

REPORT

Assessment of Respiratory Disorders in Relation to Solution Gas Flaring Activities in Alberta

Clean Air
Strategic Alliance



Alberta
HEALTH

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Executive Summary

Alberta Health conducted a study of health data, socioeconomic and environmental factors including solution gas flaring activity in response to concerns raised through the Clean Air Strategic Alliance (CASA).

The study involved information for the period 1994 to 1996 on population demographics, physician claims and hospitalizations collected from Alberta Health databases. This information was compared to data on flaring activities obtained from the Alberta Energy and Utilities Board (AEUB). The health disorders investigated were asthma, bronchitis, pneumonia and respiratory infections. The age-standardized rate of physician claims and hospitalizations were estimated for each postal code area in the province. Figure E-1 shows an example of the data on flaring activities and physician claims for asthma mapped at the postal code level.

The analysis of these maps found no significant correlation between flaring activities and physician claims for asthma. The following scatter plot (Figure E-2) provides another look at the correlation between the volumes of gas flared and the rate of physician claims for asthma in the same postal code. Again, the analysis of the data showed no correlation between solution gas flaring and the rate of physician claims for asthma.

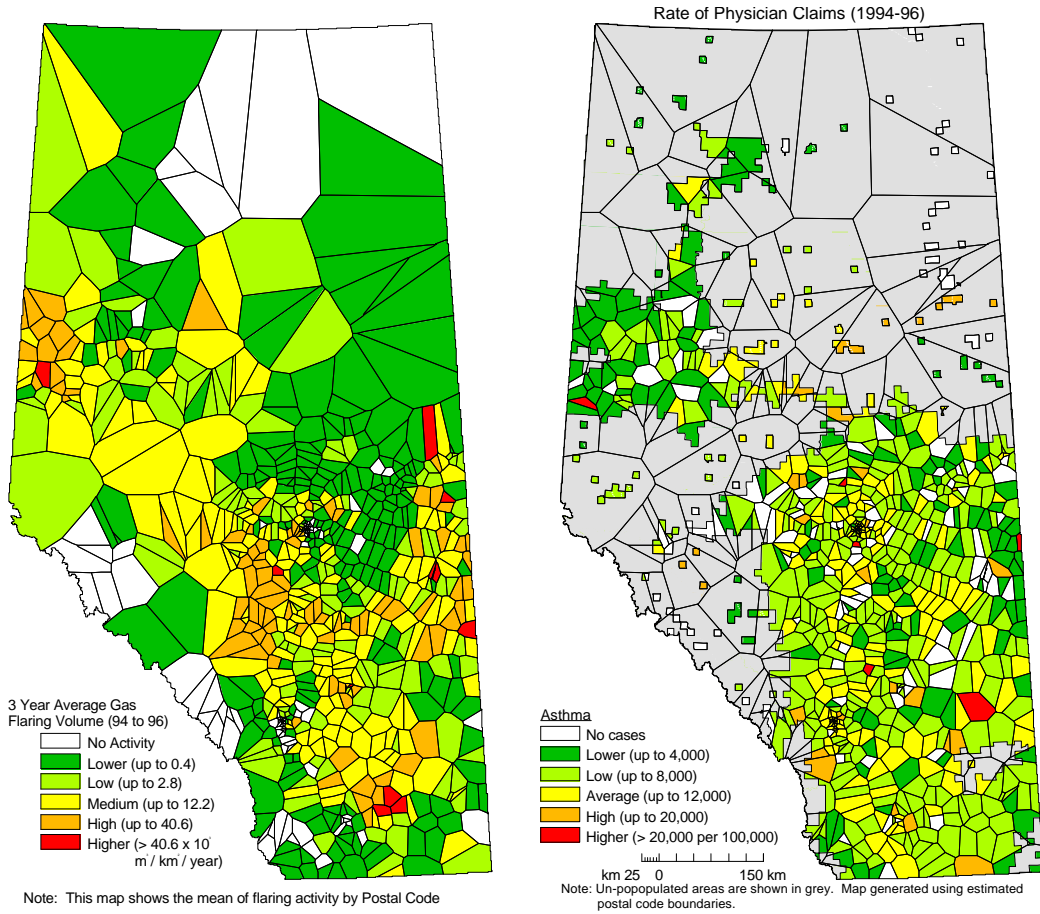


Figure E-1 3-Year Average of Flaring Volume and the Rate of Physician Claims for Asthma

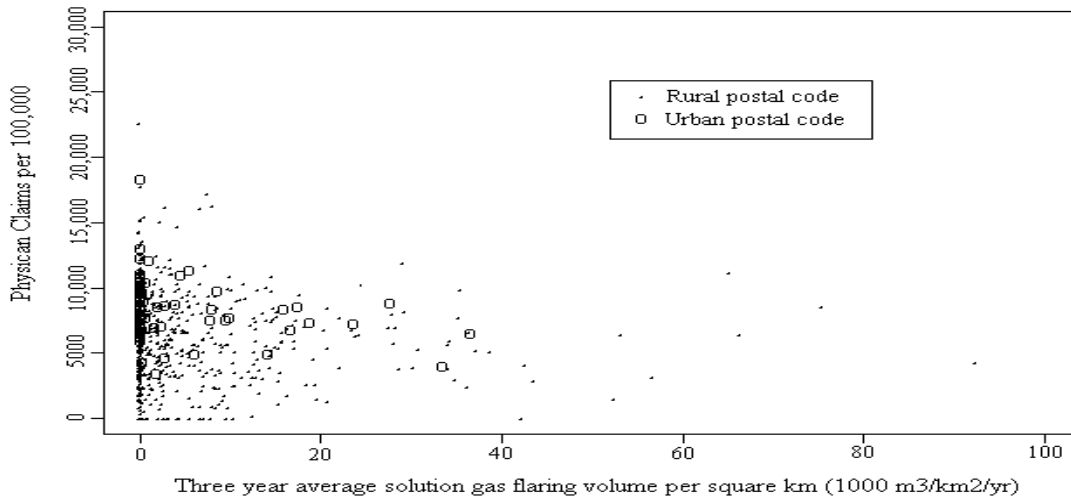


Figure E-2 Plot of Physician Claims for Asthma vs. Solution Gas Flaring Activities

Overall, no correlation at the postal code level was found between the 3-year average solution gas flaring volume and the rate of physician claims or hospitalizations for any of the respiratory disorders examined, regardless of the rural-urban status, ethnicity, entire population or children only. The urban/rural status and ethnicity were shown to be important contributing factors to the variations in the rates of the health disorders examined independent of flaring.

There are several limitations to this study that must be remembered when drawing conclusions. The lack of a positive correlation does not exclude the possibility of human health effects below the detection limit of this type of study. The detection limit of this analysis was investigated and upper respiratory infections proved the most sensitive disorder for detecting flaring effects with only a 1.88% increase in claims required for detection. That is, the smallest flaring effect detected with this analysis would require at least a 1.88% increase in claims for upper respiratory infection that must be distributed according to flaring levels. The three other disorders investigated proved less sensitive with asthma requiring a 10.6% increase, bronchitis 10.9% and pneumonia a 13.3% increase to be detectable. The smallest detectable flaring effect would result in less than 10 additional physician claims amongst 1000 average rural residents for all the disorders investigated. The limitations of this study are discussed in detail in the attached report.

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1. Introduction

This report describes work undertaken to compare existing data on human health outcomes with flaring activities and other socioeconomic and environmental factors. The motivation behind this was the common concern that flaring of solution gas has had a negative impact on human health. The work was initiated by the Flaring Working Group of the Clean Air Strategic Alliance (CASA) and was intended to satisfy the following terms of reference:

- Review and summarize existing information on the impacts of flaring on humans, animals, and the environment.
- Collect and analyze population, human, and animal health data surrounding flaring facilities.

This report contains only the human health related issues of the tasks.

The general approach comprised a plan to investigate, at a small area level (i.e. postal code level), geographical variations in human health disorders compared to geographical variations of socioeconomic and environmental factors. The plan was to gather data from 1989-96 and evaluate long term average conditions and changes over the time period investigated.

The present study focused on the assessment of the relationship between selected human health disorders (Asthma, bronchitis, pneumonia and upper respiratory infections) and solution gas flaring activities, with additional attention paid to rural/urban status and aboriginal populations for 1994 to 1996.

2. Methods

2.1 Rationale of Analysis

Data on human health disorders were derived from a study of physician billing practices on the assumption that these practices approximate the occurrence of the health disorder. This study used the rate of physician claims as an estimate of prevalence of health disorders.

The rationale for the analysis performed was based on the assumption that an impact on human health caused by flaring activities would be manifested by:

1. people experiencing new health disorders,
2. a recurrence of a previous health disorder, or
3. an increase in severity of an existing condition.

All of which would be reflected in physician and hospital visits. Alberta Health collected information on all visits for billing purposes and can establish geographical distribution of the visits based on individuals addresses. Proper analysis of this data could identify impacted areas if the negative impacts from flaring were significant over the random geographical variation of physician visit rates. Physician billing practices and how they reflect health disorders may vary geographically and will add to the “background noise” of the data. In order for any negative impacts from flaring to be identified in this analysis the increase in the rate of physician visits would have to be large enough to be distinguished over this “background noise”.

2.2 Data and Data Sources

Alberta health maintains data on demographics and health and AEUB maintains data on flaring activities. Three types of data were made available for the analysis, including:

1. Demographic information from the Alberta Health Care Insurance Plan (AHCIP), 1994-1996, including population counts by sex , age group, rural-urban status, and ethnicity (aboriginal or non-aboriginal);
2. Data on health outcomes from Physician Claims and Hospital Morbidity, 1994-1996; and
3. Environmental data from the AEUB including annual flaring volumes from 1989-1996 and monthly volumes for 1996.

2.3 Geographic Unit of Analysis

In this type of study, personal exposure to flaring emissions was estimated by physical proximity to the source of the emissions. The postal code was the smallest geographic unit available and was chosen as the unit of analysis in order to best estimate proximity to flaring emissions. Note that exposure estimates based on proximity carry some lack of precision. Other work has shown that personal exposure to air pollutants is very difficult to characterize, with the most reliable method being actual measurements (Alberta Health, 1997). However, there is limited personal exposure data available and collecting additional data for this study was impractical.

Most flaring activities in the province occur in rural areas and accordingly a rural-area “optimized postal code” was developed as the basic unit for all subsequent analyses. The optimized postal code was created by aggregating postal codes in the urban area to the first three digits while keeping the complete postal codes in the rural area. A total of 789 optimized postal codes were generated from 61,366 original postal codes recorded in the

AHCIP database during 1994 and 1996. This large reduction in the number of postal codes reflects the fact that most of the 61,366 postal codes are in the cities.

Mapping of gas flaring and health outcomes at postal code level requires the postal code boundaries which are not available. Estimated optimised postal code boundaries were obtained using the approximate locations of the centre of the postal codes from Statistics Canada (1996). This was accomplished by translating the file containing approximate postal code centres into a dBase format and loading it into SPANS 6. The boundaries were estimated using the Voronoi function, which creates a line mid-way between every pair of points in the file. The resulting boundaries are shown in Figure 2-1 and represent roughly the areas of the individual postal code.

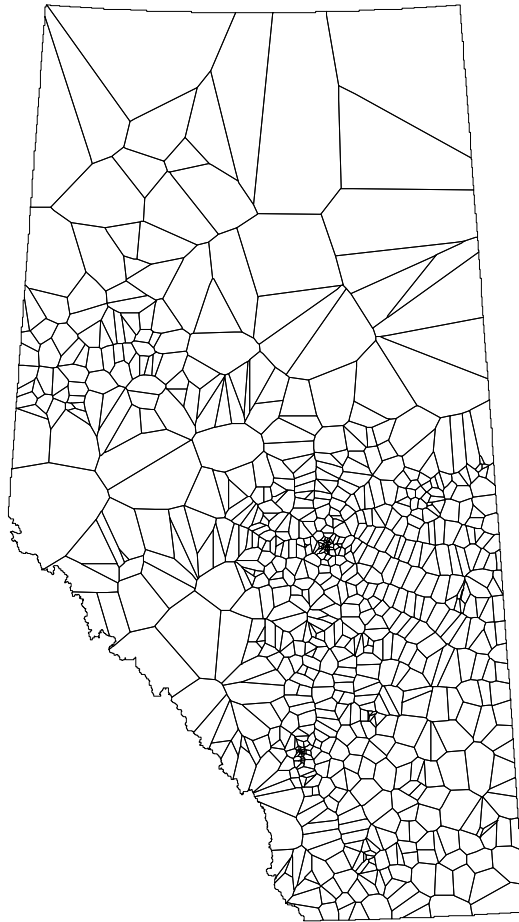


Figure 2-1 Estimated Boundaries of Optimized Postal Codes in Alberta

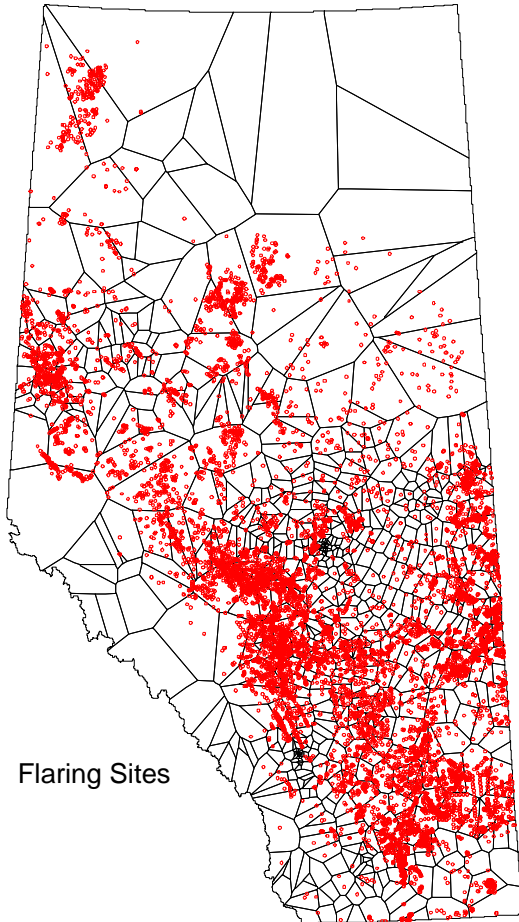
2.4 Exposure Assessment

The average volume of gas flared per square kilometer in a postal code was selected as the measure of solution gas flaring activities. These values were obtained by the following steps:

1. Data on locations and volumes of all solution gas flares in the province was obtained from the AEUB and mapped with a GIS package (see Figure 2-2).
2. A surface was generated over the entire province representing the volume of gas flared per square kilometer from all the flares combined. This was done by spreading the

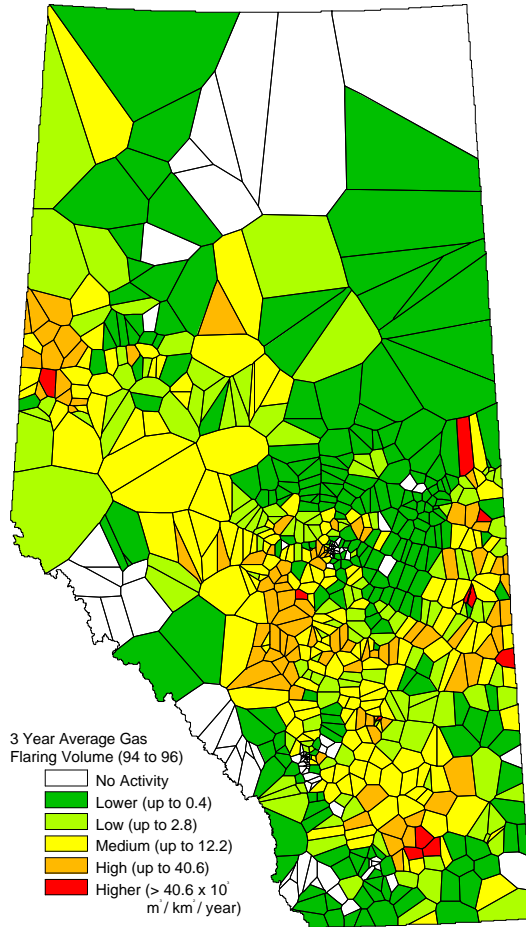
volume of gas from each individual flare over a circle of radius 2.8 km and overlaying all the circles combining any areas of overlap.

3. The estimated postal code boundaries (Figure 2-1) were overlaid on the flaring volume surface (Figure 2-2) and the average value of the surface within each postal code was determined.
4. The postal code areas with the assigned flaring levels are shown in Figure 2-3.



Flaring Sites

Note: This map shows flaring sites and estimated Postal Code



Note: This map shows the mean of flaring activity by Postal Code

Figure 2-2 A Map of Solution Gas Flares from the AEUB Data

Figure 2-3 Estimated Postal code Areas with the Assigned Flaring Level

2.5 Measurement of a Health Outcome

The two health measures defined for this study were the rate of physician claims and the rate of hospitalization. Although the incidence rate (the number of new cases over a given time in population at risk) would have been of most value for the risk quantification from exposure, its estimation from the administrative data was not possible given the present nature of the data. Thus prevalence rates, as follows, were used:

- 1) Rate of physician claim (RPHYS): Total number of physician claims for a given disease in a postal code during 1994 and 1996 per 100,000 population. It is calculated as

$$\text{RPHYS} = \frac{\text{Total number of physician claims for disease, 1994-96}}{\text{Total population during 1994 to 1996}} \times 100,000$$

- 2) Rate of hospitalization (RHOSP): Total number of hospitalizations for disease in a postal code during 1994 and 1996 per 100,000 population. It is calculated as

$$\text{RHOSP} = \frac{\text{Total number of hospitalizations for disease, 1994-96}}{\text{Total population during 1994 to 1996}} \times 100,000$$

The health data base used in this study had the capability of storing several levels of diagnosis (1st, 2nd, 3rd etc.) as there can be evidence of multiple health disorders for a claim. The primary diagnosis was listed as the 1st level. The health measures were made as sensitive as possible by including all claims that had the health disorder in question diagnosed at any level.

Table 2-1 provides the International Classification of Diseases (ICD) codes (ninth version) used for the study and the number of visits found for each respiratory disorder during 1994 and 1996 fiscal years. Also shown is the distribution of the claims between single and multiple visits.

Table 2-1 Distribution of Repeat Claims for Respiratory Disorders in Alberta, from March 1, 1993 to April 30, 1996

Disease Group (ICD9)	Total Claims	1 Claim	2 Claims	3+ Claims	Range
Upper Resp. Infections (460-469)	5,042,364	55.0	22.8	23.0	1 - 214
Pneumonia (480)	271,399	52.7	18.6	20.6	1 - 282
Asthma (493)	737,061	52.2	18.1	26.0	1 - 127
Bronchitis (490-491)	335,909	73.7	14.0	9.5	1 - 75
All Resp. Disorders (460-519)	7,519,453	57.1	20.4	20.4	1 - 282

As shown in the table, the number of contacts with the health care system (health care providers/hospitals) can vary dramatically by person and disease with one year totals ranging from 1 to 282. Over 52 percent of individuals contacting the system during the study period only had one visit in a year. Usually, cases in severe conditions may have been hospitalized.

The rates were estimated for each postal code and for the whole province. Physician visit rates were also estimated for the population according to Aboriginal status and urban/rural

status. Table 2-2 shows the estimated rates for the respiratory disorders in question. All the rates were standardized to the 1991 Alberta age distribution. This process removes the potential impact from differences in the age structure across comparison groups.

Table 2-2 Standardized Rates (per 100,000 population) of Physician Claims for Selected Respiratory Disorders in Alberta, from March 1, 1993 to April 30, 1996.

Disease Group (ICD9)	<u>Rural Area</u>		<u>Urban Area</u>	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
All Resp. Disorders(460-519)	182,766	74,095	158,895	90,654
Resp. Infections (460-469)	126,926	48,355	116,485	61,446
Pneumonia (480)	9,895	2,977	6,130	2,969
Asthma (493)	9,215	6,652	10,724	9,371
Bronchitis (490-491)	15,603	4,716	7,690	3,328

The estimated rates of physician claims for each health disorder at the postal code level were mapped and are shown in Figures 2-4 to 2-8. These maps show the pattern of physician claims rates through the province. A correlation is not apparent when comparing these maps to the map of flaring activities in Figure 2-3. Further discussion of these figures appears later in the results section (3.2.2 Geographic Distribution of Physician Claim for Respiratory Disorders).

