

Alberta Health

Primary Health Care - Community Profiles

Community Profile: Sundre Health Data and Summary

Version 2, March 2015

Table of Contents

Introduction	i
Community Profile Summary	iii
Zone Level Information	1
Map of Alberta Health Services Central Zone	2
Population Health Indicators	3
Table 1.1 Zone versus Alberta Population Covered as at March 31, 2014	3
Table 1.2 Health Status Indicators for Zone versus Alberta Residents, 2012 and 2013 (BMI, Physical Activity, Smoking, Self-Perceived Mental Health)	3
Table 1.3 Zone versus Alberta Infant Mortality Rates (per 1,000 live births), Years 2011 – 2013	4
Local Geographic Area Level Information	5
Map of Selected Health Services in Local Geographic Area	6
Demographics	7
Table 2.1 Distribution of Population Covered by Age and Gender as at March 31, 2014	7
Figure 2.1 Percentage Distribution of Local Geographic Area versus Alberta Population by Age Groups as at March 31, 2014	7
Figure 2.2 Local Geographic Area Population Covered as at end of Fiscal Years 1994 – 2014	8
Socio-Economic Indicators	9
Table 3.1 Population Percentage of First Nations with Treaty Status and Inuit as at March 31, 2011 ..	9
Table 3.2 Socio-Economic Indicators for Local Geographic Area versus Alberta Residents, 2011 (Family Composition, Family Income, Housing, Mobility, Language, Immigration, Educational Attainment, Household and Dwelling Characteristics).....	9
Chronic Disease Prevalence	12
Figure 4.1 Local Geographic Area Age-Standardized Chronic Disease Prevalence Rates (per 100 population), 2005 – 2012 (Chronic Obstructive Pulmonary Disease, Diabetes, Hypertension, Ischemic Heart Disease)	12
Figure 4.2 Local Geographic Area versus Alberta Age-Standardized Chronic Disease Prevalence Rates (per 100 population), 2012 (Chronic Obstructive Pulmonary Disease, Diabetes, Hypertension, Ischemic Heart Disease)	13
Maternal and Child Health	14
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, 2013	15
Communicable Diseases		16
Table 6.1	Top 5 Sexually Transmitted Infection (STI) Rates (per 100,000 population) by Three-Year Period	16
Mortality		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 2011 – 2013	18
Figure 7.3	Local Geographic Area Distribution of Deaths by Cause of Death Across 10 Years, 2004 – 2013.....	19
Emergency Service Utilization		20
Table 8.1	Emergency Visits for Patients Residing in the Local Geographic Area by Triage Level, Fiscal Years 2011/2012 – 2013/2014	20
Figure 8.1	Emergency Visit Rates (per 1,000 population) for Triage Levels Semi-Urgent (4) and Non-Urgent (5), Fiscal Year 2013/2014	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 2013/2014	21
Figure 8.3	Local Geographic Area Age-Standardized Emergency Visit Rates (per 100,000 population) for Selected Conditions, 2006 – 2013 (Acute Upper Respiratory Infections, Arthritis, Asthma, Diabetes, Diseases of Middle Ear and Mastoid, Emphysema and Chronic Bronchitis, Influenza, Mental & Behavioural Disorders due to Psychoactive Substance Use, Other Acute Lower Respiratory Infections, Renal Failure, Stroke)	23
Figure 8.4	Local Geographic Area versus Alberta Age-Standardized Emergency Visit Rates (per 100,000 population) for Selected Conditions, 2013 (Acute Upper Respiratory Infections, Arthritis, Asthma, Diabetes, Diseases of Middle Ear and Mastoid, Emphysema and Chronic Bronchitis, Influenza, Mental & Behavioural Disorders due to Psychoactive Substance Use, Other Acute Lower Respiratory Infections, Renal Failure, Stroke)	24
Inpatient Service Utilization		25
Table 9.1	Inpatient Separation Rates (per 1,000 population) for Patients Residing in the Local Geographic Area versus Alberta, Fiscal Years 2011/2012 – 2013/2014.....	25
Figure 9.1	Local Geographic Area Age-Standardized Inpatient Separation (IP Sep) Rates (per 100,000 population) for Selected Conditions, 2006/2007 – 2013/2014 (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 IP Sep Rates (per 100,000 population), for Selected Conditions, 2013/2014 (Asthma, Diabetes, Influenza, Ischemic Heart Diseases, Mental and Behavioural Disorders due to Psychoactive Substance Use, Pneumonia, Pulmonary Heart and Pulmonary Circulation Diseases)	26

Primary Health Care Indicators of Community Primary Care Need	27
Table 10.1 Proposed Primary Health Care Indicators of Community Primary Care Need.....	27
1. Travel: Percentage of Total Family Physician Claims Outside the Recipient’s 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	
 Access to Health Services.....	 33
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 2013/2014	33
Table 11.2 Top 3 Non-Local Ambulatory Care Facilities/ Acute Care Hospitals Accessed by Local Residents, Fiscal Year 2013/2014.....	33
 Appendix A – Definitions	 35
Appendix B – Community Services Online Resources.....	43
Appendix C – Health Link Alberta Calls by Zone.....	47
Appendix D – Select Health Services in Local Geographic Area.....	50

Note:

Qualifiers such as ‘higher than’, ‘much lower than’, ‘similar to’ etc. are used throughout the community profile to compare local geographic area (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.

Suggested Citation:

Alberta Health Primary Health Care – Community Profiles, Community Profile: [insert LGA name], Health Data and Summary, Version 2, March 2015

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 delivery within the province. The Primary Health Care Strategy has three strategic directions: enhancing the delivery of care, cultural change, and building blocks for change. 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, 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 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 LGAs 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 data at both the Zone and LGA level, information could be updated or added to the profile if it is provided by the community. For more information contact primaryhealthcare@gov.ab.ca.

Note:

Various data sources are used to compile the Community Profiles. The Profiles are developed through the collaboration of the Primary Health Care Branch, Health Analytics Branch, Surveillance and Assessment Branch in Alberta Health, along with Statistics Canada and Alberta Health Services.

Contributors:

Ade A Davies, Primary Health Care, Alberta Health
Candy Gregory, Primary Health Care, Alberta Health
Fred Ackah, Health Analytics, Alberta Health
Jennifer Bian, Health Analytics, Alberta Health
Gary Gilham, Health Analytics, Alberta Health
Fareeza Khurshed, Health Analytics, Alberta Health
Katherine Lyman, Health Analytics, Alberta Health
Kimberley McCarthy, Health Analytics, Alberta Health
Dan Metes, Health Analytics, Alberta Health
Darlene Skiba, Health Analytics, Alberta Health
Mengzhe Wang, Health Analytics, Alberta Health
Yiming Weng, Health Analytics, Alberta Health
Xianpei Zhou, Health Analytics, Alberta Health
Sue Cumming, Alberta Health Services
Caroline McAuley, Alberta Health Services

COMMUNITY PROFILE SUMMARY

Local Geographic Area: Sundre

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), Sundre. 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 Central Zone (which includes Sundre) was higher than the provincial percentage in 2013 (21.2% Central Zone vs. 19.3% AB). (Table 1.2)
- The Central Zone reported a much higher proportion of inactive people compared to the provincial proportion during the same year (45.5% Central Zone vs. 42.6% AB). (Table 1.2)

DEMOGRAPHICS

- Sundre's population increased by 30.8% between 1994 and 2014 (compared to a 56% increase for Alberta) and currently stands at 7,153 people. (Figure 2.2)
- The largest age group in the LGA, in 2014, was 35-64 year olds who accounted for 41.8% of the population compared to 40.4% for Alberta. (Figure 2.1)
- Children 17 and under made up 19.1% of the LGA's population compared to 22.2% for Alberta, while individuals 65 and older accounted for 19.2% of the population in the LGA and 11.3% in Alberta. (Figure 2.1)

SOCIO - ECONOMIC INDICATORS

- Sundre had a similar proportion of First Nations and Inuit people compared to Alberta (0.9% vs. 3.4% AB). (Table 3.1)
- The percentage of female lone-parent families was lower than the provincial percentage (8.3% vs. 11.1% AB). (Table 3.2)
- A similar proportion of families with an after-tax low-income level were reported in the LGA compared to Alberta (11.6% vs. 10.7% AB). (Table 3.2)
- The most common non-official languages spoken at home in the LGA were: German, Dutch, Korean, and Panjabi (Punjabi). (Table 3.2)

CHRONIC DISEASE PREVALENCE

- In 2012, the disease with the highest prevalence rate (per 100 population) in Sundre was hypertension. The rate associated with this disease was 0.9 times lower than the provincial rate (11.6 vs. 12.3 AB). (Figure 4.2)

MATERNAL HEALTH

- From 2009/2010 to 2011/2012, Sundre's birth rate per 1,000 women was lower than the provincial rate (20.0 vs. 26.8 AB) and the teen birth rate per 1,000 women was similar to Alberta's teen rate (18.7 vs. 17.4 AB). (Table 5.1)

SEXUALLY TRANSMITTED INFECTIONS

- The highest sexually transmitted infections (STI) rate per 100,000 population in the LGA, in 2011/2012 - 2013/2014, was reported for chlamydia. 2 of the top 3 STI rates in the LGA were higher than the provincial rates, where comparisons could be made. (Table 6.1)

MORTALITY

- The mortality rate (per 100,000 population) due to all causes was similar in the LGA, in 2011-2013, compared to the province (474.7 vs. 452.2 AB) and the most frequent cause of death reported between 2004 and 2013 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 66.8% of all emergency visits in 2013/2014. (Table 8.1)
- Acute Upper Respiratory Infections were the most common reason for emergency visits (among select conditions) in 2013, and had a higher rate (per 100,000 population) compared to the provincial rate (5,789.0 vs. 3,748.0 AB). (Figure 8.4)
- Ischemic heart diseases, mental & behavioural disorders due to psychoactive substance use, and pneumonia were the top three main reasons for inpatient separations (among selected conditions) in 2014, and inpatient separation rates were higher than the provincial rates for 6 of 7 diagnoses. (Figure 9.2)

MENTAL AND BEHAVIOURAL DISORDERS

- Mental and behavioural disorders are particularly important from a population health perspective. In 2013, Sundre's emergency department (ED) visit rate for mental and behavioural disorders was similar to the provincial ED visit rate per 100,000 population (758.2 vs. 633.3 AB). (Figure 8.4)
- The inpatient discharge rate associated with mental and behavioural disorders was higher than Alberta's discharge rate per 100,000 population (230.8 vs. 120.0 AB). (Figure 9.2)
- During 2004 to 2013 mental and behavioural disorders accounted for 3.5% 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:

- Sundre's separation rate for ambulatory care sensitive conditions (per 100,000 population) was similar to the corresponding rural provincial rate (730.3 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 Sundre 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 \$-5.18 in Sundre compared to the \$-2.92 rural provincial average. (Table 10.1)
- Residents of Sundre 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

- Sundre residents received ambulatory care services at facilities located outside the LGA. In 2013/2014, these visits made up 48.5% (or 7,913 visits) of all ambulatory care visits and most such visits (i.e. 29.1% of all external visits) were to the Red Deer Regional Hospital Centre in Red Deer (LGA of Red Deer - SW). (Tables 11.1 and 11.2)
- In 2013/2014, inpatient separations outside the LGA made up 58.8% (or 509) of all inpatient separations for Sundre residents and most of them (i.e. 36.9% of all external inpatient separations) occurred at the Red Deer Regional Hospital Centre in Red Deer (LGA of Red Deer - SW). (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 Central Zone

POPULATION HEALTH INDICATORS

Table 1.1 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 Covered¹, as at March 31, 2014

	Central Zone			Alberta ²		
	Female	Male	Total	Female	Male	Total
Population	241,444	246,014	487,458	2,090,074	2,137,807	4,227,881
Percentage Distribution of Population by Age Groups						
Age Group	Female	Male	Total	Female	Male	Total
Infants: Under 1	0.6%	0.6%	1.2%	0.6%	0.7%	1.3%
Pediatric: 1-17	10.5%	11.1%	21.5%	10.2%	10.7%	20.9%
18-34	12.0%	12.5%	24.5%	12.9%	13.3%	26.1%
35-64	19.2%	19.8%	39.0%	19.7%	20.7%	40.4%
65-79	5.1%	4.9%	10.0%	4.3%	4.1%	8.4%
80 & Older	2.2%	1.5%	3.7%	1.8%	1.2%	2.9%
Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

In 2014, the largest age group was 35-64 year olds, accounting for 39.0% of the overall population in the Central Zone and 40.4% of the population in Alberta. Children 17 and under comprised 22.8% of Central Zone's overall population, compared to 22.2% for Alberta. In addition, residents 65 and older accounted for 13.7% of Central Zone's overall population, 2.4 percentage points higher than the corresponding provincial proportion.

