

# **Alberta Health**

## **Primary Health Care - Community Profiles**

### Community Profile: Beaverlodge Health Data and Summary

Primary Health Care Division  
February 2013

## Table of Contents

<b>Introduction .....</b>	<b>i</b>
<b>Community Profile Summary .....</b>	<b>iii</b>
<b>Zone Level Information .....</b>	<b>1</b>
<b>Map of Alberta Health Services North Zone .....</b>	<b>2</b>
<b>Population Health Indicators .....</b>	<b>3</b>
Table 1.1 Zone versus Alberta Population Covered as at March 31, 2012 .....	3
Table 1.2 Health Status Indicators for Zone versus Alberta Residents, 2010 and 2011 (BMI, Physical Activity, Smoking, Self-Perceived Mental Health) .....	3
Table 1.3 Zone versus Alberta Infant Mortality Rates (per 1,000 live births), Fiscal Years 2008/2009 to 2010/2011 .....	4
<b>Local Geographic Area Level Information .....</b>	<b>5</b>
<b>Map of Selected Health Services in Local Geographic Area .....</b>	<b>6</b>
<b>Demographics .....</b>	<b>7</b>
Table 2.1 Distribution of Population Covered by Age and Gender as at March 31, 2012 .....	7
Figure 2.1 Percentage Distribution of Local Geographic Area versus Alberta Population by Age Groups as at March 31, 2012 .....	7
Figure 2.2 Local Geographic Area Population Covered as at end of Fiscal Year 1994 to 2012 .....	8
<b>Socio-Economic Indicators .....</b>	<b>9</b>
Table 3.1 Population Percentage of First Nations with Treaty Status as at March 31, 2006 .....	9
Table 3.2 Socio-Economic Indicators for Local Geographic Area versus Alberta Residents, 2006 (Family Composition, Family Income, Housing, Mobility, Language, Immigration, Educational Attainment, Household and Dwelling Characteristics) .....	9
<b>Chronic Disease Prevalence .....</b>	<b>12</b>
Figure 4.1 Local Geographic Area Age-Standardized Chronic Disease Prevalence Rates (per 100 population), 2003 to 2010 (Hypertension, Diabetes, Ischemic Heart Disease, Chronic Obstructive Pulmonary Disease) .....	12
Figure 4.2 Local Geographic Area versus Alberta Age-Standardized Chronic Disease Prevalence Rates (per 100 population), 2010 (Hypertension, Diabetes, Ischemic Heart Disease, Chronic Obstructive Pulmonary Disease) .....	13
<b>Maternal and Child Health .....</b>	<b>14</b>
Table 5.1 Local Geographic Area Maternal and Child Health Indicators for Three-Year Period (Number of Births, Percent of Low/High Birth Weight, Birth Rate, Fertility Rate, Teen Birth Rate, Percent Maternal Prenatal Smoking) .....	14

Table 5.2	Childhood Immunization Coverage Rates, 2010 .....	15
<b>Communicable Diseases</b> .....		16
Table 6.1	Top 5 Sexually Transmitted Infection (STI) Rates (per 100,000 population) by Three-Year Period.....	16
<b>Mortality</b> .....		17
Figure 7.1	Local Geographic Area Age-Standardized Mortality Rates (per 100,000 population) by Three-Year Period .....	17
Figure 7.2	Local Geographic Area versus Alberta Age-Standardized Mortality Rates (per 100,000 population) for Three-Year Period 2008 – 2010.....	18
Figure 7.3	Local Geographic Area Distribution of Deaths by Cause of Death Across 10 Years, 2001 to 2010.....	19
<b>Emergency Service Utilization</b> .....		20
Table 8.1	Emergency Visits for Patients Residing in the Local Geographic Area by Triage Level, Fiscal Years 2009/2010 to 2011/2012 .....	20
Figure 8.1	Emergency Visit Rates (per 1,000 population) for Triage Levels Semi-Urgent (4) and Non-Urgent (5), Fiscal Year 2011/2012 .....	20
Figure 8.2	All Emergency Visits for Patients Residing in the Local Geographic Area for Triage Levels Semi-Urgent (4) and Non-Urgent (5) Combined by Weekday and Time, Fiscal Year 2011/2012.....	21
Figure 8.3	Local Geographic Area Age-Standardized Emergency Visit Rates (per 100,000 population) for Selected Conditions, 2003 – 2010 (Acute Upper Respiratory Infections, Mental & Behaviour Disorders due to Psychoactive Substance Use, Diseases of Middle Ear and Mastoid, Emphysema and Chronic Bronchitis, Diabetes, Asthma, Influenza, Other Acute Lower Respiratory Infections, Renal Failure) .....	23
Figure 8.4	Local Geographic Area versus Alberta Age-Standardized Emergency Visit Rates (per 100,000 population) for Selected Conditions, 2010 (Acute Upper Respiratory Infections, Diseases of Middle Ear and Mastoid, Asthma, Mental & Behaviour Disorders due to Psychoactive Substance Use, Other Acute Lower Respiratory Infections, Stroke, Diabetes, Influenza, Renal Failure, Emphysema and Chronic Bronchitis, Arthritis).....	24
<b>Inpatient Service Utilization</b> .....		25
Table 9.1	Inpatient Separation Rates (per 1,000 population) for Patients Residing in the Local Geographic Area versus Alberta, Fiscal Years 2009/2010 to 2011/2012 .....	25
Figure 9.1	Local Geographic Area Age-Standardized Inpatient Separation (Sep) Rates (per 100,000 population) for Selected Conditions, 2003 – 2010 (Asthma, Diabetes, Influenza, Ischemic Heart Diseases, Mental and Behavioural Disorders due to Psychoactive Substance Use, Pneumonia, Pulmonary Heart and Pulmonary Circulation Diseases) .....	25
Figure 9.2	Local Geographic Area versus Alberta Age-Standardized Inpatient Separation Rates (per 100,000 population), for Selected Conditions, 2010 (Asthma, Diabetes, Influenza, Ischemic Heart Diseases, Mental and Behavioural Disorders due to Psychoactive Substance Use, Pneumonia, Pulmonary Heart and Pulmonary Circulation Diseases).....	26

<b>Primary Health Care Indicators of Community Primary Care Need .....</b>	<b>27</b>
Table 10.1 Proposed Primary Health Care Indicators of Community Primary Care Need .....	27
1. Travel: Percentage of Total Family Physician Claims Outside the Recipients Home Local Geographic Area, 2010/2011	
2. Ambulatory Care Sensitive Conditions - Age-Standardized Hospitalization Rate (per 100,000 population), 2003 to 2011	
3. Continuity of Care, 2010	
4. ED Visits Related to Mood Disorders (Age-Standardized, per 100,000 population), 2003 to 2011	
5. ED Visits Related to Anxiety Disorders (Age-Standardized, per 100,000 population), 2003 to 2011	
6. ED Visits Related to Injuries (Age-Standardized, per 100,000 population), 2003 to 2011	
7. Diabetes Prevalence (per 100 population), 2010	
8. Chronic Obstructive Pulmonary Disease Prevalence Rate (per 100 population), 2010	
9. Age-Standardized Rate of People with Three or more Chronic Diseases (per 100 population), 2010	
10. Influenza Vaccines for Those 65 and Over, 2011/2012	
11. Predicted Primary Health Care Utilization, 2006/2007 to 2008/2009	
12. Primary Health Care Service Gap, 2006/2007 to 2008/2009	
13. Life Expectancy at Birth, 2000 to 2011	
<b>Access to Health Services .....</b>	<b>33</b>
Table 11.1 Ambulatory Care Visits and Inpatient Separations for the Local Geographic Area Residents to Facilities Located In versus Out of the Local Geographic Area, Fiscal Year 2011/2012 .....	33
Table 11.2 Top 3 Non-Local Ambulatory Care Facilities Accessed by Local Residents, Fiscal Year 2011/2012 .....	33
<b>Appendix A – Definitions.....</b>	<b>35</b>
<b>Appendix B – Community Services Online Resources.....</b>	<b>41</b>
<b>Appendix C – Health Link Alberta Calls by Zone.....</b>	<b>45</b>
<b>Appendix D – Select Health Services in Local Geographic Area.....</b>	<b>48</b>

### **Note:**

*Qualifiers such as 'higher than', 'much lower than', 'similar to' etc. are used throughout the community profile to compare LGA indicator values to the provincial average. Note that the qualifiers 'similar' and 'comparable' are chosen to describe situations in which the LGA indicator value is either identical or very close to the provincial average. For further details on these qualifiers please refer to Appendix A.*

## INTRODUCTION

Primary Health Care provides an entry point into the health care system and links individuals to medical services and social and community supports. The Government of Alberta is currently working to improve primary health care within the province. The government's goal is to have a 'health home' for all Albertans, where they can receive coordinated and comprehensive primary health care. Primary health care services in Alberta are delivered in a variety of settings and by a range of providers. Current primary health care models in Alberta include: primary care networks, family care clinics, stand-alone physician clinics, community health centres, urgent-care centres, community ambulatory care centres, medi-centres, and university health centres.

To assist with primary health care planning, Alberta Health has developed a series of reports to provide a broad range of demographic, socio-economic and population health statistics considered relevant to primary health care for communities across the province. Alberta Health Services divides the province into five large health service Zones, and these Zones are subdivided into smaller geographic areas called local geographic areas (LGAs). The Alberta Health "Community Profile" reports provide information at the Zone and LGA level for each of the 132 LGAs in Alberta.

The Community Profiles (Profiles) are intended to highlight areas of need and provide relevant information to support the consistent and sustainable planning of primary health services. Each Profile offers an overview of the current health status of residents in the LGA, indicators of the area's current and future health needs, and evidence as to which quality services are needed on a timely and efficient basis to address the area's needs.

Each report includes sections that present Zone and LGA level information. In addition, the Profile includes Appendices containing sources of additional information about the community (e.g. Health Link Alberta and community services).

The Zone level section opens with a Zone map that puts the specific LGA into context and includes health-related statistics at the Zone level (the highest geographic breakdown next to the full provincial view). Some of the Zone level health indicators are unique to this section and are not currently available at the LGA level.

The LGA section of the Profile is divided into a number of sub-sections and is the core component of each report. The population size of LGA varies substantially from very small in rural areas to large in metropolitan centers. A compendium of health related information on demographics, prevalence rates, emergency visits, maternal and child health and more, is included in this section. In addition, information on indicators of need (relating to utilization, health population needs and social determinants of health) is also provided.

Furthermore, each Community Profile contains information on access statistics, offering some additional insight into existing needs that are not being met, as well as the utilization of non-local facilities by LGA residents. A map of selected health services available in each LGA, together with a listing of these locations, is also included in each report.

While the current Profile contains information at both the Zone and LGA level, information could be updated or added to the profile if information is provided by the community. For more information contact [primaryhealthcare@gov.ab.ca](mailto:primaryhealthcare@gov.ab.ca)

## COMMUNITY PROFILE SUMMARY

### Local Geographic Area: Beaverlodge

The community profile contains a large number of demographic, socio-economic and health related indicators intended to provide a better understanding of the community's current and future health needs. The summary that follows provides a brief overview of some of the key indicators for the local geographic area (LGA), Beaverlodge. For a more in depth look at the data, please refer to the various sections of the report.

#### POPULATION HEALTH INDICATORS

- Health status indicators are available solely at the zone level. The percentage of obese people in the North Zone (which includes Beaverlodge) was higher than the provincial percentage in 2011 (25.5% North Zone vs. 19.6% AB). (Table 1.2)
- The North Zone reported a higher proportion of inactive people compared to the provincial proportion during the same year (45.4% North Zone vs. 43.8% AB). (Table 1.2)

#### DEMOGRAPHICS

- Beaverlodge's population increased by 30.5% between 1994 and 2012 (compared to a 44.3% increase for Alberta) and currently stands at 11,989 people. (Figure 2.2)
- The largest age group in the LGA, in 2012, was 35-64 year olds who accounted for 38.8% of the population compared to 40.6% for Alberta. (Figure 2.1)
- Children 17 and under made up 26.6% of the LGA's population compared to 22.5% for Alberta, while individuals 65 and older accounted for 11.6% of the population in the LGA and 11.1% in Alberta. (Figure 2.1)

#### SOCIO - ECONOMIC INDICATORS

- Beaverlodge had a similar proportion of First Nations people compared to Alberta (5.7% vs. 3.8% AB). (Table 3.1)
- The percentage of female lone-parent families was lower than the provincial percentage (5.4% vs. 11.3% AB). (Table 3.2)
- A lower proportion of families with an income below the low income cut-off point was reported in the LGA compared to Alberta (2.9% vs. 6.4% AB). (Table 3.2)
- The most common non-official languages spoken at home in the LGA were: German, Chinese (n.o.s.). (Table 3.2)

#### CHRONIC DISEASE PREVALENCE

- In 2010, the disease with the highest prevalence rate (per 100 population) in Beaverlodge was hypertension. The rate associated with this disease was similar to the provincial rate (14.1 vs. 14.2 AB). (Figure 4.2)

## MATERNAL HEALTH

- In 2008/2009 to 2010/2011, Beaverlodge's birth rate per 1,000 women was higher than the provincial rate (29.7 vs. 27.4 AB) and the teen birth rate per 1,000 women was higher than Alberta's teen rate (32.4 vs. 18.9 AB). (Table 5.1)

## SEXUALLY TRANSMITTED INFECTIONS

- The highest sexually transmitted infections (STI) rate per 100,000 population in the LGA, in 2009 - 2012, was reported for chlamydia. STI rates in the LGA were higher than the provincial rates for none of the top 4 Alberta STIs, where comparisons could be made. (Table 6.1)

## MORTALITY

- The mortality rate (per 100,000 population) due to all causes was higher in the LGA compared to the province (559.8 vs. 519.2 AB) and the most frequent cause of death reported between 2001 and 2010 was diseases of the circulatory system. (Figures 7.2 and 7.3)

## EMERGENCY AND INPATIENT SERVICE UTILIZATION

- Semi and non-urgent emergency visits accounted for 70.9% of all emergency visits in 2011/2012. (Table 8.1)
- Acute Upper Respiratory Infections were the most common reason for emergency visits (among select conditions) in 2010, and had a much higher rate (per 100,000 population) compared to the provincial rate (13,680.9 vs. 3,069.2 AB). (Figure 8.4)
- Ischemic heart diseases, pneumonia, and diabetes were the top three main reasons for inpatient discharges (among selected conditions) in 2010, and inpatient separation rates were higher than the provincial rates for 4 of 7 diagnoses. (Figure 9.2)

## MENTAL AND BEHAVIOURAL DISORDERS

- Mental and behavioural disorders are particularly important from a population health perspective. In 2010, Beaverlodge's ED visit rate for mental and behavioural disorders was similar to the provincial ED visit rate per 100,000 population (386.1 vs. 465.8 AB). (Figure 8.4)
- The inpatient discharge rate associated with mental and behavioural disorders was comparable to Alberta's discharge rate per 100,000 population (63.5 vs. 107.2 AB). (Figure 9.2)
- During 2001 to 2010 mental and behavioural disorders accounted for 2.7% of all deaths in the LGA. (Figure 7.3) Note that deaths due to the top 8 disease categories are displayed in Figure 7.3, while the remaining disease categories are grouped into the generic 'Other'.

