



Figure 3

Total Aboriginal Identity Population Distribution by Gender and Age Cohort, Rainy River District, 2006¹



Notes:

1. Errors may occur due to rounding
2. Source: Statistics Canada. 2007. 2006 Aboriginal Population Profile. 2006 Census.



1.4 Language

Mother tongue is defined as the first language learned in childhood and still understood at the time of the Census. It offers a historical look at language preference because it does not measure current language preferences. Home language, on the other hand, is defined as the language spoken at home by the individual at the time of the census. Home language reflects current language preferences of a community.

In the 2006 Census, the majority of residents in Rainy River District recorded English as their home language (97.9%). Francophones comprised only 0.2% of the population while 'non-official languages' tallied 1.6%. This will be updated upon the release of the new 2011 Census figures, but in the absence of any in-migration, it is unlikely to materially change (Table 8).

1.5 Education

The level of education was very similar throughout the Region. The largest percentage of the population aged 15 years and older had no secondary schooling. Only about 10 percent of the population in each district had a university degree or certificate. These trends mirror the situation at the provincial level (Table 8).

Table 8
Selected Social Characteristics
Rainy River District, North West LHIN and Ontario, 2006

Characteristics	Rainy River District						North West LHIN						Ontario					
	Total		Male		Female		Total		Male		Female		Total		Male		Female	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Language spoken at home most often																		
Total population	21,270		10,530		10,740		232,370		114,960		117,405		12,028,895		5,877,875		6,151,020	
English	20,815	97.9	10,305	97.9	10,510	97.9	213,925	92.1	105,855	92.1	108,075	92.1	9,655,830	80.3	4,733,165	80.5	4,922,665	80.0
French	50	0.2	25	0.2	25	0.6	2,695	1.2	1,345	1.2	1,350	1.1	289,035	2.4	136,125	2.3	152,910	2.5
Non-official	340	1.6	170	1.6	170	1.6	14,415	6.2	7,055	6.1	7,355	6.3	1,811,620	15.1	874,575	14.9	937,050	15.2
Educational attainment																		
Population 15+	17,035		8,425		8,610		187,975		92,340		95,635		9,819,420		4,744,710		1,124,615	
No certificate	5,140	30.2	2,655	31.5	2,480	28.8	56,550	30.1	28,330	30.7	28,215	29.5	2,183,625	22.2	1,059,015	22.3	1,124,615	22.2
High school	4,805	28.2	2,190	26.0	2,610	30.3	47,315	25.2	21,845	23.7	25,465	26.6	2,628,575	26.8	1,220,380	25.7	1,408,190	27.7
Apprent./Trade	1,980	11.6	1,395	16.6	585	6.8	21,060	11.2	15,430	16.7	5,630	5.9	785,115	8.0	514,820	10.9	270,295	5.3
College	2,980	17.5	1,230	14.6	1,750	20.3	34,910	18.6	14,350	15.5	20,555	21.5	1,804,775	18.4	782,360	16.5	1,022,420	20.1
Univer. no degree	550	3.2	230	2.7	320	3.7	5,385	2.9	2,295	2.5	3,095	3.2	405,270	4.1	181,355	3.8	223,915	4.4
Univer. degree	1,585	9.3	725	8.6	860	10.0	22,760	12.1	10,080	10.9	12,675	13.3	2,012,060	20.5	986,780	20.8	1,025,280	20.2
Employment																		
Population 15+	17,035		8,425		8,610		187,975		92,340		95,635		9,819,420		4,744,710		1,124,615	
In the labour force	10,935	64.2	5,810	69.0	5,120	59.5	120,050	63.9	62,700	67.9	57,345	60.0	6,587,580	67.1	3,437,670	72.5	3,149,905	62.1
Employed	10,075	59.1	5,315	63.1	4,760	55.3	110,115	58.6	56,770	61.5	53,335	55.8	6,164,245	62.8	3,230,050	68.1	2,934,195	57.8
Unemployed	865	5.1	500	5.9	360	4.2	9,940	5.3	5,930	6.4	4,005	4.2	423,335	4.3	207,620	4.4	215,710	4.3
Not in labour force	6,100	35.8	2,615	31.0	3,490	40.5	67,925	36.1	29,640	32.1	38,295	40.0	3,231,840	32.9	1,307,035	27.5	1,924,805	37.9
Participation %	64.2		69		59.5		63.9		67.9		60.0		67.1		72.5		62.1	
Employment %	59.1		63.1		55.3		58.6		61.5		55.8		62.8		68.1		57.8	
Unemployment %	7.9		8.6		7		8.3		9.5		7.0		6.4		6		6.8	

Source: Statistics Canada, Census 2006.