Table 1.2 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, 2012 and 2013

Category	Year	Central Zone			Alberta		
		Female	Male	Total	Female	Male	Total
Body Mass Index (BMI)³							
Under Weight	2012	4.1%	0.3%	2.1%	3.0%	0.7%	1.8%
	2013	2.6%	2.4%	2.5%	3.6%	0.6%	2.0%
Normal Weight	2012	37.8%	34.9%	36.2%	50.6%	39.2%	44.6%
	2013	52.0%	29.5%	40.0%	53.1%	35.5%	43.8%
Over Weight	2012	29.2%	36.8%	33.3%	28.1%	40.8%	34.8%
	2013	29.6%	42.1%	36.3%	25.5%	43.3%	34.9%
Obese	2012	28.8%	28.0%	28.4%	18.3%	19.3%	18.8%
	2013	15.8%	26.0%	21.2%	17.9%	20.6%	19.3%

TABLE 1.2 Health Status Indicators for Zone versus Alberta Residents, 2012 and 2013 (continued)

		Central Zone			Alberta		
Physical Activity ³							
Category	Year	Female	Male	Total	Female	Male	Total
Active or moderately active	2012	55.1%	52.8%	53.9%	54.4%	55.4%	54.9%
	2013	59.6%	49.6%	54.5%	56.2%	58.6%	57.4%
Inactive	2012	44.9%	47.2%	46.1%	45.6%	44.6%	45.1%
	2013	40.4%	50.4%	45.5%	43.8%	41.4%	42.6%
Smoking ³							
Daily smokers	2012	17.3%	23.6%	20.5%	12.7%	20.8%	16.8%
	2013	18.9%	22.4%	20.7%	11.7%	18.6%	15.2%
Never/former/occasional smokers	2012	82.7%	76.4%	79.5%	87.3%	79.2%	83.2%
	2013	81.1%	77.6%	79.3%	88.3%	81.4%	84.8%
Self-Perceived Mental Health ³							
Excellent or Very Good	2012	66.1%	74.3%	70.3%	69.3%	72.7%	71.0%
	2013	72.3%	69.9%	71.1%	73.1%	72.8%	72.9%
Poor Fair or Good	2012	33.9%	25.7%	29.7%	30.7%	27.3%	29.0%
	2013	27.7%	30.1%	28.9%	26.9%	27.2%	27.1%

The percentage of obese people in the Central Zone in 2013 was higher than the provincial percentage (21.2% vs. 19.3% AB) and there was a much higher proportion of inactive people compared to Alberta (45.5% vs. 42.6% AB). In addition, a higher percentage of daily smokers was reported at the zone level compared to the province in 2013 (20.7% vs. 15.2% AB) and a lower proportion considered themselves as having excellent or very good mental health (71.1% vs. 72.9% AB).

Table 1.3 reports the infant mortality rates per 1,000 live births for the zone and the province, for the most recent calendar years available.

TABLE 1.3 Zone versus Alberta Infant Mortality Rates (per 1,000 live births)
Years 2011 - 2013

	Central Zone	Alberta
Infant Mortality Rate (per 1,000 births) ³		
2011	4.9	5.1
2012	5.2	4.1
2013	5.0	4.5

The infant mortality rates in the Central Zone varied between 4.9 per 1,000 births in 2011 and 5.2 per 1,000 births in 2012. Compared to Alberta, infant mortality rates in the Central Zone were higher for 2 of the 3 calendar 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:¹ Population covered represents number of people covered under the Alberta Health Care Insurance Plan (AHCIP)

² Alberta population figure was calculated based on valid Alberta postal codes.

³ See Appendix A for definition.

Methodology:

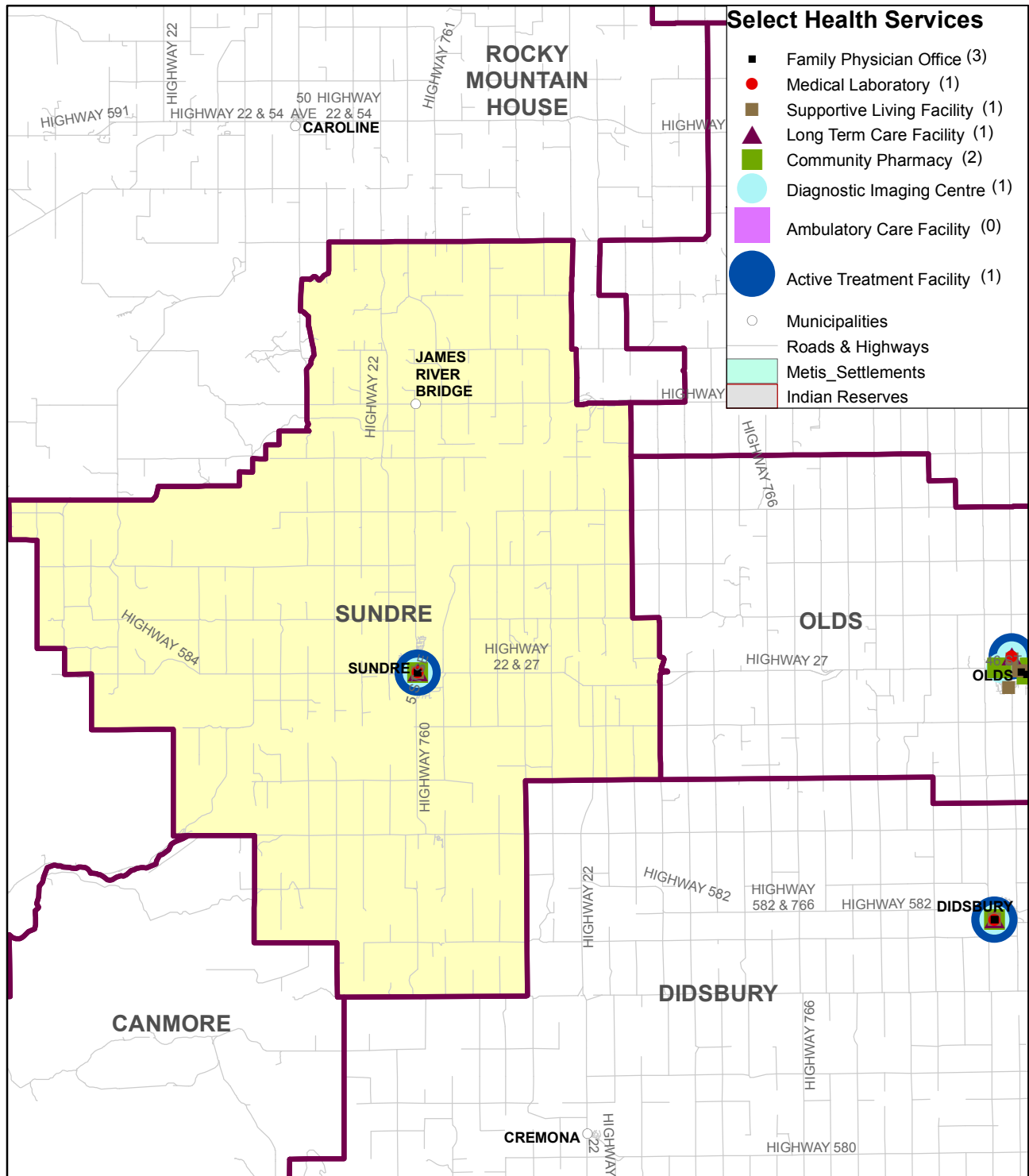
Surveillance and Assessment Branch, Alberta Health (As of Nov 2014) See link: http://www.ahw.gov.ab.ca/IHDA_Retrieval

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. The Federal Census (2011) and National Household Survey (2011) information is custom extracted by Statistics Canada at the local geographic area level. The population of these areas varies from very small in rural areas to large in metropolitan centers.

Map of Selected Health Services in Local Geographic Area of Sundre

Population (2014): 7,153



Prepared by Health Analytics Branch, Alberta Health

Note: For additional details regarding the selected health service facilities in the above map please refer to Appendix D.

Local Geographic Area: Sundre

DEMOGRAPHICS

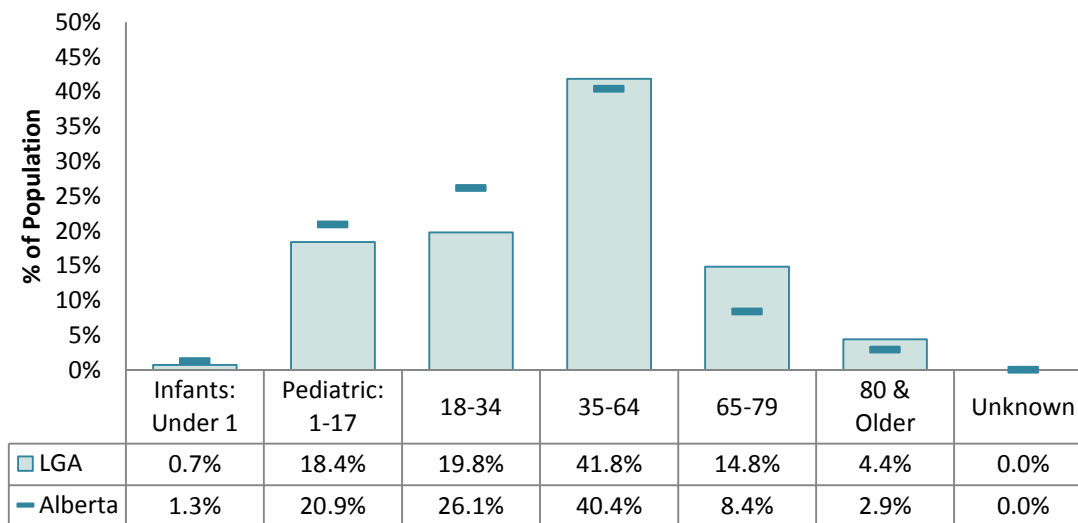
Table 2.1 shows the population distribution of the local geographic area broken down by age group and gender, for the most recent fiscal year available. Specific age groups have been identified. Children under the age of one were defined as infants, while the pediatric age group includes all minors excluding infants. People with no age information available were categorized as unknown.

TABLE 2.1 Distribution of Population Covered¹ by Age and Gender
As at March 31, 2014

Local Geographic Area Population			
Age Group	Female	Male	Total
Infants: Under 1	34	19	53
Pediatric: 1-17	615	701	1,316
18-34	694	721	1,415
35-64	1,468	1,525	2,993
65-79	527	534	1,061
80 & Older	178	137	315
Unknown	0	0	0
Total	3,516	3,637	7,153

Figure 2.1 profiles the population distribution by age group for both the local geographic area and Alberta, for the most recent fiscal year available.