## PRIMARY HEALTH CARE INDICATORS OF COMMUNITY PRIMARY CARE NEED

During a mapping project conducted by Alberta Health Services in 2012, 13 indicators relating to primary health care needs were developed for each local geographic area. Some of these indicators relate to primary care utilization and availability of primary care services, while others refer to health conditions or health status such as incidence and prevalence of diseases. One additional indicator included, life expectancy at birth, was seen as a strong determinant of health status. Stratification by geographic peer groups (metro, metro moderate, urban, rural, rural remote) was applied to some of these indicators to account for substantially different rates across groups. The following indicators have been highlighted for this LGA:

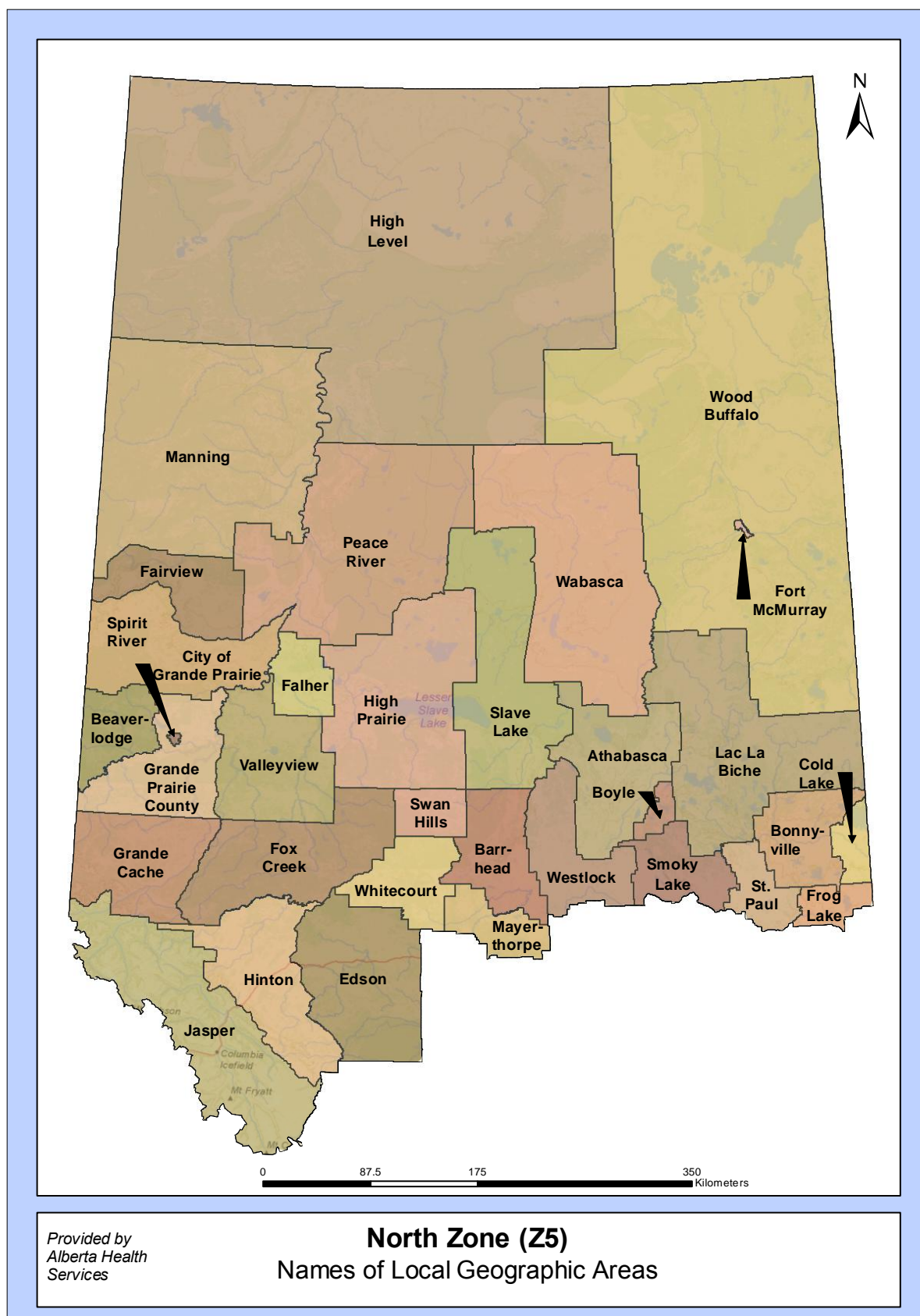
- Beaverlodge's separation rate for ambulatory care sensitive conditions (per 100,000 population) was 1.1 times higher than the corresponding rural provincial rate (762.0 vs. 708.8 AB rural). (Table 10.1)
- The age-standardized rate for people with three or more chronic diseases per 100 population was similar in Beaverlodge compared to the province (2.2 vs. 2.2 AB). (Table 10.1)
- The dollar gap between actual and predicted community and primary care per capita billings during 2006/2007 and 2008/2009 was \$-31.07 in Beaverlodge compared to the \$-2.92 rural provincial average. (Table 10.1)
- Residents of Beaverlodge had a life expectancy at birth of 79.9 years compared to 80.5 years for Alberta. (Table 10.1)

## ACCESS TO HEALTH CARE SERVICES

- Beaverlodge residents received ambulatory care services at facilities located outside the LGA. These visits made up 43.3% (or 13,493 visits) of all ambulatory care visits and most such visits (i.e. 67.7% of all external visits) were to the Queen Elizabeth II Hospital in Grande Prairie (LGA of City of Grande Prairie). (Tables 11.1 and 11.2)
- Inpatient separations outside the LGA made up 70.7% (or 838) of all inpatient separations for Beaverlodge residents and most of them (i.e. 77.6% of all external inpatient separations) occurred at the Queen Elizabeth II Hospital in Grande Prairie (LGA of City of Grande Prairie). (Tables 11.1 and 11.2)

## Zone Level Information

*This section contains information presented at the highest geographic breakdown level before rolling up to a full provincial view. The map of Alberta has been partitioned into five geographic zones (Calgary Zone, Central Zone, Edmonton Zone, North Zone, and South Zone), representing the health zones within Alberta Health Services. A variety of health indicators are unique to this section and are only captured at this level of geography due to either sampling and variability errors, or unavailability of data at the level of local geographical areas.*



## Alberta North Zone

### POPULATION HEALTH INDICATORS

The table below shows the zone-level population distribution compared to the province, by age group and gender, for the most recent fiscal year available. Children under the age of one were defined as infants, while the pediatric age group consists of all minors excluding infants. People with no age information available were categorized as unknown.

**TABLE 1.1** Zone versus Alberta Population Covered<sup>1</sup>, as at March 31, 2012

	North Zone			Alberta <sup>2</sup>		
	Population					
	Female	Male	Total	Female	Male	Total
	225,906	240,235	466,141	1,944,849	1,964,616	3,909,465
Percentage Distribution of Population by Age Groups						
Age Group	Female	Male	Total	Female	Male	Total
Infants: Under 1	0.7%	0.8%	1.5%	0.6%	0.7%	1.3%
Pediatric: 1-17	11.6%	12.3%	23.9%	10.3%	10.9%	21.2%
18-34	13.2%	13.8%	26.9%	12.8%	12.9%	25.8%
35-64	18.5%	20.3%	38.8%	20.0%	20.7%	40.6%
65-79	3.3%	3.5%	6.8%	4.2%	3.9%	8.1%
80 & Older	1.2%	0.9%	2.0%	1.8%	1.2%	3.0%
Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

In 2012, the largest age group was 35-64 year olds, accounting for 38.8% of the overall population in the North Zone and 40.6% of the population in Alberta. Children 17 and under comprised 25.4% of North Zone's overall population, compared to 22.5% for Alberta. In addition, residents 65 and older accounted for 8.8% of North Zone's overall population, 2.3 percentage points lower than the corresponding provincial proportion.

The following table shows zone-level health status indicators compared to the province for the two most recent fiscal years available.

**TABLE 1.2** Health Status Indicators for Zone versus Alberta Residents, 2010 and 2011

		North Zone			Alberta		
Body Mass Index (BMI) <sup>3</sup>							
Category	Year	Female	Male	Total	Female	Male	Total
Under Weight	2010	2.2%	0.2%	1.1%	3.9%	0.5%	2.1%
	2011	2.5%	0.2%	1.3%	3.7%	0.8%	2.1%
Normal Weight	2010	42.9%	30.6%	36.1%	54.9%	38.6%	46.2%
	2011	45.5%	31.9%	37.9%	56.1%	35.4%	45.1%
Over Weight	2010	26.8%	38.0%	33.0%	24.5%	39.8%	32.6%
	2011	27.4%	41.6%	35.3%	23.9%	41.4%	33.2%
Obese	2010	28.1%	31.1%	29.8%	16.8%	21.1%	19.1%
	2011	24.6%	26.3%	25.5%	16.3%	22.4%	19.6%

**TABLE 1.2** Health Status Indicators for Zone versus Alberta Residents, 2010 and 2011 (continued)

		North Zone			Alberta		
Physical Activity <sup>3</sup>							
Category	Year	Female	Male	Total	Female	Male	Total
Active or moderately active	2010	52.0%	55.6%	53.9%	54.3%	57.8%	56.1%
	2011	58.1%	51.5%	54.6%	55.5%	57.0%	56.2%
Inactive	2010	48.0%	44.4%	46.1%	45.7%	42.2%	43.9%
	2011	41.9%	48.5%	45.4%	44.5%	43.0%	43.8%
Smoking <sup>3</sup>							
Daily smokers	2010	18.3%	22.9%	20.7%	13.9%	19.8%	16.9%
	2011	18.2%	27.0%	22.8%	14.6%	18.2%	16.5%
Never/former/occasional smokers	2010	81.7%	77.1%	79.3%	86.1%	80.2%	83.1%
	2011	81.8%	73.0%	77.2%	85.4%	81.8%	83.5%
Self-Perceived Mental Health <sup>3</sup>							
Excellent or Very Good	2010	71.2%	72.1%	71.7%	73.5%	73.5%	73.5%
	2011	64.1%	72.0%	68.3%	73.8%	75.1%	74.5%
Poor Fair or Good	2010	28.8%	27.9%	28.3%	26.5%	26.5%	26.5%
	2011	35.9%	28.0%	31.7%	26.2%	24.9%	25.5%

The percentage of obese people in the North Zone in 2011 was higher than the provincial percentage (25.5% vs. 19.6% AB) and there was a higher proportion of inactive people compared to Alberta. In addition, a much higher percentage of daily smokers was reported at the zone level compared to the province in 2011 (22.8% vs. 16.5% AB) and a much lower proportion considered themselves as having excellent or very good mental health (68.3% vs. 74.5% AB).

The table below reports the infant mortality rates per 1,000 live births for the zone and the province, for the most recent fiscal years available.

**TABLE 1.3** Zone versus Alberta Infant Mortality Rates (per 1,000 live births)  
Fiscal Years 2008/2009 to 2010/2011

	North Zone	Alberta
Infant Mortality Rate (per 1,000 births) <sup>3</sup>		
2008/2009	6.4	6.0
2009/2010	6.7	6.3
2010/2011	6.2	6.2

The infant mortality rates in the North Zone varied between 6.2 per 1,000 births in 2010/2011 and 6.7 per 1,000 births in 2009/2010. Compared to Alberta, infant mortality rates in the North Zone were higher for 2 of the 3 fiscal years.

**Sources:**

Canadian Community Health Survey Provincial Share Files  
Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry Files, Alberta Health  
Postal Code Translation File, Alberta Health  
Alberta Vital Statistics Births and Deaths Files

**Notes:** <sup>1</sup> Population covered represents number of people covered under the Alberta Health Care Insurance Plan (AHCIP)

<sup>2</sup> Alberta population figure was calculated based on valid Alberta postal codes.

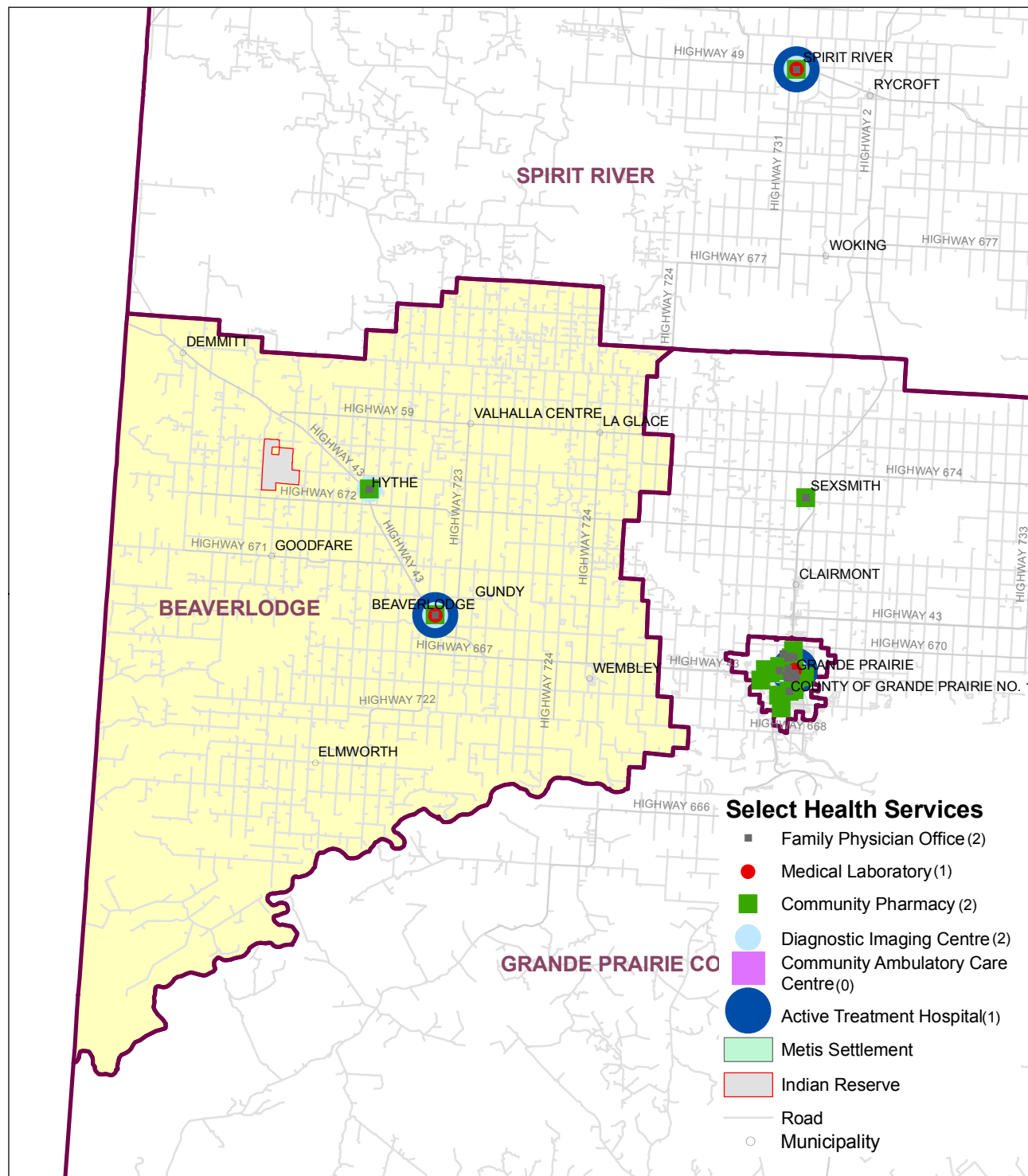
<sup>3</sup> See Appendix A for definition.

## Local Geographic Area Level Information

*This section contains information presented at the level of the local geographic area and is more granular than the information at the zone level. Local geographic area refers to 132 geographic areas created by Alberta Health (AH) and Alberta Health Services (AHS) based on census boundaries. Census sub-divisions and dissemination areas were used whenever possible to achieve the closest match to zone boundaries. The population of these areas varied from very small in rural areas to large in metropolitan centers.*

## Map of Selected Health Services in Local Geographic Area of Beaverlodge

Population (2012): 11,989



Prepared by Information and Analysis Branch, Alberta Health

## Local Geographic Area: Beaverlodge

### DEMOGRAPHICS

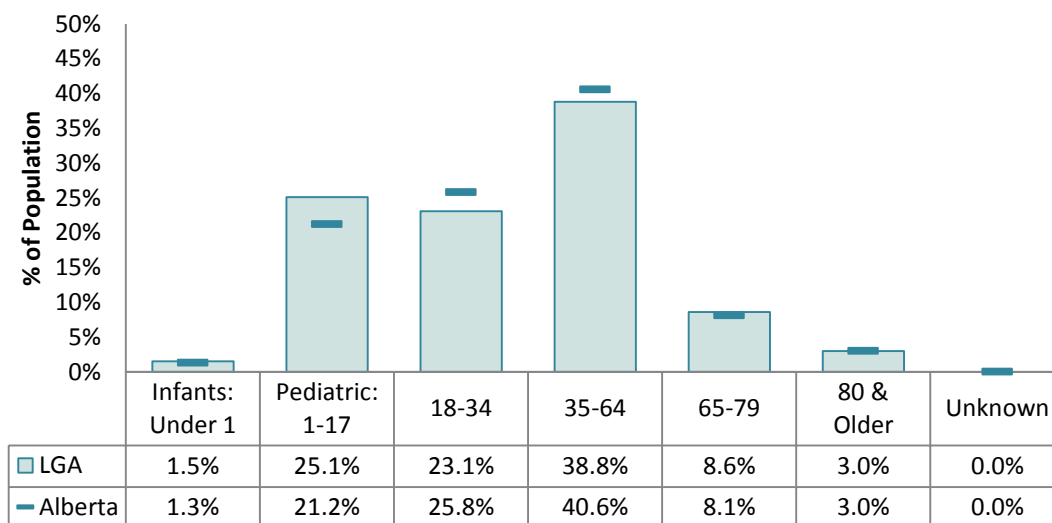
The table below shows the population distribution of the local geographic area broken down by age group and gender, for the most recent fiscal year available. Specific age groups have been identified. Children under the age of one were defined as infants, while pediatric age group includes all minors excluding infants. People with no age information available were categorized as unknown.