1.6 Employment

There is little difference in the employment rate between the Rainy River District and the North West LHIN. Relative to a provincial rate of 6.4 percent, unemployment rates in both northern jurisdictions are higher. Unemployment has been associated with poorer overall health. The Federal, Provincial and Territorial Advisory Committee on Population Health (1994) noted that:

. . . the unemployed have significantly more psychological distress, anxiety, depressive symptoms, disability days, activity limitation, health problems, hospitalization and physician visits than the employed. People with lower incomes reported more anxiety and depressive symptoms but most health problems [seem] to be associated with the stress of unemployment not the lack of income per se.

1.7 Income

In all three jurisdictions reviewed, men earned more than women in 2005. The percentage difference was more apparent in Rainy River District and within the North West LHIN (74% and 71%, respectively) compared to the province (59%).

Rainy River District had the lowest median income of the areas under review but reported the highest rate of percentage of government transfer of total income received (14.6%) with the rate for females as the highest (19.1%) (Table 9).

Table 9									
Selected Income Characteristics									
Rainy River District, North West LHIN and Ontario, 2006									
	Rainy River District			North West LHIN			Ontario		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Population 15+ with income	16,375	8,125	8,250	180,330	88,945	91,385	9,340,020	4,540,895	4,799,125
Median income persons 15+ (\$)	25,470	34,056	19,536	26,404	34,922	20,419	27,258	34,454	21,669
% Government transfer of total income	14.6	11.6	19.1	13.4	10.2	18.1	9.8	6.9	14
% low income before taxes	10.2	10	10.4	10.7	9.4	11.9	14.7	13.7	15.6
<i>Source: Statistics Canada, Census 2006.</i>									



1.8 Marital Status

In 2006, marital status in Rainy River District was similar to that of the NW LHIN and the province (Table 10). This will be updated upon the release of the new 2011 Census figures, but the current rates are unlikely to materially change.

Table 10
Legal Marital Status Characteristics
Rainy River District, North West LHIN and Ontario, 2006

Legal Marital Status Characteristics	Rainy River District						North West LHIN						Ontario					
	Total		Male		Female		Total		Male		Female		Total		Male		Female	
	n	%	n	%	n	%	n	%	N	%	n	%	n	%	n	%	n	%
Total population 15 +	17,315	80.3	8,510	80.1	8,810	80.6	190,575	81.1	93,525	80.5	97,055	81.7	9,949,480	81.8	4,796,850	80.9	5,152,635	82.7
Never legally married (single)	5,260	30.4	2,900	34.1	2,365	26.8	64,160	33.7	34,920	37.3	29,240	30.1	3,143,960	31.6	1,662,930	34.7	1,481,025	28.7
Legally married (and not separated)	8,940	51.6	4,465	52.5	4,470	50.7	92,050	48.3	46,010	49.2	46,040	47.4	5,168,660	51.9	2,585,115	53.9	2,583,545	50.1
In a common-law relationship	1,610	9.3	805	9.5	805	9.1	19,710	10.3	9,825	10.5	9,885	10.2	691,755	7.0	347,915	7.3	343,840	6.7
Separated, but still legally married	520	3.3	260	3.4	260	3.3	7,630	4.0	3,545	3.8	4,090	4.2	345,075	3.5	150,090	3.1	194,980	3.8
Divorced	1,130	6.5	590	6.9	540	6.1	13,080	6.9	6,230	6.7	6,855	7.1	679,990	6.8	283,150	5.9	396,840	7.7
Widowed	1,470	8.5	300	3.5	1,175	13.3	13,655	7.2	2,820	3.0	10,840	11.2	611,805	6.1	115,565	2.4	496,235	9.6

Source: Statistics Canada, Census 2006

1.9 Family Composition

Table 11 summarizes selected characteristics of the composition of families in Rainy River District. With regards to the number of married couple families, there are similar percentages between the District and the province, however when the heads of lone parent families are reviewed, the province records a higher percentage of families lead by a sole female parent.