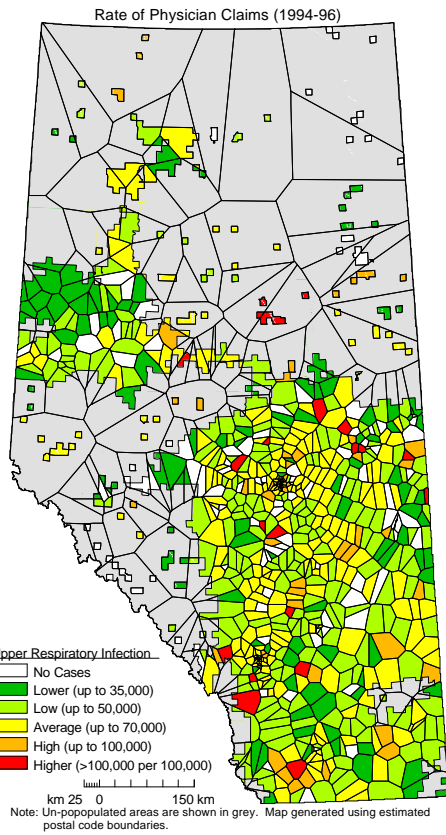


Figure 2-4 Physician Claim Rates for Upper Resp. Infection in Postal Code Areas

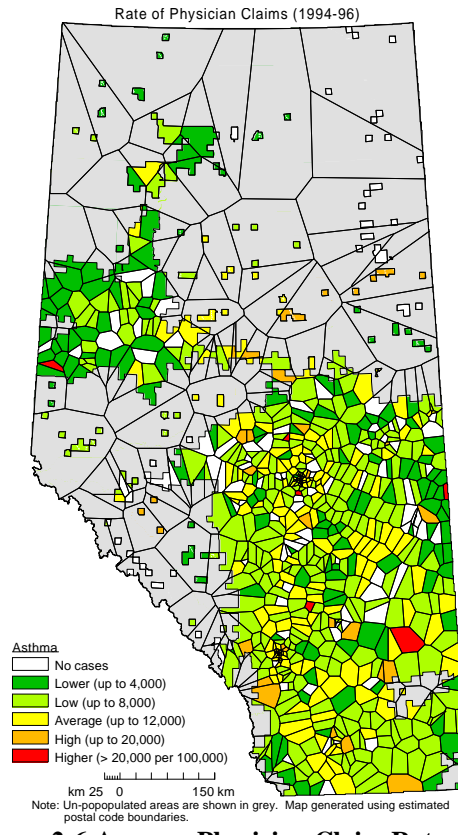


Figure 2-6 Average Physician Claim Rates for Asthma in Postal Code Areas

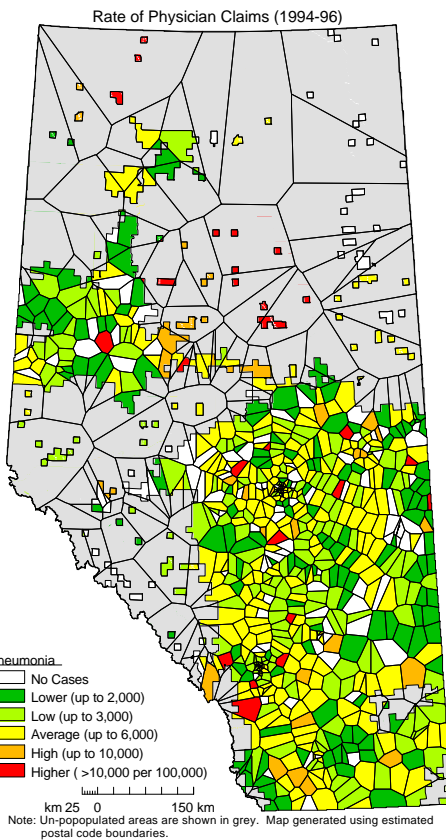


Figure 2-5 Average Physician Claim Rates for Pneumonia in Postal Code Areas

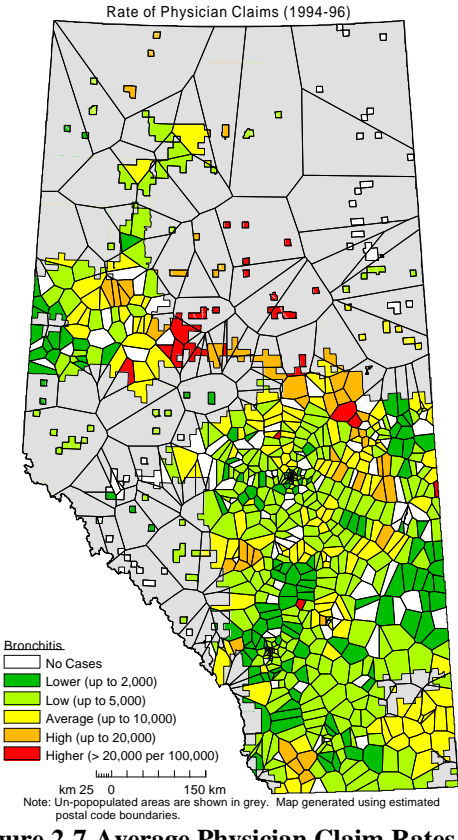


Figure 2-7 Average Physician Claim Rates for Bronchitis in Postal Code Areas

2.5.1 Comparison of Findings from the Present Study with Other Publications

Table 2-3a and 2-3b presents the rates of hospitalizations and physician claims or services for selected respiratory disorders from this study and other studies (Hessel et al., 1995; Green, 1996; Wang et al., 1996; Statistics Canada, 1995). Comparing the hospitalization rates (Table 2-3a) the present study shows slightly higher rates. However the discrepancy is explained by the other studies use of the primary diagnosis only, while the present study used all diagnostic levels. Table 2-3b shows that the rates of physician services reported by Hessel *et al.* (1995) and Green *et al.* (1996) were similar to each other and are roughly twice the rate of claims reported here and by Wang *et al.* (1996). This is as expected because a single physician claim often represents multiple services.

Table 2-3a Comparison of Calculated Hospitalization Rates to other Publications (rate per 100,000 annually)

Disease Group	Present Study	Hessel (92-93)	Green (92-93)	Strathcona (90-94)	Statistics Canada
Upper Resp. Infections	339	-	-	-	-
Pneumonia	397	-	-	-	307
Asthma	428	240	290	240	271
Bronchitis	119	-	-	70	93.5
All Resp. Disorders	2380	-	-	-	1648

Table 2-3b Comparison of Calculated Physician Claims and Service Rates to other Publications (rate per 100,000 annually)

Disease Group	Present Study (claims)	Hessel (92-93) (services)	Green (92-93) (services)	Strathcona (90-94) (claims)	Statistics Canada
Upper Resp. Infections	60,316	-	-	-	-
Pneumonia	3,116	-	-	-	-
Asthma	8,717	14,400	15,500	7,381	-
Bronchitis	3,883	-	-	4,768	-
All Resp. Disorders	89,056	-	-	-	-

2.5.2 Study Data Set

Appendix I contains the combined flaring and health data set generated for this study. The appendix shows the postal code name, location, estimated area, average flaring volume, and population. For each health disorder the appendix shows the number and standardized rate of hospitalizations and the number and standardized rate of total claims per year for each postal code. Data has been suppressed in the appendix for postal codes with populations less than five individuals.

2.6 Unlinked Data

A total of 958 obviously incorrect postal codes from the registration file were eliminated from the analysis. This accounts for 1.5 % of total postal codes recorded in the registration file during the three year period. The population count excluded from these postal codes was 2,676 for the study period.

As expected, the matching of postal codes from Alberta Health databases to flaring databases was not 100%. Overall, there were 732/868 of postal codes which matched between the registration file and the flaring file. The unmatched postal codes did not have a significant population and will have little impact on the findings of the study. A total of 57 postal codes from the registration file did not show up in the flaring database and 79 postal codes from the flaring database did not appear in the registration file (Table 2-4). These discrepancies were possibly due to typing errors, retired or new postal codes and some postal codes with no individuals assigned to them (i.e. businesses only). Only the

732 postal codes that matched from the Health data and flaring data were included in the analysis.

Table 2 - 4 Linkage between the Registration File and the Flaring File at the Optimized Postal Code Level

<u>Registration File</u>	<u>Flaring Database</u>		Total
	Match	Non-Match	
Match	732	57	789
Non-Match	79	0	79
Total	811	57	868

*Overall Agreement = 732/868 * 100 = 84.3% matched postal codes .*

Most of the discrepancies found in postal code matching were explainable and there is confidence that the data sets were free of large systemic errors that would undermine the conclusions.

2.7 Statistical Analysis

Analysis of the distribution of the data found a skewed normal distribution with several outliers. Most of the outliers were attributed to postal codes with very low populations or claims totals. A correlation analyses which involved scatter plots and correlation coefficient (r) estimations were performed and 95 percent confidence intervals were also estimated. The rank-based Spearman’s ρ measure of correlation was used, as it is less sensitive to outliers and non-normality compared to the standard Pearson estimate (Snedecor GW *et al.*, 1994). These analyses were done in a S-Plus software (StatSci, 1993). Also, the X^2 (Chi-Square) test were calculated in the SAS program (version 6.12,

SAS Institute, 1996) and used for comparisons of categorical variables such as rural or urban status. The level of significance is set to 0.05 for all statistical inference.

3. Results

3.1 Sociodemographic Characteristics of Study Population

3.1.1 Age Structure of Population by Rural-Urban Status and Ethnicity

The population data used in this study was generated from the Alberta Health Care Insurance Plan Registration File (AHCIP). The average population over the period of study was 2,822,054, including 88,418 (3.1%) people reporting of Aboriginal status and 2,733,636 (96.9%) non-Aboriginal (Table 3-1). Of the total population studied, 24.7 percent live in the rural area and the remaining (75.3%) were the urban residents. These proportions were slightly different from those 1991 figures reported by Statistics Canada (20.2% and 79.8%, respectively, 1992). A much higher proportion of aboriginal people registered with the AHCIP lived in the rural area compared to the general population (61% vs. 23.5%, $p < 0.001$). During the study period, the registered population increased by 1%, from 2,806,709 in 1993/94 to 2,834,607 in 1995/96. The female to male ratio (1,416,545/1,418,062) in 1995/96 was close to one regardless of the rural-urban status and ethnicity.

Table 3-1 Average study Population by Ethnicity in Alberta, 1994-1996

Status		Aboriginal	Non-Aboriginal	Total
Rural Area	n	53,920	643,202	697,122
	percent	61.0%	23.5%	24.7%
Urban Area	n	34,499	2,090,434	2,124,933
	percent	39.0%	76.5%	75.3%
Total		88,418	2,733,636	2,822,054

Chi-square Test for differences in the distribution: $X^2 = 64,591, p < 0.001$

Source: Alberta Health Care Insurance Plan Registration File, 1994-96.

Table 3-2 shows the age structure of the population varied by rural-urban status and ethnicity. Compared to the urban residents, the rural residents showed a higher proportion of children (25.7% vs. 21.9.0%) and adolescents (14.8% vs. 13.8%) but a lower proportion of people aged 25-44 (30.2% vs. 35.2%). This pattern was true for both the non-Aboriginal and Aboriginal people.

Differences between the non-Aboriginal and Aboriginal population structure were large. The proportions of Aboriginal people ages 0-14 and 15-24 years were about 1.7 and 1.3 times of those non-Aboriginal of corresponding age groups. In contrast, proportions of older age groups in Aboriginal people were much lower, especially in those aged 65-74 (1.5% vs. 5.9%) and 75 years and over (0.7% vs. 4.4%). All these differences were statistically significant ($p < 0.05$).

Table 3-2 Population Age Distribution by Rural-Urban Status and Ethnicity in Alberta, 1995/96

Age Group	Rural Population			Urban Population			Total Population
	Non-Native	Native	All	Non-Native	Native	All	
<i>Number</i>							
0-14	149,702	22,110	171,812	462,389	13,175	475,564	647,376
15-24	89,038	9,984	99,022	292,168	6,234	298,402	397,424
25-44	185,967	15,591	201,558	751,020	12,175	763,195	964,753
45-64	117,496	5,937	123,433	412,001	3,505	415,506	538,939
65-74	39,044	983	40,027	122,876	367	123,243	163,270
75+	31,151	537	31,688	90,138	135	90,273	121,961
Unknown	156	0	156	726	2	728	884
Total	612,554	55,142	667,696	2,131,318	35,593	2,166,911	2,834,607
<i>Percent</i>							
0-14	24.4%	40.1%	25.7%	21.7%	37.0%	21.9%	22.8%
15-24	14.5%	18.1%	14.8%	13.7%	17.5%	13.8%	14.0%
25-44	30.4%	28.3%	30.2%	35.2%	34.2%	35.2%	34.0%
45-64	19.2%	10.8%	18.5%	19.3%	9.8%	19.2%	19.0%
65-74	6.4%	1.8%	6.0%	5.8%	1.0%	5.7%	5.8%
75+	5.1%	1.0%	4.7%	4.2%	0.4%	4.2%	4.3%
Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: Excluded 1,057 individuals with missing/incorrect postal codes

The differences in the age structure of the population between the rural and urban area and between Aboriginal people and the non-Aboriginal population underlines the need of the age-standardization when the rates for the entire population were compared between these groups.

3.1.2 Geographic Distribution of Population

The size of population in the optimized postal codes varied significantly, ranging from 1 to 186,784. The majority (90%) of postal code areas had a population size greater than 130 during the 3-year period (Table 3-3). Figure 3-1 displays the detailed geographic

distribution of the population in the province by township and community. The figure shows the areas in Northern Alberta and the parks with low population densities.

Table 3-3 Geographic Distribution of Study Population by Postal Code in Alberta, 1994-96

Basic Statistics	1994 (n = 752)	1995 (n = 762)	1996 (n = 752)	1994-96 (n = 789)
Total Population	2,806,709	2,824,845	2,834,607	8,466,161
Mean (SD)	3,733 (8,355)	3,708 (8292)	3,770 (8,345)	10,720 (24,507)
Quantiles- 5%	12	18	33	3
- 10%	77	69	97	135
- 25%	242	247	260	633
- 50%	672	681	714	1,948
- 75%	2,330	2,327	2,501	6,778
- 90%	11,170	10,966	10,922	29,614
- 95%	22,271	21,535	22,049	63,202
Range	1 - 62,880	1 - 61,881	1 - 62,023	1 - 186,784

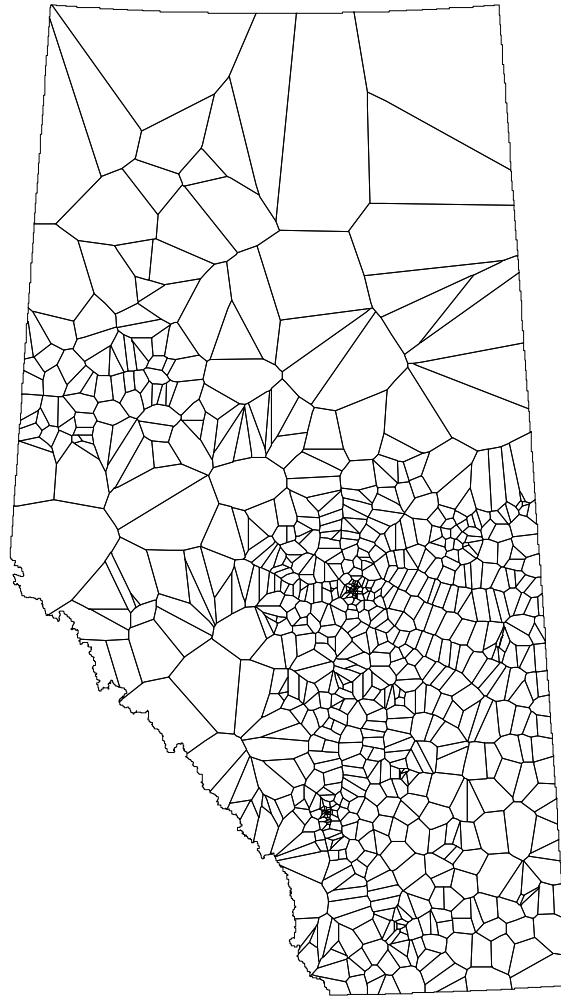


Figure 3-1 The Geographic Distribution of the Population of Alberta by Township and Community

3.2 Respiratory Disorders in Alberta, 1994-1996

3.2.1 Distribution of Respiratory Disorder by Rural-Urban Status and Ethnicity

Table 3-4 presents the rate ratio (RR) of physician claims for the selected respiratory disorders by rural-urban status and ethnicity. The rural-urban differences in rates of physician claims varied by ethnicity. For Aboriginal people, the rate in the rural area was higher for all disease groups but asthma with bronchitis (RR=2.03) and pneumonia (1.61)

showing the largest differences. For the non-Aboriginal population, the rate in the rural area was lower for respiratory infections (RR=0.79) and asthma (RR=0.71), the same for pneumonia (RR=1.00), and higher for bronchitis (RR=1.42). All the comparisons were statistically significant ($p < 0.05$) except for RR=1.00. These findings suggest that the rate of physician claims for most of the respiratory disorders in the rural and urban area was significantly dependent on ethnicity. In discussion of the rural-urban variations of these disorders, the effect of ethnicity will be accounted for.

Table 3-4 Rate Ratios of Physician Claims Rates for Selected Respiratory Disorders in Alberta, from March 1, 1993 to April 30 1996

Disease Group (ICD9)	Ratio of Aboriginal / Non-Aboriginal		Ratio of Rural / Urban	
	Rural	Urban	Aboriginal	Non-Aboriginal
All Resp. Disorders(460-519)	2.47	1.75	1.15	0.82
Resp. Infections (460-469)	2.62	1.9	1.09	0.79
Pneumonia (480)	3.32	2.06	1.61	1.00
Asthma (493)	1.39	1.14	0.86	0.71
Bronchitis (490-491)	3.31	2.13	2.03	1.42

** All rate ratios are statistically significant ($p < 0.05$) except for RR=1.00*

The rates of physician claims for Aboriginal people were higher than the non-Aboriginal population, especially in the rural area. In the rural area, the rate for Aboriginal people was 147% higher for all respiratory disorders (RR=2.47), 162% higher for upper respiratory infections, 232% higher for pneumonia, 39% higher for asthma, and 231% higher for bronchitis. This pattern was similar but to a lesser extent in the urban area with the largest ratios being for bronchitis (RR = 2.31) and pneumonia (RR=2.06).

Findings from this section suggest the importance of the rural-urban status and ethnicity for this study, and possibly others, for respiratory disorders.

3.2.2 Geographic Distribution of Physician Claim for Respiratory Disorders

As described earlier, Figure 2-3 showed the distribution by postal code of flaring activities in the province while Figures 2-4 to 2-7 showed maps of the rate of physician claims for respiratory disorders. A visual comparison of the maps found no obvious correlation between areas of high flaring activity and higher rates of physician claims.

The postal codes of higher physician claims rates did coincide somewhat with areas of higher Aboriginal populations such as Morley, Wabasca, Lac La Biche, and Hobbema.

3.3 Examination of Association between Health Outcomes and Explanatory Variables

To further examine the association between the health outcomes and the flaring activity, scatter plots were generated. Figure 3-2 is an example of the scatter plots of the data generated with flaring activity on the x axis and rate of physician claims or hospitalizations on the y axis. An effort was made to factor out the effects of rural/urban and Aboriginal status by plotting different sub-sets of the data for each disease. Each figure includes: (a) physician claims rate in both the rural and urban areas for the Aboriginal and non-Aboriginal combined population, (b) the rate of hospitalizations in both the rural and urban areas for the whole population, (c & d) physician claims rate in the rural area only for the Aboriginal and non-Aboriginal population separately, and (e & f) physician claims rate in

the rural area only for children of the aboriginal and non-aboriginal origin. This approach was used in an attempt to have a sensitive yet comprehensive evaluation of the association.

All postal code areas that matched with the registration population file and flaring data were included in the initial evaluation, resulting in 732 optimized postal codes for the correlation analysis. To improve the view of the relationship, a few outliers with low flaring activity were removed from the display. Postal codes removed include five points for respiratory infections, two points for pneumonia, six points for asthma, and four points for bronchitis. These outliers were mostly due to those postal codes areas with very small population (less than five) or a small number of observations (less than two).

3.3.1. Upper Respiratory Infections

Figure 3-2 shows the scatter plots between upper respiratory infections and the solution gas flaring volume. There did not appear to be an obvious correlation between the flaring activity and the rates of physician claims/hospitalizations for respiratory infections, regardless of measure of health outcomes (physician claims or hospitalizations), the rural-urban status, and ethnicity when looking at the whole population or children only. All correlations were virtually zero (all r 's < 0.05) and none being statistically significant. This indicates that there was no detectable relationship between upper Respiratory Infections and flaring.

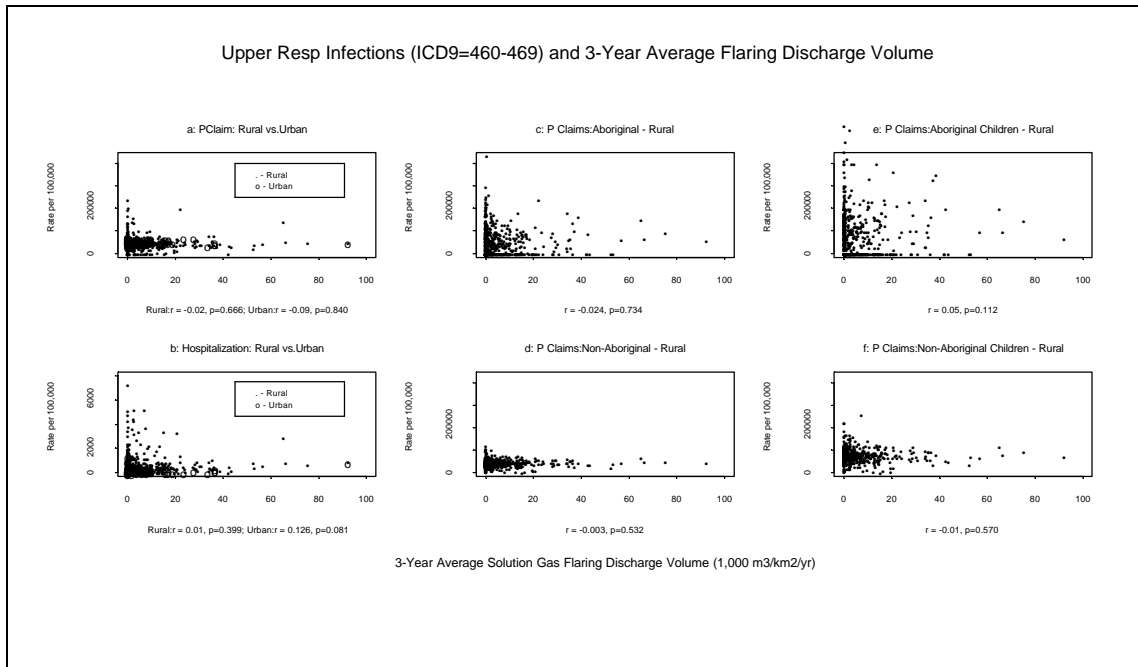


Figure 3-2 Plots of Upper Respiratory Infections (ICD9=460-469) vs. Average flaring Volumes

Figure 3-2a & b shows the rates of physician claims/hospitalizations in the rural and urban area. As shown, most of the postal code areas had a rate of physician claims below 90,000 per 100,000 population. The rate of hospitalization is lower than that of physician claims with slightly more variability. No correlation was found between the flaring volume and the rates of physician claims/hospitalizations for respiratory infections in both the rural and urban areas.

Figure. 3-2c & d shows the rate of physician claims in the rural area for the Aboriginal and non-Aboriginal population separately. It shows that the rate for Aboriginal people was generally higher than that of the non-Aboriginal population. All the postal codes with extremely high physician claims rates could be attributed to the Aboriginal fraction of the

population. There was no obvious relationship between solution gas flaring activities and the rate of physician claims.

Figure 3-2e & f presents the rates of physician claims in the rural area for children (0-14 years) which are usually more sensitive to respiratory disorders than the adult population. These figures show the same result as the general population. Some of the rates for aboriginal children were unstable due to small populations or few claims and accordingly caution should be used when interpreting the results (this is common to all health disorders investigated).