**TABLE 2.1** Distribution of Population Covered<sup>1</sup> by Age and Gender  
As at March 31, 2012

Local Geographic Area Population			
Age Group	Female	Male	Total
Infants: Under 1	84	97	181
Pediatric: 1-17	1,483	1,521	3,004
18-34	1,390	1,374	2,764
35-64	2,239	2,413	4,652
65-79	509	523	1,032
80 & Older	212	144	356
Unknown	0	0	0
<b>Total</b>	<b>5,917</b>	<b>6,072</b>	<b>11,989</b>

The following figure profiles the age group distribution of population for both the local geographic area and Alberta, for the most recent fiscal year available.

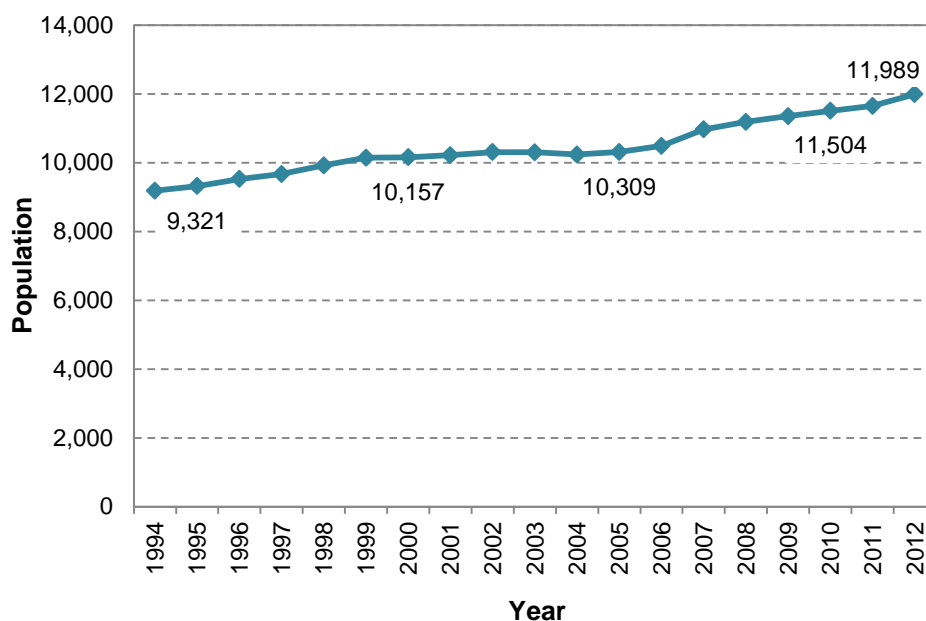
**FIGURE 2.1** Percentage Distribution of Local Geographic Area (LGA) versus Alberta Population  
By Age Groups as at March 31, 2012



In 2012, the largest age group was 35-64 year olds, accounting for 38.8% of the overall population. Children 17 and under comprised 26.6% of Beaverlodge's overall population, compared to 22.5% for Alberta. In addition, residents 65 and older accounted for 11.6% of Beaverlodge's overall population, similar to the corresponding provincial proportion.

The population counts for each year between 1994 and the most recent fiscal year are provided in the figure below.

**FIGURE 2.2** Local Geographic Area Population Covered as at End of Fiscal Years 1994 - 2012



The population of Beaverlodge increased by 30.5% between 1994 and 2012. A low of 9,186 individuals was reported in 1994 and a peak of 11,989 people was reported in 2012.

**Sources:**

*Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry File, Alberta Health  
Postal Code Translation File, Alberta Health*

**Notes:**

<sup>1</sup> Population covered represents number of people covered under the Alberta Health Care Insurance Plan (AHCIP)

## Local Geographic Area: Beaverlodge

### SOCIO-ECONOMIC INDICATORS

The following two tables highlight a number of indicators relating to social determinants of health, such as family income, housing and educational attainment. Values for the local geographic area and Alberta are listed as proportions, raw numbers, or dollar amounts, depending on the indicator.

**TABLE 3.1** Population Percentage of First Nations with Treaty Status<sup>1</sup> as at March 31, 2006

First Nations with Treaty Status Population		
	Beaverlodge	Alberta
Percent of Population that is First Nations with Treaty Status	5.7%	3.8%

**Sources:** Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry Files, Alberta Health

**TABLE 3.2** Socio-Economic Indicators<sup>2</sup> for Local Geographic Area versus Alberta Residents, 2006

Family Composition		
	Beaverlodge	Alberta
Percent (Number of) Male Lone-Parent Families	1.7% (15)	3.1% (27,710)
Percent (Number of) Female Lone-Parent Families	5.4% (48)	11.3% (102,555)
Percent (Number of) 65 Years of Age and Older Who Live Alone	26.1% (102)	27.2% (88,410)
Percent (Number of) Persons not in Census Family <sup>1</sup>	8.9% (278)	16.2% (531,785)
Percent (Number of) Census Family Persons	87.3% (2,710)	81.9% (2,696,285)
Average Number of Persons per Census Family	3.0	3.0
Family Income		
	Beaverlodge	Alberta
Percent (Number of) of Families with Income Below LICO <sup>3</sup>	2.9% (25)	6.4% (56,937)
Percent (Number) of Families with Income Greater Than \$100,000/yr	31.6% (274)	33.1% (297,680)
Average Census Family Income	\$123,273	\$98,240
Housing		
	Beaverlodge	Alberta
Percent Living in Owned Dwellings	83.7%	73.1%
Percent Where Greater Than 30% of Income Is Spent on Housing for Homeowners	15.4%	16.6%
Average Value of Dwelling	\$242,545	\$293,811
Percent of Homeowners Who Have Homes in Need of Major Repairs	12.0%	6.7%
Percent Living in Rented Dwellings	15.4%	26.3%
Percent Where Greater Than 30% of Income Is Spent on Housing for Renters	38.2%	37.1%
Percent Living in Band Housing <sup>4</sup>	0.0%	0.6%

Compared to Alberta, Beaverlodge had a similar proportion of First Nations people (5.7% vs. 3.8% AB). The proportion of female lone-parent families was lower than the provincial proportion (5.4% vs. 11.3% AB). In addition, the proportion of male lone-parent families in Beaverlodge was lower than the provincial proportion (1.7% vs. 3.1% AB).

Furthermore, a lower percentage of families had an income below the low income cut-off point (as defined by Statistics Canada) compared to the province (2.9% vs. 6.4% AB). Compared to Alberta, the percentage of people who spent 30% or more of their income on housing related expenses was 1.2 percentage points lower in Beaverlodge. In addition, a higher proportion of people in Beaverlodge lived in dwellings they owned (83.7% vs. 73.1% AB).

**TABLE 3.2** Socio-Economic Indicators<sup>2</sup> for LGA versus Alberta Residents, 2006 (continued)

Mobility		
	Beaverlodge	Alberta
Percent who lived at the Same Address One Year Ago	90.4%	81.1%
Percent who lived at the Same Address Five Years Ago	69.7%	52.2%
Language		
	Beaverlodge	Alberta
Percent Who Do Not Speak English or French	0.3%	1.2%
Percent of Households Where a Non-Official Language Is Spoken at Home	4.4%	9.1%
Top Five Non-Official Languages Spoken at Home <sup>5</sup>	German, Chinese (n.o.s.)	Chinese (n.o.s.), German, Panjabi (Punjabi), Cantonese, Spanish
Immigration		
	Beaverlodge	Alberta
Total Number of Immigrants	175	527,030
Percent of Immigrants Who Arrived in the Last Five Years	0.3%	3.2%
Top Five Places of Birth for Recent Immigrants <sup>6</sup>	Eastern Europe	Eastern Asia, Southern Asia, Southeast Asia, West Central Asia and the Middle East, Eastern Europe
Educational Attainment		
	Beaverlodge	Alberta
Percent with No High School Graduation Certificate	22.1%	15.4%
Percent with High School Graduation Certificate	25.0%	24.1%
Percent with Apprenticeship, Trades Certificate or Diploma	19.6%	12.4%
Percent with College, Other Non-University Certificate, or Diploma	22.5%	21.5%
Percent with University Certificate, Diploma or Degree	10.8%	26.6%

**TABLE 3.2** Socio-Economic Indicators<sup>2</sup> for LGA versus Alberta Residents, 2006 (continued)

Household and Dwelling Characteristics		
	Beaverlodge	Alberta
Percent Persons in Private Households <sup>1</sup>	96.7%	98.1%
Total Number of Households by Household Type	1,117	1,256,195
Census Family Households	80.4%	72.0%
One-Family-Only Households	75.4%	68.4%
Two-or-More-Family Households	0.9%	1.8%
Other Family Households	21.1%	29.9%
Total Number of Dwellings by Structural Type	1,118	1,256,190
Single-Detached House	78.2%	63.3%
Moveable Dwelling	10.1%	3.0%
Other Dwelling	10.4%	33.7%

Beaverlodge had a lower proportion of non-English and non-French speaking people compared to Alberta (0.3% vs. 1.2% AB). Also, a lower proportion of immigrants arrived in the last five years in Beaverlodge compared to the province (0.3% vs. 3.2% AB). Furthermore, Beaverlodge reported a lower proportion of people with university certificates, diplomas or degrees (10.8% vs. 26.6% AB).

**Sources:**

*Federal Census (2006), Statistics Canada*

*Postal Code Conversion File, Statistics Canada*

*Postal Code Translation File, Alberta Health*

*Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry Files, Alberta Health (2006)*

**Notes:**

<sup>1</sup> See Appendix A for definition.

<sup>2</sup> N/A indicates that data were not available for a specific metric for this LGA

<sup>3</sup> LICO - Low Income Cut Off (as defined by Statistics Canada) <http://www.statcan.gc.ca>

<sup>4</sup> See Appendix A for more details.

<sup>5</sup> Less than five languages may be listed if no others were reported. Six or more languages may be listed in the case of ties.

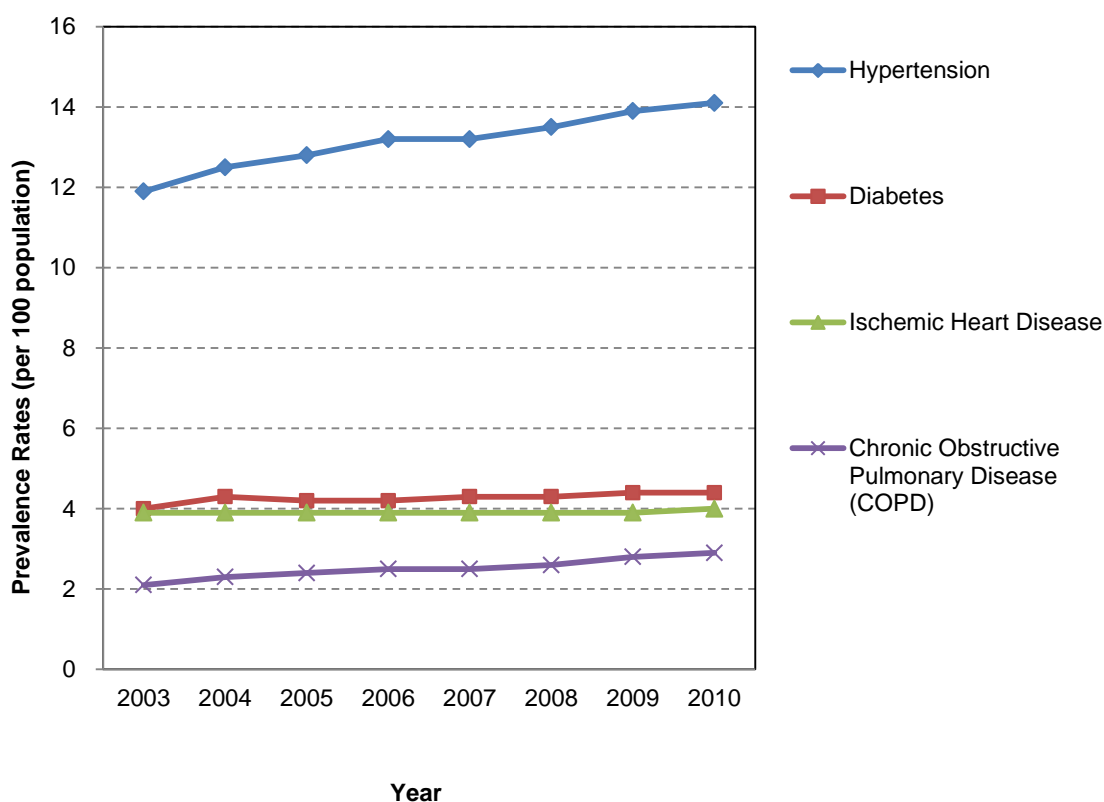
<sup>6</sup> Less than five places of birth may be listed if no others were reported. Six or more places of birth may be listed in the case of ties.

## Local Geographic Area: Beaverlodge

### CHRONIC DISEASE PREVALENCE

The figure below displays the rates per 100 population of the most prevalent chronic diseases in the local geographic area. The prevalence rates refer to the number of diagnosed individuals at a given time and have been standardized by age.

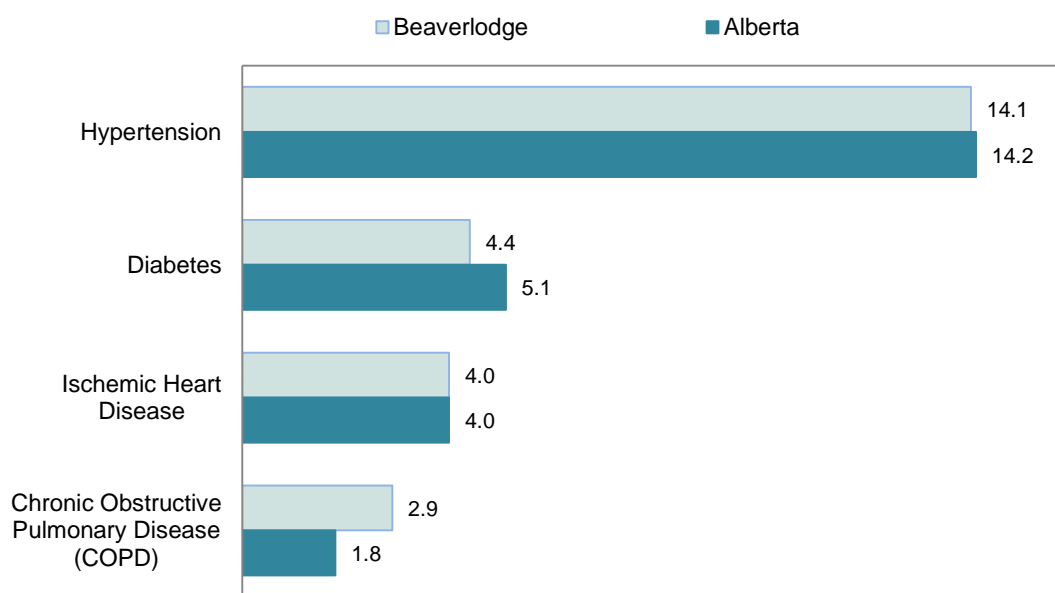
**FIGURE 4.1** LGA Age-Standardized Chronic Disease Prevalence Rates<sup>1</sup> (per 100 population)  
2003 - 2010



On average, the condition with the highest chronic disease prevalence rate reported for Beaverlodge during 2003 to 2010 was for hypertension. The largest rate of change during this time period was reported for hypertension (a 0.29 per 100 population average rate increase per year - based on regression line fitting). In 2010, Beaverlodge ranked number 84 in hypertension, number 106 in diabetes, number 79 in ischemic heart disease and number 18 in COPD among prevalence rates reported for the 132 local geographical areas.

The following figure depicts the age-standardized prevalence rates of major chronic diseases, per 100 population, for 2010, comparing the local geographic area to Alberta.