Table 11
Selected Family Composition Characteristics
Rainy River District, North West LHIN and Ontario, 2006

	Rainy River District	North West LHIN	Ontario
Number of census families	6,120	67,260	3,422,315
Number of married couple families	4,405 (72.0%)	45,395 (67.5%)	2,530,560 (73.9%)
Number of lone parent families	905 (14.8%)	11,965 (17.8%)	540,715 (15.8%)
Female-head lone parent families	705 (78.0%)	9,305 (77.8%)	441,105 (81.6%)
Male-head lone parent families	200 (22.0%)	2,655 (22.2%)	99,605 (18.4%)

Source: Statistics Canada, Census 2006.



1.10 Diversity (Non-Aboriginal)

	Rainy River District			North West LHIN			Ontario		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total population	21,270	10,530	10,745	232,365	114,960	117,410	12,028,895	5,877,875	6,151,020
Total visible minority population	75 (0.4%)	45 (0.5%)	30 (0.3%)	4,265 (1.8%)	2,270 (2.0%)	2,000 (1.7%)	2,745,200 (22.8%)	1,332,995 (22.7%)	1,412,205 (23.0%)
Black	10 (13%)			615 (2.6%)			473,765 (17.3%)		
Chinese	10 (13%)			1,035 (24.3%)			576,975 (21.0%)		
Filipino	10 (13%)			405 (9.5%)			203,215 (7.4%)		
Latin American	45 (60.0%)			370 (8.7%)			147,140 (5.4%)		
Not a visible minority	21,190 (99.6%)	10,480 (99.5%)	10,715 (99.7%)	228,090 (98.2%)	112,685 (98.0%)	115,415 (98.3%)	9,283,695 (77.2%)	4,544,875 (77.3%)	3,369,910 (77.0%)

Source: Statistics Canada, Census 2006.

1.11 Isolation Characteristics

As the population density reported, with the exception of population centres like Fort Frances, Emo, Rainy River and Atikokan, much of the District of Rainy River may be characterized as being sparsely populated. While the largest proportion of the District's population lives in urban areas (n=12,833 or 63%), a good number (n=7,537) are rural residents.

Rural communities often lack the amenities available in urban centres that foster group activities (i.e., recreation centres/programs, movie theatres). Isolation occurs when individuals are not in contact with others. Distance between places is a significant fact of life in the Northwest and in Rainy River District where access to primary and specialized care can be a major barrier. The absence of passenger rail travel and the lack of reliable, scheduled and affordable land or air transportation tends to increase the incidence of isolation for many as travel between communities is limited.

Other factors like winter weather and lack of critical mass (number of people) for local service delivery emphasize the isolation factor.



2.0 POPULATION HEALTH PROFILE OF RAINY RIVER DISTRICT

2.1 Introduction

Perhaps the greatest barrier to the accurate review of health data in Rainy River District is its small population count. Representing less than 10% per the North West Local Health Integration Network (LHIN) area and representing only 0.2% of the provincial population, it is not often possible to present statistically significant health status information on our geography.

As a result, we then must rely on North West LHIN-level information and their corresponding age standardized comparisons with provincial activity and then extrapolate the results to our small jurisdiction. Alternately, we can present crude (i.e., non-age standardized) counts and rates of our local data collected over several years to examine trends. Both formats are used in this section to provide the reader with the best possible profile to help support corporate strategic planning and organizational decision making for the health care system.

2.2 Well-Being

Well-being is defined as the population over the age of 12 who reported their own health status as being either excellent or very good or fair or poor in Statistics Canada’s Canadian Community Health Survey, 2009/10 (CCHS). Perceived health refers to the perception of a person's health in general, either by the person himself or herself, or, in the case of proxy response, by the person responding. Health means not only the absence of disease or injury but also physical, mental and social well-being.

Perceived health is an indicator of overall health status. It can reflect aspects of health not captured in other measures, such as incipient disease, disease severity, physiological and psychological reserves as well as social and mental function. Perceived health refers to a person's health in general — not only the absence of disease or injury, but also physical, mental and social well-being.

Fewer residents of the North West LHIN reported excellent or very good health, excellent or very good mental health and less life stress compared to the province as a whole (Table 13).