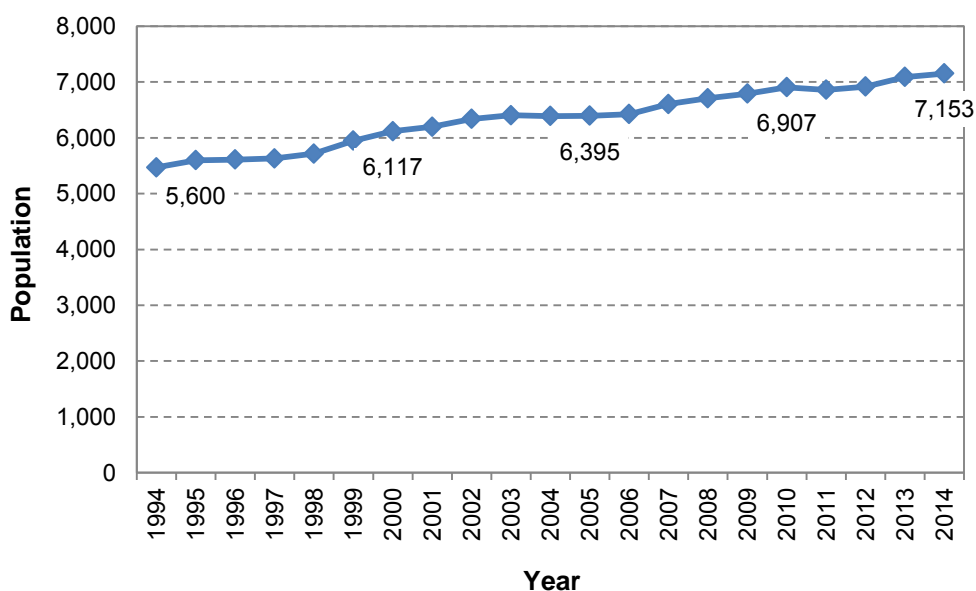
FIGURE 2.1 Percentage Distribution of Local Geographic Area (LGA) versus Alberta Population
By Age Group as at March 31, 2014



In 2014, the largest age group was 35-64 year olds, accounting for 41.8% of the overall population. Children 17 and under comprised 19.1% of Sundre's overall population, compared to 22.2% for Alberta. In addition, residents 65 and older accounted for 19.2% of Sundre's overall population, 7.9 percentage points higher than the corresponding provincial proportion.

The population counts for each year between 1994 and the most recent fiscal year are provided in Figure 2.2.

FIGURE 2.2 Local Geographic Area Population Covered as at End (i.e. Mar 31) of Fiscal Years 1994 - 2014



The population of Sundre increased by 30.8% between 1994 and 2014. A low of 5,470 individuals was reported in 1994 and a peak of 7,153 people was reported in 2014.

Sources:

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

Notes:

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

Local Geographic Area: Sundre

SOCIO-ECONOMIC INDICATORS

Tables 3.1 and 3.2 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 Status¹ and Inuit as at March 31, 2011

First Nations with Treaty Status and Inuit Population		
	Sundre	Alberta
Percent of Population that is First Nations or Inuit	0.9%	3.4%

TABLE 3.2 Socio-Economic Indicators² for Local Geographic Area versus Alberta Residents, 2011

Family Composition		
	Sundre	Alberta
Percent (Number of) Male Lone-Parent Families	2.7% (55)	3.4% (33,705)
Percent (Number of) Female Lone-Parent Families	8.3% (170)	11.1% (110,800)
Percent (Number of) 65 Years of Age and Older Who Live Alone	25.4% (290)	25.0% (91,355)
Percent (Number of) Persons not in Census Family ¹	14.5% (950)	17.3% (616,065)
Percent (Number of) Census Family Persons	85.4% (5,600)	82.7% (2,951,865)
Average Number of Persons per Census Family	2.7	3.0
Family Income		
	Sundre	Alberta
Percent (Number of) of Families with After-Tax Low-Income ¹	11.6% (230)	10.7% (105,875)
Percent (Number) of Private Households with an After-Tax Income ≥ \$100,000 in 2010	18.8% (500)	27.8% (386,990)
Average Census Family Income	\$97,227	\$116,232
Housing		
	Sundre	Alberta
Percent Living in Owned Dwellings	91.0%	73.6%
Percent Where Greater Than 30% of Income Is Spent on Housing for Homeowners	18.0%	18.4%
Average Value of Dwelling	\$351,261	\$398,839
Percent of Homeowners Who Have Homes in Need of Major Repairs	9.4%	7.0%
Percent Living in Rented Dwellings	8.8%	25.7%
Percent Where Greater Than 30% of Income Is Spent on Housing for Renters	27.7%	38.6%
Percent Living in Band Housing ¹	0.0%	0.7%

Compared to Alberta, Sundre had a similar proportion of First Nations people (0.9% vs. 3.4% AB). The proportion of female lone-parent families was lower than the provincial proportion (8.3% vs. 11.1% AB). In addition, the proportion of male lone-parent families in Sundre was lower than the provincial proportion (2.7% vs. 3.4% AB).

Furthermore, a similar percentage of families had an after-tax low-income level compared to the province (11.6% vs. 10.7% AB). Compared to Alberta, the percentage of people who spent 30% or more of their income on housing related expenses was 0.4 percentage points lower in Sundre. In addition, a higher proportion of people in Sundre lived in dwellings they owned (91.0% vs. 73.6% AB).

TABLE 3.2 Socio-Economic Indicators² for LGA versus Alberta Residents, 2011 (continued)

Mobility		
	Sundre	Alberta
Percent who lived at the Same Address One Year Ago	91.7%	84.8%
Percent who lived at the Same Address Five Years Ago	70.1%	55.1%
Language		
	Sundre	Alberta
Percent Who Do Not Speak English or French	0.2%	1.4%
Percent of Households Where a Non-Official Language Is Spoken at Home	1.7%	10.5%
Top Five Non-Official Languages Spoken at Home ³	German, Dutch, Korean, and Panjabi (Punjabi)	Panjabi (Punjabi), German, Tagalog (Pilipino, Filipino), Chinese (n.o.s.), and Spanish
Immigration		
	Sundre	Alberta
Total Number of Immigrants	470	644,115
Percent of Immigrants Who Arrived in the Last Five Years	0.5%	4.0%
Top Five Places of Birth for Recent Immigrants ⁴	Other places of birth in Europe	Philippines, India, China, United Kingdom, and United States
Educational Attainment		
	Sundre	Alberta
Percent with No High School Graduation Certificate	14.0%	12.3%
Percent with High School Graduation Certificate	26.8%	23.8%
Percent with Apprenticeship, Trades Certificate or Diploma	16.4%	12.2%
Percent with College, Other Non-University Certificate, or Diploma	25.2%	21.4%
Percent with University Certificate, Diploma or Degree	17.5%	30.3%

TABLE 3.2 Socio-Economic Indicators² for LGA versus Alberta Residents, 2011 (continued)

Household and Dwelling Characteristics		
	Sundre	Alberta
Percent Persons in Private Households ¹	98.0%	97.9%
Total Number of Households by Household Type	2,785	1,390,275
Census Family Households	72.5%	69.8%
One-Family-Only Households	68.8%	62.6%
Two-or-More-Family Households	3.8%	7.1%
Non-Family Households	27.6%	30.2%
Total Number of Dwellings by Structural Type	2,785	1,390,275
Single-Detached House	68.6%	63.5%
Moveable Dwelling	22.6%	3.4%
Other Dwelling Including ≥5 Storey Apartment Buildings	8.8%	33.1%

Sundre had a lower proportion of non-English and non-French speaking people compared to Alberta (0.2% vs. 1.4% AB). Also, a lower proportion of immigrants arrived in the last five years in Sundre compared to the province (0.5% vs. 4.0% AB). Furthermore, Sundre reported a lower proportion of people with university certificates, diplomas or degrees (17.5% vs. 30.3% AB).

Sources:

Federal Census (2011) by LGA - Custom Extract, Statistics Canada
National Household Survey (2011) by LGA - Custom Extract, Statistics Canada
Postal Code Translation File, Alberta Health
Alberta Health Care Insurance Plan (AHCIP) Annual Population Registry Files, Alberta Health (2011)

Notes:

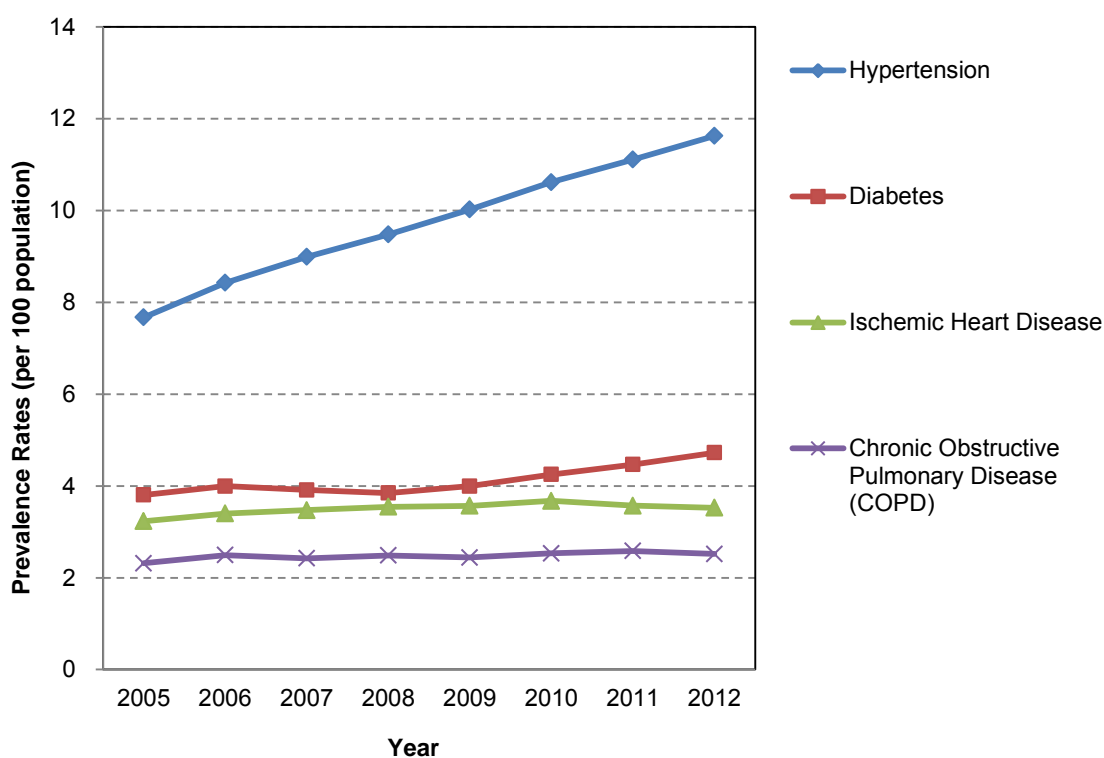
- ¹ See Appendix A for definition.
- ² N/A indicates that data were not available for a specific metric for this LGA
- ³ Less than five languages may be listed if no others were reported. Six or more languages may be listed in the case of ties.
- ⁴ Less than five places of birth may be listed if no others were reported. Six or more places of birth may be listed in the case of ties. Since only a select number of countries was included for each continent, categories like "Other places of birth in Continent X" may appear among the top 5 places of birth listed in Table 3.2; to better understand which countries are included in the "Other..." categories please refer to the list of select counties that appeared distinctly in the data; countries not included in "Other..." but that could appear on their own are listed below:
- > Africa: Algeria, Cameroon, Congo, Egypt, Ethiopia, Mauritius, Morocco, Nigeria, Somalia, Tunisia, South Africa
 - > Americas (N, S and Central) : Brazil, Colombia, Cuba, Guyana, Haiti, Jamaica, Mexico, Peru, United States, Venezuela
 - > Asia (incl. Middle East): Afghanistan, Bangladesh, China, Hong Kong Special Administrative Region, India, Iran, Iraq, Israel, Japan, Lebanon, Nepal, Pakistan, Philippines, Saudi Arabia, South Korea, Sri Lanka, Syria, Taiwan, Turkey, United Arab Emirates, Vietnam
 - > Europe: France, Germany, Moldova, Poland, Romania, Russian Federation, Ukraine, United Kingdom

Local Geographic Area: Sundre

CHRONIC DISEASE PREVALENCE

Figure 4.1 displays the rates per 100 population of the selected 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.