**FIGURE 4.2** LGA versus Alberta Age-Standardized Chronic Disease Prevalence Rates  
(per 100 population), 2010



**Age-Standardized Prevalence Rates (per 100 population)**

In 2010, the Beaverlodge prevalence rate for hypertension per 100 population was similar to the corresponding rate reported for the province (14.1 vs. 14.2 AB). In addition, Beaverlodge showed prevalence rates higher than the provincial rates for 1 of the 4 chronic diseases included above.

**Sources:**

Alberta Health Care Insurance Plan (AHCIP) Physician Claims Data, Alberta Health  
Alberta Health Care Insurance Plan (AHCIP) Quarterly Population Registry Files, Alberta Health  
Alberta Hospital Discharge Abstract Database (DAD), Alberta Health  
Postal Code Translation File, Alberta Health  
Census 1991 Population Data, Statistics Canada

**Notes:**

<sup>1</sup> Age-standardized prevalence rates are adjusted using the direct method of standardization, with weights from Statistics Canada's 1991 census population.

**Methodology:**

See link: [http://www.ahw.gov.ab.ca/IHDA\\_Retrieval](http://www.ahw.gov.ab.ca/IHDA_Retrieval)

## Local Geographic Area: Beaverlodge

### MATERNAL AND CHILD HEALTH

The following table highlights maternal and child health indicators such as birth weight, fertility rate, teen birth rate and prenatal smoking for the local geographic area and Alberta. The indicator information is presented as rates, percentages, or raw numbers, depending on the indicator.

**TABLE 5.1** Local Geographic Area Maternal and Child Health Indicators for Three-Year Period

Maternal and Child Health Indicators	Period	Beaverlodge	Alberta
Number of Births	2008/2009 - 2010/2011	506	151,603
Percent Low Birth Weights (of Live Births) <sup>1</sup> , less than 2500 gm	2008/2009 - 2010/2011	6.3%	6.8%
Percent High Birth Weights (of Live Births) <sup>1</sup> , greater than 4000 gm	2008/2009 - 2010/2011	14.8%	10.3%
Birth Rate (per 1,000 population) <sup>1</sup>	2008/2009 - 2010/2011	29.7	27.4
Fertility Rate (per 1,000 Women 15 to 49 Years) <sup>1</sup>	2008/2009 - 2010/2011	61.5	53.1
Teen Birth Rate (per 1,000 Women 15 to 19 Years)	2008/2009 - 2010/2011	32.4	18.9
Percent Maternal Prenatal Smoking (of Deliveries)	2007/2008 - 2009/2010	26.5%	18.0%

During 2008/2009 to 2010/2011, Beaverlodge's birth rate of 29.7 per 1,000 women was higher than the provincial rate, and the teen birth rate of 32.4 per 1,000 was higher than Alberta's teen birth rate. In addition, a higher proportion of prenatal smoking cases were reported in Beaverlodge compared to the province (26.5% vs. 18.0% AB).

The following table presents the rates for childhood immunization coverage by the age of two for the local geographic area and Alberta. The data is provided for the most recent calendar year available.

**TABLE 5.2** Childhood Immunization Coverage Rates, 2010

DTaP-IPV-Hib (Diphtheria, Tetanus, Pertussis, Polio and Haemophilus Influenza B) Dose 4 of 4			
Age Group	Period	Beaverlodge	Alberta
By Age Two	2010	48.4%	73.1%
MMR (Measles, Mumps, and Rubella)			
By Age Two	2010	69.8%	85.7%

By the age of two, 48.4% of children in Beaverlodge (in 2010) had been vaccinated against DTaP-IPV-Hib (compared to 73.1% for AB), while 69.8% had received MMR vaccines (compared to 85.7% for AB).

**Sources:**

*Alberta Hospital Discharge Abstract Database (DAD), Alberta Health*  
*Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry File, Alberta Health*  
*Alberta Vital Statistics Births File*  
*Regional Immunization Applications*  
*Immunization and Adverse Reaction to Immunization (Imm/ARI)*  
*Postal Code Translation File, Alberta Health*

**Notes:**

<sup>1</sup> See Appendix A for definition.

## Local Geographic Area: Beaverlodge

### COMMUNICABLE DISEASES

The following table lists the rates of Sexually Transmitted Infections (STI)<sup>1</sup> for the most recent three-year periods from 2008 to 2012, for the local geographic area and Alberta.

**TABLE 6.1** Top 5 Sexually Transmitted Infection (STI) Rates (per 100,000 population)  
By Three-Year Period

STI (per 100,000 population)			
Period	Disease	Beaverlodge	Alberta
2008-2011	Chlamydia	240.5	352.0
	Gonorrhea	23.2	41.0
	Non-Gonococcal Urethritis	23.2	34.5
	Mucopurulent Cervicitis	5.8	9.0
	Syphilis	N/A	6.0
2009-2012	Chlamydia	256.1	359.9
	Gonorrhea	25.6	36.8
	Non-Gonococcal Urethritis	19.9	35.8
	Mucopurulent Cervicitis	5.7	8.1
	Syphilis	N/A	4.8

Beaverlodge's highest STI rate per 100,000 population in 2009 - 2012 was reported for chlamydia and this rate was lower than the provincial rate (256.1 vs. 359.9 AB).

STI rates in Beaverlodge were higher than the provincial rates for none of the top 4 Alberta STIs in 2009 - 2012 (where comparisons could be made).

**Sources:**

*Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry Files, Alberta Health  
Communicable Disease Reporting System (CDRS)  
Postal Code Translation File, Alberta Health*

**Notes:**

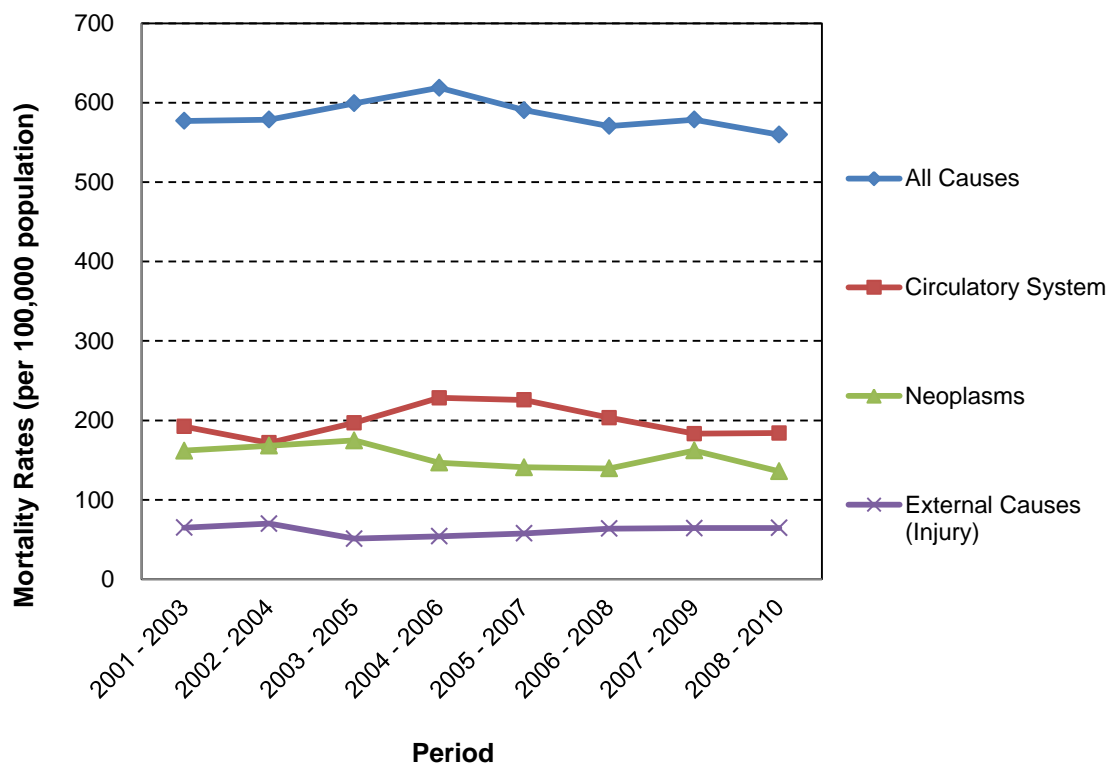
<sup>1</sup> See Appendix A for definition.

## Local Geographic Area: Beaverlodge

### MORTALITY

Figure 7.1 displays the age-standardized mortality rates<sup>1</sup>, per 100,000 population, for the three most frequent causes of death and all causes combined. Data is provided for each three-year period between 2001 and 2010. The cause-specific mortality rate is defined as the proportion of deaths among people with a common health condition for each time period.

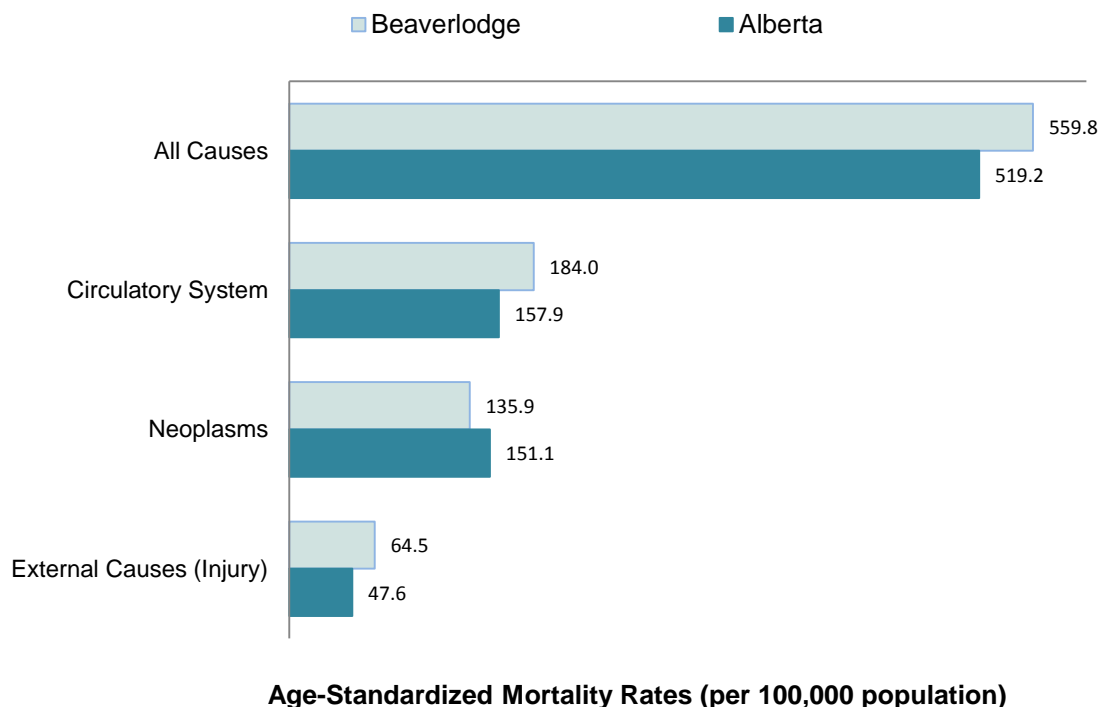
**FIGURE 7.1** Local Geographic Area Age-Standardized Mortality Rates (per 100,000 population)  
By Three-Year Period



The three-year mortality rates for Beaverlodge ranged between 559.8 and 618.8 per 100,000 population during the study period. The three most frequent causes of death, namely, diseases of the circulatory system, neoplasms, and external causes accounted for 68.7% to 72.6% of all deaths from 2001 - 2003 to 2008 - 2010.

The mortality rates per 100,000 population for the three most frequent causes of death<sup>2</sup> and all causes combined are displayed below for both the local geographic area and Alberta, for the most recent three-year period available. The mortality rates have been standardized by age.

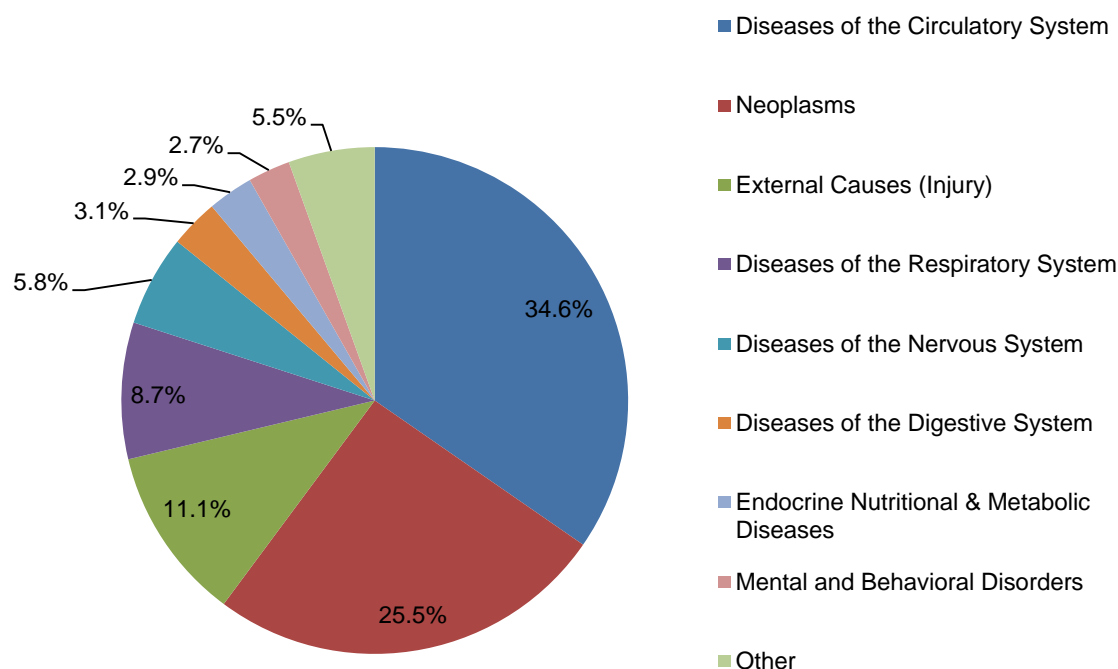
**FIGURE 7.2** Local Geographic Area versus Alberta Age-Standardized Mortality Rates  
(per 100,000 population) for Three-Year Period 2008 - 2010



Compared to the provincial mortality rate for all causes, Beaverlodge reported a higher rate (559.8 vs. 519.2 AB). In 2008 - 2010, diseases of the circulatory system was the main cause of death for Beaverlodge, with an associated mortality rate higher than the provincial rate per 100,000 population (184.0 vs. 157.9 AB). In addition, mortality rates were higher than the provincial rates for 2 of the 3 most common causes of death reported in Beaverlodge.

The pie chart below illustrates the distribution of deaths by cause of death for the local geographic area, over the most recent 10-year period available. The legend presents causes of death in descending order of magnitude.

**FIGURE 7.3** LGA Distribution of Deaths by Cause of Death Across 10 Years, 2001 to 2010



Between 2001 and 2010 diseases of the circulatory system accounted for 34.6% of all deaths reported in Beaverlodge. More than three-quarters of all reported deaths were due to four major causes: diseases of the circulatory system, neoplasms, external causes (injury), and diseases of the respiratory system.

**Sources:**

Alberta Vital Statistics Death File  
Alberta Health Care Insurance Plan (AHCIP) Quarterly Population Registry Files, Alberta Health  
Postal Code Translation File, Alberta Health  
Census 1991 Population Data, Statistics Canada

**Notes:**

<sup>1</sup> Age-standardized mortality rates are adjusted using the direct method of standardization, with weights from Statistics Canada's 1991 census population.

<sup>2</sup> Cause of death is derived from International Classification of Diseases 10 (ICD10) coding system.

**Methodology:**

See link: [http://www.ahw.gov.ab.ca/IHDA\\_Retrieval](http://www.ahw.gov.ab.ca/IHDA_Retrieval)

## Local Geographic Area: Beaverlodge

### EMERGENCY SERVICE UTILIZATION

The table below describes emergency visits by triage level<sup>1</sup> for patients residing in the local geographic area, for the three most recent fiscal years.