Table 13						
Well-being (Perceived Health) of the Population Aged 12 and Over						
North West LHIN and Ontario, 2009-10						
Characteristic	North West LHIN			Ontario		
	Total	Male	Female	Total	Male	Female
Perceived health; excellent or very good (%)	57.4	55.8	58.9	61	61.4	60.6
Perceived mental health; excellent or very good (%)	68.2	69.7	66.7	74.3	75.3	73.3
Perceived life stress (%)	21.8	20.1	23.5	24	22.2	25.7

Source: Statistics Canada, Canadian Community Health Survey, 2009-10



2.3 Health Conditions

As part of the CCHS, the status of 22 health conditions of the residents of the North West LHIN were reviewed and compared to the province (Table 14). Generally, residents of the North West LHIN report higher rates for most of the selected conditions with the following four exceptions:

- Diabetes (rates are similar);
- Asthma (NW LHIN rates are lower, although these results for the male population should be used with caution);
- Percentage of low birth weights (NW LHIN rates are lower); and
- Prostate cancer (rates are similar)

Table 14
Status of Selected Health Conditions, Aged 18 and Over
North West LHIN and Ontario, 2009-10¹

Characteristic	North West LHIN			Ontario		
	Total	Male	Female	Total	Male	Female
Overweight or obese (%) (BMI 25.00 or greater)	61.7	68.8	54.5	52	59.8	44.2
Overweight (%) (BMI 25.00 to 29.99)	36.6	40.7	32.4	34	40.4	27.5
Obese (%) (BMI 30.00 or greater)	25.1	28.1	22	18	19.4	16.6
Arthritis (%)	22.4	17.5	27.1	17.3	13.2	21.1
Diabetes (%)	6.9	7.2	6.6	6.8	7.8	5.9
Asthma (%)	7.3	5.9 ²	8.6	8.3	6.9	9.6
High blood pressure (%)	19.9	18.7	21.1	17.4	17.3	17.5
Mood disorder (%)	8.3	5.4 ²	11.1	6.8	4.9	8.6
Pain or discomfort; moderate or severe (%)	17.2	17.9	16.6	11.8	9.9	13.6
Pain or discomfort that prevents activities (%)	19	18.3	19.7	13.5	11.1	15.8
Low birth weight (% of live births)	5.4	4.9	6	6.2	5.8	6.6
Chronic obstructive pulmonary disease (COPD) (%)	6.2	5.6 ²	6.8	4.2	3.9	4.5
Injuries within the past 12 months causing limitation of normal activities (%)	19.4	20.4	18.5	14.3	16.5	12.2
Injuries in the past 12 months; sought medical attention (%)	10.4	10.5	10.4	7.7	8.6	6.8
Hospitalized stroke event rate (per 100,000 pop.)	163	193	136	125	146	107
Hospitalized acute myocardial infarction event rate (per 100,000 pop.)	327	404	256	207	290	135
Injury hospitalization (per 100,000 pop.)	801	884	705	407	445	359
Cancer incidence (per 100,000 pop.)	421.4	469.9	386.7	398.8	454.7	358
Colon cancer incidence (per 100,000 pop.)	49.8	63.5	37.8	47.8	57.9	39.2
Lung cancer incidence (per 100,000 pop.)	58.2	64.4	53.8	49.2	58.8	42.1
Breast cancer incidence (per 100,000 pop.)	-	-	105.3	-	-	97.8
Prostate cancer incidence (per 100,000 pop.)	-	136.1	-	-	135.7	-

Notes:

1. **Source:** Statistics Canada, Canadian Community Health Survey, 2009-10
2. Data should be used with caution.



2.4 Health Behaviours

Cigarette smoking, drinking alcoholic beverages, food consumption and engaging in leisure-time physical activity are examples of detrimental and positive behaviours that contribute to overall health. Table 15 identified that residents of the North West LHIN reported being higher current smokers, higher heavy drinkers and more moderately active than provincial rates while fruit and vegetable consumption and bike helmet use in the LHIN was reportedly lower.

Characteristic	North West LHIN			Ontario		
	Total	Male	Female	Total	Male	Female
Current smoker; daily or occasional (%)	23.9	25.8	22	18.9	22.5	15.5
Current smoker; daily (%)	18.5	19.3	17.7	14.5	17.3	11.9
Heavy drinking (%)	20.9	29.7	12.5	15.9	23.4	8.6
Leisure-time physical activity; moderately active or active (%)	58	60.9	55.2	50.5	54.4	46.8
Fruit and vegetable consumption; 5 times or more per day (%)	37.9	32.7	43	43.2	38	48.2
Bike helmet use (%)	28.1	18.9	39.7	34	30.2	39.4

Source: Statistics Canada, Canadian Community Health Survey, 2009-10

2.5 Accessibility to Selected Health Services

Table 17 notes that North West LHIN residents have about the same influenza immunization rates as all Ontarians, higher participation rates for mammography and PAP smears and faster access to surgery after fracturing a hip, they are less likely to have a regular medical doctor.