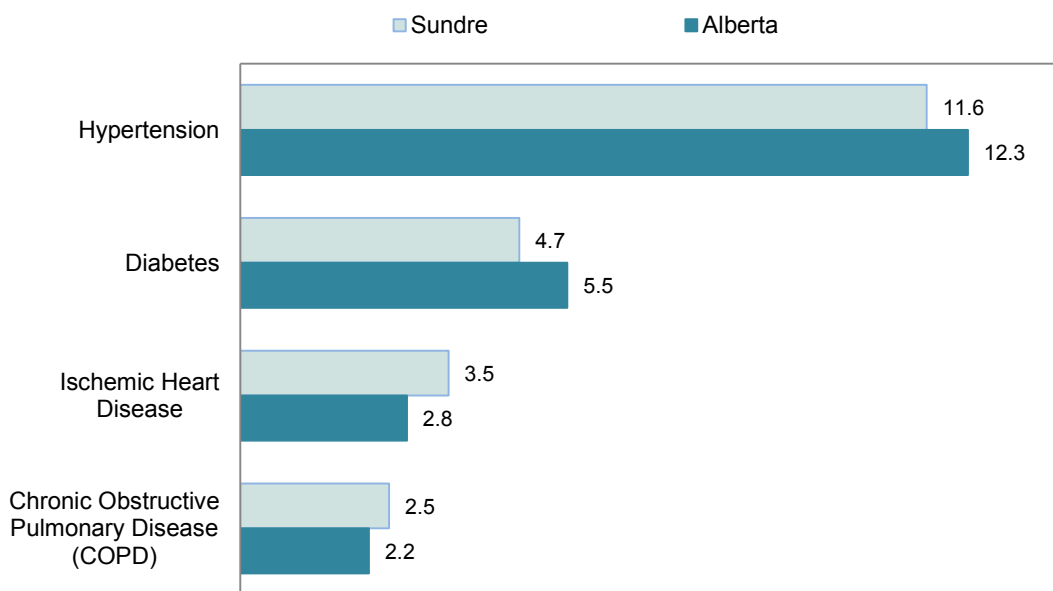
FIGURE 4.1 LGA Age-Standardized Chronic Disease Prevalence Rates¹ (per 100 population) 2005 - 2012



On average, the condition with the highest chronic disease prevalence rate reported for Sundre during 2005 to 2012 was hypertension. The largest rate of change during this time period was reported for hypertension (on average 0.55 people per 100 population average increase per year). In 2012, Sundre ranked number 103 in hypertension, number 108 in diabetes, number 28 in ischemic heart disease and number 58 in COPD among prevalence rates reported for the 132 local geographical areas.

Figure 4.2 depicts the age-standardized prevalence rate for 2012 of major chronic diseases, per 100 population, for the local geographic area compared to Alberta.

FIGURE 4.2 LGA versus Alberta Age-Standardized Chronic Disease Prevalence Rates (per 100 population), 2012



Age-Standardized Prevalence Rates (per 100 population)

In 2012, the Sundre prevalence rate for hypertension per 100 population was 0.9 times lower than the corresponding rate reported for the province (11.6 vs. 12.3 AB). In addition, Sundre showed prevalence rates higher than the provincial rates for 2 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:

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

Methodology:

Surveillance and Assessment Branch, Alberta Health (As of Nov 2014) See link: http://www.ahw.gov.ab.ca/IHDA_Retrieval

Local Geographic Area: Sundre

MATERNAL AND CHILD HEALTH

Table 5.1 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	Sundre	Alberta
Number of Births	2009/2010 - 2011/2012	203	151,845
Percent Low Birth Weights (of Live Births) ¹ , less than 2500 gm		3.4%	6.7%
Percent High Birth Weights (of Live Births) ¹ , greater than 4000 gm		11.8%	10.1%
Birth Rate (per 1,000 population) ¹		20.0	26.8
Fertility Rate (per 1,000 Women 15 to 49 Years) ¹		46.3	52.1
Teen Birth Rate (per 1,000 Women 15 to 19 Years)		18.7	17.4
Percent of Deliveries with Maternal Prenatal Smoking		25.9%	16.2%

During 2009/2010 to 2011/2012, Sundre's birth rate of 20.0 per 1,000 women was lower than the provincial rate, and the teen birth rate of 18.7 per 1,000 was similar to Alberta's teen birth rate. In addition, a higher proportion of prenatal smoking cases were reported in Sundre compared to the province (25.9% vs. 16.2% AB).

Table 5.2 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, 2013

DTaP-IPV-Hib (Diphtheria, Tetanus, Pertussis, Polio and Haemophilus Influenza B) Dose 4 of 4			
Age Group	Period	Sundre	Alberta
By Age Two	2013	70.7%	74.3%
MMR (Measles, Mumps, and Rubella)			
By Age Two	2013	86.0%	85.7%

By the age of two, 70.7% of children in Sundre (in 2013) had been vaccinated against DTaP-IPV-Hib (compared to 74.3% for AB), while 86.0% 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:

¹ See Appendix A for definition.

Methodology (Childhood Immunizations):

Surveillance and Assessment Branch, Alberta Health (As of Nov 2014) See link: http://www.ahw.gov.ab.ca/IHDA_Retrieval

Local Geographic Area: Sundre

COMMUNICABLE DISEASES

Table 6.1 lists the rates of Sexually Transmitted Infections (STI) for the most recent three-year periods available, for the local geographic area and Alberta.

TABLE 6.1 Top 5 Sexually Transmitted Infection (STI)¹ Rates (per 100,000 population)
By Three-Year Period

STI (per 100,000 population)			
Period	Disease	Sundre	Alberta
2010/2011 - 2012/2013	Chlamydia	225.2	365.6
	Non-Gonococcal Urethritis	28.8	35.9
	Mucopurulent Cervicitis	9.6	7.7
	Syphilis	N/A	8.8
	Gonorrhea	N/A	41.9
2011/2012 - 2013/2014	Chlamydia	212.7	377.0
	Non-Gonococcal Urethritis	52.0	36.3
	Mucopurulent Cervicitis	9.5	7.4
	Syphilis	N/A	8.3
	Gonorrhea	N/A	46.8

Sundre's highest STI rate per 100,000 population in 2011/2012 - 2013/2014 was reported for chlamydia and this rate was lower than the provincial rate (212.7 vs. 377.0 AB).

2 of the top 3 STI rates in Sundre were higher than the provincial rates for STIs in 2011/2012 - 2013/2014 (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:

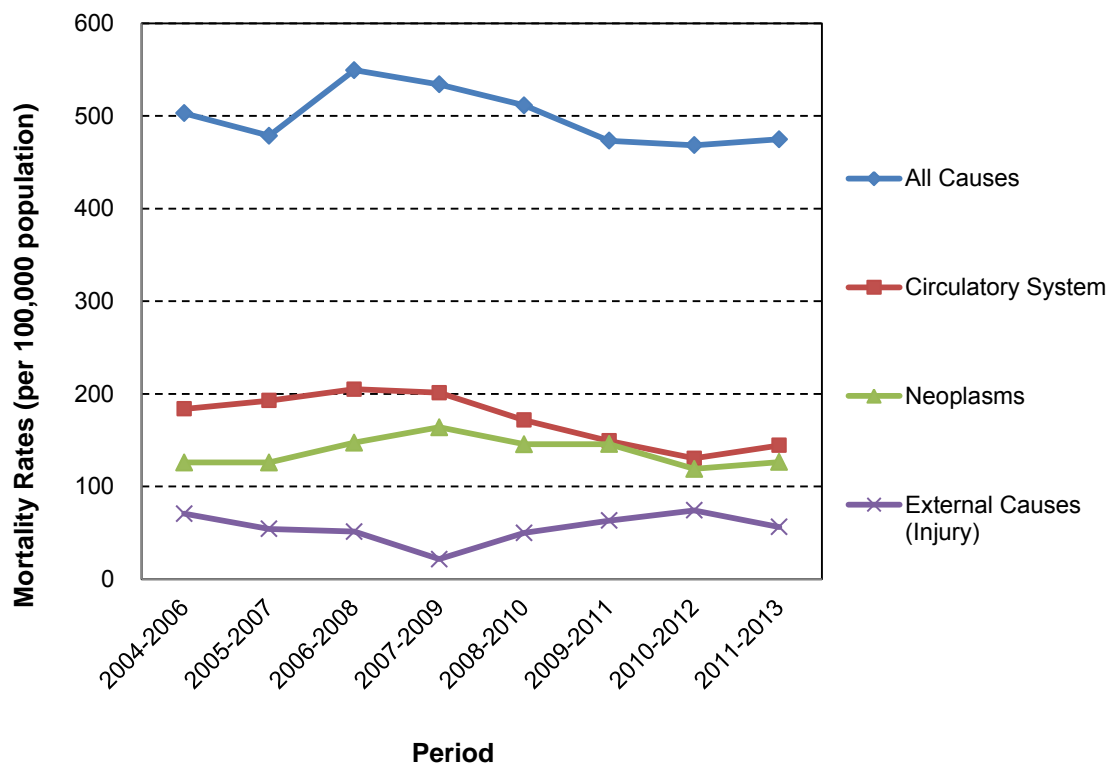
¹ See Appendix A for definition.

Local Geographic Area: Sundre

MORTALITY

Figure 7.1 displays the age-standardized mortality rates¹, per 100,000 population, for the three selected causes of death and all causes combined. Data is provided for each three-year period between 2004 and 2013. 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.

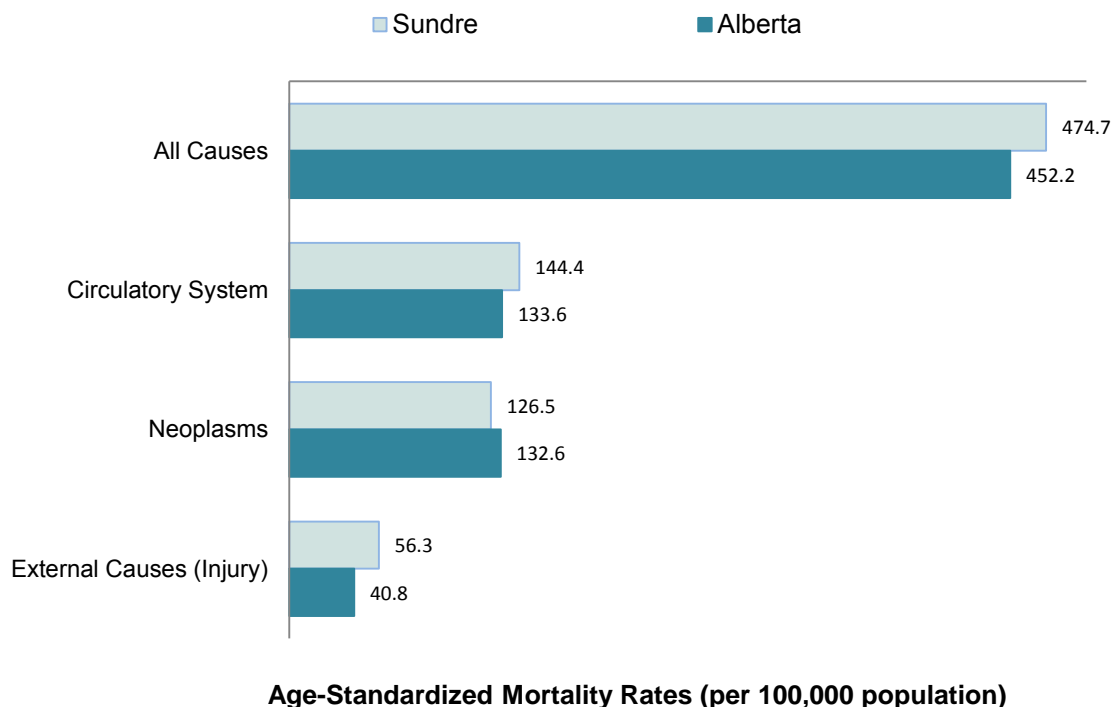
FIGURE 7.1 Local Geographic Area Age-Standardized Mortality Rates¹ (per 100,000 population) By Three-Year Period



The three-year mortality rates for Sundre ranged between 468.3 and 549.4 per 100,000 population during the study period. The three selected causes of death, namely, diseases of the circulatory system, neoplasms, and external causes accounted for 67.5% to 78.2% of all deaths from 2004 - 2006 to 2011 - 2013.