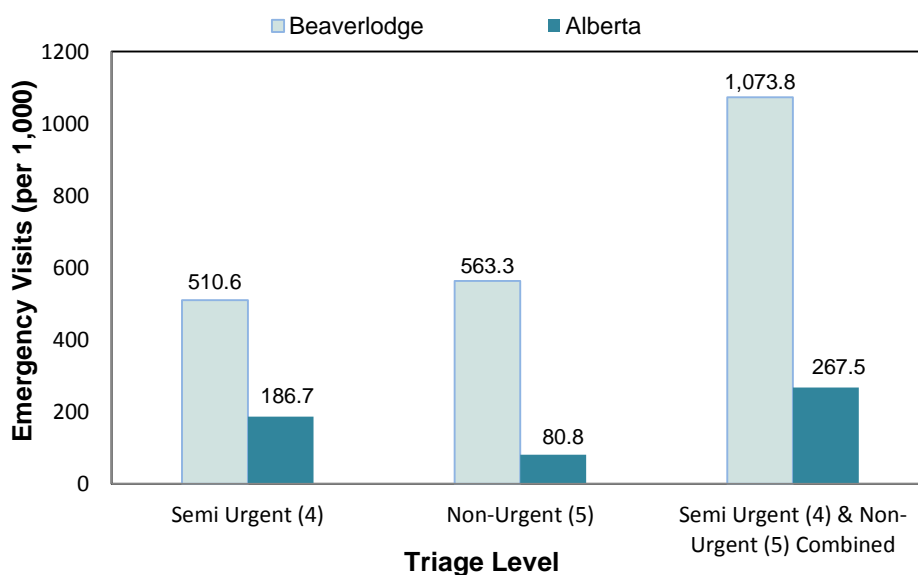
**TABLE 8.1** Emergency Visits for Patients Residing in the Local Geographic Area by Triage Level  
Fiscal Years 2009/2010 to 2011/2012

Triage Level	Emergency Visits		
	2009/2010	2010/2011	2011/2012
Resuscitation (1) and Emergency (2) Combined	307	315	270
Urgent (3)	1,225	1,370	1,339
Semi Urgent (4)	3,600	4,829	6,121
Non-Urgent (5)	5,045	6,267	6,753
Unknown	7,779	7,006	3,674
<b>Total</b>	<b>17,956</b>	<b>19,787</b>	<b>18,157</b>

The volume of emergency visits for patients residing in Beaverlodge increased by 1.1% between 2009/2010 and 2011/2012. In addition, semi-urgent and non-urgent visits combined accounted for 70.9% of all emergency visits in 2011/2012.

The following figure shows emergency visit rates by semi-urgent and non-urgent triage levels for patients residing in the local geographic area and Alberta, for the most recent fiscal year available.

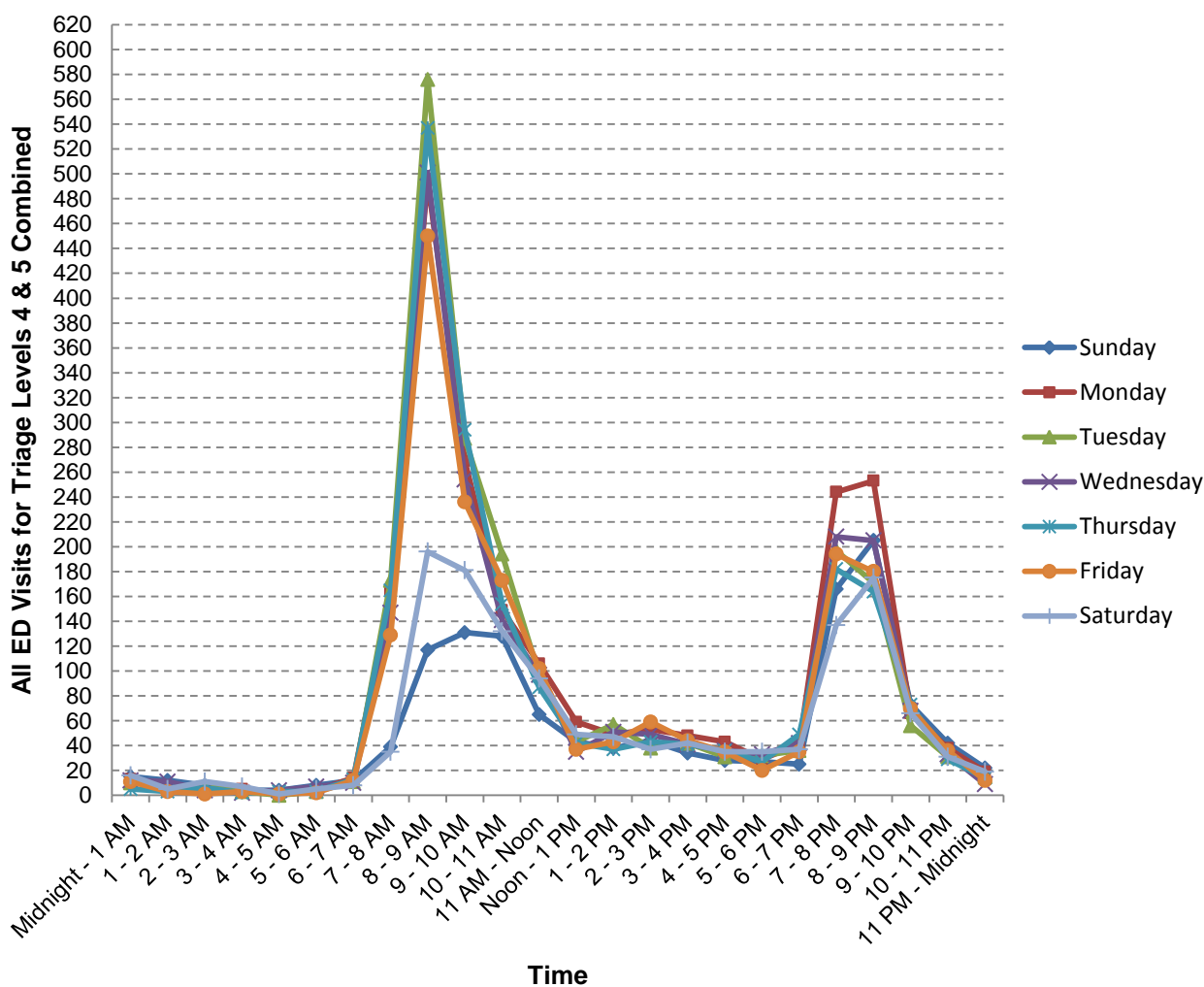
**FIGURE 8.1** Emergency Visit Rates<sup>1</sup> (per 1,000 population) for Triage Levels Semi-Urgent (4) and Non-Urgent (5)<sup>2</sup>, Fiscal Year 2011/2012



Beaverlodge's combined semi-urgent and non-urgent emergency visit rate per 1,000 population was much higher than the provincial rate in 2011/2012 (1073.8 vs. 267.5 AB). Semi-urgent emergency visits occurred at a 2.7 times higher rate in Beaverlodge compared to Alberta (510.6 vs. 186.7 AB).

A time profile of the number of emergency visits by day of the week is shown in the following figure. Data covers both semi-urgent and non-urgent emergency visit triage levels during the most recent fiscal year available, for patients residing in the local geographic area.

**FIGURE 8.2** All Emergency Visits for Patients Residing in the Local Geographic Area  
For Triage Levels Semi-Urgent(4) and Non-Urgent(5) Combined by Weekday and Time  
Fiscal Year 2011/2012



The peak total number of emergency visits for Beaverlodge in 2011/2012 was reported for Tuesdays between 8 - 9 AM (576 emergency visits). The volume of emergency visits was low during the early morning hours and declined gradually throughout the day after peaking somewhere between late morning and early afternoon.

**Sources:**

*Ambulatory Care Data, Alberta Health*

*Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry File, Alberta Health*

*Postal Code Translation File, Alberta Health*

**Notes:**

<sup>1</sup> See Appendix A for definition.

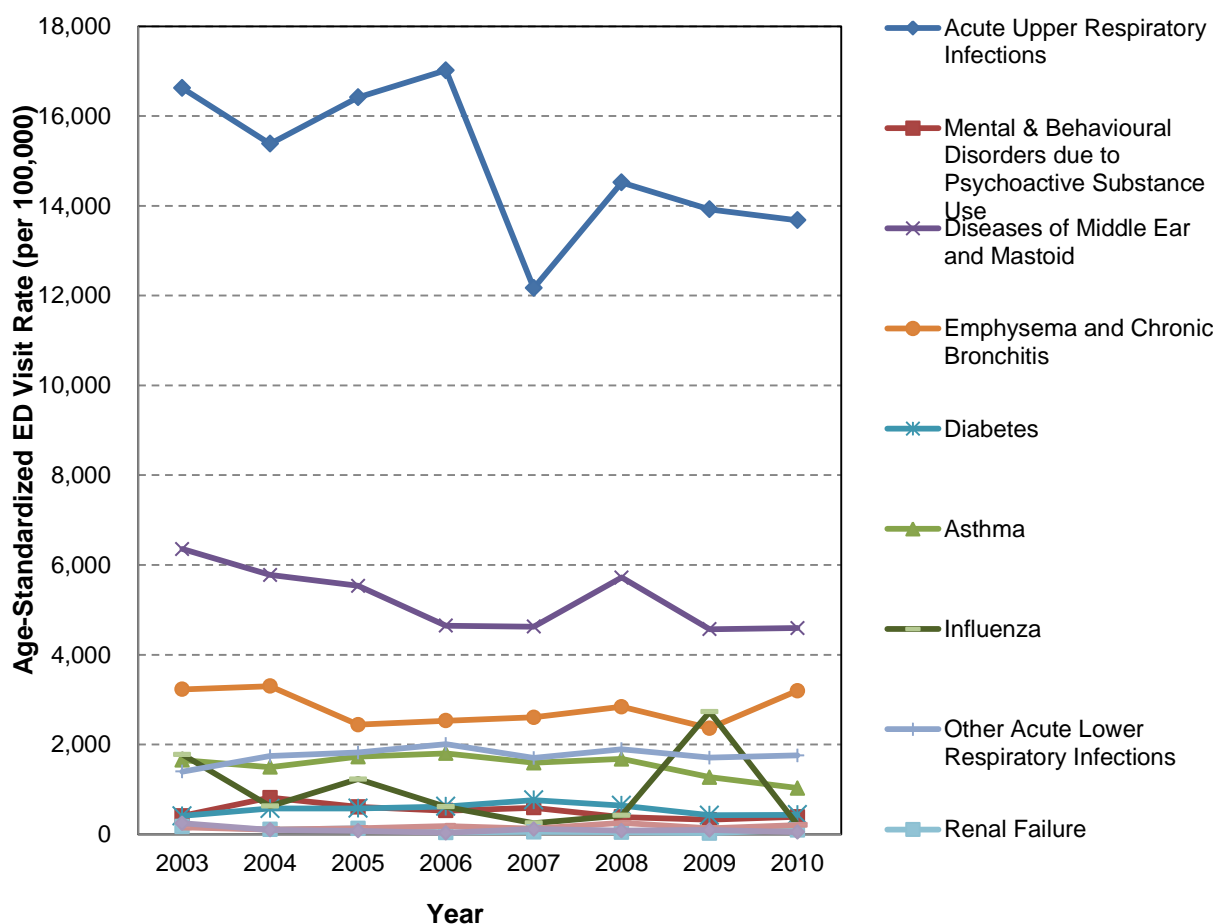
<sup>2</sup> In order to be consistent with the type of services expected to be provided by primary health care, the analysis above focused only on semi-urgent and non-urgent emergency triage levels.

## Local Geographic Area: Beaverlodge

### EMERGENCY SERVICE UTILIZATION

The following figure provides age-standardized emergency visit rates for selected health conditions per 100,000 population for each year beginning in 2003. Emergency department visit rates are defined as the number of visits to emergency departments due to a certain condition, divided by the total population of the local geographic area.

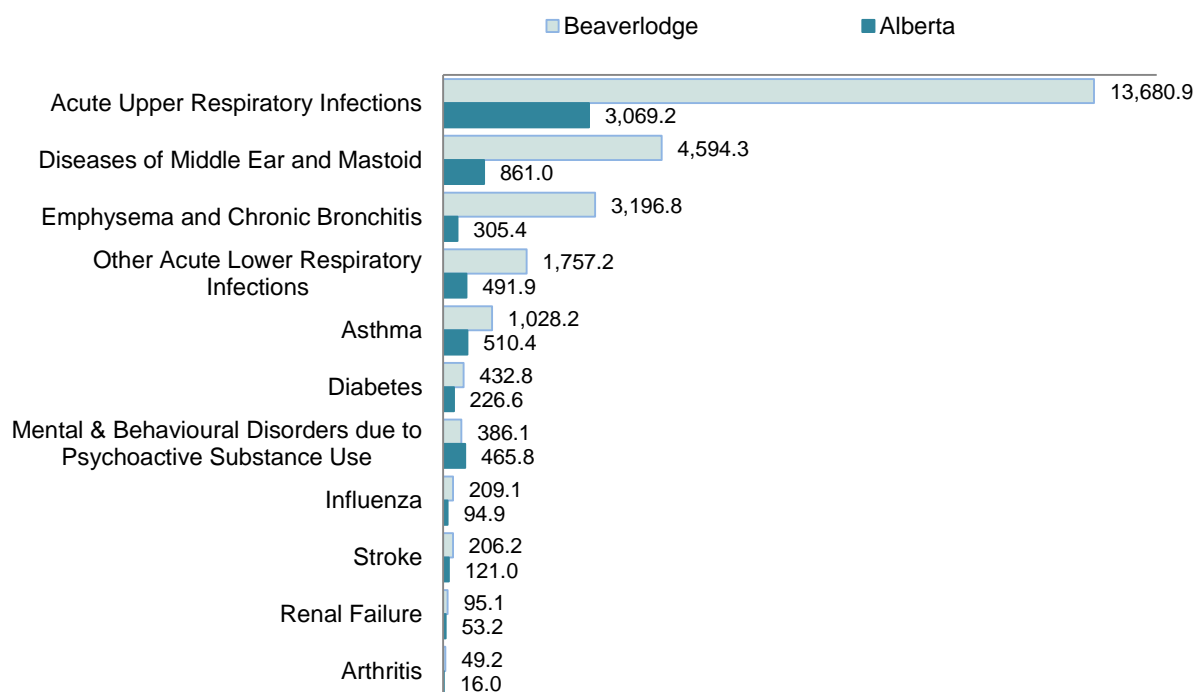
**FIGURE 8.3** LGA Age-Standardized Emergency Visit Rates (per 100,000 population)  
For Selected Conditions, 2003 - 2010



On average, the highest emergency visit rates, for selected health conditions, reported for Beaverlodge during 2003 to 2010 were due to acute upper respiratory infections. In addition, among selected health conditions, the largest rate of change among emergency visits during this time period was reported for acute upper respiratory infections (a 457.9 per 100,000 population average rate decrease per year - based on regression line fitting).

Age-standardized emergency visit rates per 100,000 population, by selected health conditions, for the most current year available, are shown below for both the local geographic area and Alberta.

**FIGURE 8.4** LGA versus Alberta Age-Standardized Emergency Visit Rates (per 100,000 population)  
For Selected Conditions, 2010



**Age-Standardized Emergency Rates (per 100,000 population)**

In 2010, the three most common reasons for emergency visits, among selected health conditions, were: acute upper respiratory infections, diseases of middle ear and mastoid, and emphysema and chronic bronchitis. Among selected health conditions, the most common reason for emergency visits in 2010, acute upper respiratory infections, had a much higher rate in Beaverlodge compared to the provincial rate per 100,000 population (13,680.9 vs. 3,069.2 AB). Furthermore, Beaverlodge showed emergency rates higher than the provincial rates for 10 of the 11 selected conditions.

**Sources:**

*Ambulatory Care Data, Alberta Health*  
*Alberta Health Care Insurance Plan (AHCIP) Quarterly Population Registry Files, Alberta Health*  
*Postal Code Translation File, Alberta Health*  
*Census 1991 Population Data, Statistics Canada*  
*Age-standardized rates are adjusted using the direct method of standardization, with weights from Statistics Canada's 1991 census population.*

**Notes:** <sup>1</sup> See Appendix A for definition.

**Methodology:**

See link: [http://www.ahw.gov.ab.ca/IHDA\\_Retrieval](http://www.ahw.gov.ab.ca/IHDA_Retrieval)

## Local Geographic Area: Beaverlodge

### INPATIENT SERVICE UTILIZATION

The following table describes inpatient separation<sup>1</sup> rates per 1,000 population for patients residing in the LGA and Alberta accessing health facilities across all of Alberta.