Characteristic	North West LHIN			Ontario		
	Total	Male	Female	Total	Male	Female
Influenza immunization (%)	34.2	29.2	39.2	31.2	29.3	33
Mammography (%)			77.4			73.2
Pap smear (%)			74.5			72.9
Regular medical doctor (%)	83.5	82.5	84.5	91.1	88.8	93.4
Wait time for hip fracture surgery (Proportion with surgery within 48 hours) (proportion)	82.2			78.7		

Source: Statistics Canada, Canadian Community Health Survey, 2009-10



2.6 Mortality (Death)

Table 17 provides a comprehensive review of the causes of death in the North West LHIN and province from the 2009 Canadian Community Health Survey. The following comparisons are noteworthy:

- Life expectancy at birth and at the age of 65 are lower for residents in the North West LHIN
- Based on rates per 100,000 population, deaths from all causes is almost 20% higher in the North West LHIN
In particular:
 - Infant mortality (North West LHIN 6 deaths/1,000 live births vs 5.1 deaths/1,000 live births Ontario)
 - Suicides and self-inflicted injuries (North West LHIN 20.6 deaths/100,000 population vs 7.7 deaths/100,000 population Ontario)
 - Unintentional injuries/deaths (North West LHIN 39.4 deaths/100,000 population vs 23.4 deaths/100,000 population Ontario)
- Most remarkable is that the rate of premature mortality per 100,000 population is 34% higher in the North West LHIN (329.6 vs. 245.7)

Characteristic	North West LHIN			Ontario		
	Total	Male	Female	Total	Male	Female
Infant mortality (per 1,000 live births)	6	6.9	5.1	5.1	5.5	4.6
Life expectancy at birth (years)	78.6	76.2	81.1	81.5	79.2	83.6
Life expectancy at age 65 (years)	19.6	17.9	21.1	20.3	18.7	21.7
Total; all causes of death (per 100,000 pop.)	629.1	761.6	518.4	521.8	640.8	430.2
All cancers; deaths (per 100,000 pop.)	171.7	203.3	148.9	159.1	192	135.9
Colorectal cancer; deaths (per 100,000 pop.)	18.9	24	14.6	17	21.6	13.4
Lung cancer; deaths (per 100,000 pop.)	48	58.2	41	40.3	51	32.3
Breast cancer; deaths (per 100,000 pop.)	8.3	-	15.5	12	-	22
Prostate cancer; deaths (per 100,000 pop.)	8	19.3	-	8	20.5	-
Circulatory diseases; deaths (per 100,000 pop.)	182.4	234.2	138.9	155.6	197.1	122.9
Ischaemic heart diseases; deaths (per 100,000 pop.)	100.3	141.9	65.8	86.9	119.1	61.7
Cerebrovascular diseases; deaths (per 100,000 pop.)	35.3	37.5	33	30.7	33.3	28.6
All other circulatory diseases; deaths (per 100,000 pop.)	46.8	54.7	40.1	38	44.8	32.6
Respiratory diseases; deaths (per 100,000 pop.)	41.8	54.9	33.1	41.3	53.8	33.4
Pneumonia and influenza; deaths (per 100,000 pop.)	11.2	See note 2	See note 2	11.2	13.6	9.7
Bronchitis; emphysema, asthma; deaths (per 100,000 pop.)	1.6	See note 2	See note 2	2.2	2.8	1.8
All other respiratory diseases; deaths (per 100,000 pop.)	29	41.3	21.4	27.8	37.5	21.8
Unintentional injuries; deaths (per 100,000 pop.)	39.4	52.5	26.6	23.4	31.6	16.1
Suicides and self-inflicted injuries; deaths (per 100,000 pop.)	20.6	27.7	13.5	7.7	11.9	3.8
HIV disease; deaths (per 100,000 pop.)	1.7	See note 2	See note 2	0.9	1.6	0.3
Premature mortality (per 100,000 pop.)	329.6	401.7	257.9	245.7	305.5	189.6

Notes:

1. Source: Statistics Canada, Canadian Community Health Survey, 2009-10
2. Data suppressed to meet the confidentiality requirements of the Statistics Act



2.6 Morbidity (Illness) and Hospital Utilization

2.6.1 *Where Rainy River District Residents Seek Acute Hospital Care*

Hospitalized →	Kenora District	Rainy River District	Thunder Bay City	Thunder Bay District	Other Ontario	Total
Rainy River District %	4	71	22	0	3	100
Rainy River District Days	570	10,531	3,136	0	428	14,255

Notes.