3.3.2. Pneumonia

Figure 3-3 shows the scatter plots of physician claims/hospitalization rates for pneumonia versus the 3-year average solution gas flaring activity. Similar to respiratory infections, there appeared to be no correlation between the solution gas flaring volume and the rates of physician claims or hospitalizations for pneumonia, regardless of the measure of health outcomes, the rural-urban status, and ethnicity when looking at the whole population or children only. The positive correlation coefficients were less than 0.04 for all correlation estimates and none were significantly different from zero ($p=0.05$).

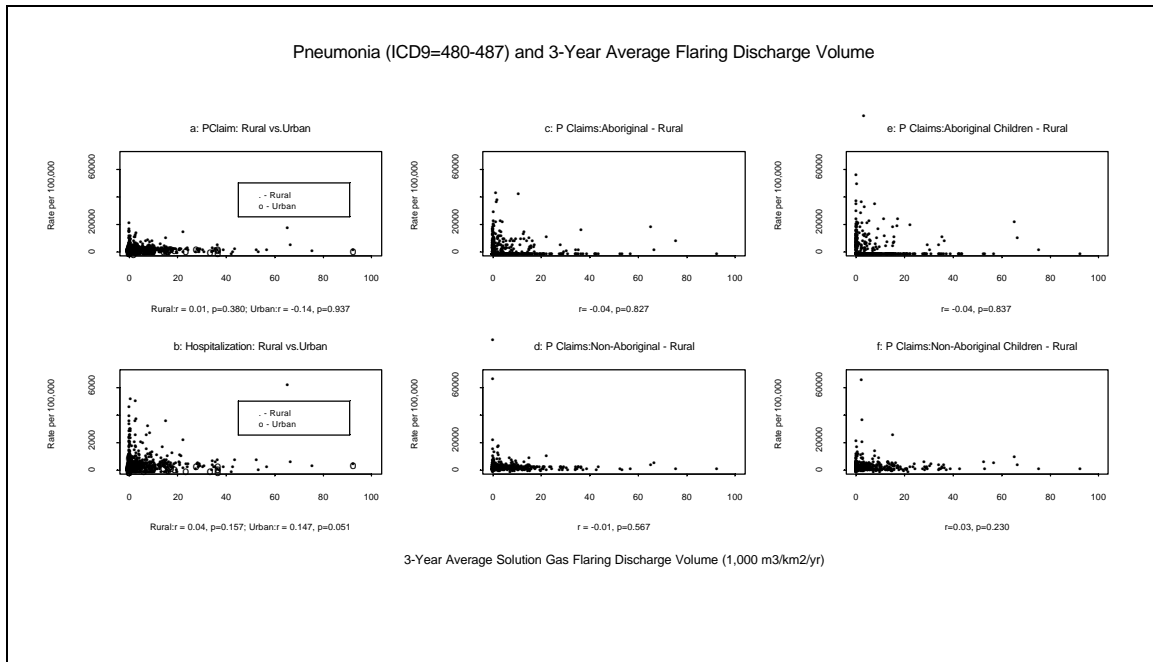


Figure 3-3 Plots of Pneumonia (ICD9=480-487) vs. Average flaring Volumes

Some of the rates for aboriginal children were unstable due to small populations or few claims and accordingly caution should be used when interpreting the results.

3.3.3. Asthma

Asthma is an allergic condition which has drawn much attention in studies of environmental epidemiology (NRBS ref). Figure 3-4 shows the scatter plots of physician claims/ hospitalization rates of asthma versus the 3-year average solution gas flaring activity. No correlation was suggested by any of the six plots when considering physician claims or hospitalizations, the rural or urban area, Aboriginal or non-Aboriginal origin, and children or the entire population. All of the estimated correlation coefficients were essentially zero (< 0.04), and none were significantly different from zero ($p < 0.05$). It was also evident that the rate of physician claims in the rural area for Aboriginal people was

higher than the non-Aboriginal population, and the rate of physician claims for children was higher than for the entire population. These observations agreed with those shown in Table 3-4 earlier and those found by others (Hessel et al., 1996). Although not shown clearly, the rates of physician claims/hospitalizations for asthma in the rural area was in general lower than those in the urban area which also agrees with other studies.

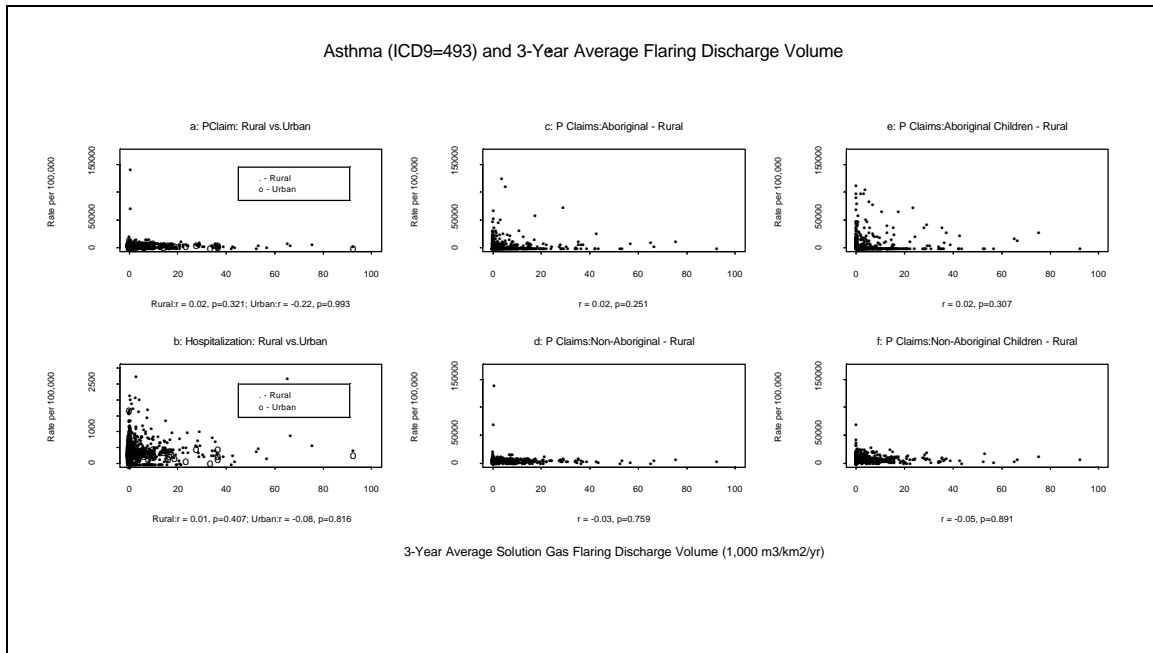


Figure 3-4 Plots of Asthma (ICD9=493) vs. Average flaring Volumes

3.3.4. Bronchitis

The diagnosis of bronchitis included in this study is primarily of the chronic nature. Figure 3-5 shows the scatter plots of physician claims/hospitalization rates for bronchitis versus the 3-year average solution gas flaring activity. Like patterns of other disorders discussed earlier, no relationship between health and flaring was suggested from any of the six plots, regardless of rural-urban status, and ethnicity, or age (children only or the entire population). None of the estimated correlation coefficients were found to be positive and

none significantly different from zero ($p=0.05$). These observations agree with those shown in the earlier Table 3-4 and the literature (NRBS ref).

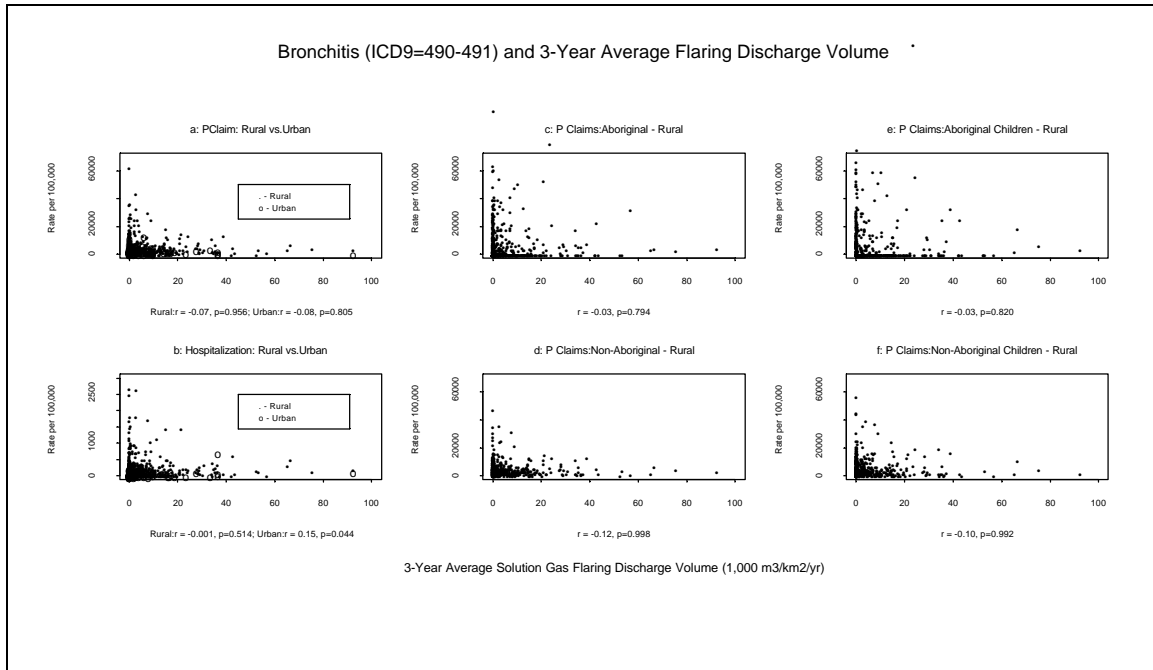


Figure 3-5 Plots of Bronchitis (ICD9=490-491) vs. Average flaring Volumes

3.4 Correctional Analysis between Rate of Physician Claims and Hospitalizations

Analysis was done to investigate the relationship between the rate of physician claims and hospitalizations as an estimate of validity. Figure 3.6 shows the scatter plot of the rate of physician claims and hospitalizations for the disorders under study. The correlation coefficients and the 95 percent confidence interval (95% CI) was also calculated.

Generally the rate of physician claims was moderately correlated with the rate of hospitalizations. The correlation was relatively stronger for pneumonia ($r = 0.56$), asthma ($r = 0.50$) and bronchitis ($r = 0.47, p < 0.01$), but weaker for respiratory infections ($r = 0.29$). As indicated by the 95% CI, all of the correlation coefficients were statistically significant ($p < 0.05$).

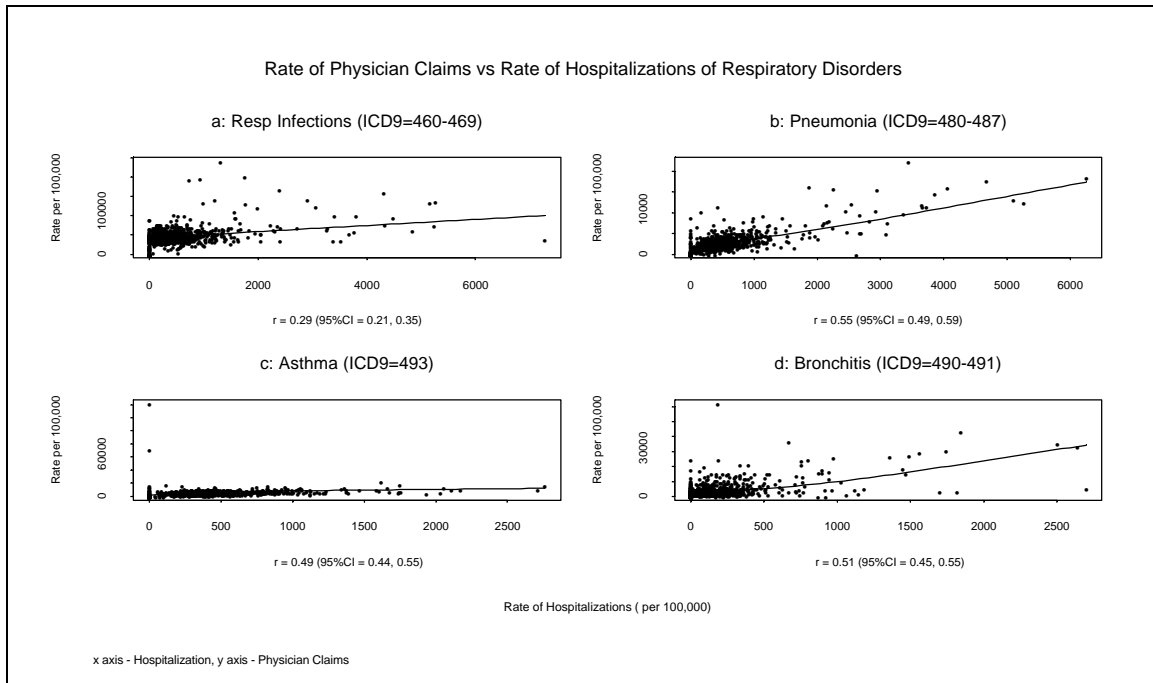


Figure 3-6 Plots of the Rates of Physician Claims vs. Hospitalizations for the Selected Respiratory Disorders

3.5 Sensitivity of the Analysis

The previous analysis found no significant correlation between flaring activities and the health disorders investigated. This indicates that any effects of flaring on these health disorders is below the detection limit of the methods that were used. This limit of detection defines the magnitude of the effect that could be present but remain unidentified. This part of the investigation is thus limited to an evaluation of the level of effect that can be reliably detected.

The approach taken to quantify this limit of detection was to answer the question, "given the characteristics of these data, what is the smallest flaring effect that could be identified as a statistically significant correlation in this analysis"? To answer this question, a

hypothetical flaring effect was applied to the postal code claims rates which resulted in an artificial increase in the claims rate of each postal code in comparison to the level of flaring that actually took place. This superimposed effect was adjusted until the correlation between the health disorder and the flaring activity became just significantly positive ($p=0.05$).

The Figures 3-7a and 3-7b demonstrates a superimposed flaring effect on upper respiratory infection claims rates in the rural non-aboriginal population by postal code. Figure 3-7a plots the unadjusted claims rates and Figure 3-7b shows the superimposed flaring effect of 1.60% (increase in claims rate per 1000 $m^3/km^2/yr$) required for a significantly positive increase in the trend. The total increase in the number of claims associated with this adjustment would be 5,855 which is a 1.88% increase. That is, for a significant flaring effect to be detected with this analysis, at least 5,855 additional claims for upper respiratory infection must occur in the rural non-aboriginal population and be distributed according to flaring levels. In terms of rate per 1000 people, this means 9 claims in addition to the 483 expected annually.

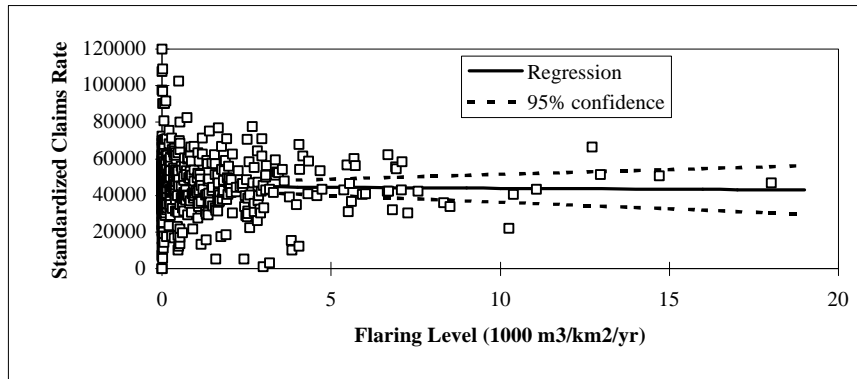


Figure 3-7a Regression Plot of Upper Respiratory Infections for Rural Non-Aboriginal postal codes, No Superimposed Flaring Effect

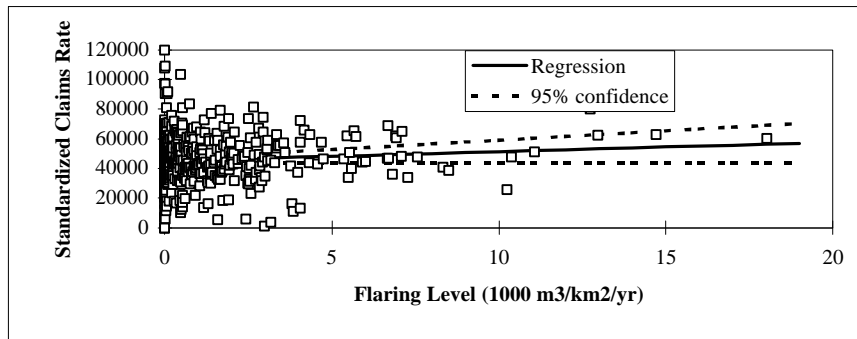


Figure 3-7b Regression Plot of Upper Respiratory Infections for Rural Non-Aboriginal postal codes, Superimposed Flaring Effect of 1.60% increase in claims rate per 1000 m³/km²/yr Gas Flared

Table 3-5 shows the results of the sensitivity analysis for the other respiratory disorders investigated in this analysis. The table shows that upper respiratory infections were the most sensitive disorder for detecting flaring effects with only a 1.88% increase in claims required. The three other disorders investigated proved less sensitive with asthma needing a 10.6% increase, bronchitis 10.9% and pneumonia a 13.3% increase to be detectable.

While the percentage increases are much large for the latter disorders, the table shows the actual additional claims in a average postal code of 1000 people are less than the number

needed for the more sensitive upper respiratory infections. This is because the sensitivity is dependent on how prevalent the physician claims are for the disorder. Physician claims for upper respiratory infection are roughly 10 times more numerous than the other disorders investigated and accordingly it has the highest sensitivity.

Table 3-5 The Smallest Flaring Effects that are Detectable in this Analysis and the Associated Claims Increases for Rural non-Aboriginal Postal Codes.

Health Disorder	Total Annual Claims Among Population Group	Smallest Detectable Flaring Effects (% increase in claims rate per 10 ³ m ³ /km ² /yr)	Annual Increase in Claims Due to Smallest Detectable Effects	Percent Increase in Claims Annually	Additional Claims in an Average Postal Code of 1000 People
Asthma	42,915	9.25%	4,531	10.6%	7.1
Bronchitis	30,516	9.60%	3,334	10.9%	5.1
Pneumonia	19,367	12.6%	2,575	13.3%	3.4
Upper Resp. Infections	311,774	1.60%	5,855	1.88%	9.1
All Respiratory	477,564	2.70%	14,713	3.08%	22.8

This provides a good feel for the level of flaring effect that could be detected in this type of analysis and alternatively the magnitude of the effect that could be present but undetected.

4. Strength and Limitations

4.1 Strengths

- Use of the postal code as the unit of analysis was a strength for this type of study because the smaller unit of analysis makes the relationship of proximity to actual

exposure stronger. Also, the numerous data points that resulted from using the smaller unit of analysis enabled a lower detection limit. This was the first ecological study to date exploring the relationship between the environment and the health outcomes in Alberta at postal code level.

- Multiple measures of correlation between the health outcomes and the flaring activities increased the validity of study. This study used rate of physician visits in the rural and urban area for the entire population, in the rural area for the Aboriginal and non-Aboriginal population, and in the rural area for children of Aboriginal and non-Aboriginal origin, as well as the rate of hospitalization in the rural and urban area. Limitations of each single measure were compensated by using these measures together. None of these measures were found to be correlated with the solution gas flaring activity.
- Cases from all diagnostic levels (1st, 2nd, 3rd, etc.) were used in the study maximizing the capture of possible “cases”.
- Upper respiratory infections were the most sensitive disorder for detecting flaring effects with only a 1.88% increase in claims required. That is, the smallest significant flaring effect detected with this analysis requires at least a 1.88% increase in claims for upper respiratory infection that must and be distributed according to flaring levels. The three other disorders investigated proved less sensitive with asthma needing a 10.6% increase, bronchitis 10.9% and pneumonia a 13.3% increase to be detectable.

The smallest detectable flaring effect would result in less than 10 additional physician claims amongst 1000 average rural residents for all the disorders investigated.

4.2 Limitations

- This type of study is limited by the phenomenon known as ecological fallacy. Ecological fallacy refers to the false association observed between variables at an aggregate level which is not necessarily true at the individual level. Thus any association observed in this study may not represent a relationship at the individual level.
- The study used physician claims administrative data as a surrogate indicator of health effects. By using this data the actual health effects may be confounded by geographical variations in physician billing practices.
- An important limitation was the characterization of exposure to air pollutants. In this study proximity to flaring activity at the postal code level was assumed to represent exposure to flaring emissions. This is not always accurate and can result in individuals who are not actually exposed to flaring emissions counted as exposed and individuals who are actually exposed counted as unexposed. This may result in the dilution of any effect that may be due to flaring.
- The limitations of this study were such that site specific, or other impacts localized to an area smaller than the postal code may not be detected here.

- A minor limitation was the accuracy of the estimated postal code boundaries. This could have potentially confound the classification of an individual's claims data and the corresponding flaring activity level. The impact of this misclassification on the findings was considered to be minimal.
- Postal code accuracy and data linkage problem. Postal codes were not intended for the purposes in this study and some of their characteristics are problematic. There are cases of retired or new postal codes which cause difficulties in assigning people to these areas which can change historically. Despite all effort in data linkage, a total of 136 postal codes were still not linked in this report. Most of these unlinked codes had no population and only 2675 people (0.03%) were unlinked. This linkage problem did not have a significant impact on the finding.
- A potential misclassification of the rural-urban status of postal codes may have occurred due to the difficulty of precisely defining rural and urban areas. However the number of postal codes that may have so been missclassified is small.
- The estimated rates in some postal areas, especially for children of Aboriginal origin, were based on a small number of observations or population resulting in instability. This point has been taken into account in data presentation and interpretation.

5. Conclusions and Recommendations

5.1 Conclusions

- No correlation was found between the solution gas flaring activities and the rates of physician claims or hospitalizations for the respiratory disorders investigated. This was the conclusion regardless of the measure of health outcomes, the rural-urban status, ethnicity, or age.
- The limitations of this study are such that site specific situations or any localized impacts smaller than the postal code area may not be detected here.
- Overall, the number of physician claims per 100,000 population for selected respiratory disorders during 1994-96 was the highest for upper respiratory infections (60,316), followed by asthma (8,717), bronchitis (3,883), and pneumonia (3,116). The pattern of hospitalization rate was different, with asthma being the highest (428), pneumonia the second (397), upper respiratory infections the third (339), and bronchitis the lowest (119).
- In general, the rate of physician claims for the respiratory disorders in Aboriginal people was higher than the non-Aboriginal population, especially in the rural area. The differences were most pronounced for bronchitis and pneumonia.