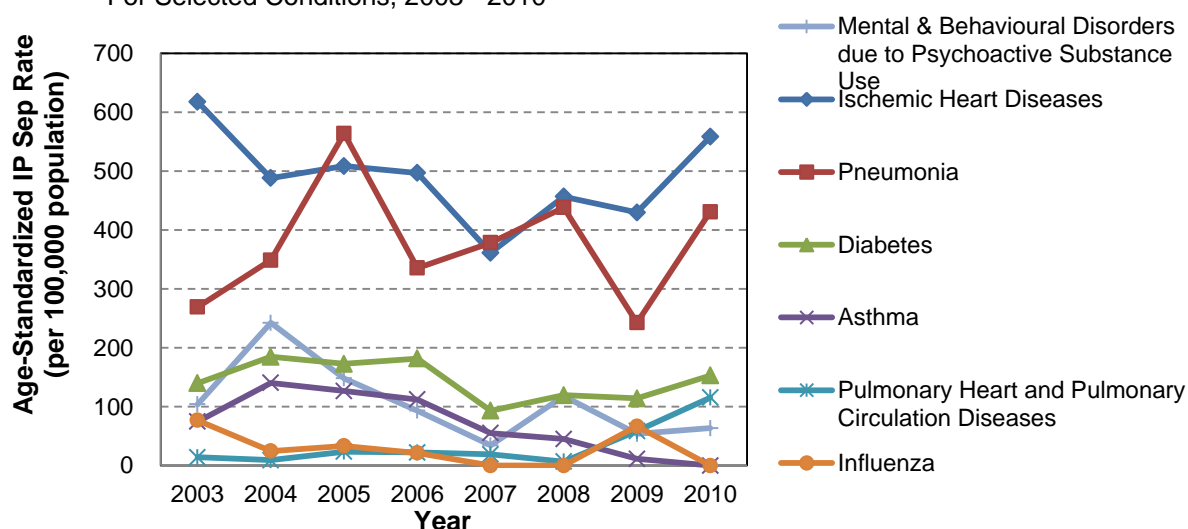
**TABLE 9.1** Inpatient Separation Rates (per 1,000 population) for Patients Residing in the LGA versus AB  
Fiscal Years 2009/2010 to 2011/2012

Inpatient Separation Rates (per 1,000 population)		
Fiscal Years	Beaverlodge	Alberta
2009/2010	116.7	89.7
2010/2011	112.6	88.0
2011/2012	98.8	88.3

Beaverlodge's inpatient separation rate for patients residing in the local geographic area varied between 98.8 in 2011/2012 and 116.7 in 2009/2010. In addition, in 2011/2012, the inpatient separation rate for patients residing in Beaverlodge was 1.1 times higher than the provincial rate (98.8 vs. 88.3 AB).

The figure below presents inpatient separation rates for selected health conditions (per 100,000 population), for patients residing in the local geographic area, for the calendar years 2003 through 2010. The rate of inpatient separations is the ratio between the total number of separations and the total local population, for each year. The rates have been standardized by age.

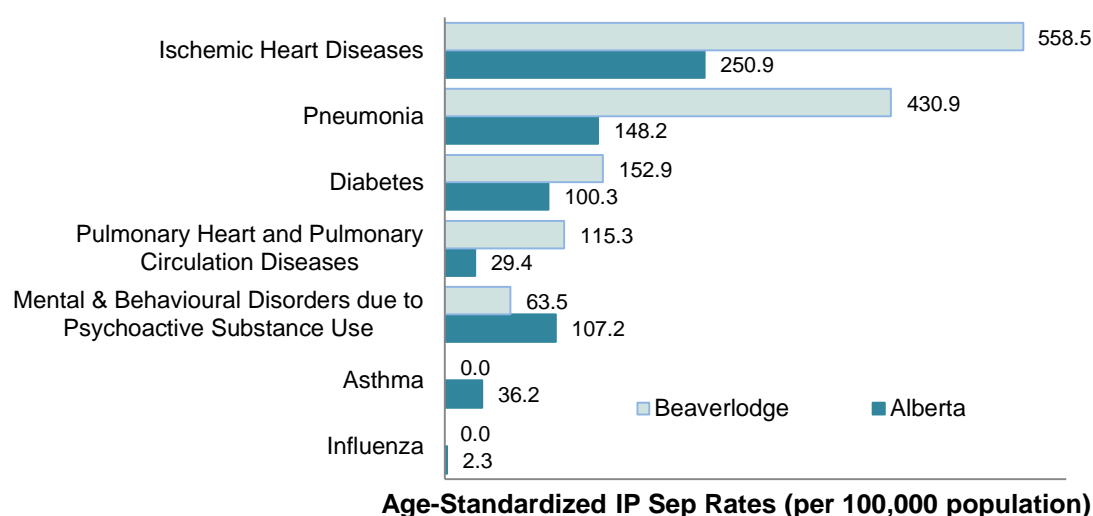
**FIGURE 9.1** LGA Age-Standardized<sup>2</sup> Inpatient Separation (IP Sep) Rates (per 100,000 population)  
For Selected Conditions, 2003 - 2010



On average, the highest inpatient separation rates, among selected health conditions, reported in Beaverlodge during 2003 to 2010 were due to ischemic heart diseases. These rates reached a high of 617.9 per 100,000 population in 2003 and a low of 361.3 per 100,000 population in 2007. In addition, among selected conditions, the largest inpatient separation rate of change during this time period was reported for asthma (a 17.5 per 100,000 population average rate decrease per year - based on regression line fitting).

The following figure presents inpatient separation rates per 100,000 population for patients residing in the local geographic area, compared to provincial rates, for the most recent calendar year and selected health conditions.

**FIGURE 9.2** LGA versus Alberta Age-Standardized Inpatient Separation Rates (per 100,000 population) For Selected Conditions, 2010



In 2010, the three highest inpatient separation rates were reported for ischemic heart diseases, pneumonia, and diabetes. The most common reason for inpatient separations in Beaverlodge was ischemic heart diseases, which had a much higher rate compared to the provincial rate per 100,000 population (558.5 vs. 250.9 AB). Additionally, Beaverlodge's inpatient separation rates were higher than the provincial rates for 4 of the 7 diagnoses.

**Sources:**

Alberta Hospital Discharge Abstract Database (DAD), Alberta Health  
Alberta Health Care Insurance Plan (AHCIP) Quarterly Population Registry Files, Alberta Health  
Postal Code Translation File, Alberta Health  
Census 1991 Population Data, Statistics Canada

**Notes:** <sup>1</sup> See Appendix A for definition.

<sup>2</sup> Age-standardized rates are adjusted using the direct method of standardization, with weights from Statistics Canada's 1991 census population.

**Methodology:**

See link: [http://www.ahw.gov.ab.ca/IHDA\\_Retrieval](http://www.ahw.gov.ab.ca/IHDA_Retrieval)

## Local Geographic Area: Beaverlodge

### PRIMARY HEALTH CARE INDICATORS OF COMMUNITY PRIMARY CARE NEED

As a result of consultations and analysis during the summer of 2012, 13 indicators were identified to help identify the need for new or additional primary health care services across all local geographic areas throughout Alberta. Six of these indicators were related to utilization, another six were associated with health population needs and a final indicator, life expectancy at birth, is seen as a reflection of health status.<sup>1</sup> The indicators are standardized by age, where appropriate, to allow comparison of information across local geographic areas and the province. Examples of some of these indicators are given below.

- the burden of disease in the population that could be monitored and/or ameliorated by primary health care services (e.g. the proportion of the population with diabetes);
- a gap between population health needs and available health care services (e.g. use of emergency departments for non-urgent health care).

The table below profiles recent data for these indicators for both the local geographic area (LGA) and Alberta. Due to considerable differences in population densities and travel times to a variety of health services, the various LGAs have been categorized into five geographic peer groups: rural, rural remote, urban, metro, and metro moderate. This grouping (stratification) was applied to 7 of the 13 indicators below. For these indicators, the LGA indicator value is compared to the corresponding geographic peer group average (rather than the Alberta average) to allow for a more reasonable comparison between LGAs with similar characteristics.

**TABLE 10.1.** Proposed Primary Health Care Indicators of Community Primary Care Need

Utilization Indicators		Beaverlodge	Alberta / Geographic Peer Group Average
1*	Travel: Percentage of Total Family Physician Claims Outside the Recipients Home Local Geographic Area, 2010/2011	28.4%	31.0%
2*	Ambulatory Care Sensitive Conditions - Age-Standardized Separation Rate (per 100,000 population), 2003 to 2011	762.0	708.8
3	Continuity of Care, 2010	9.9%	14.0%
4*	ED Visits Related to Mood Disorders (Age-Standardized, per 100,000 population), 2003 to 2011	947.9	469.8
5*	ED Visits Related to Anxiety Disorders (Age-Standardized, per 100,000 population), 2003 to 2011	1,195.3	948.6
6*	ED Visits Related to Injuries (Age-Standardized, per 100,000 population), 2003 to 2011	29,239.0	19,823.7

**TABLE 10.1.** Proposed Primary Health Care Indicators of Community Primary Care Need (continued)

Health Status Indicators		Beaverlodge	Alberta / Geographic Peer Group Average
7	Diabetes Prevalence (per 100 population), 2010	4.4	5.1
8	Chronic Obstructive Pulmonary Disease Prevalence Rate (per 100 population), 2010	2.9	1.8
9	Age-Standardized Rate of People with Three or more Chronic Diseases (per 100 population), 2010	2.2	2.2
10	Influenza Vaccines for Those 65 and Over, 2011/2012	44.2%	40.6%
11*	Predicted Primary Health Care Utilization, 2006/2007 to 2008/2009	\$118.67	\$117.51
12*	Primary Health Care Service Gap, 2006/2007 to 2008/2009	-\$31.07	-\$2.92
Social Determinant of Health		Beaverlodge	Alberta / Geographic Peer Group Average
13	Life Expectancy at Birth, 2000 to 2011	79.9	80.5

*\* Note: For these indicators, the Beaverlodge indicator value is compared to the Alberta rural average to allow for a more reasonable comparison between LGAs with similar characteristics.*

Each of the 13 indicators displayed for Beaverlodge is described below.

#### Indicator 1:

The percentage of total Family Physician claims outside the recipient's home local geographic area is a proxy for access to primary care facilities. This indicator is stratified by geographic peer groups (metro, metro moderate, urban, rural, rural remote) due to substantially different rates across groups. While the indicator provides values for all LGAs, the values are more informative for rural and rural remote areas (as travel inside urban areas has different meaning and impact).

For patients residing in Beaverlodge a similar percentage of Family Physician services was provided outside the recipient's home local geographic area compared to the rural provincial average (28.4% vs. 31.0% AB rural).

#### Indicator 2:

The Canadian Institute of Health Information (CIHI) has recognized ambulatory care sensitive conditions (ACSC) separation rates as a valid proxy indicator for the robustness of a primary care system. The ACSC indicator measures the aggregate acute care separation rate, per 100,000 population, over one year for the following seven conditions: Angina, Asthma, Congestive Heart Failure, Chronic Obstructive Pulmonary Disorder, Diabetes, Epileptic Convulsion or Seizure, and Hypertension. A disproportionately high rate is presumed to reflect problems in obtaining access to appropriate primary care.

This indicator is stratified by geographic peer groups (metro, metro moderate, urban, rural, rural remote) due to substantially different rates across groups.

Beaverlodge's separation rate for ambulatory care sensitive conditions (per 100,000 population) was 1.1 times higher than the corresponding rural provincial rate (762.0 vs. 708.8 AB rural).

### **Indicator 3:**

Continuity of care describes the percentage of patients with minor or severe chronic illnesses that have access to their family physician less than 50% of the time. Higher values indicate areas with higher proportions of "unhealthy" or "sick" patients who are weakly attached to their Family Physician. Lower values are preferable.

Beaverlodge's percentage of patients with minor or severe chronic illnesses with a low degree of continuity of care was lower than the percentage reported in Alberta (9.9% vs. 14.0% AB).

### **Indicator 4:**

The age-standardized emergency visit rates for mood disorder (per 100,000 population) are stratified by geographic peer groups (metro, metro moderate, urban, rural, rural remote) due to substantially different rates across groups.

Beaverlodge's rate of emergency department visits related to mood disorders (per 100,000 population) was 2.0 times higher than the provincial rural average rate (947.9 vs. 469.8 AB rural).

### **Indicator 5:**

The age-standardized emergency visit rates for anxiety disorder (per 100,000 population) are stratified by geographic peer groups (metro, metro moderate, urban, rural, rural remote) due to substantially different rates across groups.

Beaverlodge's rate of emergency department visits related to anxiety disorders (per 100,000 population) was 1.3 times higher than the provincial rural average rate (1,195.3 vs. 948.6 AB rural).

### **Indicator 6:**

The age-standardized emergency visit rates due to injuries, per 100,000 population, (excluding adverse effects due to drugs/medical procedures) are stratified by geographic peer groups (metro, metro moderate, urban, rural, rural remote) due to substantial differences across groups.

Emergency visits related to injuries occurred at a 1.5 times higher rate in Beaverlodge, compared to the provincial rural average rate per 100,000 population (29,239.0 vs. 19,823.7 AB rural).

**Indicator 7:**

Chronic diseases such as diabetes are a heavy burden for the health care system in terms of both associated costs and the impact they have on an individual's quality of life. This indicator presents the age-standardized diabetes prevalence rate per 100 population.

The prevalence rate for diabetes in Beaverlodge was lower than the provincial rate (4.4 vs. 5.1 AB).

**Indicator 8:**

Chronic diseases such as Chronic Obstructive Pulmonary Disease (COPD) are a heavy burden for the health care system in terms of both associated costs and the impact they have on an individual's quality of life. This indicator presents the age-standardized COPD prevalence rate per 100 population (due to small numbers).

For COPD, the prevalence rate in Beaverlodge was 1.6 times higher than the provincial rate (2.9 vs. 1.8 AB).

**Indicator 9:**

Interdisciplinary care and coordination of services is required for patients with multiple chronic conditions. The age-standardized rate of people with three or more chronic diseases tracks the proportion of patients with three or more conditions which may include: COPD, diabetes, ischemic heart disease, asthma, and/or kidney disease.

The age-standardized rate for people with three or more chronic diseases per 100 population was similar in Beaverlodge compared to the province (2.2 vs. 2.2 AB).

**Indicator 10:**

The percentage of influenza vaccines administered annually to 65 year olds and over is an important primary health care indicator of preventive services delivered through primary health care. The data for this indicator includes immunizations delivered by community pharmacists and physicians between September 1, 2011 and March 31, 2012.

Beaverlodge's percentage of the population 65 and over who had been administered influenza vaccines was higher than the provincial percentage (44.2% vs. 40.6% AB).

### Indicator 11:

The Health Human Resource Forecasting and Simulation Model (HHRFSM) predicts future need/use of primary health care services by residents, based on the characteristics of the individuals and their community.

HHRFSM predicts future primary health care utilization in terms of costs, specifically the expected per capita billings for general practitioner visits. The indicator constitutes a composite measure of relative health need based on personal characteristics (e.g. age, gender), health status (e.g. chronic diseases, inpatient status) and various socio-economic factors (e.g. educational level, income level).

The dollar value for community and primary care billings per capita during 2006/2007 to 2008/2009 was \$118.67 in Beaverlodge, similar to the \$117.51 rural provincial average.

### Indicator 12:

The primary health care service gap is measured as the difference between actual and predicted per capita billings for community and primary care services from HHRFSM (see indicator 11). A positive value indicates the average resident is receiving more primary health care services than expected; negative values indicate fewer services received than expected. Stratification by the geographic peer group (metro, metro moderate, urban, rural, rural remote) was applied to this indicator due to substantially different rates across groups.

The dollar gap between actual and predicted community and primary care per capita billings during 2006/2007 and 2008/2009 was \$-31.07 in Beaverlodge compared to the \$-2.92 rural provincial average.

### Indicator 13:

The life expectancy at birth correlates highly with determinants of health and is a good predictor of future health related costs. This measure is considered a significant indicator of overall population health.

Beaverlodge had a lower life expectancy at birth in comparison to the provincial life expectancy (79.9 years vs. 80.5 years AB).