The mortality rates per 100,000 population for the three selected causes of death² and all causes combined are displayed in Figure 7.2 for both the local geographic area and Alberta, for the most recent three-year period available. The mortality rates have been standardized by age.

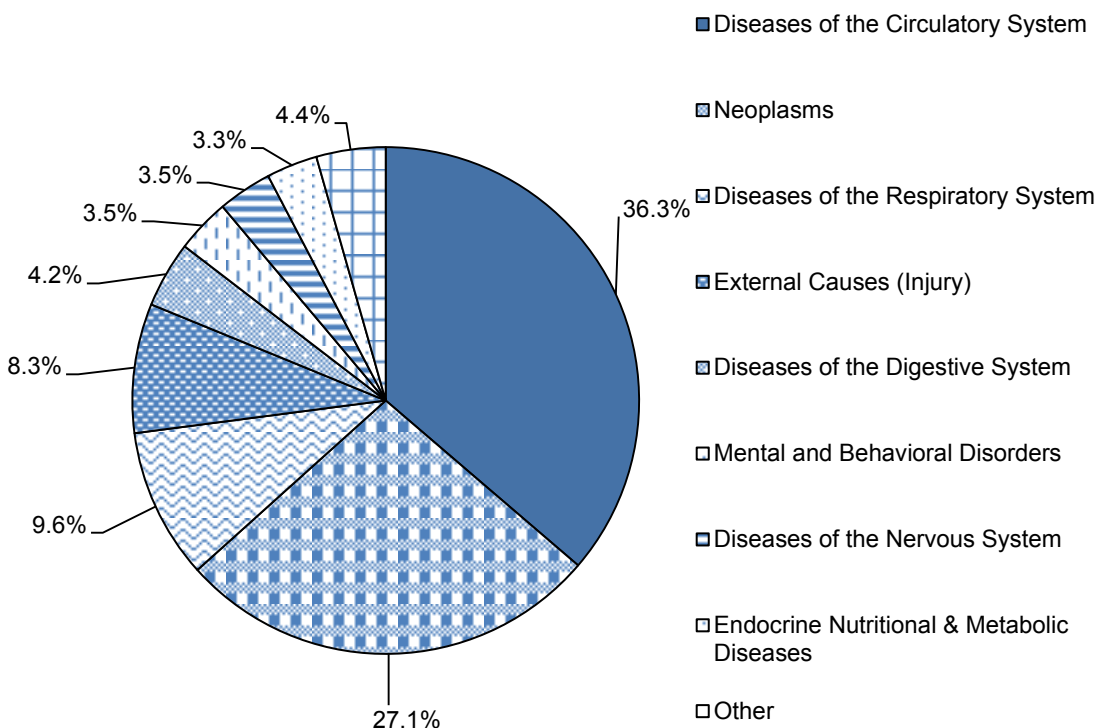
FIGURE 7.2 Local Geographic Area versus Alberta Age-Standardized Mortality Rates (per 100,000 population) for Three-Year Period 2011-2013



For all causes, Sundre reported a similar mortality rate compared to the provincial rate (474.7 vs. 452.2 AB). In 2011 - 2013, diseases of the circulatory system was the main cause of death for Sundre, with an associated mortality rate higher than the provincial rate per 100,000 population (144.4 vs. 133.6 AB). In addition, mortality rates were higher than the provincial rates for 2 of the 3 selected causes of death reported in Sundre.

Figure 7.3 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 2004-2013



Between 2004 and 2013 diseases of the circulatory system accounted for 36.3% of all deaths reported in Sundre. More than three-quarters of all reported deaths were due to four major causes: diseases of the circulatory system, neoplasms, diseases of the respiratory system, and external causes (injury).

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:

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

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

Local Geographic Area: Sundre

EMERGENCY SERVICE UTILIZATION

Table 8.1 describes emergency visits by triage level¹ for patients residing in the local geographic area, for the three most recent fiscal years.

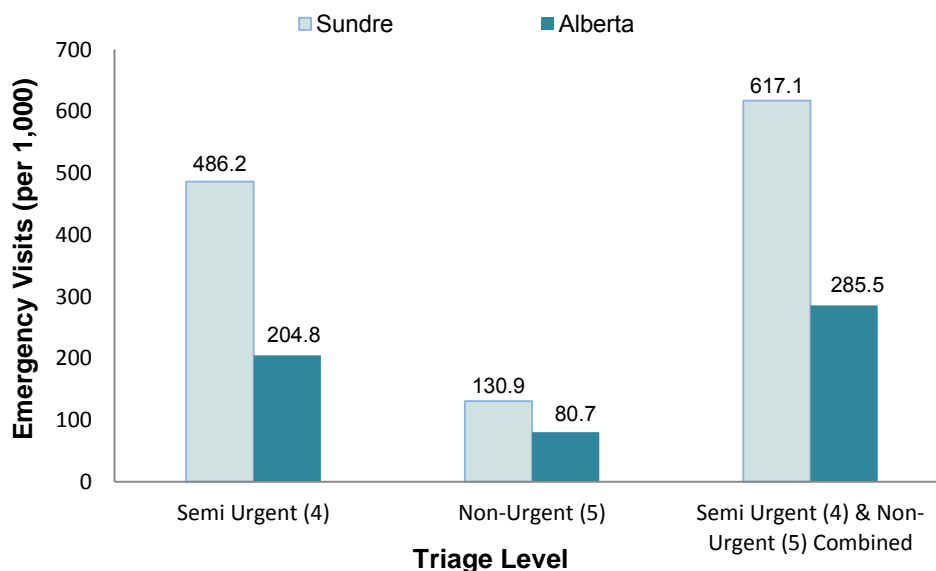
TABLE 8.1 Emergency Visits for Patients Residing in the Local Geographic Area by Triage Level
Fiscal Years 2011/2012 - 2013/2014

Triage Level	Emergency Visits		
	2011/2012	2012/2013	2013/2014
Resuscitation (1) and Emergency (2) Combined	267	283	270
Urgent (3)	1,454	1,446	1,344
Semi Urgent (4)	3,499	3,668	3,478
Non-Urgent (5)	1,093	1,283	936
Unknown	598	690	577
Total	6,911	7,370	6,605

The volume of emergency visits for patients residing in Sundre decreased by 4.4% between 2011/2012 and 2013/2014. In addition, semi-urgent and non-urgent visits combined accounted for 66.8% of all emergency visits in 2013/2014.

Figure 8.1 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.

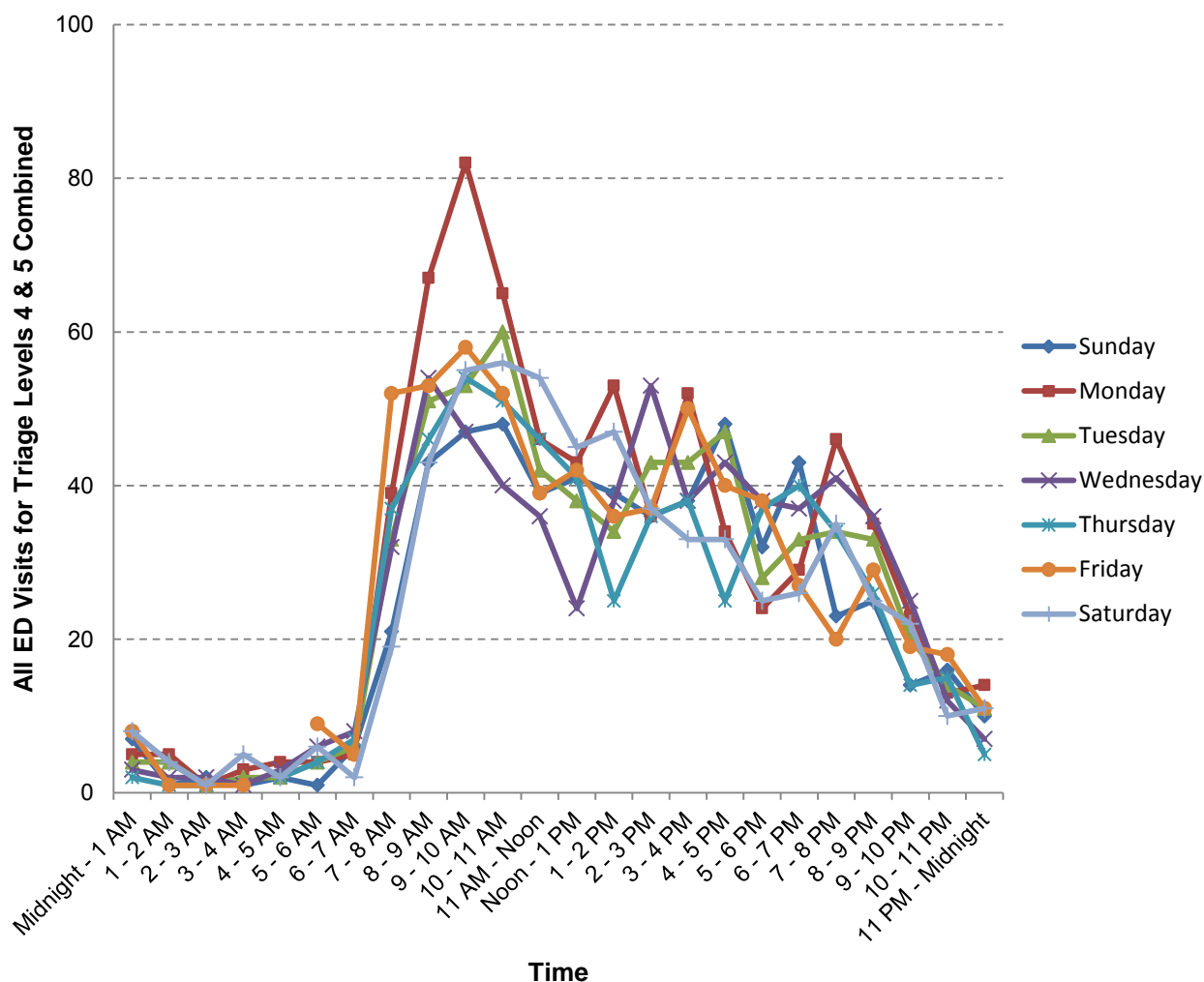
FIGURE 8.1 Emergency Visit Rates¹ (per 1,000 population) for Triage Levels Semi-Urgent (4) and Non-Urgent (5)², Fiscal Year 2013/2014



Sundre's combined semi-urgent and non-urgent emergency visit rate per 1,000 population was higher than the provincial rate in 2013/2014 (617.1 vs. 285.5 AB). Semi-urgent emergency visits occurred at a 2.4 times higher rate in Sundre compared to Alberta (486.2 vs. 204.8 AB).