- The rural-urban variations for the disorders examined depended on the ethnicity and disease group studied. The rate in the rural area was higher for bronchitis, particularly in Aboriginal people; but was lower for asthma. For pneumonia and upper respiratory infections, the rate in the rural area was higher among Aboriginal people, but lower or the same among the non-Aboriginal population.

5.2 Recommendations

- Measurement of the actual personal exposure to the air pollutants of concern is the recommended method to quantify exposure.
- Identification of bio-markers of exposure and effect reflective of the compounds of interest is an important area for further development.
- Extending the period of observation to increase the persons time at risk is important to address the issue of small numbers. Including other health outcome/flare activity measures, such as incidence, prevalence, and cumulative exposure.
- Development of a responsive and comprehensive geographic information database that allows the data linkage at all geographic levels for different periods of time.

- Continuing monitoring the human health status and the gas flaring activities in the province, focusing on the areas with high flaring discharge and/or health outcomes. If community concerns persist, community studies including personal exposure monitoring may be considered.

6. References

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Appendix I Study Data Set

Postal Code	Postal Code Name	Postal Code Information				Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis				
		Latitude	Longitude	Area km2	Flaring Vol. 1000m3/m2/yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits
TOA0A0	ABEE	-113.03000	54.23300	307	0.09	169	135	80060	11	3545	85	54522	1	268	3	2020	2	885	13	6415	0	119	5	3392	15	334
TOA0B0	ARDMORE	-110.48000	54.33300	236	3.98	765	474	61882	23	2887	318	41717	2	260	15	1892	5	597	50	6601	2	200	27	3500	0	0
TOA0C0	ASHMONT	-111.57000	54.13300	155	0.05	668	404	59799	37	4592	210	33032	3	394	20	2686	7	878	44	7023	4	687	30	4390	3	141
TOA0E0	ATMORE	-112.55000	54.81700	282	0.13	303	195	62594	11	3429	105	32636	1	339	13	4241	3	961	10	3274	0	97	19	7061	1	71
TOA0G0	BEAVER CROSSING	-110.20000	54.36700	128	0.92	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA0H0	BEAVERDAM	-110.30000	54.20000	707	10.30	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA0I0	BELLIS	-112.15000	54.15000	584	0.18	243	156	61107	5	1674	105	42963	1	300	6	2646	1	516	7	2274	0	0	11	4062	2	133
TOA0K0	BON ACCORD	-113.40000	53.83300	137	29.27	2306	1973	84405	46	2161	1348	56412	5	184	59	2933	8	431	193	8253	13	585	98	4429	2	238
TOA0L0	BONNVILLE	-110.75000	54.26700	241	2.67	49	10	22047	0	0	6	13710	0	0	0	610	0	0	2	3734	0	0	1	1491	4	302
TOA0M0	BOYLE	-112.80000	54.60000	350	1.23	2531	2347	91064	146	4659	1555	62629	34	1277	96	3086	36	1056	175	6888	20	701	163	5795	1	303
TOA0N0	BOYNE LAKE	-111.68333	54.23333	174	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA0P0	BREYNAT	-112.50000	55.10000	1026	0.07	134	82	59169	4	2310	39	30855	0	315	1	625	1	372	7	4839	1	379	13	8174	0	170
TOA0R0	CASLAN	-112.52000	54.63300	600	0.51	560	919	161279	77	12829	579	100302	25	3800	47	7811	19	3111	42	7476	8	1374	70	12419	66	894
TOA0S0	CHARD	-110.91666	55.83333	5754	0.07	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA0T0	CHERRY GROVE	-110.08000	54.35000	231	0.72	317	175	53913	5	1529	110	33278	1	471	6	1989	1	165	17	5362	1	398	17	5361	0	36
TOA0V0	COLD LAKE	-110.33370	54.45710	1070	6.98	825	548	65844	30	3657	274	32402	4	454	31	3707	5	605	44	5151	4	434	97	12193	0	76
TOA0V1	COLD LAKE	-110.19120	54.47000	1787	0.03	915	541	57505	20	2868	299	29004	4	289	13	1307	2	252	53	5513	4	392	39	4542	4	242
TOA0V2	COLD LAKE	-110.23280	54.45830	40	0.38	791	478	57951	23	2742	264	31535	2	195	18	2016	3	307	40	4690	1	153	49	6823	5	304
TOA0V3	COLD LAKE	-110.19120	54.47000	1787	0.00	996	565	53169	24	2721	320	28924	2	220	16	1619	4	490	49	4270	3	308	62	7189	2	315
TOA0V4	COLD LAKE	-110.19120	54.47000	1787	0.00	560	379	64976	15	3712	200	32405	2	337	11	2107	1	117	43	6093	3	366	36	7960	1	393
TOA0W0	CONKIN	-111.08000	55.63300	8150	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA0X0	CORONADO	-113.30000	53.88333	87	0.65	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA0Y0	DONATVILLE	-112.80000	54.75000	530	0.09	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA0Z0	EGREMENT	-113.22000	54.00000	257	0.00	197	159	80147	7	2334	113	60197	1	565	3	1231	1	179	16	7085	0	116	3	1275	1	257
TOA1A0	ELK POINT	-110.90000	53.90000	614	15.68	2604	1952	73166	120	3672	1425	54824	17	581	75	2461	23	615	159	5998	18	680	37	1437	0	0
TOA1B0	ELLSMITH	-112.90000	54.50000	527	0.42	42	17	42358	1	1987	11	29422	1	1495	1	4901	0	0	1	540	0	0	1	2479	0	0
TOA1C0	EMBARRAS PORTAGE	-111.46667	54.85000	16161	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA1E0	FOJIS	-111.58334	53.88333	172	0.10	175	180	104988	11	6140	136	77767	1	698	7	3949	4	2017	7	4127	1	399	11	7020	0	0
TOA1G0	FORT CHIPEWYAN	-111.15000	58.71700	26461	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA1H0	FORT KENT	-110.60000	54.31700	200	13.97	347	281	78229	12	3105	200	56009	1	347	7	1809	2	465	37	10050	2	544	7	1846	0	95
TOA1I0	FORT MACKAY	-111.61667	57.18333	15631	0.00	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA1K0	FORT MCMURRAT LAKE	-111.38333	56.73333	3733	0.01	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA1L0	FRANCHERE	-111.03333	54.26667	234	0.20	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA1M0	FROG LAKE	-110.41666	53.83333	210	65.17	900	1650	183604	168	16983	1294	141097	33	2903	138	18450	50	6253	103	11235	34	2714	23	3438	0	0
TOA1N0	GIBBONS	-113.33000	53.83300	104	1.06	4599	5033	107553	136	3361	3647	76294	15	311	182	4273	27	673	439	9259	27	585	159	3994	0	0
TOA1P0	GLENDON	-111.15000	54.25000	164	0.25	1273	926	70124	72	4426	442	36305	6	409	121	8260	15	985	74	5168	6	435	73	4966	0	313
TOA1R0	GOODFISH LAKE	-111.83334	54.30000	323	0.00	931	1850	186460	69	7693	1073	109147	17	1564	98	16302	16	1868	20	2481	4	383	238	26659	0	0
TOA1S0	GOODRIDGE	-111.36667	54.38333	506	0.21	67	48	74449	3	5020	15	25334	0	605	6	8739	0	523	1	2058	0	0	4	5381	0	0
TOA1T0	GRAND CENTRE	-110.33370	54.45710	1070	0.00	3099	2169	68681	137	4975	1261	38527	27	810	123	4019	25	849	186	5642	14	422	268	9453	0	0
TOA1T1	GRAND CENTRE	-110.22580	54.41450	34	0.00	498	371	74473	15	3647	226	42823	3	458	7	1547	2	655	45	8403	3	486	22	5194	4	150
TOA1T2	GRAND CENTRE	-110.22580	54.41450	34	1.91	553	416	76548	19	4703	219	39743	1	294	28	4502	3	624	64	10733	2	263	22	5378	2	330
TOA1T3	GRAND CENTRE	-110.22580	54.41450	34	0.00	504	318	63485	17	3431	187	37723	4	705	13	2554	4	742	32	6312	2	363	30	5713	0	0
TOA1T4	GRAND CENTRE	-110.22580	54.41450	34	0.00	847	510	58675	22	2794	306	34743	2	239	15	1720	2	245	57	6504	4	444	42	5180	0	24
TOA1T5	GRAND CENTRE	-110.22580	54.41450	34	0.00	676	486	63084	12	2004	315	39640	6	704	10	1328	1	308	57	6670	1	83	22	3721	9	1846
TOA1V0	GRASSLAND	-112.68000	54.81700	541	0.14	349	170	50101	9	2824	95	28340	0	113	5	1531	1	400	9	2714	1	415	21	6014	0	56
TOA1W0	GURNEYVILLE	-110.75000	54.13333	475	2.44	170	125	70873	11	7055	96	52294	2	1199	8	5290	4	2695	7	4203	0	312	1	761	0	0
TOA1X0	HEINSBURG	-110.42000	53.76700	274	34.16	496	488	98178	20	3736	389	79212	5	949	21	3706	5	795	21	3856	2	444	12	2484	1	349
TOA1Y0	HOSELAW	-110.90000	54.18333	290	0.75	128	100	73946	7	4466	72	53975	3	2049	3	1781	0	205	16	10406	2	1027	1	523	0	0
TOA1Z0	HYLO	-112.22000	54.68300	473	0.15	151	119	74040	7	3312	51	38005	0	0	9	4403	2	1221	5	2023	1	385	18	10887	0	0
TOA2A0	IRON RIVER	-110.91666	54.45000	1622	0.07	300	182	61326	9	2646	115	40228	1	228	6	1811	1	244	36	11519	2	554	5	1037	0	62
TOA2B0	KIKINO	-112.10000	54.45000	949	0.06	116	164	112470	8	6879	89	64125	0	217	3	1838	1	1430	6	4141	0	217	31	27233	2	98
TOA2C0	LAC LA BICHE	-111.97000	54.76700	2661	0.26	7612	9421	119753	477	6313	4592	56458	76	909	245	3201	72	926	700	9079	87	1128	1413	18358	2	493
TOA2E0	LA COREY	-110.77000	54.45000	1352	43.55	279	145	51160	9	2412	92	33906	1	157	12	3306	3	827	9	2857	0	81	6	1785	2	239
TOA2G0	LAFOND	-111.47000	53.88300	289	0.10	150	101	69131	5	3532	57	40061	1	856	5	3263	2	1077	13	8926	0	0	7	4725	1	66
TOA2H0	LANCASTER PARK	-113.48333	53.66667	68	0.38	1234	844	52304	15	925	532	32380	3	148	22	1923</										

Postal Code	Postal Code Name	Postal Code Information					Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis			
		Latitude	Longitude	Area km ²	Flaring Vol. 100m ³ /km ² /yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits
TOA3B0	ST VINCENT	111.28000	54.15000	198	0.01	294	178	56219	9	3071	93	28381	0	78	33	3114	1	528	25	7070	2	506	14	4807	0	0
TOA3C0	SMOKY LAKE	112.47000	54.11700	596	0.19	2174	1514	72238	82	2828	892	46279	6	340	91	3077	16	519	137	6261	11	459	128	5050	15	116
TOA3E0	SPEDDEN	111.72000	54.13300	145	0.04	724	1004	136852	49	6172	684	94600	13	1590	45	5917	10	1212	26	3377	4	585	98	13580	2	269
TOA3G0	SPUTINOW	110.27000	53.91700	719	0.26	217	230	101222	12	6415	186	79690	2	698	10	5041	5	3084	7	3343	1	628	3	1517	1	114
TOA3H0	THORHILL	111.25000	54.23300	104	0.18	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA3I0	TULLIBY LAKE	113.13000	54.15000	339	0.12	1588	1275	78367	85	3722	746	50693	8	517	71	3596	14	620	128	8185	10	560	49	2600	0	0
TOA3L0	VILNA	110.20000	53.71700	531	1.96	111	75	63399	1	802	47	41774	0	0	1	1043	0	138	8	7599	0	243	9	6691	4	179
TOA3M0	WANDERING RIVER	111.92000	54.11700	233	0.10	1268	1060	84924	68	3923	627	52787	13	740	83	4853	8	415	50	4014	11	758	153	10994	2	254
TOA3N0	WARSPITE	112.40000	55.20000	5228	0.05	294	204	70085	19	7043	97	33008	3	1152	3	1089	3	969	23	7407	3	837	27	10082	3	481
TOA3P0	WASKATENA	112.62000	54.10000	344	0.08	168	109	69359	10	5827	76	52683	1	605	3	1917	1	777	8	4332	2	1123	8	3377	0	0
TOA3Q0	WASKATENA	112.78000	54.10000	314	0.09	871	733	86274	52	3962	459	59116	6	569	33	3567	8	725	79	8330	10	876	34	3278	1	136
TOA3R0	FORT MCMURRAY S	111.36510	56.72530	2968	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA3S0	FORT MCMURRAY S	111.36510	56.72530	2968	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA3T0	SADDLE LAKE	111.66666	54.01667	165	0.03	1620	3399	214850	136	9104	2660	167967	42	2387	114	7532	34	2106	104	5876	15	808	164	12037	0	0
TOA3U0	MILDRED LAKE	110.45000	52.90000	553	7.38	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA3V0	ST PAUL SUB 1	111.30760	53.99580	170	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOA3X0	ST PAUL SUB 2	111.30760	53.99580	170	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOB0A0	ALLIANCE	111.78000	52.43300	695	35.44	627	585	89078	31	4085	347	54466	7	1081	26	3274	6	732	65	9900	5	724	50	7292	1	99
TOB0B0	AMISK	111.07000	52.56700	519	1.49	420	285	62903	31	5935	143	33268	6	1201	6	1042	3	601	40	8848	9	1754	36	8132	0	0
TOB0C0	ANDREW	112.33000	53.88300	384	0.14	1292	946	74201	82	3994	611	52519	18	954	50	2093	12	546	77	56219	14	871	56	4014	0	0
TOB0E0	ARDROSSAN	113.13000	53.53300	199	0.13	4955	4349	87766	58	1413	3068	61733	8	158	98	2064	7	172	451	9028	12	268	116	2429	1	1469
TOB0G0	ARMENA	112.95000	53.11700	211	1.14	120	75	54723	3	3846	54	37839	1	629	3	2827	0	0	9	6693	1	478	4	3013	0	0
TOB0H0	BASHAW	112.97000	52.58300	495	2.41	1824	1478	82931	71	3032	903	53437	7	381	61	2173	13	416	172	9478	15	924	61	2906	0	111
TOB0I0	BAWLF	112.47000	52.91700	324	0.11	800	683	82795	6	4003	486	59455	6	707	23	2681	7	813	37	4001	5	508	22	2631	5	406
TOB0K0	BEAUVALLON	111.37000	53.66700	236	0.00	162	122	77042	9	4460	70	50469	2	1326	12	4356	2	820	3	1865	1	414	22	12498	1	1489
TOB0L0	BLACKFOOT	110.17000	53.28300	309	15.40	496	241	47717	2	265	168	33241	0	0	8	1392	1	106	14	2911	0	0	19	3818	21	2642
TOB0M0	BODO	110.08000	52.15000	508	52.49	140	48	30267	5	3402	35	22091	1	850	3	2158	1	836	2	1517	1	418	1	447	0	0
TOB0N0	BREMNER	113.25000	53.56667	74	0.04	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOB0P0	BROSSEAU	111.68333	53.78333	245	0.06	121	73	55095	3	2029	40	34512	0	317	1	546	0	137	3	1762	1	410	8	6464	0	0
TOB0R0	BRUCE	112.03000	53.18300	580	0.16	301	197	56742	18	4642	98	31997	3	953	30	5218	2	285	9	3071	2	649	12	3748	1	244
TOB0S0	BRUDERHEIM	112.93000	53.80000	328	35.34	1770	1498	83175	47	2639	1017	56088	5	261	55	3088	6	359	141	7725	8	439	52	2991	1	240
TOB0T0	CADOGAN	110.45000	52.31700	578	34.31	311	181	58868	11	2994	129	42206	2	450	7	1986	1	457	18	5964	3	840	7	2118	1	112
TOB0V0	CHAUVIN	110.15000	52.70000	303	28.66	903	508	54455	22	2261	343	36771	4	379	13	1387	4	386	38	3878	2	254	19	2028	0	0
TOB0W0	CHIPMAN	112.63000	53.70000	503	0.12	492	388	78622	22	3430	248	52957	3	564	13	2079	3	378	33	7217	3	527	28	5150	0	49
TOB0X0	CLANDONALD	110.72000	53.56700	437	3.11	466	229	48138	12	2365	158	33275	3	592	11	2435	2	453	20	3998	2	447	4	929	0	0
TOB0Y0	COOKING LAKE	113.05333	53.43333	151	0.20	223	179	83169	5	2105	120	57817	1	495	7	2997	0	195	20	8208	0	0	9	3568	1	62
TOB0Z0	CZAR	110.83000	52.45000	662	9.22	534	331	61462	27	3864	216	41752	4	635	13	2494	4	593	27	5510	2	445	29	4772	2	57
TOB1A0	DAYS LAND	112.27000	52.86700	392	0.22	1525	1387	89864	86	4686	986	65810	13	877	38	2186	11	639	122	7442	11	621	19	1125	0	106
TOB1B0	DENWOOD	110.88333	52.81667	112	0.61	475	245	40699	4	511	216	36302	2	240	5	896	0	32	10	1554	0	0	4	641	1	335
TOB1C0	DERWENT	110.97000	53.65000	565	10.26	411	282	68596	19	2517	168	45649	2	345	11	1951	3	332	12	2533	1	177	20	2952	3	203
TOB1E0	DEVILLE	112.91666	53.45000	252	0.03	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOB1G0	DEWBERRY	110.52000	53.58300	217	4.69	744	459	60369	21	2255	290	38857	4	541	18	2305	4	465	42	5215	2	221	27	3230	0	378
TOB1H0	DONALD	112.57000	52.58300	390	0.13	814	563	66752	39	3748	386	48080	5	562	22	2090	8	719	36	3782	3	287	41	3924	9	1446
TOB1J0	EDBERG	112.78000	52.78300	214	0.09	440	288	62638	12	2163	164	38060	1	219	17	4170	3	730	19	3486	2	313	31	5704	0	0
TOB1K0	EDGERTON	110.47000	52.76700	278	2.29	1033	544	51595	41	3335	416	40337	8	740	36	3020	9	740	32	2837	6	509	21	1752	0	0
TOB1L0	FABYAN	111.00000	52.88300	510	3.44	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOB1M0	FERINTOSH	112.97000	52.76700	411	1.62	543	354	63480	17	2594	237	44062	2	352	11	2057	2	362	22	3863	2	341	30	4786	0	0
TOB1N0	FORESTBURG	112.05000	52.58300	400	3.80	1491	1605	108530	114	6413	1205	82642	26	1666	55	3291	27	1522	119	8204	11	616	71	4424	13	720
TOB1P0	FORT SASKATCHEW	113.21667	53.71667	321	0.17	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOB1R0	GALAHAD	111.93000	52.51700	396	13.60	427	478	112218	34	6436	327	78680	10	2220	11	1870	4	757	31	8070	2	448	28	6097	4	356
TOB1S0	HAIRY HILL	111.96667	53.76667	377	0.16	263	158	65054	8	2719	91	38793	1	590	6	1948	1	395	19	6782	1	312	21	8655	0	0
TOB1T0	HAMLIN	111.90000	53.96667	326	0.06	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOB1V0	HARDISTY	111.30000	52.66700	674	7.25	1304	1059	78397	82	5529	482	36583	12	825	60	4264	14	890	151	11724	20	1467	173	13043	0	0
TOB1W0	HAY LAKES	113.05000	53.20000	270	4.52	863	601	68476	18	2025	370	41923	3	304	28	3263	6	649	40	4306	4	406	32	3637	2	188
TOB1X0	HAYTER	110.12000	52.35000	412	8.15	294																				