### Sources:

*Health Human Resource Forecasting and Simulation Model, Alberta Health*  
*Interactive Health Data Application (IHDA), Alberta Health*  
*Clinical Risk Grouper (CRG) Application, Alberta Health*  
*Alberta Provider Directory, Alberta Health*  
*Alberta Health Care Insurance Plan (AHCIP) Physician Claims Data, Alberta Health*  
*Stakeholder Registry File, Alberta Health*  
*Alberta Hospital Discharge Abstract Database (DAD), Alberta Health*  
*Ambulatory Care Data, Alberta Health*  
*Wait List Registry, Alberta Health*  
*Alberta Health Care Insurance Plan (AHCIP) Quarterly Population Registry Files, Alberta Health*  
*Case Costing Files, Alberta Health*

*Postal Code Translation File, Alberta Health*  
*Alberta Blue Cross Claims Data, Alberta Health*  
*Census 2006 Population Data, Statistics Canada*  
*Canadian Community Health Survey (CCHS), Statistics Canada*  
*Long Term Care Funding File, Alberta Health*  
*Continuing Care Bed Survey, Alberta Health*

**Notes:** <sup>1</sup> For more details see Local Area Family Care Clinic Prioritization Framework Report:  
<http://www.health.alberta.ca/documents/PHC-FCC-Framework-TELUS-2012.pdf>

## Local Geographic Area: Beaverlodge

### ACCESS TO HEALTH CARE SERVICES

The table below provides the number of ambulatory care visits or inpatient separations made by local area residents to facilities within the local geographic area as well as facilities outside of it. The data is provided for the most recent fiscal year available.

**TABLE 11.1** Ambulatory Care Visits and Inpatient Separations for the Local Geographic Area Residents<sup>1</sup>  
To Facilities Located In versus Out of the Local Geographic Area, Fiscal Year 2011/2012

Ambulatory Care Visits				
Visits Within Local Area of Residence (IN)	Visits Outside Local Area of Residence (OUT)	Total Visits	Percent IN	Percent OUT
17,660	13,493	31,153	56.7%	43.3%
Inpatient Separations (Seps)				
Seps Within Local Area of Residence	Seps Outside Local Area of Residence	Total Seps	Percent IN	Percent OUT
347	838	1,185	29.3%	70.7%

The following table focuses on ambulatory care visits or inpatient separations made by local area residents to the top three accessed non-local facilities. Of particular interest is the percentage of non-local visits to, or separations from each of the three facilities out of all non-local visits or separations. These percentages appear in the last column of the table below. The data is provided for the most recent fiscal year available.

**TABLE 11.2** Top 3 Non-Local Ambulatory Care Facilities Accessed by Local Residents  
Fiscal Year 2011/2012

Local Residents Accessing Non-Local Ambulatory Care Facilities				
Ambulatory Care Facility Name	Facility Municipality	Facility LGA	Number of OUT Visits	% of Total OUT Visits
Queen Elizabeth II Hospital	Grande Prairie	City of Grande Prairie	9,129	67.7%
University of Alberta Hospital	Edmonton	Edmonton - Bonnie Doon	2,193	16.3%
Royal Alexandra Hospital	Edmonton	Edmonton - Eastwood	434	3.2%

**TABLE 11.2** Top 3 Non-Local Acute Care Hospitals Accessed by Local Residents  
Fiscal Year 2011/2012 (continued)

Local Residents Accessing Non-Local Acute Care Hospitals				
Hospital Name	Hospital Municipality	Hospital LGA	Number of OUT Seps	% of Total OUT Seps
Queen Elizabeth II Hospital	Grande Prairie	City of Grande Prairie	650	77.6%
University of Alberta Hospital	Edmonton	Edmonton - Bonnie Doon	64	7.6%
Royal Alexandra Hospital	Edmonton	Edmonton - Eastwood	54	6.4%

**Sources:**

*Ambulatory Care Data, Alberta Health*

*Alberta Hospital Discharge Abstract Database (DAD), Alberta Health*

*Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry File, Alberta Health*

*Postal Code Translation File, Alberta Health*

## Definitions

## Appendix A

### Age Standardization

Age standardization is a technique applied to make rates comparable across groups with different age distributions. A simple rate is defined as the number of people with a particular condition divided by the whole population. An age-standardized rate is defined as the number of people with a condition divided by the population within each age group. Standardizing (adjusting) the rate across age groups allows a more accurate comparison between populations that have different age structures. Age standardization is typically done when comparing rates across time periods, different geographic areas, and or population sub-groups (e.g. ethnic group).

### Band Housing

For historical and statutory reasons, shelter occupancy on reserves does not lend itself to the usual classification by standard tenure categories. Therefore, a special category, band housing, has been created for 1991 Census products. Band housing also appears in the 1996, 2001, and 2006 Census products. (Statistics Canada)

### Birth Rate

The number of live births, of a given geographic area in a given fiscal year, per 1,000 population of the same geographic area in the same year. (Statistics Canada)

### Body Mass Index (BMI)

The BMI is a method of classifying body weights by health risk level, adopted by the World Health Organization (WHO). Guidelines were put in place by Health Canada to clearly define this index.

The BMI is computed as an individual's weight (in kilograms) divided by the square of their height (in meters). The standard BMI categories used are: underweight, normal, overweight and obese (classes I-III). For the purposes of this report, the following categories were used:

<b>BMI Categories</b>	<b>BMI</b>
under weight	less than 18.50
normal weight	18.50 to 24.99
overweight	25.00 to 29.99
obese	30.00 or greater

Obesity has been linked with many chronic diseases, including hypertension, type 2 diabetes, cardiovascular disease, osteoarthritis and certain types of cancer. (Statistics Canada, Canadian Community Health Survey)

### Canadian Triage and Acuity Scale (CTAS)

A scale to categorize patients according to the type and severity of their initial presenting signs and symptoms at the Emergency Department that helps to determine priorities for treatment. The

Canadian Triage and Acuity Scale (CTAS) is used to determine the triage level. There are 5 levels, with level 1 being the most urgent and level 5 the least urgent.

#### Triage Level 1 – Resuscitation

Conditions that are threats to life or limb (or imminent risk of deterioration) requiring immediate aggressive interventions.

#### Triage Level 2 – Emergent

Conditions that are a potential threat to life, limb or function, requiring rapid medical intervention or delegated acts.

#### Triage Level 3 – Urgent

Conditions that could potentially progress to a serious problem requiring emergency intervention. May be associated with significant discomfort or affecting ability to function at work or activities of daily living.

#### Triage Level 4 – Less Urgent (Semi urgent)

Conditions that are related to patient age, distress, or potential for deterioration or complications and would benefit from intervention or reassurance within 1-2 hours.

#### Triage Level 5 – Non Urgent

Conditions that may be acute but non-urgent as well as conditions which may be part of a chronic problem with or without evidence of deterioration. The investigation or interventions for some of these illnesses or injuries could be delayed or even referred to other areas of the hospital or health care system.

#### Triage Level 9 – Unknown

The information regarding this particular level is included in the National Ambulatory Care Reporting System Manual available through CIHI.

For further details please refer to the link below:

[http://www.calgaryhealthregion.ca/policy/docs/1451/Admission\\_over-capacity\\_AppendixA.pdf](http://www.calgaryhealthregion.ca/policy/docs/1451/Admission_over-capacity_AppendixA.pdf)

### **Census**

A survey that collects data from all the members of a population, whether it's people or businesses. The most common use of the term "Census" is the population Census of Canada which is taken at 5-year intervals which counts persons and households and a wide variety of characteristics. In fact, some of the Census questions are asked on a sample basis i.e. in the past every fifth household receives a long-form questionnaire asking additional questions. (Statistics Canada)

### **Census Family**

A family as defined by the Census includes one of the following: a married couple and the children, if any, of either or both spouses; a couple living common law and the children, if any, of either or both partners; or, a lone parent of any marital status with at least one child living in the same

dwelling. In addition, the following criteria must apply: all members of a particular census family live in the same dwelling; a couple may be of opposite or same sex; children may be children by birth, marriage or adoption regardless of their age or marital status as long as they live in the dwelling and do not have their own spouse or child living in the dwelling. Grandchildren living with their grandparent(s) but with no parents present also constitute a census family. (Statistics Canada)

### **Chinese, n.o.s.**

The 2006 census category 'Chinese, n.o.s.' (not otherwise specified) includes responses of 'Chinese' as well as all Chinese languages other than Cantonese, Mandarin, Taiwanese, Chaochow (Teochow), Fukien, Hakka and Shanghainese. (Statistics Canada)

### **Chronic Obstructive Pulmonary Disease (COPD)**

Population aged 35 and over who reported being diagnosed by a health professional with chronic bronchitis, emphysema or chronic obstructive pulmonary disease (COPD). (Statistics Canada, Canadian Community Health Survey)

COPD is a progressive disease that makes it hard to breathe. It can cause coughing that produces large amounts of mucus, wheezing, shortness of breath, chest tightness, and other symptoms. Cigarette smoking is the leading cause of COPD. Most people who have COPD smoke or used to smoke. Long-term exposure to other lung irritants (such as air pollution, chemical fumes, or dust) also may contribute to COPD.

### **Emergency Department (ED) Visit Rate**

The number of visits to the emergency department divided by the total population of the local geographic area.

### **Family Care Clinic (FCC)**

Family Care Clinics provide primary health care services, such as diagnosis and treatment of illness, immunizations, screening and links to other health services and community agencies. The clinics will emphasize health promotion, disease and injury prevention, and self-management and care of chronic disease. FCCs will offer extended hours of service and same day access.

### **Fertility Rate**

The fertility rate is the number of live births per 1,000 women of reproductive age (15 - 49 years) in a population per year. This is a more standardized way to measure fertility in a population than birth rate because it accounts for the percentage of women of reproductive age. (Statistics Canada)

### **First Nations with Treaty Status**

First Nation is a term that came into common usage in the 1970s to replace the word "Indian". Although the term First Nation is widely used, no legal definition of it exists. Among its uses, the term "First Nations people" refers to the Indian people in Canada, both Status and non-Status.

Starting in 1701, the British Crown entered into solemn treaties to encourage peaceful relationships between First Nations and non-Aboriginal people. Over the next several centuries, treaties were signed to define, among other things, the respective rights of Aboriginal people and governments to use and enjoy lands that Aboriginal people traditionally occupied. The Government of Canada and the courts understand treaties between the Crown and Aboriginal people to be solemn agreements

that set out promises, obligations and benefits for both parties (Aboriginal Affairs and Northern Development Canada).

### **Health Status**

The level of health of the individual, group or population as subjectively assessed by the individual or by more objective measures. (Statistics Canada)

### **High Birth Weight**

Birth weight is the body weight of a baby at its birth. High birth weight is defined as live births with a weight of 4,500 grams or more, expressed as a percentage of all live births with known weight (Statistics Canada, Vital Statistics, Birth Database)

### **Hospitalization Rate**

Age-standardized rate of acute care hospitalization, per 100,000 population. (Canadian Institute for Health Information)

### **Infant Mortality Rate**

Infants who die in the first year of life, expressed as a count and a rate per 1,000 live births. (Statistics Canada, Vital Statistics, Birth and Death Databases)

### **Inpatient**

An individual who has been officially admitted to a hospital for the purpose of receiving one or more health services. (Canadian Institute for Health Information: MIS Standards 2011)

### **Inpatient Separations (Seps)**

A separation from a health care facility occurs anytime a patient (or resident) leaves because of death, discharge, sign-out against medical advice or transfer. The number of separations is the most commonly used measure of the utilization of hospital services. Separations, rather than admissions, are used because hospital abstracts for inpatient care are based on information gathered at the time of discharge.

### **Low-income Cutoffs (LICOs)**

Represent an income threshold where a family is likely to spend 20% more of its income on food, shelter and clothing than the average family, leaving less income available for other expenses such as health, education, transportation and recreation. The LICOs are calculated for families and communities of different sizes. (Statistics Canada)

### **Low Birth Weight**

Birth weight is the body weight of a baby at its birth. Live births less than 5.5 pounds or 2500 grams at birth are considered as babies with low birth weight. Low birth weight is a key determinant of infant survival, health, and development. (Statistics Canada, Vital Statistics, Birth Database)

### **Mortality Rate by Cause of Death**

The age-standardized mortality rate by cause of death is a measure of the frequency (rate) at which deaths occur in a given population due to a certain cause. The potential confounding effect of

different age structures (i.e. across geographic boundaries or years) is reduced when comparing rates that have been age-adjusted. (Interactive Health Data Application, Alberta Health)

## Neoplasms

An unusual new growth of tissue resulted by uncontrolled production of cells. These cells do not coordinate with normal cells and may appear abnormal compared to the normal cells. The term "tumor" is used to name a neoplasm that has formed a lump. Some neoplasms do not form lumps. The neoplasms that spread to the other parts of the body are commonly known as 'Cancers'. (<http://www.cancer.gov/cancertopics/understandingcancer/cancer/AllPages>)

## Physical Activity

Population aged 12 and over who reported a level of physical activity, based on their responses to questions about the frequency, nature and duration of their participation in leisure time physical activity. Respondents are classified as active, moderately active or inactive based on an index of average daily physical activity over the past 3 months.

For each leisure time physical activity engaged in by the respondent, an average daily energy expenditure is calculated by multiplying the number of times the activity was performed by the average duration of the activity by the energy cost (kilocalories per kilogram of body weight per hour) of the activity. The index is calculated as the sum of the average daily energy expenditures of all activities. Respondents are classified as follows: 3.0 kcal/kg/day or more = physically active; 1.5 to 2.9 kcal/kg/day = moderately active; less than 1.5 kcal per day = inactive. (Statistics Canada, Canadian Community Health Survey)

## Prevalence Rate

Prevalence is a measure of disease that allows us to determine a person's likelihood of having a disease. Therefore, the number of prevalent cases is the total number of cases of disease existing in a population. A prevalence rate is the total number of cases of a disease existing in a population divided by the total population. (<http://www.health.ny.gov/diseases/chronic/basicstat.htm>)

## Primary Care

The first point of contact that people have with the health care system for medical needs requiring treatment and referral to other services as needed and is usually provided by a family physician or other health care professional. (<http://www.albertapci.ca/aboutpcns/primarycare/pages/default.aspx>)

## Primary Care Networks

Primary Care Networks are groups of family doctors that work with Alberta Health Services and other health professionals to coordinate the delivery of primary health services for their patients.

## Private Household

A person or a group of people occupying the same dwelling and who do not have a usual place of residence elsewhere in Canada or abroad. The household universe is divided into two sub-universes on the basis of whether the household is occupying a collective dwelling or a private dwelling. The latter is a private household. (Statistics Canada)

### Qualifier (comparisons between indicator values)

In comparing indicators across local geographic areas (LGAs) and the Province, this report uses qualifiers such as 'higher than', 'lower than', 'similar to', etc. These statements are based on a simple statistical comparison that determines how far apart the indicator values are on the full scale of values for the indicator. For each indicator, the standard deviation (SD) was used as the measuring stick for whether the values are "close" or "far apart". For each indicator, the distance between the LGA value and the provincial (AB) value was measured as number of SDs, and the direction of the difference (plus or minus). For example, if the LGA value is 2 SDs above the AB value, then the LGA value is said to be 'much higher' than the provincial value. The complete set of comparison criteria is given below.

Qualifier	Distance between values
Much Lower	below $-1.5$ SD
Lower	$-1.5$ SD to $-0.25$ SD
Similar/Comparable	$-0.25$ SD to $+0.25$ SD
Higher	$+0.25$ SD to $+1.5$ SD
Much Higher	$+1.5$ SD and higher

### Separation Rate

A separation from a health care facility occurs anytime a patient (or resident) leaves because of death, discharge, sign-out against medical advice or transfer. The separation rate is the total number of inpatient separations divided by the total population.

### Self-Perceived Mental Health

Perceived mental health is a general indication of the number of people in the population suffering from some form of mental disorder, mental or emotional problems or distress, not necessarily reflected in self-perceived health. This data is usually collected through surveys where respondents are asked to rate their mental health as poor, fair, good, very good or excellent. (Statistics Canada, Canadian Community Health Survey).

### Smoker

As defined by Statistics Canada, 'smokers' are members of the population aged 12 and older who report being a current smoker. A "daily smoker" is someone who reports smoking cigarettes every day (although it does not take into account the number of cigarettes smoked). 'Occasional smokers' refers to those who reported smoking cigarettes occasionally; this includes former daily smokers who now smoke occasionally. (Statistics Canada, Canadian Community Health Survey)

### Sexually Transmitted Infection (STI)

An infection that can be transferred from one person to another through sexual contact. (Public Health Agency of Canada)

### Teen Birth Rate

The teenage live birth rate is the number of live births per 1,000 women aged 15 to 19. (E-STAT, Statistics Canada).