A time profile of the number of emergency visits by day of the week is shown in Figure 8.2. 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
For Fiscal Year 2013/2014



The peak total number of emergency visits for Sundre in 2013/2014 was reported for Mondays between 9 - 10 AM (82 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:

¹ See Appendix A for definition.

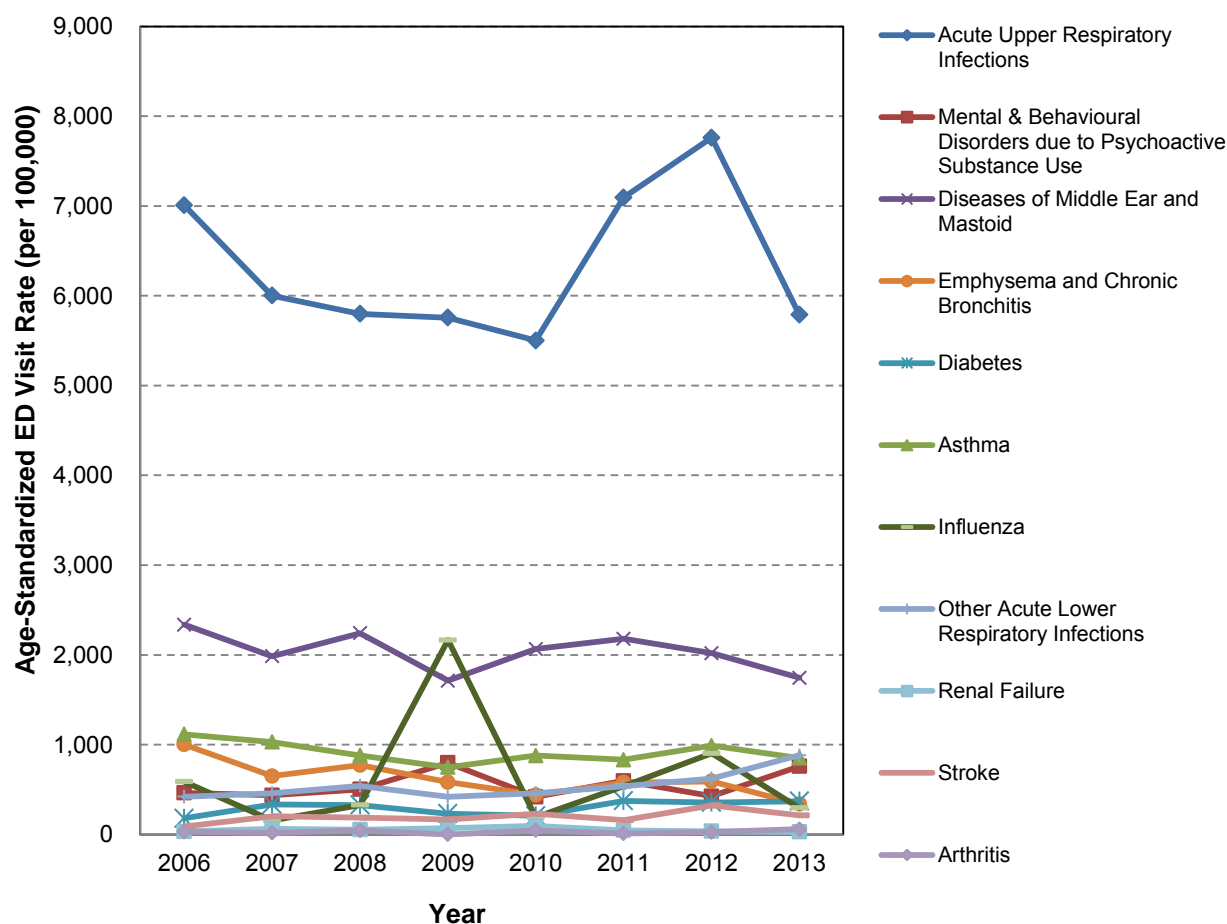
² In order to be consistent with the type of services expected to be provided by primary health care, the analysis above focused only on semi-urgent and non-urgent emergency triage levels.

Local Geographic Area: Sundre

EMERGENCY SERVICE UTILIZATION

Figure 8.3 provides age-standardized emergency visit rates¹ for selected health conditions per 100,000 population for each year beginning in 2006. 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.

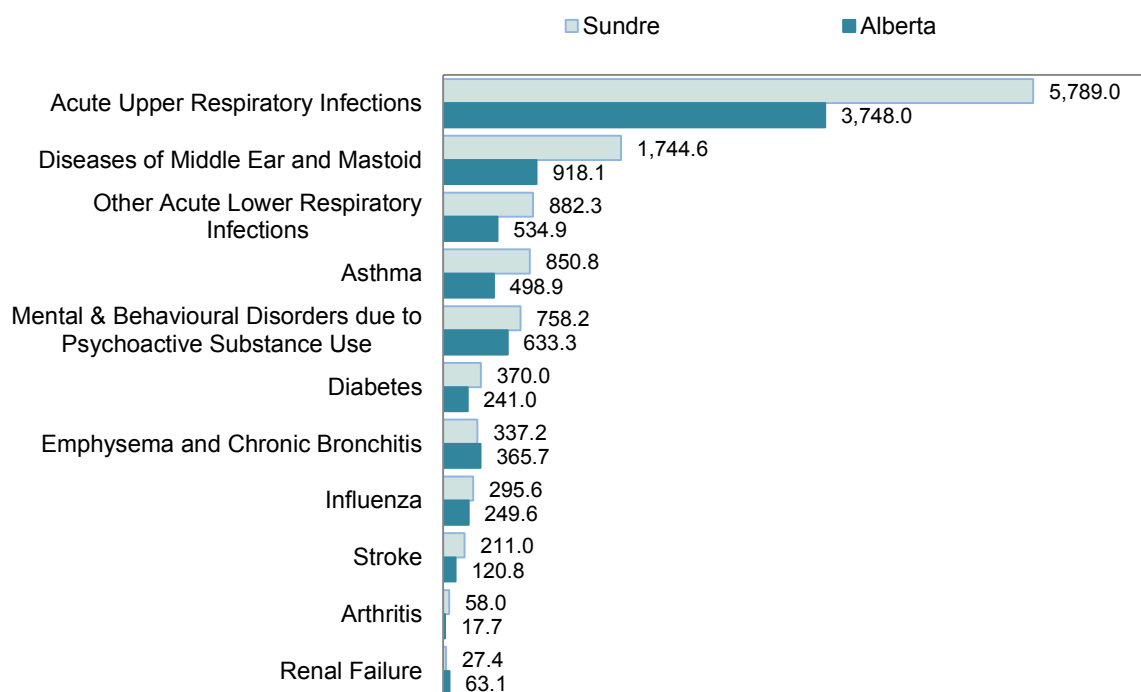
FIGURE 8.3 LGA Age-Standardized² Emergency Visit Rates (per 100,000 population)
For Selected Conditions, 2006 - 2013



On average, the highest emergency visit rates, for selected health conditions, reported for Sundre during 2006 to 2013 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 emphysema and chronic bronchitis (on average, 68 emergency visits per 100,000 population decrease per year).

Age-standardized emergency visit rates per 100,000 population, by selected health conditions, for the most current year available, are shown in Figure 8.4 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, 2013



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

In 2013, the three most common reasons for emergency visits, among selected health conditions, were: acute upper respiratory infections, diseases of middle ear and mastoid, and other acute lower respiratory infections. Among selected health conditions, the most common reason for emergency visits in 2013, acute upper respiratory infections, had a higher rate in Sundre compared to the provincial rate per 100,000 population (5,789.0 vs. 3,748.0 AB). Furthermore, Sundre showed emergency rates higher than the provincial rates for 9 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

Notes: ¹ See Appendix A for definition.
² Age-standardized rates are adjusted using the direct method of standardization, with weights from Statistics Canada's 1991 census population.

Methodology:
 Surveillance and Assessment Branch, Alberta Health (As of Dec 2014)
 See link: http://www.ahw.gov.ab.ca/IHDA_Retrieval

Local Geographic Area: Sundre

INPATIENT SERVICE UTILIZATION

Table 9.1 describes inpatient separation¹ rates per 1,000 population for patients residing in the LGA and Alberta accessing health facilities across all of Alberta. The rate of inpatient separations is the ratio between the total number of separations and the total local population, for each year.

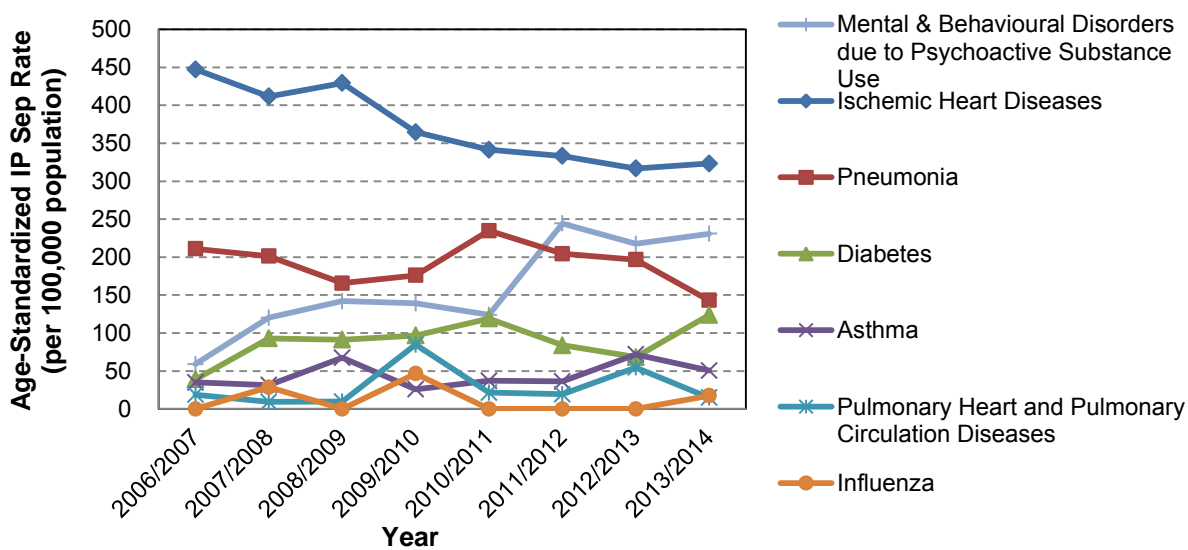
TABLE 9.1 Inpatient Separation Rates (per 1,000 population) for Patients Residing in the LGA versus Alberta, Fiscal Years 2011/2012 - 2013/2014

Inpatient Separation Rates (per 1,000 population)		
Fiscal Years	Sundre	Alberta
2011/2012	138.6	88.7
2012/2013	135.3	87.5
2013/2014	109.0	86.1

Sundre's inpatient separation rate for patients residing in the local geographic area varied between 109.0 in 2013/2014 and 138.6 in 2011/2012. In addition, in 2013/2014, the inpatient separation rate for patients residing in Sundre was 1.3 times higher than the provincial rate (109.0 vs. 86.1 AB).

Figure 9.1 presents inpatient separation rates for selected health conditions (per 100,000 population), for patients residing in the local geographic area, for the fiscal years 2006/2007 through 2013/2014. The rates have been standardized by age.