Postal Code	Postal Code Name	Postal Code Information				Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis					
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T0B2V0	MCLAUGHLIN	110.17000	52.98300	298	0.11	134	75	47799	69	448	42	30973	0	0	10	6847	0	0	96	2959	0	0	6	2544	1	157	
T0B2Z0	MEETING CREEK	112.73000	52.68300	282	0.18	271	192	70051	7	2567	139	50852	2	554	14	5263	2	537	14	4358	1	342	13	4987	0	83	
T0B3A0	METISKOW	110.63000	52.41700	601	7.04	171	95	55522	12	6344	59	35505	3	1630	4	2317	2	949	5	3241	0	0	4	1989	0	0	
T0B3B0	MINBURN	111.37000	53.31700	489	2.68	377	375	95406	34	7902	248	64985	13	3262	18	4191	8	1887	7	1756	1	281	62	14422	9	1361	
T0B3C0	MIRROR	113.12000	52.46700	251	1.76	689	488	70369	22	2392	313	47136	3	371	13	1334	6	550	49	6992	3	296	41	5256	0	0	
T0B3E0	MORECAMBE	111.46667	53.66666	342	0.11	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T0B3G0	WAINWRIGHT MPO	110.86667	52.81667	99	0.34	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T0B3H0	MUNDARE	112.35000	53.60000	491	0.27	1378	1267	94999	69	3185	670	56661	6	398	54	2719	9	354	103	7300	16	739	149	10729	0	0	
T0B3I0	MUSIDORA	111.37000	53.66700	236	0.13	34	11	23133	2	2480	5	15669	0	522	1	915	1	1052	0	1824	0	0	1	1757	1	90	
T0B3K0	MYRNA	111.23000	53.66700	466	0.11	664	701	99704	76	7041	319	56303	16	1939	46	3741	15	1233	48	6391	6	855	135	13459	1	294	
T0B3L0	NEW NORWAY	112.95000	52.86700	264	3.72	1096	706	62308	23	2005	463	40700	4	294	29	2552	5	389	43	3704	1	75	65	5471	0	0	
T0B3M0	NEW SAREPTA	113.15000	53.26700	187	11.50	1937	1607	81713	43	2215	1053	53352	3	157	61	3037	5	228	203	10325	11	544	61	3138	2	341	
T0B3N0	NORTH COOKING LA	112.95000	53.46700	176	0.19	73	54	74145	3	4352	42	57274	0	478	1	956	0	610	7	9934	0	0	2	2725	0	0	
T0B3P0	OHATON	112.67000	52.96700	272	0.11	581	454	78371	16	2430	292	51599	2	330	18	2807	2	241	42	6750	3	453	41	6697	0	159	
T0B3R0	PARADISE VALLEY	110.30000	53.03300	594	4.45	582	330	51847	7	1151	192	31380	0	52	10	1681	1	86	19	3229	1	111	35	5469	0	0	
T0B3S0	PROVOST	110.27000	52.35000	405	34.84	2800	1255	44013	76	2111	902	32485	10	337	49	1626	12	318	89	3001	9	268	39	1254	0	0	
T0B3T0	RANFURLY	111.68000	53.40000	401	0.12	223	165	79320	7	2491	93	45517	1	240	7	2168	1	495	16	9069	0	85	19	8622	1	119	
T0B3V0	RED WILLOW	112.57000	52.45000	418	1.19	53	33	70566	2	3003	21	50040	1	348	1	2090	0	1045	6	8340	0	429	3	7068	6	412	
T0B3W0	RIBSTONE	110.27000	52.70000	450	12.61	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T0B3X0	RIVERCOURSE	110.05000	53.01700	231	13.20	168	83	53303	0	195	62	40238	0	195	2	952	0	0	3	1964	0	0	6	3995	0	0	
T0B3Y0	ROSALIND	112.43000	52.78300	271	0.50	520	384	70022	26	4146	282	51385	2	406	8	1441	1	212	39	6782	6	938	21	2696	1	98	
T0B3Z0	ROUND HILL	112.62000	53.16700	388	0.05	231	225	95814	13	5307	144	62071	3	1130	7	3268	1	279	11	5080	1	649	24	9451	4	190	
T0B4A0	RYLEY	112.42000	53.30000	434	0.00	1048	848	78311	77	5667	548	53307	8	772	30	2346	6	511	50	5112	5	471	50	4062	0	0	
T0B4B0	ST MICHAEL	112.63000	53.83300	241	0.67	408	226	60838	8	1699	161	46982	1	406	7	1060	2	409	20	4566	0	0	12	2207	0	0	
T0B4C0	SEDGEWICK	111.68000	52.76700	324	0.62	1501	1826	106604	102	5006	1147	70940	30	1507	69	4029	13	691	125	7980	9	558	38	2130	2	422	
T0B4E0	STAR	112.78000	53.81700	180	9.05	264	158	56394	6	1709	95	38387	1	199	7	1523	1	222	16	5102	1	446	8	2920	9	279	
T0B4G0	STREAMSTOWN	110.18000	53.43300	367	1.00	118	73	61376	1	434	56	47259	0	0	1	546	0	0	2	1876	0	0	6	5012	5	138	
T0B4H0	STROME	112.07000	52.81700	423	0.02	615	489	75754	35	5068	330	53240	8	1262	13	1984	2	311	32	4493	8	1035	12	1574	0	0	
T0B4I0	TOFIELD	112.67000	53.26700	462	0.04	4903	4404	88949	333	5923	2971	61375	49	1010	194	3653	43	799	270	5514	40	797	159	3100	0	0	
T0B4K0	TWO HILLS	111.75000	53.70000	361	0.05	1991	1429	70834	114	3558	801	44527	13	612	56	2155	12	449	99	4495	15	420	136	6760	1	40	
T0B4L0	VEGREVILLE	112.07000	53.50000	331	0.14	53	22	40759	2	2165	6	11466	0	0	4	10170	0	159	7	11042	1	1064	2	2843	2	607	
T0B4M0	VERMILLION	110.85000	53.35000	422	0.83	5075	3923	76838	209	4477	2595	52051	43	804	163	2651	40	618	284	5523	28	516	197	3456	0	0	
T0B4N0	VIKING	111.77000	53.10000	686	0.14	2311	1424	62396	140	3741	758	53238	26	1110	137	5100	25	897	127	6269	11	568	64	2203	0	0	
T0B4P0	WAINWRIGHT	110.85000	52.83300	7	92.29	3763	2424	62953	177	3954	1793	46990	42	942	84	2078	24	544	165	4306	17	440	135	3307	1	43	
T0B4R0	WILLINGDON	112.12000	53.83300	343	0.16	900	845	95961	71	5285	502	62648	25	1835	41	3136	8	518	81	9540	8	1098	75	7994	2	424	
T0B4S0	WOSTOK	112.47000	53.83300	251	0.00	39	34	92430	0	0	18	52462	0	0	3	4418	0	0	2	3964	0	0	5	12815	1	257	
T0B4T0	WAINWRIGHT MPO	110.96450	52.83550	187	7.13	11	9	75314	1	7870	9	75314	1	5247	0	0	0	2623	0	0	0	0	0	0	0	3	109
T0B4V0	WAINWRIGHT SUB 1	110.85570	52.83170	2	0.90	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T0B4W0	VERMILLION SUB 1	110.85740	53.34940	491	2.02	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T0B4X0	VEGREVILLE SUB 1	112.05900	53.49760	224	0.29	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T0B4Y0	WAINWRIGHT M.P.O	110.84270	52.83200	198	52.42	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T0B4Z0	WAINWRIGHT M.P.O	110.86550	52.83700	100	41.64	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T0C0A0	ALDER FLATS	114.95000	52.93300	1210	4.82	688	492	72600	21	2996	363	53932	5	774	9	1358	3	365	36	5341	5	649	24	2976	0	0	
T0C0B0	ALIX	113.18000	52.40000	214	12.95	1510	938	61092	60	3433	573	38848	9	562	46	2420	9	479	108	6945	10	685	94	5484	0	0	
T0C0C0	ALSIKE	114.48333	53.18333	122	14.49	134	102	75740	2	1545	60	45041	0	0	3	2585	1	831	14	9783	1	470	12	8740	0	0	
T0C0E0	ALTARIO	110.17000	51.91700	452	4.71	175	118	67818	4	2144	77	46370	1	754	2	1450	1	307	15	6612	1	380	2	727	0	0	
T0C0G0	ASPEN BEACH	113.93333	52.45000	203	19.80	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T0C0H0	BEAUMONT	113.42000	53.35000	103	0.33	108	68	60283	1	522	50	44515	0	0	0	284	0	0	7	6389	0	261	1	607	1	134	
T0C0I0	BENTLEY	114.05000	52.46700	340	10.64	2277	2072	88691	55	2044	1452	62958	6	232	79	3201	9	347	215	9092	5	183	68	2644	5	438	
T0C0K0	BERRYMOOR	117.50000	53.28333	704	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T0C0L0	BITTERN LAKE	113.05000	53.00000	200	0.54	403	217	53519	13	2835	156	38494	1	316	9	2588	1	334	9	2310	1	177	13	3059	0	0	
T0C0M0	BLUFFTON	114.28000	52.75000	728	12.98	1549	747	48177	39	2284	470	30773	6	346	34	1963	8	466	71	4620	6	383	73	4575	0	36	
T0C0N0	BOTHA	112.52000	52.30000	312	15.74	434	346	77919	14	2904	249	56355	2	349	10	2120	3	552	28	6667	1	256	20	4117	0	0	
T0C0P0	BRETON	114.47000	53.11700	263	12.74	1567	1223	75767	44	2452	757	48992	9	527	58	3299	13	728	134	7746	5	342	67	3273	1	1064	
T0C0R0	BROWNFIELD	111.58000	52.23300	762	9.26	129	113	89273	2	1794																	

Postal Code	Postal Code Name	Postal Code Information				Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis				
		Latitude	Longitude	Area km2	Flaring Vol. 1000m3/km2/yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits
TOC1R0	KIRRIEMUIR	-110.32000	51.91700	406	0.00	113	116	97372	3	2752	86	72507	1	589	2	1509	1	629	5251	0	0	0	0	0	0	0
TOC1S0	LACOMBE	-113.72000	52.46700	106	3.60	10166	7567	72817	318	2673	4404	42907	53	456	363	3231	66	544	723	6868	38	343	950	8932	4	234
TOC1T0	LAKEDBELL	-114.06667	52.96667	175	42.12	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOC1V0	LEDUC LCD	-113.54720	53.27530	158	8.94	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOC1W0	LINDALE	-114.60000	53.25000	241	22.11	254	150	57258	8	2762	103	41058	4	1409	5	1378	1	275	9	3978	1	549	5	1610	14	199
TOC1X0	MA-ME-O BEACH	-113.97000	52.96700	131	4.67	555	746	134770	49	8144	562	100281	22	3405	46	8062	13	2186	46	8196	5	766	24	4913	0	0
TOC1Y0	MENAIAK	-113.51667	52.75000	363	3.24	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOC1Z0	MILLET	-113.47000	53.10000	275	0.23	4794	4117	84176	128	2850	2727	54795	20	383	147	3126	26	563	458	9332	17	361	191	4301	0	0
TOC2A0	MONITOR	-110.57000	51.98300	599	11.23	86	72	81482	12	7980	37	44463	1	1509	4	2765	2	1193	5	3185	1	542	2	1915	0	99
TOC2B0	MORNINGSIDE	-113.63000	52.58300	325	6.65	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOC2C0	MULHURST	-113.98333	53.05000	321	10.22	222	202	87770	8	2691	89	49686	0	0	18	4834	2	410	32	9918	1	155	17	4585	1	95
TOC2E0	NEVIS	-113.03000	52.33300	188	6.97	69	48	53059	3	1982	29	36461	1	222	4	2089	0	111	5	4424	0	0	3	1625	0	0
TOC2G0	NISKU	-113.53000	53.33300	76	0.00	317	242	79427	6	2023	133	42122	1	230	6	1888	0	0	66	22665	5	1618	13	4233	0	0
TOC2H0	PONOKA	-113.58000	52.68300	231	4.20	2203	2175	95515	109	3742	1579	71248	14	567	125	4538	35	1179	234	10344	8	288	67	2386	6	139
TOC2I0	RIMBEY	-114.23000	52.63300	692	13.95	4828	2903	58929	193	2860	1682	35645	24	431	131	2371	30	419	271	5566	18	373	285	5375	0	26
TOC2K0	ROLLY VIEW	-113.32000	53.25000	220	0.10	416	290	69361	6	1483	206	48573	1	228	8	1891	1	222	28	6853	1	218	9	2268	1	60
TOC2L0	STETTLER	-112.95510	52.33280	141	5.70	4298	3106	71815	145	2913	2180	51471	22	471	75	1554	23	468	236	5266	14	327	213	4557	0	0
TOC2L1	STETTLER	-112.74130	52.32610	105	7.96	2271	2054	88410	90	3282	1415	62187	18	755	50	1938	10	343	150	6258	8	335	139	5519	0	0
TOC2L2	STETTLER	-112.72940	52.31370	119	14.41	1305	1195	87317	89	4233	790	64007	11	883	42	2059	14	559	72	3894	5	382	99	5626	11	271
TOC2M0	SUNNYBROOK	-114.17000	53.26700	352	0.30	220	119	57071	5	1696	75	37680	1	497	9	4093	0	96	11	5254	0	209	6	2626	1	205
TOC2N0	TEES	-113.32000	52.46700	295	14.50	541	335	62180	10	1649	200	37209	2	340	9	1645	2	373	29	5204	0	77	28	5192	6	149
TOC2P0	THORSBY	-114.05000	53.23300	302	4.19	2966	2238	75542	84	2225	1379	49197	8	245	125	3847	24	598	253	8108	12	396	96	2724	1	241
TOC2R0	THRONE	-111.28333	52.05000	671	4.42	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOC2S0	VETERAN	-111.12000	52.00000	927	16.29	756	546	68979	42	4409	330	43519	7	831	29	3179	8	747	54	6939	3	450	11	1378	3	249
TOC2T0	WARBURG	-114.32000	53.18300	268	5.60	1806	1155	63849	56	2426	775	43796	9	435	51	2514	12	443	93	5040	5	276	42	1975	0	0
TOC2V0	WESTEROSE	-114.07000	52.91700	394	14.58	1035	685	66656	38	3028	399	42708	7	831	21	1787	5	399	86	7431	9	723	49	3958	0	176
TOC2X0	WINFIELD	-114.43000	52.96700	522	12.91	1108	627	53215	40	2579	344	31472	5	358	30	2312	6	348	36	3142	3	289	42	2801	1	91
TOC2Y0	LACOMBE SUB 1	-113.75300	52.47400	97	3.96	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOC2Z0	STETTLER SUB 1	-112.72570	52.32560	68	0.38	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOC3A0	PONOKA SUB 1	-113.57630	52.67680	167	1.57	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOE0A0	ALBERTA BEACH	-114.35000	53.68300	173	0.34	1559	1260	80241	44	2121	796	54100	4	218	48	2253	6	263	129	8192	5	267	90	4673	4	184
TOE0B0	BLUE RIDGE	-115.37000	54.13300	527	2.00	466	363	77348	19	3902	250	53257	3	565	24	4911	4	724	28	5914	2	434	17	3676	1	93
TOE0C0	BRULE	-117.87000	53.28300	701	0.00	189	117	60071	4	1949	83	42780	1	395	2	789	0	0	20	9829	1	326	2	954	1	121
TOE0E0	CADOMIN	-117.33000	53.03300	3476	0.00	104	88	89881	2	1852	56	57526	0	229	1	1255	0	0	15	14405	0	0	2	1826	1	244
TOE0G0	CARROT CREEK	-115.85000	53.61667	859	10.62	329	183	53450	9	2556	103	30461	1	173	15	4089	2	485	8	2501	0	0	24	6920	1	383
TOE0H0	CARVEL	-114.21667	53.53333	269	0.57	2618	1996	76642	40	1935	1490	55240	5	189	86	4657	7	359	173	6539	10	377	39	1806	0	0
TOE0I0	CHERHILL	-114.67000	53.90000	124	1.09	570	335	56401	17	2145	195	36483	2	327	23	3679	3	380	44	6625	3	313	29	4226	0	0
TOE0K0	CYNTHIA	-115.15000	53.13300	331	9.05	48	51	95263	2	3224	35	66700	0	0	2	2689	0	0	4	3575	0	1122	0	513	0	0
TOE0L0	DARWELL	-114.82220	53.77350	139	1.30	539	372	68029	11	1403	270	51533	0	67	25	3677	3	419	30	4931	2	271	10	1622	0	14
TOE0M0	DRAYTON VALLEY	-114.98000	53.21700	82	1.85	8094	7753	93728	225	3069	5545	66084	51	638	146	2016	45	648	706	8607	33	426	294	3704	0	0
TOE0N0	DUFIELD	-114.33000	53.53300	208	2.87	2094	2496	112318	78	3782	2026	90059	14	507	140	6404	30	1342	123	5409	8	395	41	2054	2	65
TOE0P0	EDSON	-116.45000	53.58300	1516	5.94	123	25	21278	0	0	16	13193	0	0	1	694	0	0	1	985	0	0	4	3749	0	53
TOE0R0	ENTRANCE	-117.68333	53.36667	825	0.01	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOE0S0	ENTWISTLE	-115.00000	53.60000	152	0.70	927	803	87294	32	2776	554	61935	4	444	33	3071	9	713	90	9507	6	580	25	2343	2	341
TOE0T0	EVANSBURG	-115.02000	53.60000	197	4.37	1706	1446	85661	57	2301	1073	65881	8	387	60	2732	13	433	142	7710	6	313	33	1535	0	0
TOE0V0	FALLS	-114.58000	53.56700	170	0.16	359	224	52757	10	1252	126	36953	0	148	24	3238	2	188	12	3223	1	69	34	4158	0	0
TOE0W0	GAINFORD	-114.78000	53.58300	122	3.60	187	110	56593	9	4236	67	37309	1	919	6	2800	1	431	13	6082	1	357	8	2741	0	0
TOE0X0	GLENEVIS	-114.57000	53.83300	374	22.22	929	2274	249085	49	5057	1826	196585	12	923	134	15753	24	2252	76	7711	4	358	26	3531	2	369
TOE0Y0	GRANDE CACHE	-119.13000</																								

Postal Code	Postal Code Name	Postal Code Information				Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis				
		Latitude	Longitude	Area km2	Flaring Vol, 1000m3/km2/yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits
TOE2G0	STONY PLAIN	-114.00000	53.53300	200	3.82	8328	6827	81133	149	1789	5100	60365	14	154	246	2948	29	340	568	6769	28	327	179	2229	0	0
TOE2H0	TOMAHAWK	-114.77000	53.40000	327	8.50	636	447	71989	139	1950	283	47044	2	362	18	2605	4	570	54	8421	1	139	22	3471	0	0
TOE2J0	VIOLET GROVE	-115.03333	53.16667	124	9.79	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOE2K0	WABAMUN	-114.47000	53.56700	85	0.00	1345	928	68176	42	2704	603	45514	2	136	43	2855	9	594	99	7086	7	435	35	2403	0	0
TOE2L0	WHITECOURT	-115.65000	54.13300	659	6.65	83	24	29136	0	915	13	15701	0	0	0	0	0	3	3720	0	0	2	2173	12	255	
TOE2M0	WILDWOOD	-115.23333	53.61667	393	5.31	1495	1122	73310	56	2888	734	50213	6	384	60	3254	15	770	144	9029	5	276	41	2396	0	118
TOE2N0	WINTERBURN	-113.68333	53.53333	61	36.35	2835	3090	108192	65	2816	2352	80566	14	494	155	6049	17	822	189	6612	9	318	71	2759	0	0
TOE2P0	WHITECOURT SUB N	-115.68000	54.12760	2252	3.06	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOE2R0	SPRUCE GROVE SUB	-113.89740	53.55470	83	0.03	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOE2S0	EDSON SUB 1	-116.47170	53.57660	815	15.16	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOE2T0	HINTON SUB 1	-117.59160	53.38950	63	0.11	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOE2V0	STONY PLAIN SUB 1	-113.99190	53.54310	98	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOE2W0	DRAYTON VALLEY S	-114.96360	53.21470	74	5.96	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOE2X0	JASPER SUB 1	-118.08070	52.87310	1785	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOE2Y0	KAPASIWIN	-114.45000	53.55000	138	9.49	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOE2P0		-	-	0	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOG0A0	ALCOMDALE	-113.83000	53.90000	203	1.14	242	147	57928	3	1094	110	43271	0	0	2	983	0	120	9	3473	1	397	10	4055	2	71
TOG0B0	ATHABASCA	-113.30000	54.71700	1386	0.15	5627	4166	72962	279	4487	2366	41677	69	1150	114	1916	36	578	358	6260	57	962	876	15259	0	0
TOG0C0	ATKAMEG	-115.85000	56.36700	2463	15.02	781	637	81882	108	13729	293	34864	31	3378	98	11429	36	3722	50	5476	12	1390	120	18628	1	131
TOG0E0	BARRHEAD	-114.42000	54.13300	133	0.18	79	20	25413	1	793	16	19718	0	437	1	881	0	0	0	400	0	0	1	874	0	0
TOG0G0	BLOOMSBURY	-114.48000	54.21700	236	0.14	92	71	81014	2	1372	43	45085	0	221	3	2121	0	0	1	705	0	0	2	2492	0	0
TOG0H0	BUSBY	-113.88000	53.95000	350	0.45	891	647	72670	27	2701	361	41658	3	373	17	1716	3	299	89	9672	5	517	60	6408	1	136
TOG0I0	CALAHOO	-113.95000	53.71700	260	2.07	1128	1019	90547	22	2197	715	63063	3	296	32	2815	4	352	99	8707	3	266	44	4065	0	0
TOG0K0	CALLING LAKE	-113.33334	55.25000	3956	0.06	655	1012	138569	96	11762	558	76391	37	4332	39	5266	21	2670	88	10624	21	2170	259	36774	2	215
TOG0L0	CAMP CREEK	-114.77540	54.18350	323	0.11	164	123	81270	3	1841	50	31156	1	587	4	2459	0	186	23	13293	1	720	3	1894	0	299
TOG0M0	CANYON CREEK	-115.08000	53.36700	448	3.31	262	325	120503	16	6032	150	53320	3	1172	16	6972	3	1005	33	12206	2	875	63	24784	6	944
TOG0N0	CHISHOLM MILLS	-114.16666	54.91667	1526	1.44	31	10	31813	0	0	6	17829	0	0	0	0	0	1	2207	0	0	2	4036	0	0	
TOG0P0	CLYDE	-113.63000	54.15000	216	0.03	873	709	38393	30	2982	458	55845	5	542	21	2022	5	421	73	8510	5	573	55	6088	0	0
TOG0R0	COLINTON	-113.25000	54.61700	286	0.02	469	286	59605	31	5171	158	36099	5	1384	10	1406	5	742	30	5449	5	906	58	11182	0	0
TOG0S0	DAPP	-113.92000	54.35000	358	0.13	601	409	66077	11	1748	275	44734	4	724	15	2409	2	356	35	5646	1	206	37	5702	2	204
TOG0T0	DESMARAIS	-113.80000	55.95000	7048	2.72	1299	3030	214440	208	16103	1994	136331	82	5260	178	14663	45	3858	200	16196	32	2762	404	33165	0	0
TOG0V0	DRIFTPILE	-115.76667	55.33333	1112	0.02	605	1547	215354	57	9299	820	125070	19	3061	84	17723	21	4676	66	10043	5	792	352	62324	1	264
TOG0W0	ENILDA	-116.32000	55.41700	782	0.58	519	665	125014	47	9298	366	66059	10	1681	37	7840	4	826	32	6103	5	1152	153	29401	0	0
TOG0X0	FAUST	-115.62000	55.31700	782	1.99	416	449	105259	22	4789	250	59696	6	1347	16	3783	4	993	19	4413	2	383	92	21838	1	242
TOG0Y0	FAWCETT	-114.10000	54.53300	443	0.04	449	332	70941	21	3812	224	50784	4	850	9	1858	2	318	30	5559	3	524	21	3860	0	0
TOG0Z0	FLATBUSH	-114.15000	54.68300	1322	0.10	414	257	63164	12	2588	189	46557	3	568	7	1662	2	478	9	2364	1	169	23	5634	7	94
TOG1A0	FORT ASSINBOINE	-114.77000	54.33300	966	0.05	1161	762	64993	26	2158	447	38546	2	196	48	4059	5	408	114	9729	3	287	51	4255	0	0
TOG1B0	GIFT LAKE	-115.82000	55.88300	4069	7.59	610	778	122407	92	13845	395	59926	33	3764	70	9775	25	3354	58	8888	12	1740	184	30663	0	0
TOG1C0	GROUARD MISSION	-116.15000	55.55000	1173	2.62	684	1236	169596	82	12355	711	95957	35	4491	51	7163	13	1807	67	9780	6	786	289	43626	1	171
TOG1E0	HIGH PRAIRIE	-116.48000	55.43300	319	9.01	7028	8329	114342	511	7064	4650	63344	176	2286	350	4697	90	1197	426	5668	47	653	1810	25054	0	0
TOG1G0	HONDO	-114.03333	55.06667	878	0.09	135	111	87714	6	3616	60	48907	2	1380	6	3722	2	878	16	13424	1	952	15	10076	6	134
TOG1H0	JARVIE	-113.98000	54.45000	469	0.08	529	426	80968	18	2873	289	55574	3	527	17	3077	2	314	25	4595	2	371	32	6006	10	237
TOG1I0	JOUSSARD	-115.95000	55.40000	769	0.65	452	528	116295	32	6586	295	65776	6	1167	18	4053	5	1031	32	6796	3	574	121	26508	5	145
TOG1K0	KINUSO	-115.43000	55.33300	853	0.60	961	1230	121876	47	4651	589	59461	13	1339	48	4791	11	1047	71	7011	5	545	189	19766	1	87
TOG1L0	LEGAL	-113.58000	53.95000	273	3.65	2259	1944	84251	66	2580	1180	51768	4	178	97	4127	10	411	259	11085	13	565	121	5144	0	0
TOG1M0	LONE PINE	-115.11667	54.30000	1136	0.03	25	17	68399	1	3287	9	44052	0	0	1	3090	0	1545	4	11464	0	0	1	5400	0	0
TOG1N0	MEANOOK	-113.33334	54.56667	394	0.03	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOG1P0	MORINVILLE	-113.63000	53.80000	209	5.58	5998	6142	98176	133	2649	3991	61561	21	329	245	4477	23	481	530	8657	29	528	593	9889	2	161
TOG1R0	NEERLANDIA	-114.38000	54.31700	337	0.04	878	520	59483	23	3192	295	30684	3	194	42	5704	7	1087	71	8779	2	314	51	6276	0	0
TOG1S0	NESTOW	-113.60000	54.23333	223	0.13	64	43	63624	1	876	31	49182	0	0	1	338	0	169	1	2245	0	0	1	2314	0	0
TOG1T0	PERRYVALE	-113.38000	54.46700	418	0.04	191	74	38281	9	3828	40	23434	2	1007	4	2030	2	1071	5	1460	1	219	17	8752	5	392
TOG1V0	PIBROCH	-113.87000	54.25000	291	0.07	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOG1W0	PICKARDVILLE	-113.88000	54.05000	313	0.04	861	556	65118	27	2729	341	41073	4	511	15	1805	3	246	35	4301	3	389	44	4391	0	0
TOG1X0	RED EARTH CREEK	-115.25000	56.55000	5636	5.40	789	715	81160	60	8181	338	36353	19	2397	57	7121	20	2088	91	9523	11	1232	113	14177	0	450
TOG1Y0	RIVIERE QUI BARRE	-113.83000	53.76700	211	1.56	415	343	79918	10	2453	215</															