- Numbers may not add due to rounding
- Source: North West LHIN Blueprint Project Report, October 2011.

It is also noteworthy that in the same year, there were 317 admissions of Rainy River District residents to hospitals in Manitoba. The number of patient days were not available.

2.6.1 *Riverside Health Care In-Patient Hospital Performance 2011-12*

Table 19 provides a high level summary of hospital performance at each of the Riverside hospital sites.

All cases												
Site	Total Cases	ALC ¹ cases	% ALC Cases	Acute Days	ALC Days	Total Days	% ALC Days	ELOS ² Days	Variance ³	Acute LOS	ALC LOS	Total LOS
EHC	84	8	9.5%	433	129	562	23.0%	485.2	-52.2	5.2	16.1	6.7
LVGH	1701	82	4.8%	7472	1253	8725	14.4%	8362.2	-890.2	4.4	15.3	5.1
RRHC	103	7	6.8%	438	169	607	27.8%	498.2	-60.2	4.3	24.1	5.9
Total	1888	97	5.1%	8343	1551	9894	15.7%	9345.6	-1002.6	4.4	16.0	5.2

Notes.

- ALC – alternate level of care.
- ELOS – Expected Length of Stay
- Variance = ELOS – Acute Days (a negative number is preferred)
- Source: CIHI database, accessed October 6, 2012



It is worthwhile noting that ALOS at all sites perform better than the CIHI calculated ELOS when ALC days are not included in the calculation, which is a standard across the country. To put things into perspective, the ALC rates at RCHF (1,551 days or 15.7% of all days) equate to about five beds per year if those beds have an 85% occupancy rate.

The largest contributors to ALC rates are mental diseases and disorders and other reasons for hospitalization which account for 61% of all ALC days at the LVGH site and 59% of all ALC days across RCHF.

The main clinical categories accounting for almost 70% of all cases seen at RCHF in 2011-12 were:

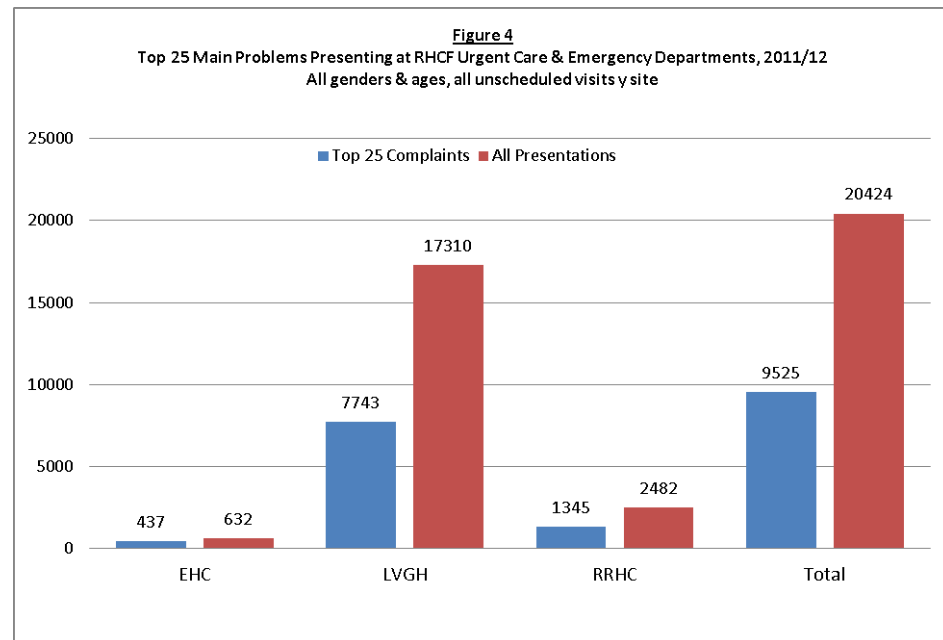
- Circulatory system diseases (248 cases, 13%)
- Other reasons for hospitalization (223 cases, 11.8%)
- Digestive system diseases (209 cases, 11.1%)
- Pregnancy & childbirth (186 cases, 9.9%)
- Newborns (186 cases, 9.9%)
- Respiratory diseases (152 cases, 8.1%)
- Trauma and other injuries (94 cases, 5%)

2.6.2 Riverside Health Care District Emergency Department Utilization 2011-12

Figure 4 and Table 20 summarize the “Top 25 Main Problems” that presented to the urgent care clinic at the Emo Health Centre and the La Verendrye General Hospital and Rainy River Health Centre emergency departments.