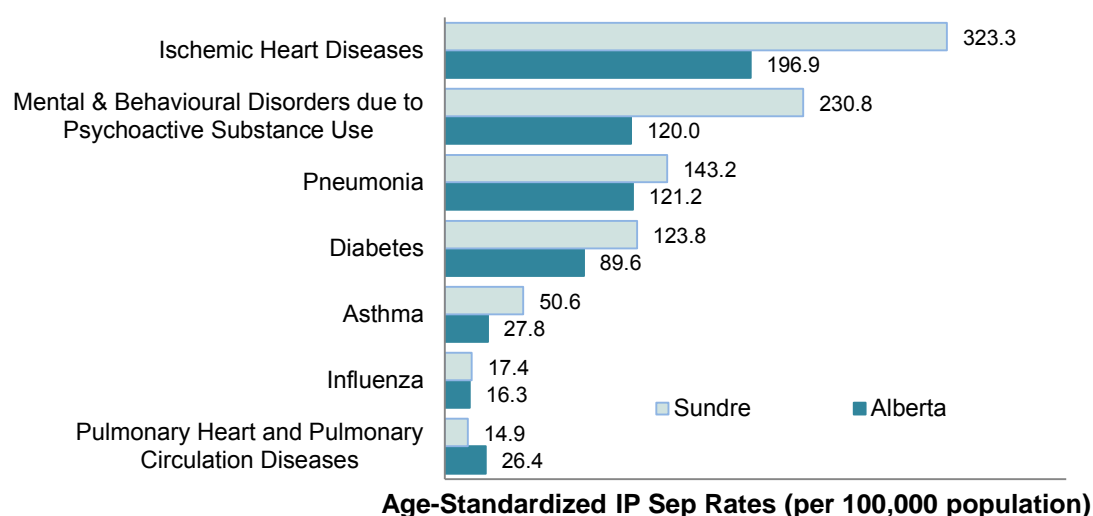
FIGURE 9.1 LGA Age-Standardized² Inpatient Separation (IP Sep) Rates (per 100,000 population) For Selected Conditions, 2006/2007 - 2013/2014



On average, the highest inpatient separation rates, among selected health conditions, reported in Sundre during 2006/2007 to 2013/2014 were due to ischemic heart diseases. These rates reached a high of 447.4 per 100,000 population in 2006/2007 and a low of 316.9 per 100,000 population in 2012/2013. In addition, among selected conditions, the largest inpatient separation rate of change during this time period was reported for mental & behavioural disorders due to psychoactive substance use (on average 24 inpatient separations per 100,000 population increase per year).

Figure 9.2 presents inpatient separation rates per 100,000 population for patients residing in the local geographic area, compared to provincial rates, for the most recent fiscal year and selected health conditions.

FIGURE 9.2 LGA versus Alberta Age-Standardized IP Sep Rates (per 100,000 population)
For Selected Conditions, 2013/2014



In 2013/2014, the three highest inpatient separation rates were reported for ischemic heart diseases, mental & behavioural disorders due to psychoactive substance use, and pneumonia. The most common reason for inpatient separations in Sundre was ischemic heart diseases, which had a much higher rate compared to the provincial rate per 100,000 population (323.3 vs. 196.9 AB). Additionally, Sundre's inpatient separation rates were higher than the provincial rates for 6 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: ¹ See Appendix A for definition.

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

Methodology:

Surveillance and Assessment Branch, Alberta Health (As of Dec 2014) See link: http://www.ahw.gov.ab.ca/IHDA_Retrieval

Local Geographic Area: Sundre

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 determine 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.¹ The indicators are standardized by age, where appropriate, to allow comparison of information across local geographic areas and the province. The bullets below present the underlying issues that these indicators will address.

- Health status indicators help show the burden of disease in the population that could be monitored and/or improved by primary health care services (e.g. the proportion of the population with diabetes);
- Utilization indicators determine if there is a gap between population health needs and available health care services and suggests where this gap exists (e.g. use of emergency departments for non-urgent health care).

Table 10.1 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		Sundre	Alberta / Geographic Peer Group Average
1*	Travel: Percentage of Total Family Physician Claims Outside the Recipient's Home Local Geographic Area, 2010/2011	23.6%	31.0%
2*	Ambulatory Care Sensitive Conditions - Age-Standardized Separation Rate (per 100,000 population), 2003 to 2011	730.3	708.8
3	Continuity of Care, 2010	28.9%	14.0%
4*	ED Visits Related to Mood Disorders (Age-Standardized, per 100,000 population), 2003 to 2011	534.3	469.8
5*	ED Visits Related to Anxiety Disorders (Age-Standardized, per 100,000 population), 2003 to 2011	1,024.1	948.6
6*	ED Visits Related to Injuries (Age-Standardized, per 100,000 population), 2003 to 2011	24,667.4	19,823.7

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

Health Status Indicators		Sundre	Alberta / Geographic Peer Group Average
7	Diabetes Prevalence (per 100 population), 2010	4.3	5.1
8	Chronic Obstructive Pulmonary Disease Prevalence Rate (per 100 population), 2010	2.0	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	42.9%	40.6%
11*	Predicted Primary Health Care Utilization, 2006/2007 to 2008/2009	\$112.40	\$117.51
12*	Primary Health Care Service Gap, 2006/2007 to 2008/2009	-\$5.18	-\$2.92
Social Determinant of Health		Sundre	Alberta / Geographic Peer Group Average
13	Life Expectancy at Birth, 2000 to 2011	79.9	80.5

** Note: For these indicators, the Sundre 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 Sundre 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 Sundre a lower percentage of Family Physician services was provided outside the recipient's home local geographic area compared to the rural provincial average (23.6% 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.

Sundre's separation rate for ambulatory care sensitive conditions (per 100,000 population) was similar to the corresponding rural provincial rate (730.3 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.

Sundre's percentage of patients with minor or severe chronic illnesses with a low degree of continuity of care was much higher than the percentage reported in Alberta (28.9% 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.

Sundre's rate of emergency department visits related to mood disorders (per 100,000 population) was 1.1 times higher than the provincial rural average rate (534.3 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.

Sundre's rate of emergency department visits related to anxiety disorders (per 100,000 population) was 1.1 times higher than the provincial rural average rate (1,024.1 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 1.2 times higher rate in Sundre, compared to the provincial rural average rate per 100,000 population (24,667.4 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 Sundre was lower than the provincial rate (4.3 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 Sundre was 1.1 times higher than the provincial rate (2.0 vs. 1.8 AB).

Indicator 9:

Interdisciplinary care and coordination of services is required for patients with multiple chronic conditions. The age-standardized rate, per 100 population, 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 Sundre 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.

Sundre's percentage of the population 65 and over who had been administered influenza vaccines was higher than the provincial percentage (42.9% 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 \$112.40 in Sundre, 4.3% lower than 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 \$-5.18 in Sundre 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.

Sundre 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), Surveillance and Assessment Branch, 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: ¹ 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: Sundre

ACCESS TO HEALTH CARE SERVICES

Table 11.1 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 To Facilities Located In versus Out of the Local Geographic Area, Fiscal Year 2013/2014

Ambulatory Care Visits				
Visits Within Local Area of Residence (IN)	Visits Outside Local Area of Residence (OUT)	Total Visits	Percent IN	Percent OUT
8,412	7,913	16,325	51.5%	48.5%
Inpatient Separations (Seps)				
Seps Within Local Area of Residence	Seps Outside Local Area of Residence	Total Seps	Percent IN	Percent OUT
357	509	866	41.2%	58.8%

Table 11.2 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 2013/2014

Local Residents Accessing Non-Local Ambulatory Care Facilities				
Ambulatory Care Facility Name	Facility Municipality	Facility LGA	Number of OUT Visits	% of Total OUT Visits
Red Deer Regional Hospital Centre	Red Deer	Red Deer - SW	2,300	29.1%
Foothills Medical Centre	Calgary	Calgary - Centre North	1,468	18.6%
Olds Hospital and Care Centre	Olds	Olds	691	8.7%

TABLE 11.2 Top 3 Non-Local Acute Care Hospitals Accessed by Local Residents
Fiscal Year 2013/2014 (continued)

Local Residents Accessing Non-Local Acute Care Hospitals				
Hospital Name	Hospital Municipality	Hospital LGA	Number of OUT Seps	% of Total OUT Seps
Red Deer Regional Hospital Centre	Red Deer	Red Deer - SW	188	36.9%
Foothills Medical Centre	Calgary	Calgary - Centre North	125	24.6%
Olds Hospital and Care Centre	Olds	Olds	59	11.6%

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

After-Tax Low Income Measure

Income status can be measured in several different ways in household surveys. For the standard products of the National Household Survey, the line chosen is a relative measure: the after-tax low-income measure (LIM-AT). For this measure, the income used is after-tax income of households. There are no regional variations to account for prices or cost of living differences: all applicable households in Canada face the same line adjusted for household size. This line is set at half the median of adjusted household after-tax income. To account for potential economies of scale, the income of households with more than one member is divided by the square root of the size of the household. All household members are considered to share the household income and are attributed the same income status.

Note: Low-income estimates in the 2011 National Household Survey. For the 2011 National Household Survey (NHS), low-income statistics are presented based on the after-tax low-income measure (LIM-AT). This measure is not related to the low-income cut-offs (LICO) presented in the 2006 Census and prevalence rates are conceptually not comparable. Because of the sensitivity of certain income indicators to differences in methodology and response patterns, direct comparisons to establish trends with low-income estimates from other household surveys, administrative programs or the 2006 Census are discouraged. The prevalence rates observed in the NHS at the national level are generally 1 to 2 percentage points higher than seen for similar concepts in other programs. However, analysis of the NHS data suggests that it is valid to compare low-income data for different sub-populations within the NHS (i.e., for different geographic areas or demographic groups). For more information, refer to the Income Reference Guide, National Household Survey, Catalogue no. 99-014-X2011006. Age - Refers to the age at last birthday before the reference date, that is, before May 10, 2011. (Statistics Canada)

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. In 2011, band housing appeared in the NHS Survey instead of the Census (Statistics Canada)

Birth Rate

The birth rate is the number of live births, of a given geographic area in a given 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, which is 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:

BMI Categories	BMI
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)

The CTAS is 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 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

Patients are categorized as having conditions that are threats to life or limb (or imminent risk of deterioration) requiring immediate aggressive interventions.

Triage Level 2 – Emergent

Patients are categorized as having conditions that are a potential threat to life, limb or function, requiring rapid medical intervention or delegated acts.

Triage Level 3 – Urgent

Patients are categorized as having conditions that could potentially progress to a serious problem requiring emergency intervention. These conditions 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)

Patients are categorized as having 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

Patients are categorized as having 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

Census

The census is 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.

For 2011, Statistics Canada did not use a mandatory long-form questionnaire as part of the census. Information previously collected by the mandatory long-form census questionnaire was collected as part of the new voluntary National Household Survey (NHS).

Collection of the NHS began within four weeks of the May 2011 Census. Approximately 4.5 million households received the NHS questionnaire.

The 2011 Census questionnaire consisted of the same eight questions that appeared on the 2006 Census short-form questionnaire, with the addition of two questions on language. (Statistics Canada)

Census Family

A family as defined by the Census includes one of the following: a married couple (with or without children of either and/or both spouses), a common-law couple (with or without children of either and/or both partners) or a lone parent of any marital status, with at least one child.

A couple may be of opposite sex or same sex. A couple family with children may be further classified as either an intact family in which all children are the biological and/or adopted children of both married spouses or of both common-law partners, or a stepfamily with at least one biological or adopted child of only one married spouse or common-law partner and whose birth or adoption preceded the current relationship.

Stepfamilies, in turn may be classified as simple or complex. A simple stepfamily is a couple family in which all children are biological or adopted children of one, and only one, married spouse or common-law partner whose birth or adoption preceded the current relationship. A complex stepfamily is a couple family which contains at least one biological or adopted child whose birth or adoption preceded the current relationship.