Postal Code	Postal Code Name	Postal Code Information				Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis							
		Latitude	Longitude	Area km2	Flaring Vol. 1000m3/km2/yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits			
TOG2V0	HIGH PRAIRIE SUB.	-116.48080	55.43490	517	2.09	0																							
TOG2W0	PEERLESS LAKE	-114.57000	56.66700	12205	2.00	91	140	120158	11	7267	66	55403	5	3672	19	12030	4	2150	9	7677	1	375	24	25059	0	0			
TOH0A0	BAY TREE	-119.90000	55.81667	622	15.31	300	13	4127	2	648	4	1206	0	0	0	105	0	0	3	1165	1	276	2	681	3	316			
TOH0B0	BEAR CANYON	-119.82000	56.20000	880	12.41	132	9	7144	1	597	7	5490	0	0	1	597	0	299	0	215	0	0	0	0	1	47			
TOH0C0	BEAVER LODGE	-119.42000	55.21700	394	0.46	3788	2846	72047	148	3464	2037	52220	22	548	159	3825	24	573	137	34220	13	322	67	1676	0	0			
TOH0E0	BERWYN	-117.73000	56.15000	339	0.15	983	617	61830	63	5421	289	30456	9	889	38	3483	14	1138	58	5400	13	1227	121	12092	0	0			
TOH0G0	BEZANSON	-118.37000	55.23300	1010	4.04	626	416	66611	22	3507	310	49663	4	644	7	1075	1	168	21	3363	1	105	29	4714	1	70			
TOH0H0	BLUEBERRY MOUNT	-119.15000	55.93333	942	14.45	109	51	46812	2	2434	29	26412	0	238	0	365	0	5	5	4908	0	366	5	3486	0	0			
TOH0I0	BLUESKY	-118.23000	56.06700	376	0.10	440	268	59813	17	3766	141	31479	3	735	12	2536	3	521	27	6563	2	406	38	8205	0	53			
TOH0K0	BONANZA	-119.81667	55.91667	453	8.09	470	36	8013	3	489	23	5271	0	70	2	485	1	163	5	973	0	70	2	421	0	0			
TOH0L0	BROWNVALE	-117.88000	56.13300	467	0.05	405	288	71036	18	4094	143	36274	3	649	22	5102	8	1785	18	4524	2	581	59	14128	13	504			
TOH0M0	BUFFALO CREEK	-119.02720	55.31290	287	30.59	0																							
TOH0N0	CADOTTE LAKE	-116.38000	56.46700	4740	0.38	432	464	94353	56	13923	289	55327	10	2044	46	12493	24	5261	29	5156	10	2035	72	16271	1	179			
TOH0P0	CALAIS	-117.48130	55.05110	1305	3.92	269	298	116329	31	12612	185	69220	9	2714	9	3748	3	1269	22	8721	4	1676	50	21255	1	187			
TOH0R0	CARCAJOU	-117.03000	57.76700	5188	0.01	20	23	95385	1	2639	15	66478	0	0	1	4303	0	0	2	6694	0	1216	1	2700	0	0			
TOH0S0	CHATEH	-118.60000	58.66666	8662	8.44	985	575	54781	75	6865	378	35340	28	2050	82	8268	28	2822	30	2384	4	304	32	3648	0	73			
TOH0T0	CHERRY POINT	-119.95000	56.18333	262	16.26	64	5	7404	1	1260	2	3425	0	525	0	0	0	0	1	1768	0	442	1	884	0	174			
TOH0V0	CHINOOK VALLEY	-117.65000	56.48333	937	0.71	0																							
TOH0W0	CLAIRMONT	-118.78000	55.26700	212	30.28	1379	792	54771	28	2228	600	40925	8	571	37	2715	5	361	56	3902	5	320	28	2162	0	0			
TOH0X0	CODESA	-118.06667	55.76667	506	7.80	0																							
TOH0Y0	CROOKED CREEK	-117.86667	55.16667	1582	0.48	871	481	54124	26	2938	330	36670	6	630	15	1743	5	558	31	3487	2	247	46	5394	0	261			
TOH0Z0	CULP	-117.53333	55.75000	362	0.27	0																							
TOH1A0	DEADWOOD	-117.42000	56.75000	2243	0.00	219	128	67479	8	2850	95	52437	1	571	5	1629	1	281	8	3898	1	670	5	2188	1	87			
TOH1B0	DEBOLT	-118.02000	55.21700	815	1.23	819	404	48821	18	1921	312	38020	2	203	13	1505	2	258	22	2343	2	184	11	1289	4	145			
TOH1C0	DEMIMITT	-119.90000	55.45000	611	8.70	73	42	56261	3	4011	30	40352	0	0	4	5476	1	1344	3	3783	0	0	1	1596	0	15			
TOH1E0	DIXONVILLE	-117.67000	56.53300	955	0.07	532	355	65108	24	4156	197	36738	4	622	19	3451	6	1060	16	2890	2	347	52	9663	2	200			
TOH1G0	DONNELLY	-117.10000	55.73300	280	3.28	628	492	78393	32	5137	303	48337	4	591	20	3205	4	699	36	5649	5	720	52	8431	0	0			
TOH1H0	EAGLESHAM	-117.88000	55.78300	308	2.42	537	261	48988	13	2260	161	30785	2	450	10	1675	1	91	29	5578	3	664	19	3430	0	0			
TOH1I0	ELMWORTH	-119.61667	55.05000	3349	1.25	152	62	39963	3	2146	45	29146	0	288	5	3136	1	523	2	1116	0	0	1	676	4	505			
TOH1K0	EUREKA RIVER	-118.73333	56.45000	1806	3.07	110	34	32550	2	1587	19	17795	1	544	1	1059	1	642	3	3488	0	0	5	4555	1	133			
TOH1L0	FAIRVIEW	-118.38000	56.06700	697	3.32	5181	3266	61409	191	3398	1674	31851	38	694	133	2363	29	513	220	4077	15	272	502	9435	0	0			
TOH1M0	FALHER	-117.20000	55.73300	213	3.32	2181	1533	68671	117	4270	903	42258	14	638	68	2567	20	675	139	6041	13	521	168	6953	2	406			
TOH1N0	FORT VERMILION	-116.00000	58.38300	4930	0.00	3443	3178	91707	354	11214	2281	62087	180	4846	95	2839	39	1157	125	3382	23	582	183	5466	0	0			
TOH1P0	FOX CREEK	-116.80000	54.40000	6613	4.46	2504	2143	84514	36	2084	1575	59283	13	433	49	2174	4	214	194	7156	7	241	43	3617	1	97			
TOH1R0	FOX LAKE	-114.51666	58.46667	26675	0.00	1218	755	57512	176	14378	582	38113	106	7279	51	5645	34	2474	19	1466	5	389	38	3270	1	159			
TOH1S0	GIRouxVILLE	-117.33000	55.75000	253	0.77	813	531	64332	30	3287	351	43659	4	450	20	2349	4	474	46	5335	7	767	55	6184	0	0			
TOH1T0	GOUDFARE	-119.71667	55.26667	429	0.36	84	54	66029	4	7636	43	52658	0	265	3	3609	1	875	1	1214	0	374	1	639	4	52			
TOH1V0	GORDONDALE	-119.35000	55.86700	896	19.67	119	16	14492	1	429	11	10311	0	0	1	555	0	0	2	1479	0	0	2	1810	0	0			
TOH1W0	GRIMSHAW	-117.62000	56.20000	455	0.15	3942	3129	77351	217	5429	1607	39350	43	1020	117	2954	34	866	274	6672	41	993	630	15794	0	0			
TOH1X0	GROVEDALE	-118.86667	55.05000	4076	8.76	744	381	50165	19	2846	297	37025	2	284	17	2419	5	714	19	2387	2	214	15	2278	1	871			
TOH1Y0	GUY	-117.22000	55.45000	1003	0.65	183	103	56881	3	1565	67	38995	0	0	4	2061	1	443	2	1518	0	234	17	9666	2	63			
TOH1Z0	HIGH LEVEL	-117.15000	58.51700	5204	0.00	5287	4015	74342	178	4101	2760	47719	61	1052	160	3451	28	563	342	5935	21	440	186	4132	2	91			
TOH2A0	HINES CREEK	-118.60000	56.25000	1216	1.01	1601	764	46805	72	4306	388	23725	9	572	42	2528	12	733	45	2657	7	483	126	7905	0	195			
TOH2B0	HOTCHKISS	-117.55000	57.06667	2863	0.00	120	70	57522	4	3243	54	44888	1	569	0	301	1	464	2	1492	0	0	3	2270	0	224			
TOH2C0	HYTHE	-119.57000	55.33300	248	15.66	1908	1490	72852	122	5218	1119	55446	28	1329	72	3161	28	1143	79	3600	7	355	37	1706	13	158			
TOH2E0	JEAN COTE	-117.32000	55.90000	445	5.54	225	122	53897	7	3051	79	35702	1	586	13	5226	2	844	4	15									

Postal Code	Postal Code Name	Postal Code Information				Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis					
		Latitude	Longitude	Area km ²	Flaring Vol. 1000m ³ /km ² /yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	
TOH3R0	WATINO	-117.82000	55.70000	718	2.29	64	44	84932	6	9256	14	50330	2	1151	8	1951	2	3655	11	4097	0	0	3	4870	6	110	
TOH3S0	WEMBLEY	-119.13000	55.15000	591	7.53	2697	1642	58736	6	2637	1233	42996	13	411	59	2226	9	338	97	3555	10	411	59	2301	2	337	
TOH3T0	WHITELAW	-118.07000	56.11700	576	0.03	260	157	58157	12	4034	80	31095	1	255	9	2934	2	844	5	2108	1	393	31	11463	1	537	
TOH3V0	WOKING	-118.77000	55.60000	733	3.89	488	226	46697	16	2771	138	29403	1	229	13	2584	3	417	15	3315	2	315	33	6135	4	179	
TOH3W0	WORSLEY	-119.33000	56.38300	1493	20.74	687	195	26822	18	2552	89	12397	2	336	14	2161	4	650	10	1297	0	37	24	3284	0	0	
TOH3X0	JOHN D'OR PRAIRIE	-115.13333	58.50000	12787	0.00	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOH3Y0	CLEARDALE	-119.25000	56.63300	7361	2.35	433	158	31536	11	1699	92	18218	3	535	8	1564	2	318	8	1125	0	45	26	5126	1	153	
TOH3Z0	LITTLE SMOKY	-117.17000	54.73300	4873	6.97	164	89	49659	3	2213	59	33127	1	534	1	803	0	0	4	2132	0	215	13	7252	4	337	
TOH4A0	BUFFALO HEAD PRA	-116.35000	58.06700	6040	0.00	251	94	29877	5	1174	65	20348	2	580	1	132	1	198	3	850	0	0	8	2750	0	0	
TOH4B0	PEACE RIVER	-117.30000	56.21200	574	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOH4C0	GUNDY	-118.28350	55.49550	985	4.16	49	0	915	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	127	
TOH4D0	ACADIA VALLEY	-110.20000	51.16700	973	0.05	368	321	86455	13	2970	207	59875	2	553	15	3090	1	114	22	6056	1	281	7	1569	0	0	
TOH4E0	BASSANO	-112.47000	50.78300	1000	6.84	2058	1936	91977	141	5956	1234	59996	19	877	58	2692	14	590	175	8091	24	1047	71	3316	5	511	
TOH4F0	BEYNON	-112.78333	51.33333	311	16.14	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOH4G0	BIG STONE	-111.20000	51.20000	1522	0.35	10	11	88352	1	4293	6	90325	0	0	0	0	0	0	3	72070	0	0	0	2918	1	167	
TOH4H0	BIG VALLEY	-112.75000	52.03300	516	1.79	708	606	78808	34	2944	445	61535	6	579	26	2569	5	448	40	4397	2	214	32	3171	3	276	
TOH4I0	BINDLOSS	-110.18000	50.73300	1015	0.23	153	173	112798	7	4532	121	80986	2	1110	4	2229	1	526	17	10766	1	456	9	5035	0	0	
TOH4J0	BROOKS	-111.88000	50.56700	268	8.89	102	24	23042	1	2284	17	17676	0	0	1	497	0	0	1	1146	0	0	2	1720	1	210	
TOH4K0	BUFFALO	-110.66666	50.80000	2204	1.21	98	58	54938	3	2367	39	36794	0	0	6	6104	0	0	9	7191	1	1005	2	2484	1	124	
TOH4L0	BYEMOOR	-112.28000	51.98300	716	4.26	380	229	55695	13	2508	145	37216	2	540	15	2586	2	395	23	5067	2	439	11	2413	0	82	
TOH4M0	CARSELAND	-113.47000	50.85000	378	11.20	997	687	67963	14	1460	433	41877	1	70	23	2358	2	206	87	9134	3	267	29	3104	14	529	
TOH4N0	CEREA	-110.80000	51.41700	973	0.17	422	318	71381	21	3293	212	49746	4	717	6	600	2	304	26	5586	2	497	3	635	0	0	
TOH4O0	CESSFORD	-111.58000	51.10000	646	0.00	119	78	59654	1	2122	37	38071	0	0	5	4258	0	271	12	9548	0	0	2	1786	0	0	
TOH4P0	CHINOOK	-111.20000	51.53300	673	0.05	95	52	58918	2	2122	37	41688	0	0	0	468	0	0	8	8964	1	750	0	3	872	0	0
TOH4Q0	CLUNY	-112.87000	50.83300	555	8.05	1108	1487	133820	45	4253	1119	99113	8	649	64	5949	11	1039	68	6972	4	424	49	4820	6	250	
TOH4R0	DALEMMEAD	-112.25000	51.66700	533	2.12	374	253	67443	17	3720	177	47729	2	653	12	2905	2	577	19	4480	2	333	9	2201	0	0	
TOH4S0	DALEMEAD	-113.63000	50.86700	326	6.54	157	88	57386	2	866	61	40208	0	0	5	3249	0	0	13	8916	1	429	3	1212	0	0	
TOH4T0	DELIA	-112.37000	51.63300	437	0.70	655	369	57896	25	2340	236	38672	2	232	15	2091	6	543	45	6671	3	508	37	5269	0	0	
TOH4U0	DOROTHY	-112.02000	51.25000	1395	1.17	27	17	69838	2	2153	12	59452	0	0	1	771	0	386	1	3126	0	0	2	3241	0	74	
TOH4V0	DRUMHELLER	-113.06190	51.47800	321	16.82	3323	2194	65031	126	3458	1385	41853	19	569	122	3326	17	493	244	7197	26	782	197	5804	2	346	
TOH4W0	DRUMHELLER	-112.74000	51.47160	27	17.17	909	641	70696	29	2841	460	51355	3	354	23	2573	6	643	50	5413	4	407	51	5486	0	0	
TOH4X0	DRUMHELLER	-112.72960	51.46670	27	66.39	698	548	77642	33	4644	371	52200	6	828	43	6301	5	683	44	6469	6	901	50	7138	0	0	
TOH4Y0	DRUMHELLER	-112.72960	51.46670	27	0.00	315	222	76215	11	2865	160	56842	1	414	11	2555	2	646	12	3962	2	708	24	8477	3	74	
TOH4Z0	DRUMHELLER	-112.72620	51.45970	43	0.00	582	443	73504	47	4479	249	46482	5	587	32	3688	3	209	46	8105	4	732	40	6646	1	136	
TOH5A0	DRUMHELLER	-112.72620	51.45970	43	0.00	661	553	78289	59	3923	297	50712	3	459	21	1791	8	524	40	5720	3	517	56	7170	1	279	
TOH5B0	DRUMHELLER	-112.72620	51.45970	43	2.23	1199	948	78820	47	3759	630	52733	5	436	23	1867	6	445	102	8506	11	969	98	8096	0	0	
TOH5C0	DRUMHELLER	-112.72620	51.45970	43	0.00	464	348	71967	16	3278	247	51079	3	501	8	1746	2	496	36	7062	4	836	32	6708	1	111	
TOH5D0	DUCHESNE	-111.90000	50.73300	394	9.86	1355	1018	71752	36	2588	719	49644	6	373	51	3787	4	312	105	7435	11	780	35	2663	0	111	
TOH5E0	DUNSMORE	-110.58000	49.96700	514	0.53	651	422	65183	14	2403	285	42932	2	347	22	3570	3	484	24	3978	1	155	33	5080	23	605	
TOH5F0	EAST COULLEE	-112.48000	51.33300	644	1.80	212	161	76482	13	4096	70	42816	0	0	34	8992	2	992	22	12503	2	631	12	5136	1	292	
TOH5G0	ELKWATER	-110.28333	49.66666	1622	0.00	118	69	62665	4	2733	50	48499	0	0	3	2276	1	905	2	1814	0	0	7	5117	2	368	
TOH5H0	EMPRESS	-110.02000	50.95000	497	0.00	284	256	92317	17	5328	185	68846	3	1224	4	1220	2	456	29	10356	5	1587	9	2665	1	198	
TOH5I0	ENDIANG	-112.15000	51.95000	409	0.14	195	129	63119	9	3801	72	36262	1	313	4	1899	1	575	21	9301	1	452	6	2215	1	221	
TOH5J0	ESTHER	-110.26667	51.70000	730	2.72	130	113	89200	7	4023	84	68530	1	526	4	1992	2	804	16	11659	2	1119	0	198	3	280	
TOH5K0	FENN	-112.75000	52.13333	442	8.48	22	12	49154	0	0	10	41498	0	0	0	0	0	0	0	906	0	0	1	3760	2	334	
TOH5L0	FINNEGAN	-112.55000	51.11667	600	1.78	27	9	22878	0	0	6	16778	0	0	0	0	0	0	1	1523	0	0	0	1146	0	24	
TOH5M0	GEM	-112.18000	50.95000	929	10.10	375	267	69009	12	2935	181	46587	3	622	10	2735	1	322	27	6554	2	479	7	1718	1	186	
TOH5N0	GLEICHEN	-113.05000	50.86700	452	9.35	1812	2543	141497	90	5276	1889	103817	8	447	152	8904	24	1450	144	7999	15	812	74	4339	0	0	
TOH5O0	HANNA	-111.93000	51.65000	430	0.74	4500	3094	68536	183	3275	2141	48550	23	498	116	2216	29	538	358	7886	31	599	43	956	13	245	
TOH5P0	HILDA	-110.03000	50.48300	559	0.62	267	138	48742	5	1560	91	32147	0	0	8	2715	2	506	10	3402	1	198	11	4044	2	121	
TOH5Q0	HUSSAR	-112.68000	51.03300	517	5.29	721	516	70347	26	3782	315	41870	4	530	26	3658	3	441	37	5027	3	371	34	5071	0	0	
TOH5R0	IDDESLEIGH	-111.18000	50.78300	1786	14.53	45	32	76516	2	3066	19	47279	0	0	2	4960	0	756	4	10919	0	756	3	7964	2	130	
TOH5S0	IRVINE	-110.27000	49.95000	737	0.16	720	522	71717	26	3534	295	40612	3	467	27	3758	4	620	54	7332	4	504	51	7026	1	255	
TOH5T0	JENNER	-111.18000	50.78300	1786	0.00	373	310	75737	13	3355	213	50835	3	616													