Noteworthy is the fact that the top complaints account for:

- 69.1% of all presentations at the Emo Health Centre,
- 44.7% of all presentations at the La Verendrye General Hospital Emergency Department,
- 54.2% of all presentations at the Rainy River Health Centre, and
- 46.6% of all presentations across RCHF



**Table 21**

**Top 25 Unscheduled Emergency Department Presentation by Site, All Genders, All Ages
Riverside Health Care Facilities, 2011-12**

Emo Health Centre	n	% cumulative	La Verendrye General	n	% Cumulative	Rainy River Health Centre	n	% cumulative
Other surgical care followup	120	27.46	Abdo/pelvic pain	524	6.77	Other surgical care followup	274	20.37
Other medical care	113	53.32	Acute upper resp. infection	520	13.48	Other medical care	156	31.97
Open wound of wrist/hand	34	61.10	Acute pharyngitis (sore throat)	515	20.13	Followup exam	77	37.70
Followup exam	22	66.13	Followup exam	515	26.79	Abdo/pelvic pain	72	43.05
Other ortho followup	12	68.88	Otitis media (ear ache)	488	33.09	Acute pharyngitis (sore throat)	68	48.10
Other urinary disorders	11	71.40	Other surgical care followup	421	38.53	Other circumstances	59	52.49
Primary hypertension	9	73.46	Other medical care	420	43.95	Dorsalgia (back pain)	55	56.58
Other intestinal disorders	8	75.29	Dorsalgia (back pain)	401	49.13	Pain in throat/chest	53	60.52
Pain in throat/chest	8	77.12	Other dis. urinary system	398	54.27	Open wound of wrist/hand	45	63.87
Other special exams	8	78.95	Pain in throat/chest	339	58.65	Other dis. urinary system	44	67.14
Other prophylactic measures	8	80.78	Other circumstances	329	62.90	Otitis media (ear ache)	42	70.26
Fitting/adjust. of devices	8	82.61	Viral infection	327	67.12	Other soft tissue disorders	40	73.23
Viral infection	7	84.21	Open wound of wrist/hand	253	70.39	Other anxiety disorders	37	75.99
Dorsalgia (back pain)	7	85.81	Other gastroenteritis/colitis	251	73.63	Cellulitis	33	78.44
Adverse effects	7	87.41	Pneumonia	246	76.80	Other gastroenteritis/colitis	31	80.74
Migraine	6	88.79	Cellulitis	232	79.80	Acute upper resp. infection	31	83.05
Otitis media (ear ache)	6	90.16	Conjunctivitis	204	82.44	Open wound of head	30	85.28
Asthma	6	91.53	Other ortho followup	185	84.83	Pneumonia	29	87.43
Pain, general	6	92.91	Mental beh/dis. due to alcohol	184	87.20	Rash/other skin eruption	28	89.52
Other circumstances	6	94.28	Other soft tissue disorders	174	89.45	Conjunctivitis	26	91.45
Acute pharyngitis (sore throat)	5	95.42	Bronchitis (unspecified)	172	91.67	Asthma	26	93.38
Acute upper resp. infection	5	96.57	Ankle/foot sprain/strain	167	93.83	Mental beh/dis. due to alcohol	25	95.24
Pneumonia	5	97.71	Open wound of head	166	95.97	Abnormalities of breathing	25	97.10
Other COPD	5	98.86	Asthma	157	98.00	Other COPD	20	98.59
Abnormalities of breathing	5	100.00	Chronic sinusitis	155	100.00	Otitis externa (swimmer's ear)	19	100.00
Subtotal	437	69.1%	Subtotal	7,743	44.7%	Subtotal	1,345	54.2%
Total of all presentations	632		Total all presentations	17,310		Total all presentations	2,482	

Source: CIHI database, accessed October 6, 201272