These families contain children from:

- each married spouse or common-law partner and no other children
- one married spouse or common-law partner and at least one other biological or adopted child of the couple
- each married spouse or common-law partner and at least one other biological or adopted child of the couple. (Statistics Canada)

Chinese, n.o.s. (not otherwise specified)

The 2011 census category 'Chinese, n.o.s.' 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)

The population aged 35 and over who reported being diagnosed by a health professional with chronic bronchitis, emphysema or 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 ED visit rate is 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 emphasize health promotion, disease and injury prevention, and self-management and care of chronic disease. FCCs 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

Health status is 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

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

Infant Mortality Rate

The infant mortality rate is 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 inpatient is 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.

Inuit

Inuit are the Aboriginal people of Arctic Canada. As of Sept 2010, it is estimated that about 45,000 Inuit live in 53 communities in: Nunatsiavut (Labrador); Nunavik (Quebec); Nunavut; and the Inuvialuit Settlement Region of the Northwest Territories. Each of these four Inuit groups have settled land claims. These Inuit regions cover one-third of Canada's land mass. Please note that small numbers of Inuit people can be found in various other regions of Canada other than the four regions listed above.

The word "Inuit" means "the people" in the Inuit language called, Inuktitut and is the term by which Inuit refer to themselves. (Aboriginal Affairs and Northern Development Canada)

Local Geographic Areas (LGAs)

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). These 132 LGAs reflect areas where given populations live, work and receive most day-to-day services including commercial services and health care.

LGA is defined based on the multiple characteristics listed below.

- population density
- distance from urban centres or major rural centres that provide a variety of services (health and non-health)
- local knowledge about the population, industry type, municipalities, resources, infrastructure, schools, etc.
- travel patterns of populations seeking services (health and non-health)
- place of work and commuting behaviours

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

A neoplasm is 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>)

National Household Survey

Between May and August 2011, Statistics Canada conducted the National Household Survey (NHS) for the first time. This voluntary, self-administered survey was introduced as a replacement for the long census questionnaire, more widely known as Census Form 2B.

The NHS is designed to collect social and economic data about the Canadian population. The objective of the NHS is to provide data for small geographic areas and small population groups.

For further details around sampling design, topics covered etc. please visit the link below: http://www12.statcan.gc.ca/nhs-enm/2011/ref/nhs-enm_guide/guide_2-eng.cfm (Statistics Canada).

Physical Activity

Physical activity is measured as the 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 three 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

Primary care is 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.

(<http://www.pcnpmo.ca/AboutPCNs/PCNsInAlberta/Pages/default.aspx>)

Private Household

A private household is 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 two 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)

A sexually transmitted infection is 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, a map 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.

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 – school authorities are listed in alphabetical order.

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* 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 post adoption registration.
- 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 (such as *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.seniors.alberta.ca/>
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, among others, your local Service delivery offices, Alberta Works Centres, Child and Family Services Authorities and Employment Services.
- Alberta Food Bank Network Association:
<http://www.albertafoodbanks.org/find-food-bank/>
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 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/Search/Results.aspx?q=lethbridge>
This link allows you to select your city or enter your postal code to find different types of services in and around your area. Click on the link above and select the “Results Near You” button next to the “Search” button.
 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

Appendix C

Health Link Alberta Calls for Central Zone

The following listing shows the town/city, number of calls and percentage where the zone was coded as Central (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 2013/2014

Town/City	# of Calls	%	Town/City	# of Calls	%
Acme	174	0.3%	Castor	151	0.3%
Alder Flats	110	0.2%	Chauvin	58	0.1%
Alhambra	48	0.1%	Chipman	47	0.1%
Alix	174	0.3%	Clandonald	25	0.0%
Alliance	54	0.1%	Clive	179	0.4%
Alsike	20	0.0%	Compeer	3	0.0%
Altario	16	0.0%	Condor	80	0.2%
Amisk	26	0.1%	Consort	84	0.2%
Andrew	79	0.2%	Coronation	103	0.2%
Armena	24	0.0%	Craigmyle	17	0.0%
Bashaw	184	0.4%	Cynthia	5	0.0%
Bawlf	108	0.2%	Czar	50	0.1%
Beauvallon	14	0.0%	Daysland	79	0.2%
Benalto	65	0.1%	Delburne	197	0.4%
Bentley	284	0.6%	Delia	50	0.1%
Big Valley	80	0.2%	Denwood	91	0.2%
Bittern Lake	71	0.1%	Derwent	46	0.1%
Blackfalds	1,154	2.3%	Dewberry	59	0.1%
Blackfoot	97	0.2%	Dickson	1	0.0%
Bluffton	136	0.3%	Donalda	74	0.1%
Bodo	4	0.0%	Dorothy	1	0.0%
Botha	66	0.1%	Drayton Valley	1,346	2.7%
Bowden	284	0.6%	Drumheller	747	1.5%
Breton	219	0.4%	East Coulee	13	0.0%
Brosseau	18	0.0%	Eckville	332	0.7%
Brownfield	11	0.0%	Edberg	58	0.1%
Bruce	13	0.0%	Edgerton	69	0.1%
Bruderheim	189	0.4%	Elnora	69	0.1%
Buck Creek	30	0.1%	Endiang	17	0.0%
Buck Lake	111	0.2%	Erskine	102	0.2%
Byemoor	37	0.1%	Falun	53	0.1%
Cadogan	15	0.0%	Fenn	6	0.0%
Camrose	2,323	4.6%	Ferintosh	84	0.2%
Carbon	76	0.2%	Forestburg	112	0.2%
Carnwood	18	0.0%	Gadsby	29	0.1%
Caroline	231	0.5%	Galahad	20	0.0%

Health Link Alberta Calls for Central Zone (Continued)

Town/City	# of Calls	%
Gull Lake	2	0.0%
Gwynne	59	0.1%
Hairy Hill	29	0.1%
Half Moon Bay	11	0.0%
Halkirk	68	0.1%
Hanna	246	0.5%
Hardisty	75	0.1%
Hay Lakes	153	0.3%
Hayter	7	0.0%
Heisler	27	0.1%
Hilliard	11	0.0%
Holden	71	0.1%
Hughenden	44	0.1%
Huxley	32	0.1%
Innisfail	1,027	2.1%
Innisfree	108	0.2%
Irma	109	0.2%
Islay	43	0.1%
James River Bridge	24	0.0%
Jarvis Bay	2	0.0%
Kanata	5	0.0%
Kelsey	9	0.0%
Killam	109	0.2%
Kingman	135	0.3%
Kinsella	29	0.1%
Kirriemuir	3	0.0%
Kitscoty	177	0.4%
Lacombe	1,769	3.5%
Lamont	238	0.5%
Lavoy	36	0.1%
Leslieville	124	0.2%
Lindale	33	0.1%
Linden	187	0.4%
Lloydminster	2,010	4.0%
Lodgepole	23	0.0%
Lougheed	44	0.1%
Lousana	32	0.1%
Ma-Me-O Beach	87	0.2%
Mannville	152	0.3%
Markerville	17	0.0%
Marwayne	92	0.2%
Maskwacis (Hobbema)	1,193	2.4%

Town/City	# of Calls	%
McLaughlin	26	0.1%
Meeting Creek	23	0.0%
Menaik	1	0.0%
Metiskow	15	0.0%
Millet	515	1.0%
Minburn	20	0.0%
Mirror	90	0.2%
Monitor	3	0.0%
Morningside	1	0.0%
Morrin	44	0.1%
Mulhurst Bay	37	0.1%
Mundare	123	0.2%
Munson	23	0.0%
Musidora	8	0.0%
Myrnam	70	0.1%
Nevis	7	0.0%
New Norway	106	0.2%
Nordegg	33	0.1%
Norglenwold	17	0.0%
Ohaton	64	0.1%
Olds	1,139	2.3%
Paradise Valley	85	0.2%
Penhold	550	1.1%
Phoenix	6	0.0%
Pigeon Lake 138	2	0.0%
Pine Lake	50	0.1%
Ponoka	1,080	2.2%
Provost	193	0.4%
Ranfurly	12	0.0%
Red Deer	12,746	25.5%
Red Deer County	317	0.6%
Red Willow	4	0.0%
Rimbey	556	1.1%
Rivercourse	13	0.0%
Rochon Sands	7	0.0%
Rocky Mountain House	1,890	3.8%
Rocky Rapids	111	0.2%
Rosalind	35	0.1%
Rosedale Station	56	0.1%
Rosedale Valley	13	0.0%
Round Hill	22	0.0%
Rowley	1	0.0%

Health Link Alberta Calls for Central Zone (Continued)

Town/City	# of Calls	%
Rumsey	23	0.0%
Ryley	119	0.2%
Sedgewick	102	0.2%
Springbrook	198	0.4%
Spruce View	28	0.1%
St Michael	24	0.0%
Star	10	0.0%
Stauffer	31	0.1%
Stettler	975	1.9%
Streamstown	5	0.0%
Strome	51	0.1%
Sundre	661	1.3%
Sunnynook	3	0.0%
Swalwell	20	0.0%
Sylvan Lake	1,676	3.4%
Taylor	1	0.0%
Tees	49	0.1%

Town/City	# of Calls	%
Three Hills	423	0.8%
Tofield	771	1.5%
Torrington	58	0.1%
Trochu	163	0.3%
Tulliby Lake	11	0.0%
Two Hills	169	0.3%
Vegreville	906	1.8%
Vermilion	425	0.8%
Veteran	57	0.1%
Viking	116	0.2%
Wainwright	652	1.3%
Westerose	145	0.3%
Wetaskiwin	2,108	4.2%
Willingdon	112	0.2%
Wimborne	9	0.0%
Winfield	112	0.2%
Wostok	3	0.0%
Total	50,002	100.0%

Source:

Health Link Alberta, Alberta Health Services

Select Health Services in Local Geographic Area

Appendix D

Sundre

Active Treatment Hospitals

Designated Service Type	Name	Address
Small Rural Community Hospital	Sundre Hospital and Care Centre	709 1 St Ne, Sundre, T0M1X0

Source:

Alberta Health, January 2015

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, January 2015

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
Sundre Hospital & Care Centre	Imaging Department, 709 1st St Ne, Sundre, T0M1X0

Source:

Alberta Health, January 2015

Community Pharmacies

Name	Address
Pharmasave #337	557 Main Ave W, Sundre, T0M1X0
Sundre Community Drug Mart	403 Main Ave West, Sundre, T0M1X0

Source:

Alberta Health, January 2015

Medical Laboratories

Name	Address
Sundre Hospital & Care Centre	Laboratory, 709 1st St Ne, Sundre, T0M1X0

Source:

Alberta Health, January 2015

Long Term Care Accommodation

Name	Address
Sundre Hospital and Care Centre	709 - 1st Street, Ne, Sundre, T0M1X0

Source:

Alberta Health, December 2014

Supportive Living Accommodation

Accommodation Type	Name	Address
Lodge	Foothills Lodge	124 1 Street, Sundre, T0M1X0

Source:

Alberta Health, December 2014

Note:

Supportive Living Accommodation refer to Assisted Living Accommodation, Group Home and Lodge

Family Physician Offices

Name	Address
Greenwood Family Phys Clinic	709 1 Street Ne, Sundre, T0M1X0
Greenwood Family Walk-in Clin	557 Main Ave W Bay 7, Sundre, T0M1X0
Moose & Squirrel Medical Clnc	200 Main Ave W Box 990 Unit 2, Sundre, T0M1X0

Sources:

*Alberta Health Care Insurance Plan (AHCIP) Data, Alberta Health, December 2014
College of Physicians and Surgeons of Alberta, January 2015*

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