## Community Services

## Appendix B

### ONLINE RESOURCES

#### 1. Aboriginal Affairs

- Alberta First Nation Community Profiles:  
<http://pse5-esd5.ainc-inac.gc.ca/fnp/Main/Search/FNListGrid.aspx?lang=eng>  
This link provides a collection of information that describes individual First Nation communities across Canada. It also allows you to quickly locate First Nation communities by consulting [the interactive map](#)
- Delegated First Nation Agencies:  
<http://humanservices.alberta.ca/family-community/15540.html>  
This link provides a list and contact details of delegated First Nation agencies and societies in Alberta.
- Programs and Services for Aboriginal People:  
<http://www.programs.alberta.ca/Living/648.aspx?N=770+173>  
This link provides an online resource to programs and services, such as Online Services, Financial Resources, Licensing and Registration, and Publications relevant to Aboriginal people in Alberta.
- Local Resources:
  - Find a list and map of your local delegated First Nation Agencies  
<http://humanservices.alberta.ca/family-community/15540.html>

#### 2. Education

- Alberta Education and Training:  
<http://alberta.ca/educationtraining.cfm>  
This link provides resources for schooling in Alberta through primary years to post-secondary and life-long learning.
- Local Resources:
  - Find a directory of your local schools and school boards:  
<http://www.education.alberta.ca/apps/schoolsdir/>  
This link provides a list of school authorities and associated public, private, francophone and early childhood services – schools are listed in alphabetical order. It also provides contact information and links to school authority websites.

#### 3. Employment

- Employment resources: <http://www.programs.alberta.ca/Living/5960.aspx?Ns=5246&N=770>  
This link provides resources for finding a job, including career planning, training and development, job search and job postings. It also provides general career and employment resources for self-employed, youth, persons with disabilities, immigrants and aboriginal people.

- Local resources:
  - Find your local employment resources:  
<http://humanservices.alberta.ca/services-near-you/11959.html>  
This link provides employment, training and career services by region. Each region links to a comprehensive list of office locations, job fairs and service directories.

#### 4. Family and Children

- Children and Family Services:  
<http://humanservices.alberta.ca/family-community.html>  
This link provides links to programs and services that support families and communities; it provides information on child care, parenting, women's issues, youth programs, safer communities, and family community support services.
- Programs and Services for Children:  
<http://www.programs.alberta.ca/Living/650.aspx?N=770+759>  
This link provides links to featured programs and services such as *Kids Help Phone Online*, *Safe Kids Canada* and *Traffic Safety Just for Kids*. It also contains activity resources for children such as colouring books and cook books.
- Programs and Services for Parents:  
<http://www.programs.alberta.ca/Living/9281.aspx?N=770+9252>  
This link provides resources for parents on childcare, finances and registration of birth.
- Programs and Services for Youth:  
<http://www.programs.alberta.ca/Living/678.aspx?N=770+177>  
This link provides resources on youth programs and services (*4-H Clubs of Alberta*, *B-Free - Stand Up and Stop Bullying*, *Get Web Wise and Young Workers*); Online Services (high school transcripts), Financial Resources (scholarship, bursary and grant programs), Licensing and Registration (social insurance number, learner's permit, driver's licence).

#### 5. Housing

- Housing and Property:  
<http://www.programs.alberta.ca/Living/6345.aspx?N=770+599>  
This link provides information on housing and property in Alberta, including information for tenants and landlords.
- Local Resources:
  - Find your local housing programs and services:  
<http://www.programs.alberta.ca/Living/13810.aspx?Ns=13705+13711+13738&N=770>  
This link provides information and links to different local and regional Housing Management Bodies in Alberta. It also provides a link to housing information specific to seniors, persons with disabilities and homeless persons. Also includes information and tips for landlords and tenants.

- Find your local homeless support resources:  
<http://humanservices.alberta.ca/homelessness/14633.html>  
This link provides information on support services provided in Edmonton, Fort McMurray, Grand Prairie, Lloydminster, Red Deer, Calgary, Medicine Hat and Lethbridge.  
<http://humanservices.alberta.ca/homelessness/16050.html>  
This link provides information on funding provided to the Outreach Support Services Initiative and the Addiction and Mental Health Strategy in the communities of Calgary, Edmonton, Grande Prairie, Fort McMurray, Red Deer, Lethbridge and Medicine Hat.

## 6. Seniors

- Alberta Seniors:  
<http://www.health.alberta.ca/seniors.html>  
This link provides information and links to the different programs and services to support seniors in Alberta.  
<http://www.programs.alberta.ca/Living/13772.aspx?Ns=13705+13715&N=770>  
This link provides information on financial help, health benefits, housing and rent, fraud prevention and personal safety for senior Albertans. It also provides resources for professionals to help their senior clients.
- Local Resources:
  - Find your local seniors' resources:  
<http://www.health.alberta.ca/seniors/contact-seniors.html>  
This link provides contact information for Seniors' Programs and Services; and Seniors' Information Services Offices in various regions throughout Alberta.

## 7. Social Services

- Alberta Human Services:  
<http://humanservices.alberta.ca/programs-and-services.html>  
This link provides a portal to the variety of programs and services provided by Alberta Human Services.
- Services near you:  
<http://humanservices.alberta.ca/services.html>  
This link provides a link to help you locate your local Service delivery offices, Alberta Works Centres, Child and Family Services Authorities and Employment Services.
- Alberta Food Bank Network Association:  
<http://www.afbna.ca/kitchens/>  
This links to the Alberta Food Banks website and a list of associated community kitchens in different areas and regions of Alberta.
- Programs and Services for Low-Income Earners:  
<http://www.programs.alberta.ca/Living/9498.aspx?N=770+11437>  
This link contains information about Alberta Works and other social assistance programs for low-income earners.

- Local Services:

- Find your local food bank:

<http://www.afbna.ca/foodbanks/>

This link provides a list and contact details of food banks that are members of the Alberta Food Banks Network Association and partner organizations.

- Find your local community non-profit and voluntary organizations:

<http://www.programs.alberta.ca/Living/9293.aspx?N=770+9301>

This link provides information on initiatives which support non-profit and voluntary organizations, grant programs and information on how to register a non-profit or charity organization.

\*\*\* To find other local community and social services in your area:

1. Find Services in Your Area:

<http://www.programs.alberta.ca/Maps/>

This link allows you to select your city or enter your postal code to find different types of services in and around your area.

2. Find local services through this province-wide service directory of community, health, social and government services:

[http://www.informalberta.ca/public/common/index\\_ClearSearch.do](http://www.informalberta.ca/public/common/index_ClearSearch.do)

## Appendix C

### Health Link Alberta Calls for North Zone

The following listing shows the town/city, number of calls and percentage where the zone was coded as North (including calls from the Mental Health Helpline). Records where the town/city is unknown or where the caller chose not to give demographic information are excluded. The listing is sorted alphabetically by Town/City in ascending order.

#### Calls by Town/City for the Fiscal Year 2011/2012

Town/City	# of Calls	%	Town/City	# of Calls	%
Abee	18	0.0%	Camp Creek	21	0.0%
Alberta Beach	217	0.4%	Canyon Creek	34	0.1%
Anzac	84	0.1%	Carrot Creek	28	0.0%
Ardmore	111	0.2%	Caslan	150	0.3%
Ashmont	83	0.1%	Chard	100	0.2%
Assumption	1	0.0%	Chateh	94	0.2%
Athabasca	691	1.2%	Cherhill	46	0.1%
Atikameg	177	0.3%	Cherry Grove	60	0.1%
Atmore	32	0.1%	Cherry Point	16	0.0%
Barrhead	754	1.3%	Chisholm Mills	2	0.0%
Bay Tree	10	0.0%	Clairmont	458	0.8%
Bear Canyon	5	0.0%	Cleardale	50	0.1%
Beaver Lake	1	0.0%	Clyde	110	0.2%
Beaverlodge	555	0.9%	Cold Lake	2,518	4.3%
Bellis	16	0.0%	Colinton	75	0.1%
Berwyn	68	0.1%	Conklin	63	0.1%
Bezanson	99	0.2%	County of Grande Prairie	92	0.2%
Bloomsbury	17	0.0%	Crooked Creek	139	0.2%
Blue Ridge	69	0.1%	Dapp	45	0.1%
Blueberry Mountain	4	0.0%	Darwell	101	0.2%
Bluesky	32	0.1%	Deadwood	13	0.0%
Bonanza	28	0.0%	Debolt	135	0.2%
Bonnyville	1,473	2.5%	Demmitt	13	0.0%
Boyle	194	0.3%	Desmarais	2	0.0%
Boyne Lake	28	0.0%	Dixonville	59	0.1%
Breynat	8	0.0%	Donnelly	72	0.1%
Brownvale	65	0.1%	Driftpile	64	0.1%
Brule	14	0.0%	Eaglesham	24	0.0%
Buffalo Head Prairie	55	0.1%	Edson	1,422	2.4%
Busby	119	0.2%	Egremont	11	0.0%
Cadomin	4	0.0%	Elk Point	184	0.3%
Cadotte Lake	128	0.2%	Ellscott	7	0.0%
Calais	47	0.1%	Elmworth	19	0.0%
Calling Lake	135	0.2%	Enilda	47	0.1%
			Eureka River	3	0.0%
			Fairview	352	0.6%

Health Link Alberta Calls for North Zone (Continued)

Town/City	# of Calls	%
Falher	216	0.4%
Faust	62	0.1%
Fawcett	55	0.1%
Fitzgerald	1	0.0%
Flatbush	24	0.0%
Foisy	4	0.0%
Fort Assiniboine	108	0.2%
Fort Chipewyan	470	0.8%
Fort Kent	54	0.1%
Fort Mackay	134	0.2%
Fort McMurray	10,502	17.8%
Fort Smith	1	0.0%
Fort Vermilion	352	0.6%
Fox Creek	166	0.3%
Fox Lake	13	0.0%
Frog Lake	130	0.2%
Garden River	9	0.0%
Gift Lake	103	0.2%
Girouxville	102	0.2%
Glendon	156	0.3%
Glenevis	202	0.3%
Goodfare	17	0.0%
Goodfish Lake	246	0.4%
Goodridge	6	0.0%
Gordondale	12	0.0%
Grande Cache	336	0.6%
Grande Prairie	11,829	20.1%
Grassland	77	0.1%
Grimshaw	365	0.6%
Grouard	118	0.2%
Grovedale	165	0.3%
Gunn	204	0.3%
Guy	14	0.0%
Heinsburg	45	0.1%
High Level	926	1.6%
High Prairie	945	1.6%
Hines Creek	81	0.1%
Hinton	1,117	1.9%
Hondo	19	0.0%
Hotchkiss	13	0.0%
Hylo	23	0.0%
Hythe	272	0.5%
Iron River	30	0.1%
Island Lake	18	0.0%
Island Lake South	1	0.0%
Jarvie	47	0.1%

Town/City	# of Calls	%
Jasper	392	0.7%
Jean Cote	15	0.0%
John d'Or Pr.	22	0.0%
Joussard	55	0.1%
Keg River	44	0.1%
Kehewin	127	0.2%
Kikino	59	0.1%
Kinuso	146	0.2%
La Corey	15	0.0%
La Crete	1,108	1.9%
La Glace	89	0.2%
Lac la Biche	1,145	1.9%
Lafond	10	0.0%
Lake Isle	14	0.0%
Lindbergh	6	0.0%
Little Buffalo	1	0.0%
Little Smoky	13	0.0%
Lone Pine	25	0.0%
Loon Lake	2	0.0%
Mallaig	47	0.1%
Manning	184	0.3%
Marie-Reine	6	0.0%
Marlboro	3	0.0%
Mayerthorpe	353	0.6%
McLennan	110	0.2%
McRae	11	0.0%
Meander River	67	0.1%
Nampa	138	0.2%
Neerlandia	96	0.2%
Nestow	10	0.0%
Newbrook	56	0.1%
Niton Junction	87	0.1%
North Star	18	0.0%
Notikewin	5	0.0%
Onoway	641	1.1%
Opal	16	0.0%
Paddle Prairie	58	0.1%
Peace River	1,317	2.2%
Peerless Lake	58	0.1%
Peers	117	0.2%
Perryvale	21	0.0%
Pickardville	98	0.2%
Plamondon	256	0.4%
Radway	57	0.1%
Rainbow Lake	211	0.4%
Red Earth Creek	170	0.3%

Health Link Alberta Calls for North Zone (Continued)

Town/City	# of Calls	%
Reno	1	0.0%
Robb	12	0.0%
Rochester	56	0.1%
Rochfort Bridge	8	0.0%
Rycroft	110	0.2%
Saddle Lake	382	0.6%
Sangudo	86	0.1%
Sexsmith	779	1.3%
Silver Valley	13	0.0%
Slave Lake	1,157	2.0%
Smith	103	0.2%
Smoky Lake	192	0.3%
South Baptiste	2	0.0%
Spedden	34	0.1%
Spirit River	201	0.3%
Sputinow	43	0.1%
St Brides	88	0.1%
St Isidore	69	0.1%
St Lina	60	0.1%
St Paul	959	1.6%
St Vincent	37	0.1%
Sunset Beach	2	0.0%
Sunset House	32	0.1%
Swan Hills	152	0.3%
Tangent	16	0.0%
Tawatinaw	9	0.0%

Town/City	# of Calls	%
Thorhild	133	0.2%
Tiger Lily	14	0.0%
Trout Lake	104	0.2%
Valhalla Centre	45	0.1%
Valleyview	516	0.9%
Vega	13	0.0%
Vilna	105	0.2%
Vimy	99	0.2%
Wabasca	668	1.1%
Wandering River	31	0.1%
Wanham	67	0.1%
Warspite	12	0.0%
Waskatenau	94	0.2%
Watino	4	0.0%
Wembley	407	0.7%
West Baptiste	8	0.0%
Westlock	766	1.3%
Whispering Hills	13	0.0%
White Gull	6	0.0%
Whitecourt	1,637	2.8%
Whitelaw	20	0.0%
Widewater	55	0.1%
Woking	48	0.1%
Worsley	66	0.1%
Yellowhead County	167	0.3%
Zama City	7	0.0%
<b>Total</b>	<b>58,968</b>	<b>100.0%</b>

**Source:**

Health Link Alberta

## Select Health Services

## Appendix D

### Local Geographic Area: Beaverlodge

#### Active Treatment Hospitals

Designated Service Type	Name	Address
Small Rural Community Hospital	Beaverlodge Municipal Hospital	422 10A St, Beaverlodge, T0H0C0

**Source:**

*Alberta Health, November 2012*

**Note:**

*Active Treatment Hospitals refer to Referral Tertiary Care Hospitals, Tertiary Pediatric Hospitals, Cancer Treatment Hospitals, Pediatric Hospitals, Psychiatric Facilities, Rehabilitation Hospitals, Regional & Urban Secondary Level Care Hospitals, Rural Community Hospitals, Small Rural Community Hospitals and Designated Ambulatory Care Hospitals*

#### Community Ambulatory Care Centres

There are no Community Ambulatory Care Centres in this Local Geographic Area

**Source:**

*Alberta Health, November 2012*

**Note:**

*Community Ambulatory Care Centres refer to Advanced Ambulatory Care Clinics, Urgent Care Centres, Basic Community Ambulatory Care Clinics and Family Care Clinics*

#### Diagnostic Imaging Centres

Name	Address
Beaverlodge Municipal Hospital	Imaging Department 422 10A St, Beaverlodge, T0H0C0
Hythe Continuing Care Centre	Imaging Department 10307 100 St, Hythe, T0H2C0

**Source:**

*Alberta Health, November 2012*

#### Community Pharmacies

Name	Address
Beaverlodge Drug Ltd.	1032 1 Ave, Beaverlodge, T0H0C0
Hythe Guardian Pharmacy	10404C 100 St, Hythe, T0H2C0

**Source:**

*Alberta Health, November 2012*

### Medical Laboratories

Name	Address
Beaverlodge Municipal Hospital	Laboratory 422 10A St, Beaverlodge, T0H0C0

**Source:**

*Alberta Health, November 2012*

### Family Physician Offices

Name	Address
Beaverlodge Medical Clinic	1030 1 Ave, Beaverlodge, T0H0C0
Hythe Medical Clinic	10410 100 St, Hythe, T0H2C0

**Sources:**

*Alberta Health Care Insurance Plan (AHCIP) Data, Alberta Health, November 2012  
College of Physicians and Surgeons of Alberta, April 2013*

**Note:**

*The Family Physician Office information is based on available Alberta Health data and College of Physicians and Surgeons of Alberta (CPSA) information. The most current contact information for physicians can be found on the CPSA website at [www.cpsa.ab.ca](http://www.cpsa.ab.ca)*