Postal Code	Postal Code Name	Postal Code Information				Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis				
		Latitude	Longitude	Area km2	Flaring Vol. 1000m3.km2/yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits
T01ZV0	ROSEDALE STATION	-112.63333	51.41666	70	5.15	526	344	65390	23	4303	223	42983	3	634	20	3597	3	565	34	6620	4	856	29	5232	6	302
T01ZW0	ROSEMARY	-112.08000	50.75000	588	4.82	770	577	72583	25	2961	384	48158	3	291	22	2768	2	250	74	9275	7	848	16	2078	0	0
T01ZX0	ROWLEY	-112.78000	51.76700	398	6.63	45	17	39369	0	0	13	29987	0	0	0	0	0	0	0	935	0	0	3	7512	0	0
T01ZY0	RUMSEY	-112.83000	51.85000	454	3.33	322	184	52322	12	2587	125	38659	1	231	8	2227	2	511	13	3282	2	450	10	2070	1	103
T01ZZ0	SCANDIA	-112.05000	50.28300	400	18.20	327	261	77150	9	2791	189	54218	2	463	11	3200	1	382	21	7085	1	476	10	3304	0	0
T013A0	SCAPA	-111.98333	51.86667	817	0.31	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T013B0	SCHULER	-110.08000	50.33300	1130	0.38	222	166	74251	10	4682	89	40165	1	288	7	2899	1	548	16	6622	2	798	15	6515	9	247
T013C0	SEDALIA	-110.67000	51.68300	881	0.44	113	90	78282	6	4793	64	56677	0	370	3	2047	1	400	8	6722	0	249	0	0	0	282
T013E0	SIBBALD	-110.15000	51.38300	693	7.06	148	90	59703	6	4521	73	49112	2	1170	3	1644	2	1643	4	2535	0	523	0	0	40	86
T013G0	STANDARD	-112.98000	51.11700	520	5.37	917	547	58511	17	1725	335	36304	1	67	39	3792	3	321	68	7584	4	414	23	2348	1	250
T013H0	STRATHMORE	-113.38000	51.05000	529	2.48	64	18	27676	2	1842	8	12628	0	0	3	4912	1	1110	2	2504	0	0	1	1687	0	0
T013J0	SUNNYNOOK	-111.58000	51.10000	646	0.00	77	54	60708	4	3658	27	32690	0	369	3	2549	1	579	12	11271	0	0	2	2557	0	0
T013K0	TILLEY	-111.65000	50.45000	958	13.14	905	774	87303	28	3249	520	58374	7	758	32	3611	5	602	88	9860	4	417	28	2922	6	164
T013L0	WALSH	-110.05000	49.95000	459	0.09	163	102	67761	6	3492	63	42453	1	450	7	4874	2	1130	11	7050	1	473	8	5321	1	108
T013M0	WARDLOW	-111.58000	51.10000	646	1.26	118	89	66159	2	1529	58	42912	0	0	5	3574	0	278	13	9287	0	194	3	2731	0	0
T013N0	WAYNE	-112.62000	51.41700	153	17.03	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T013P0	YOUNGSTOWN	-111.22000	51.53300	1169	2.51	536	319	61468	21	3535	234	45371	1	209	10	1897	3	525	40	7439	4	823	5	978	2	163
T013R0	DRUMHELLER SUB N	-112.72620	51.45970	43	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T013S0	BROOKS SUB I	-111.90040	50.58050	302	6.69	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T013T0	HANNA SUB. 1	-111.92720	51.64520	945	0.56	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T013V0	DRUMHELLER SUB P	-112.72620	51.45970	43	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T013W0	SIKSIKA	-114.24360	50.77610	144	0.00	760	1341	185123	36	6759	1046	135100	8	988	66	15555	12	2945	70	9135	4	602	41	7295	2	214
T030A0	ADEN	-111.48333	49.03333	1434	0.25	47	36	72558	1	2759	24	48061	0	0	0	756	0	0	8	13555	1	1361	2	3267	1	149
T030B0	BARNWELL	-112.27000	49.76700	188	10.38	849	529	59987	21	2476	403	45233	6	676	10	1165	1	188	35	4295	4	518	21	2592	2	920
T030C0	BELLEVEUE	-114.36667	49.58333	152	0.00	1214	114	36667	43	2450	536	47204	3	289	36	1731	7	378	46	4132	3	244	41	3519	1	290
T030E0	BLAIRMORE	-114.43333	49.60000	134	0.00	3232	2201	67104	107	2578	1381	44357	14	436	78	1718	12	236	188	5738	14	457	144	4259	0	137
T030G0	BOW ISLAND	-111.37000	49.86700	807	0.35	2677	2753	99274	122	3841	1939	70383	22	738	138	4530	25	779	166	6063	11	376	177	6264	1	66
T030H0	BROCKET	-113.73333	49.56667	753	0.00	1342	1810	131977	91	7957	1371	95984	22	1573	70	6335	27	2242	68	4397	11	377	118	10110	1	358
T030J0	BURDETT	-111.52000	49.83300	398	9.63	545	480	86108	18	2926	338	95205	5	659	17	2809	4	696	92	5673	2	319	33	6768	1	113
T030K0	CARDSTON	-113.30000	49.20000	356	0.00	8110	11563	143078	293	3311	8041	99857	47	532	292	3359	50	542	671	7588	61	668	1281	15772	0	138
T030L0	COALDALE	-112.62000	49.71700	403	0.32	503	467	86207	16	2352	248	49497	1	232	5	708	0	83	65	12381	1	244	24	4518	0	22
T030M0	COLEMAN	-114.50000	49.63333	752	0.23	2135	1289	59847	88	2952	389	38958	11	490	47	1819	10	318	120	5625	6	249	59	2765	0	110
T030N0	COUITTS	-111.97000	49.00000	355	8.46	567	458	77908	31	5364	300	51138	7	1195	22	3682	7	1239	34	5806	2	435	24	4125	1	47
T030P0	COWLEY	-114.07000	49.56700	456	0.00	489	264	53548	23	3929	165	34734	3	696	4	707	1	165	17	3217	2	307	13	2609	3	965
T030R0	CRANFORD	-112.35000	49.76667	330	14.89	291	145	49197	5	1544	89	29862	3	640	5	1936	1	271	24	7624	1	174	1	467	0	0
T030S0	DEL BONITA	-112.80000	49.16700	1061	0.29	260	176	67674	8	3130	97	38180	1	350	12	4574	2	853	31	11380	1	239	11	3986	0	0
T030T0	DIAMOND CITY	-112.83000	49.80000	82	0.00	415	291	69920	5	1191	196	45091	1	169	13	3472	1	402	35	8498	0	56	9	2634	10	358
T030V0	ENCHANT	-112.42000	50.16700	714	19.27	661	388	58749	16	2829	275	39195	3	417	16	2996	3	595	33	4596	2	315	14	2298	1	338
T030W0	ETZIKOM	-111.12000	49.48300	1091	0.29	446	306	67388	16	3550	173	37893	2	529	17	3697	2	472	39	7950	1	255	15	3695	5	972
T030X0	FOREMOST	-111.45000	49.48300	955	0.04	1313	1111	82074	37	2576	758	56676	5	366	28	2025	5	364	107	7757	4	315	52	3946	18	257
T030ZZ	GRASSY LAKE	-111.70000	49.83300	452	42.66	711	416	55531	22	2969	286	36430	4	490	11	1264	3	358	33	4137	3	269	31	5424	0	127
T031A0	HARDIEVILLE	-112.85000	49.75000	46	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T031B0	HAYS	-112.02000	50.06700	501	53.17	351	212	60355	8	2117	139	40757	1	432	3	878	0	80	23	6472	2	500	13	3667	0	0
T031C0	HILLCREST MINES	-114.38333	49.56667	657	0.00	487	254	51924	21	3055	165	36413	2	585	8	1449	2	328	20	3463	3	406	6	1257	0	0
T031E0	HILL SPRING	-113.63333	49.28333	299	0.00	668	553	84488	18	2820	367	53837	2	302	16	2533	3	610	28	4160	5	782	56	9533	11	287
T031G0	IRON SPRINGS	-112.68000	49.93300	404	1.18	423	364	82372	8	1849	258	55568	1	177	8	2061	1	274	23	5009	1	194	5	1010	4	107
T031H0	LUNDBRECK	-114.17000	49.58300	673	0.00	487	270	54890	21	3797	168	34918	4	768	12	2233	2	467	17	3727	4	612	14	2739	3	283
T031J0	MAGRATH	-112.85000	49.41700	386	0.06	3003	2721	87453	92	2756	1631	53231	17	520	140	4234	20									

Postal Code	Postal Code Name	Postal Code Information					Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis				
		Latitude	Longitude	Area km ²	Flaring Vol. 1000m ³ /km ² /yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	
TOK250	RAYMOND	-112.65000	49.46700	300	0.03	4313	4111	90388	174	3583	3207	70060	36	772	139	3036	26	545	269	5947	30	652	82	1700	0	0	
TOK270	TABER SUB 1	-112.14690	49.77790	381	5.47	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOK2V0	PINCHER CREEK SUB	-113.94480	49.49400	145	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOLA00	ALDERSYDE	-113.88000	50.66700	222	3.51	288	178	62792	8	2732	111	39994	0	117	15	4674	2	734	21	7870	0	164	9	3075	3	339	
TOL0B0	ARROWWOOD	-113.15000	50.73300	409	7.67	474	377	78437	22	4107	241	51404	3	538	27	5285	3	651	46	9443	4	852	14	2419	0	0	
TOL0C0	BANFF	-115.57000	51.16700	367	0.00	7822	3795	56965	100	1727	2708	40736	12	243	124	2087	17	301	372	5632	19	326	62	1019	2	144	
TOL0E0	BANFF	-115.57000	51.16700	367	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOL0G0	BARONS	-113.08000	50.00000	480	6.55	680	464	64441	32	3837	212	31099	2	290	34	4207	7	859	42	5611	3	368	17	2253	0	193	
TOL0H0	BLACK DIAMOND	-114.23000	50.68300	149	0.70	2090	1573	73941	85	3297	1038	49399	9	382	105	4155	16	612	168	8265	9	368	15	600	6	267	
TOL0I0	BLACKIE	-113.62000	50.60000	436	3.61	945	762	79868	24	2477	520	53741	3	274	44	5363	4	370	54	5548	4	419	27	2804	0	0	
TOL0K0	BRAGG CREEK	-114.58000	50.95000	1146	0.03	2170	1480	69610	28	1750	1023	48010	3	128	49	2453	4	300	153	7017	7	305	20	983	10	124	
TOL0L0	BRANT	-113.47000	50.45000	283	0.00	179	109	61350	5	2788	77	42613	0	163	6	3026	2	1086	4	2383	1	288	1	415	0	0	
TOL0M0	CANMORE	-115.35000	51.10000	288	0.00	7743	5299	69552	176	2458	3125	40609	24	320	282	3797	37	527	589	7867	24	327	317	4171	0	0	
TOL0N0	CARMANGAY	-113.12000	50.13300	536	9.97	564	413	70372	30	4342	230	40901	3	500	23	3479	6	840	66	10873	6	886	19	3024	4	1028	
TOL0P0	CAYLEY	-113.85000	50.45000	448	0.06	879	545	60085	18	2159	358	38260	2	179	23	2607	4	508	59	6485	4	458	23	2610	0	99	
TOL0R0	CHAMPION	-113.15000	50.23300	597	12.82	870	499	54239	31	2604	248	28452	2	195	65	6789	8	621	56	5936	3	315	35	3378	2	353	
TOL0S0	BANFF	-115.57000	51.16700	367	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOL0T0	CLARESHOLM	-113.60000	50.01700	926	1.74	4852	3482	70880	175	2682	1982	42349	27	544	175	3357	22	320	420	8721	23	449	89	1704	0	0	
TOL0T1	OKOTOKS	-113.96540	50.72420	53	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOL0T2	OKOTOKS	-113.96540	50.72420	53	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOL0T3	OKOTOKS	-113.96540	50.72420	53	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOL0T4	OKOTOKS	-113.96540	50.72420	53	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOL0T5	OKOTOKS	-113.96540	50.72420	53	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOL0U0					0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOL0V0	COALHURST	-112.92000	49.75000	36	0.00	2092	1646	79657	49	3069	1129	51180	5	206	66	4504	7	605	148	7740	12	650	83	4272	0	0	
TOL0W0	COCHRANE	-114.93240	51.27700	1429	0.02	5109	3186	63308	58	1183	2244	45183	4	83	102	2042	8	172	310	5984	9	188	59	1187	0	0	
TOL0W1	COCHRANE	-114.47200	51.19560	259	0.00	1225	1048	83343	23	1469	724	59116	1	68	58	3265	3	172	93	7935	4	285	34	1722	5	68	
TOL0W2	COCHRANE	-114.47200	51.19560	259	2.47	494	330	69368	4	1051	243	48851	0	305	6	1114	1	151	37	9389	0	59	1	199	0	0	
TOL0W3	COCHRANE	-114.48310	51.19200	132	0.26	2232	1588	67144	23	1342	1228	50938	2	85	38	2136	3	220	142	5923	5	283	13	610	9	140	
TOL0W4	COCHRANE	-114.48880	51.19560	307	0.14	1842	1388	70635	25	1369	1035	51937	2	99	36	1885	4	226	137	7236	4	187	13	650	1	156	
TOL0X0	DE WINTON	-114.02000	50.81700	167	0.00	2156	1489	71875	36	1759	986	48405	1	61	55	2538	8	383	157	7505	5	221	65	2946	0	74	
TOL0Y0	ENSIGN	-113.43000	50.48300	275	2.66	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOL0Z0	FORT MACLEOD	-113.40000	49.71700	648	0.11	5654	4722	81182	241	3644	3135	55022	32	499	205	3170	42	610	338	5520	28	464	343	5720	0	0	
TOL1A0	GRANUM	-113.52000	49.86700	766	0.12	825	517	60941	34	3107	289	35555	4	395	19	2171	3	305	85	9472	6	557	20	2185	6	360	
TOL1B0	HIGH RIVER	-113.87000	50.58300	111	0.06	490	398	78500	30	2898	241	52854	4	643	33	4612	7	557	28	5905	5	431	32	4094	1	108	
TOL1C0	KIPP	-112.95000	49.75000	198	0.10	9	1	5689	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	115	
TOL1E0	LAKE LOUISE	-116.20000	51.41700	2998	0.00	1502	612	53395	15	1449	371	36237	3	565	7	600	1	48	80	5573	5	223	41	3135	1	211	
TOL1G0	LOMOND	-112.63000	50.35000	1127	8.04	671	326	47893	14	1886	224	33117	1	145	9	1238	3	389	26	3836	3	504	20	2865	11	256	
TOL1H0	LONGVIEW	-114.23000	50.53300	1490	0.46	969	2454	256735	75	7347	1939	203020	20	1756	107	10546	24	2444	157	15504	8	748	44	5016	0	0	
TOL1J0	MIDNAPORIE	-114.08334	50.91667	70	0.00	10	2	16144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	218	
TOL1K0	MILLARVILLE	-114.33000	50.76700	552	1.20	994	630	65855	15	1607	416	43541	1	112	31	3488	3	330	60	6369	1	99	11	1113	4	156	
TOL1L0	MILO	-112.88000	50.56700	942	14.78	561	331	59855	15	2463	177	32604	2	446	23	3838	5	716	49	8498	3	511	20	3365	0	0	
TOL1M0	MONARCH	-113.10000	49.80000	342	0.06	608	409	67100	11	1747	245	39853	0	0	11	1775	1	224	55	9007	2	277	18	2847	4	177	
TOL1N0	MORLEY	-114.86667	51.15000	439	0.00	2649	7823	311686	218	8948	6052	240918	39	1310	505	22399	83	3439	445	14290	24	1055	194	10450	1	123	
TOL1P0	MOSSLEIGH	-113.32000	50.71700	405	4.64	319	124	37840	6	1817	72	21629	0	87	6	2035	1	220	11	3405	2	461	5	1524	0	0	
TOL1R0	NANTON	-113.77000	50.35000	633	0.10	2975	2132	72652	97	2448	1146	41297	11	393	193	5829	16	380	233	7857	17	481	84	2189	0	0	
TOL1S0	NOBLEFORD	-113.05000	49.88300	233	0.01	1036	668	63469	18	1537	454	42322	6	473	31	3014	3	247	39	3929	1	67	32	3109	6	329	
TOL1T0	OKOTOKS	-114.53660	50.08270	2258	0.01	4052	2811	70261	76	1917	1847	46201	6	147	128	3324	11	274	283	7036	13	329	50	1231	0	0	
TOL1T1	OKOTOKS	-113.97110	50.73430	95	0.00	1878	1622	80556	26	1944	1189	57540	2	103	46	3312	3	203	157	7656	7	423	15	1007	0	0	
TOL1T2	OKOTOKS	-113.97630	50.72680	98	0.00	2019	1960	94123	55	2888	1317	62015	4	180	102	5143	11	597	190	8771	7	348	34	1825	13	248	
TOL1T3	OKOTOKS	-113.97630	50.72680	98	0.00	1121	1012	87988	31	2830	721	62158	3	237	44	3755	4	323	78	6830	5	433	36	3341	0	0	
TOL1T4	OKOTOKS	-113.96540	50.72420	53	0.00	865	730	76024	13	2209	549	52551	1	102	23	5761	1	497	67	6768	4	818	7	685	0	75	
TOL1T5	OKOTOKS	-113.96540	50.72420	53	0.00	1199	977	74433	14	1994	726	53772	0	0	0	37	4035	2	239	96	7016	3	247	8	657	1	112
TOL1V0	PARKLAND	-113.65000	50.25000	403	0.71	60	41	73067	1	1286	527	48873	0	0	3	4403	0	0	6	9246	1	800	0	590	1	366	
TOL1W0	PRIDDIS	-114.33334	50.88333	282	0.08	1249	837	71298	20	1337	527	47269	0	14	18	1624	1	75	75</								

Postal Code	Postal Code Name	Postal Code Information					Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis			
		Latitude	Longitude	Area km2	Flaring Vol. 1000m3/km2/yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits
TOM0H0	BENALTO	114.28000	52.30000	274	28.35	367	266	72332	8	2195	171	46496	1	337	13	3102	1	339	36	6971	1	372	33	9010	2	1319
TOM0M0	BLACKFALDS	113.78000	52.38300	206	5.84	3089	2362	74738	66	2381	1592	49068	10	328	114	3922	12	423	250	8008	12	406	98	3365	1	308
TOM0K0	BOWDEN	114.03000	51.93300	366	3.39	2344	2010	86212	86	2934	1360	60673	11	501	135	5169	14	427	182	7649	11	419	56	2105	0	0
TOM0L0	CARBON	113.15000	51.48300	291	4.95	898	585	63374	53	2461	368	41282	6	639	27	2657	6	516	58	6684	5	503	42	4435	1	268
TOM0M0	CAROLINE	114.73000	52.10000	1358	15.30	1932	1298	65686	32	2941	908	46674	8	388	88	4188	12	535	108	5383	9	435	42	2014	0	0
TOM0N0	CANSTAIRS	114.10000	51.56700	413	3.25	3535	2564	71637	108	2673	1726	49175	18	506	123	3204	21	494	235	6446	18	461	64	1604	2	131
TOM0P0	CARDOR	114.52000	52.38300	251	34.06	517	351	68924	9	1622	214	42260	1	210	8	1355	1	105	29	5737	2	272	61	11891	4	738
TOM0R0	CREMONA	114.48000	51.55000	494	8.64	1179	786	65913	31	2199	421	37199	1	112	55	3787	6	387	96	8454	4	333	48	3526	1	119
TOM0S0	CROSSFIELD	114.03000	52.38300	416	1.70	3295	2968	88601	67	1865	2142	64075	5	148	119	3430	12	344	349	10396	11	331	34	981	5	96
TOM0T0	DELABOUR	113.76667	51.15000	104	0.00	185	132	73496	4	1737	101	56051	0	0	6	2799	0	166	7	4127	0	0	5	2594	0	82
TOM0V0	DELBURNE	113.23000	52.20000	369	10.50	1702	1170	67377	54	2619	825	48765	7	372	62	3202	10	456	97	5170	5	307	20	1170	0	0
TOM0W0	DIDSBURY	114.13000	51.66700	435	10.10	5731	4855	83196	192	2870	3190	56173	34	589	257	4024	41	610	506	8473	32	518	142	1971	0	0
TOM0X0	ECKVILLE	114.37000	52.36700	284	38.73	2987	2278	74640	73	1807	1235	43192	8	202	71	2039	15	347	150	5129	7	237	444	13445	0	0
TOM0Y0	ELNORA	113.20000	52.00000	318	1.40	730	719	98858	25	2602	499	71429	4	534	31	4074	3	387	72	9530	3	289	8	1042	5	124
TOM0Z0	HUXLEY	113.23000	51.91700	259	0.45	468	379	77974	17	3191	275	56871	5	932	8	1577	3	622	31	6133	1	153	6	1103	5	148
TOM1A0	INNISFAIL	113.97000	52.01700	123	1.55	2974	2941	97766	121	3062	1863	64930	17	483	164	4115	22	477	282	9553	17	486	141	4176	1	389
TOM1B0	IRRICANA	113.60000	51.31700	337	0.19	1171	972	81496	23	2038	728	60821	5	430	37	3317	2	203	94	7744	4	293	20	1758	2	163
TOM1C0	JAMES RIVER BRIDGE	114.63333	51.93333	673	13.25	118	40	35159	1	1189	25	22333	0	0	3	2547	1	1006	4	3709	0	0	4	2827	2	212
TOM1E0	KATHYRN	113.70000	51.21667	201	0.00	149	124	84897	5	2368	80	54073	0	0	3	2149	1	282	8	5308	0	225	3	2099	0	0
TOM1G0	KEOMA	113.70000	51.21700	201	0.00	153	86	57861	3	1871	59	39964	2	1619	5	2844	0	0	5	3466	0	0	2	1306	0	0
TOM1H0	LESJIEVILLE	114.60000	52.38300	447	24.24	829	618	72602	16	1715	363	43263	1	58	20	2272	5	564	54	6442	3	363	119	13703	1	110
TOM1I0	LINDEN	113.48000	51.58300	356	0.16	1369	803	56146	30	1915	500	35299	5	302	42	2693	5	303	101	6949	6	380	49	3432	0	187
TOM1K0	LOUSANA	113.18000	52.11700	316	12.85	425	411	93561	21	4096	304	70737	5	971	11	2541	2	429	35	7416	2	363	6	1202	0	0
TOM1L0	MADDEN	114.22000	51.41700	462	6.12	211	194	86441	3	1554	143	62835	0	180	7	3050	1	311	23	9391	0	235	2	692	3	187
TOM1M0	MARKERVILLE	114.17000	52.11700	299	1.76	425	290	69881	13	2616	199	50408	1	202	11	2195	2	241	23	4834	2	591	16	3168	0	0
TOM1N0	MYNARSKI PARK	113.87860	51.17960	117	0.08	374	178	38820	4	860	136	29001	1	100	4	848	0	0	22	5179	1	374	2	706	10	252
TOM1P0	OLDS	114.12000	51.80000	340	17.16	2475	2052	81992	94	2706	1434	59855	10	365	91	3049	14	347	144	5993	11	396	75	2400	1	237
TOM1R0	PENHOLD	113.87000	52.13300	340	3.01	2426	1968	77396	57	2471	1395	53966	10	381	73	2914	9	389	231	9013	15	593	44	1942	0	0
TOM1S0	PINE LAKE	113.48333	52.11667	573	9.34	270	146	55417	4	1328	112	43045	1	236	8	2639	1	240	7	1751	0	0	4	1080	2	161
TOM1T0	ROCKY MOUNTAIN	115.29570	52.42720	3159	3.33	9544	7622	78038	299	3213	4879	49570	39	397	425	4433	87	933	606	6202	33	342	863	8881	0	0
TOM1T1	ROCKY MOUNTAIN	114.93100	52.38690	519	0.00	686	529	77468	35	3389	338	51063	3	271	28	3790	6	594	46	6711	2	372	70	9561	3	1117
TOM1T2	ROCKY MOUNTAIN	114.93100	52.38690	519	20.79	704	592	82677	33	3259	380	53819	3	375	27	3282	6	503	61	8475	3	457	64	8648	2	270
TOM1T3	ROCKY MOUNTAIN	114.93100	52.36667	449	15.12	881	910	97821	27	3252	594	62202	4	450	40	4619	6	823	73	8173	4	432	114	12622	1	244
TOM1T4	ROCKY MOUNTAIN	114.92000	52.38300	105	6.98	1963	1517	73283	39	2383	1017	48042	7	322	68	3548	8	523	126	6036	4	207	156	7755	1	89
TOM1V0	SPRUCE VIEW	114.32000	52.08300	438	23.94	352	294	83511	13	3543	183	53496	1	390	13	3815	1	301	24	6346	4	1001	11	3082	1	224
TOM1W0	STAUFFER	114.58334	52.16667	307	30.80	162	96	57999	4	2626	67	40945	1	590	2	1265	1	397	9	5332	0	231	7	3664	4	99
TOM1X0	SUNDRER	114.65000	51.80000	1922	7.02	5585	4004	70240	175	2636	2303	41810	24	415	270	4184	31	450	347	6169	24	375	329	5489	0	0
TOM1Y0	SWALWELL	113.32000	51.55000	239	3.49	261	188	69749	11	3557	109	40766	3	1114	13	4708	1	426	30	11082	1	356	10	3224	0	200
TOM1Z0	SVLVAN LAKE	114.08000	52.31700	289	5.42	5664	4558	79278	126	2245	3015	52019	10	163	176	3180	23	414	565	9784	33	582	193	3468	16	144
TOM2A0	THREE HILLS	113.27000	51.70000	268	3.94	4043	2625	62812	120	2172	1574	39426	14	271	152	3088	23	354	306	6928	19	393	232	4893	10	120
TOM2B0	TORRINGTON	113.60000	51.78300	522	1.22	443	349	78122	16	3500	236	53907	1	361	14	2846	4	673	23	5308	1	348	8	1677	0	0
TOM2C0	TROCHU	113.23000	51.83300	330	8.47	1501	1642	106968	17	2905	1168	77256	13	500	40	2072	11	478	165	9411	7	398	17	974	1	93
TOM2E0	WATER VALLEY	114.62000	51.50000	982	0.29	620	357	57807	19	3402	218	35439	3	487	32	4266	1	156	34	5662	4	794	11	2052	0	0
TOM2G0	WIMBORNE	113.60000	51.86700	490	2.37	212	190	89327	8	2932	133	63529	1	273	5	2082	2	591	21	10010	1	719	3	1310	2	99
TOM2H0	NORDEGG	116.08334	52.46667	6472	0.14	116	60	49115	2	1863	43	34754	1	506	3	2649	0	273	2	1867	1	564	4	3567	1	335
TOM2I0	AIRDRIE SUB 1	113.99630	51.28910	210	2.92	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOM2K0	ROCKY MOUNTAIN	114.91660	52.37460	70	7.35	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOM2L0	INNISFAIL SUB 1	113.94960	52.01350	213	1.94	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOM2M0	OLDS SUB 1	114.10870	51.79790	242	0.18	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOM2N0	THREE HILLS SUB 1	113.27190	51.70170	268	8.46	436	211	47582	8	1908	142	31609	2	447	13	3050	3	731	16	3405	1	302	8	2014	0	0
TOM1A0	EDMONTON	113.48720	53.54580	2	0.00	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOP1A0	EMBARRAS	116.90000	53.30000	1437	0.73	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOP1B0	FORT CHIPEWYAN	111.15000	58.71700	26461	0.00	1199	534	44217	44	3782	318	25801	8	593	48	4247	12	1076	47	3683	3	247	22	2154	0	30
TOP1C0	F																									

Postal Code	Postal Code Name	Postal Code Information				Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis					
		Latitude	Longitude	Area km2	Flaring Vol. 1000m3/km2/yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. Visits	
T2AXXX	CALGARY	-113.96180	51.03750	43	4.36	62261	66540	107368	1148	215	43958	69996	111	178	1757	3068	137	264	6930	11184	270	44	2970	5072	0	0	
T2BXXX	CALGARY	-113.98500	51.03660	21	0.09	25595	26245	102072	537	2378	17221	65857	46	174	791	3318	62	279	2853	10994	110	435	1084	4542	5	69	
T2CXXX	CALGARY	-113.98670	50.99580	72	5.42	21054	19997	95404	370	2104	13502	63186	29	140	613	3136	45	273	2397	11566	86	432	552	2852	0	164	
T2EXXX	CALGARY	-114.07000	50.95000	18	0.00	32962	28897	92020	890	2296	17991	59978	52	190	1106	3001	114	278	3422	11225	154	472	1386	3853	0	0	
T2GXXX	CALGARY	-114.06560	51.00860	11	0.00	11598	9668	87164	602	3661	5016	52391	19	234	656	4265	81	460	1086	10346	96	791	680	4729	2	88	
T2HXXX	CALGARY	-114.05820	51.03730	8	0.00	12054	9630	83571	235	1901	5888	52841	16	154	369	2959	33	269	1063	9365	51	426	444	3455	2	393	
T2JXXX	CALGARY	-114.07040	50.96660	14	0.00	55580	48275	88600	873	1714	31939	58607	69	131	1445	2758	99	207	5969	10895	188	350	1363	2526	12	213	
T2KXXX	CALGARY	-114.08050	51.07990	15	0.12	39225	33977	88617	744	1768	22657	60240	46	125	1190	2869	102	235	3599	9469	152	386	1119	2692	0	0	
T2LXXX	CALGARY	-114.09500	51.08270	10	0.00	13891	10296	78012	244	1315	6478	52652	8	60	476	2822	42	221	1100	8594	43	275	275	1621	1	74	
T2MXXX	CALGARY	-114.06300	51.05800	12	0.00	22401	16642	77653	464	1660	10193	49981	27	133	621	2395	65	208	1949	9353	76	316	600	2499	3	508	
T2NXXX	CALGARY	-114.07990	51.05680	5	0.00	22959	15624	71775	484	1760	9132	44679	21	114	713	2751	73	254	1912	8869	77	331	571	2202	0	0	
T2OXXX					0.00																						
T2PXXX	CALGARY	-114.06410	51.05230	4	0.00	17166	12252	76758	288	1686	7797	50386	20	141	480	2823	42	243	1281	8111	49	291	580	3391	4	375	
T2RXXX	CALGARY	-114.08410	51.04390	3	0.00	10877	8022	82016	278	2267	4604	51214	14	208	384	3134	33	226	871	8558	50	469	452	4197	0	0	
T2SXXX	CALGARY	-114.06380	51.03750	2	0.00	13317	9782	77713	290	1756	5700	48660	16	155	436	2796	39	204	1234	9890	52	356	387	2432	1	510	
T2TXXX	CALGARY	-114.07960	51.03740	4	0.00	24990	19187	80493	507	1991	11851	50886	35	163	893	3398	62	233	2363	10023	103	414	692	2751	1	226	
T2VXXX	CALGARY	-114.07170	51.00770	15	0.00	33208	27836	87203	789	1764	16631	55785	42	144	1165	2826	117	226	3165	10167	128	348	1271	3203	28	1185	
T2WXXX	CALGARY	-114.07960	50.96260	47	0.00	49736	45554	92903	738	1760	30289	60899	64	138	1201	2738	92	237	5439	11059	191	406	1132	2487	1	128	
T2XXXX	CALGARY	-114.06540	50.91870	12	0.00	19229	17746	89516	247	1578	12084	58795	24	114	536	3090	23	166	1986	10020	56	325	644	3618	1	157	
T2YXXX	CALGARY	-114.07140	50.91030	41	0.00	14617	14260	94297	185	1623	10255	65792	18	113	318	2425	18	167	1427	9993	47	396	419	2992	0	0	
T30XXX	CALGARY	-113.98800	50.90230	160	0.21	12268	11598	91412	134	1661	8161	62721	16	139	269	2561	12	218	1236	8992	40	346	230	2164	1	82	
T31XXX	CALGARY	-114.14190	51.08200	15	0.00	37486	30871	84334	470	1250	20178	56028	23	65	1014	2673	66	176	3604	9798	98	268	770	1957	1	185	
T32XXX	CALGARY	-114.14380	51.06170	6	0.00	34286	28529	84969	748	2093	17965	54518	44	135	1065	2989	102	276	3425	10343	165	482	741	2068	0	0	
T33XXX	CALGARY	-114.13670	51.05100	8	0.00	23389	20450	91489	594	2240	12771	59736	29	142	753	2861	76	262	2343	10636	120	517	898	3656	0	0	
T34XXX					0.00																						
T35XXX	CALGARY	-114.11780	51.03790	26	0.00	39589	33176	85448	908	1910	20914	56180	59	154	1244	2745	114	222	3783	9851	169	393	1190	2642	4	530	
T36XXX	CALGARY	-114.17840	51.11420	40	0.00	23473	21444	90362	241	1228	14795	60969	23	103	608	2987	27	156	2504	10361	49	220	401	1937	0	0	
T37XXX	CALGARY	-114.18070	51.05610	131	0.00	18189	15611	86206	208	1285	10868	95989	17	94	383	2296	24	165	1731	9570	40	233	366	2064	0	0	
T38XXX	CALGARY	-113.94100	51.10000	60	0.04	26284	30022	110160	349	1636	21444	75983	46	161	590	2565	38	188	3322	12499	113	450	681	2884	0	0	
T39XXX	CALGARY	-114.07690	51.12650	67	0.65	30508	30839	97752	356	1414	21969	68259	37	113	633	2328	42	206	3341	10636	87	295	666	2416	8	317	
T40XXX	CALGARY	-114.20820	51.11580	205	3.85	6690	5725	83632	64	1254	4107	58606	8	105	155	2936	7	212	618	8984	14	228	83	1368	0	62	
T41XXX					0.00																						
T42XXX					0.00																						
T43XXX					0.00																						
T44XXX					0.00																						
T45XXX					0.00																						
T46XXX					0.00																						
T47XXX					0.00																						
T48XXX					0.00																						
T49XXX					0.00																						
T50XXX					0.00																						
T51XXX	REDWOOD MEADOW	-114.52000	50.98300	291	0.03	514	374	69470	4	755	276	51914	1	104	3	477	0	0	39	6742	1	104	6	1142	1	63	
T52XXX	AIRDRIE	-114.02000	51.26700	131	9.73	5948	6267	100816	94	2249	4595	72057	8	122	172	2999	14	390	796	12696	24	411	90	1655	3	149	
T53XXX	AIRDRIE	-114.02000	51.26700	131	9.73	11161	10995	96627	176	1836	8006	68607	18	142	384	3878	22	251	1293	11217	36	334	149	1430	1	28	
T54XXX	RED DEER	-113.77730	52.24180	256	36.61	182	113	65119	2	1506	80	47689	1	397	2	1177	0	0	11	6148	0	198	2	1617	1	48	
T55XXX	INNISFAIL	-113.97000	52.01700	123	1.55	6830	6442	93796	225	2914	4384	64717	37	535	342	4723	41	518	695	10020	36	498	123	1758	5	198	
T56XXX	OLDS	-114.12000	51.80000	340	17.16	6405	5717	88854	217	2939	4105	64894	29	458	276	3908	38	486	445	6972	29	439	153	2073	1	148	
T57XXX	PONOKA	-113.58000	52.68300	231	4.20	8218	8115	95581	313	3280	6037	71896	35	404	235	2493	74	762	1007	11691	38	439	203	2216	0	0	
T58XXX	LACOMBE	-113.72000	52.46700	106	3.60	2276	1580	69291	68	2178	967	44289	11	414	72	2498	15	423	143	6305	8	303	209	8347	2	78	
T59XXX					0.00																						
T60XXX	RED DEER	-113.79480	52.24760	76	1.68	37169	28141	76678	866	2122	19978	55320	100	273	1268	3119	159	371	2644	7187	168	443	798	1996	7	79	
T61XXX	RED DEER	-113.84840	52.30480	151	9.79	18860	15611	80615	300	1858	11613	58930	48	256	462	2699	51	339	1529	7954	63	348	330	1926	13	127	
T62XXX	RED DEER	-113.77730	52.24180	256	36.61	12087	9657	79178	191	1695	7137	58009	20	170	303	2668	29	261	811	6673	36	300	178	1547	4	392	
T63XXX	RED DEER	-113.77730	52.24180	256	36.61	1696	1157	68767	38	2133	753	44933	3	181	58	3422	8	433	143	8624	9	498	53	3145	0	0	
T64XXX					0.00																						
T65XXX	CAMROSE	-112.83000	53.01700	221	0.02	16523	12390	75343	604	2813	7496	47909	64	395	601	3106	93	398	1024	6178	96	550	1152	6274	0	170	
T66XXX	BEAUMONT	-113.42000	53.35000	103	0.33	5816	6088	978																			

Postal Code	Postal Code Name	Postal Code Information					Total Respiratory Disease				Respiratory Infection				Pneumonia				Asthma				Bronchitis								
		Latitude	Longitude	Area km2	Flaring Vol. 1000m3/km2/yr	Population	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits	Physician Claims/yr	Rate of Phys. Claims	Hospital Visits/yr	Rate of Hosp. visits					
TSZXXX	EDMONTON	-113.48100	53.59770	14	0.00	9754	10254	100753	115	1386	7294	66188	206	1268	4590	44286	6	58	360	2547	46	255	704	6539	32	234	258	2039	7	211	
T6AXXX	EDMONTON	-113.42190	53.53930	25	0.00	15493	14472	99799	328	1581	9582	70472	23	181	704	3767	65	268	1280	8696	57	368	421	2279	1	415					
T6BXXX	EDMONTON	-113.43840	53.50520	20	0.00	9989	8813	96371	189	1623	6003	69193	13	182	396	3804	36	280	796	8637	31	336	293	2528	4	223					
T6CXXX	EDMONTON	-113.45300	53.50450	9	0.00	19720	16649	89319	420	1558	10859	61656	31	192	703	3083	73	254	1639	8831	88	397	576	2480	0	200					
T6EXXX	EDMONTON	-113.47500	53.47040	7	0.00	21818	15892	79694	396	1662	10377	54363	32	209	574	2575	70	292	1647	8426	75	371	705	3039	0	0					
T6FXXX					0.00																										
T6GXXX	EDMONTON	-113.51320	53.50750	10	0.00	11708	7294	66188	206	1268	4590	44286	6	58	360	2547	46	255	704	6539	32	234	258	2039	7	211					
T6HXXX	EDMONTON	-113.50040	53.48310	8	0.00	30427	26011	89266	502	1319	17713	63234	40	155	949	2806	89	220	2397	8158	92	279	909	2672	0	0					
T6JXXX	EDMONTON	-113.50850	53.46900	18	0.00	43868	40806	95738	510	1214	28731	67718	51	129	1233	2895	75	182	4181	9865	128	303	1168	2680	2	224					
T6KXXX	EDMONTON	-113.46330	53.47080	7	0.00	33954	37164	107486	411	1343	27152	77666	52	143	968	2974	65	222	3286	9505	113	341	865	2636	7	608					
T6LXXX	EDMONTON	-113.43270	53.46810	61	0.12	52132	60130	111052	602	1302	43723	79216	87	143	1610	3190	91	202	5430	10052	192	372	1322	2724	0	0					
T6MXXX	EDMONTON	-113.61850	53.49590	46	15.95	8517	8360	97335	74	978	6029	69735	6	73	175	2137	11	156	753	8612	17	209	175	2165	1	14					
T6NXXX	EDMONTON	-113.38250	53.60280	52	0.00	94	58	64647	0	0	42	50352	0	0	1	578	0	0	5	4478	0	2	1631	2	61						
T6PXXX	MAPLE RIDGE	-113.30000	53.91700	127	0.38	2053	2022	99903	38	2093	1471	72385	7	323	62	3173	7	389	189	9220	7	365	62	2976	0	56					
T6RXXX	EDMONTON	-113.58500	53.47880	26	23.51	10829	10482	95671	73	716	7774	70932	10	91	264	2586	10	100	846	7500	17	149	185	1654	4	73					
T6SXXX	EDMONTON	-113.33100	53.58980	58	0.00	57	53	86114	2	4301	24	42922	0	1389	0	337	0	0	13	18514	1	1747	1	1257	0	0					
T6TXXX	EDMONTON	-113.38250	53.60280	52	0.00	2809	3096	105350	31	1200	2238	75741	4	151	69	2389	6	257	319	10754	11	337	68	2595	2	430					
T6VXXX	EDMONTON	-113.56460	53.61900	20	0.20	1673	1523	90688	13	935	1101	65136	1	58	40	2628	2	152	76	4456	2	98	69	4241	4	101					
T6WXXX	EDMONTON	-113.57630	53.42400	80	7.82	574	429	78585	8	1519	289	54034	0	72	17	3111	2	328	43	7784	1	178	11	1826	0	0					
T6XXX	EDMONTON	-113.49050	53.40020	57	0.01	433	324	78533	5	1059	227	55093	0	86	15	3746	1	174	27	6886	1	170	14	3313	0	0					
T6YXXX					0.00	0																									
T7AXXX	DRAYTON VALLEY	-114.98000	53.21700	82	1.85	3285	3084	92733	113	3537	2181	65000	19	570	99	3163	28	878	278	8494	15	458	127	3870	4	669					
T7EXXX	EDSON	-116.45000	53.58300	1516	5.94	11523	8387	71985	317	2964	4890	40987	48	417	291	2576	57	534	651	5531	46	404	1548	14033	1	191					
T7NXXX	BARRHEAD	-114.42000	54.13300	133	0.18	8347	6849	81558	316	2968	3663	45841	28	333	538	5884	70	639	957	11160	39	407	529	5532	0	0					
T7SXXX	WHITECOURT	-115.65000	54.13300	659	6.65	9750	7145	73460	206	3145	4447	42838	31	295	319	3879	35	572	1055	10499	40	466	223	3077	10	337					
T7VXXX	HINTON	-117.57000	53.40000	2796	0.05	11215	9290	82151	228	2758	6623	57504	37	353	230	2314	33	437	1165	10357	43	438	189	2080	0	25					
T7XXX	SPRUCE GROVE	-113.88670	53.54230	103	17.37	21067	19753	94036	290	1747	14586	68033	29	136	677	3681	53	337	1839	8760	63	337	557	3048	8	521					
T7YXXX	SPRUCE GROVE	-113.75950	53.55310	128	16.68	1866	1335	72800	24	1223	916	50010	2	98	63	3212	7	375	125	6956	6	301	59	3417	0	0					
TZXXXX	STONY PLAIN	-114.00000	53.53300	200	0.00	7381	6350	85032	124	1664	4685	62704	17	213	226	3007	26	351	562	7513	14	189	153	2047	0	0					
T8AXXX	SHERWOOD PARK	-113.28820	53.52650	39	0.00	38180	37480	99677	451	1339	26510	70184	50	139	1202	3403	68	215	3991	10666	106	299	917	2477	0	0					
T8BXXX	SHERWOOD PARK	-113.25370	53.48670	64	0.09	4173	3592	86961	43	1124	2433	58911	3	78	100	2421	9	239	421	10002	10	252	81	1896	1	67					
T8CXXX	SHERWOOD PARK	-113.19730	53.47720	73	0.00	3765	3183	86299	34	1336	2309	61589	3	73	110	3574	8	408	281	7499	6	161	77	2267	0	0					
T8EXXX	SHERWOOD PARK	-113.07030	53.47520	64	1.96	3538	2980	84030	46	1452	2146	59177	6	162	111	3337	7	215	302	8731	8	212	61	1803	0	0					
T8GXXX	SHERWOOD PARK	-113.07030	53.47520	64	0.00	2520	2135	83552	51	2467	1561	60168	9	350	74	3250	10	459	181	7113	9	320	61	2420	0	0					
T8HXXX	SHERWOOD PARK	-113.25330	53.54540	23	0.00	6096	6892	111234	64	1478	5076	78136	12	174	177	3380	10	230	641	11055	15	329	139	2641	2	578					
T8LXXX	FORT SASKATCHEW	-113.21667	53.71667	321	0.17	15542	14831	95425	339	2186	10428	67177	41	266	544	3514	60	388	1178	7548	62	396	594	3812	1	182					
T8MXXX	?				0.00	3																									
T8NXXX	ST ALBERT	-113.60730	53.63930	137	7.94	51187	47708	93748	724	1664	32159	62370	83	172	1617	3446	109	264	4373	8561	156	334	2809	5663	6	204					
T8RXXX	MORINVILLE	-113.63000	53.80000	209	5.58	4214	4062	93039	83	2348	2624	57536	13	256	165	4425	18	574	384	8973	16	399	329	7925	2	180					
T8SXXX	PEACE RIVER	-117.30000	56.21700	574	0.00	9439	5305	54663	342	3873	3327	33589	48	470	262	2914	91	1043	429	4424	52	543	770	8239	1	334					
T8VXXX	GRANDE PRAIRIE	-118.79070	55.15830	95	14.23	31916	21261	66209	752	2549	16148	49795	168	519	632	2110	102	353	1632	5092	134	429	774	2561	0	0					
T8WXXX	GRANDE PRAIRIE	-118.77670	55.13820	263	2.65	3269	2152	62301	44	1425	1687	47657	17	412	50	1569	6	189	149	4878	9	300	49	1612	0	0					
T8XXX	GRANDE PRAIRIE	-118.76220	55.17310	148	6.07	1227	753	59387	11	962	582	45013	1	96	22	1997	2	116	59	5139	3	282	18	1522	0	39					