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Introduction

This report represents the second comprehensive health assessment to be done in Churchill since the Churchill Regional Health Authority was created in 1996. The previous Health Assessment was completed in 1997, immediately following the regionalization of the province’s health service infrastructure.

In completion of the report the Churchill Regional Health Authority has adopted the Manitoba Health Performance Measurement Framework that includes the dimensions of health status and determinants:

- health system performance,
- health system infrastructure, and
- community & health system characteristics.

Limitations of this Report

The quantitative data used are from various sources dated 2002 or earlier, as referenced.

Although the data is often seen as potentially statistically significant, it must be recognized that this data may in fact be somewhat distorted as a result of small population numbers. For example, teen pregnancy appears as double the provincial average but in fact this represents only five teen pregnancies over a five year period.

Further, as pointed out in other documentation, the statistical data correlates regarding Churchill in the provincial picture are often either suppressed (due to small numbers and or issues of confidentiality) or combined with results from the Burntwood Regional Health Authority.

We have attempted to limit the combined usage data and use Churchill specific data as compared to Manitoba averages where possible.

The qualitative data (e.g., what we heard in the consultations) was collected in the winter of 2003-2004. A similar survey format was used as in 1997 to gather community opinion, thereby allowing a degree of objective comparison between the two data sets.

Resultant to several issues the timelines regarding the completion of this report were quite limited.
Executive Summary

The People and Their Issues

Churchill has historically been and will continue to be rather unique due to the transiency of a significant percentage of its population. The population is effectively transient owing to a number of factors.

The demographics of those of aboriginal descent are atypical when compared to the province overall and the North in particular. Although a large percentage of individuals are of aboriginal ancestry, there are no First Nation Reserves in immediate proximity to the town. The aboriginal individuals in Churchill tend to have a higher rate of employment compared to the total number of people employed in Manitoba.

The general population served by Churchill Regional Health Authority is comparatively young and employable. Nonetheless, the unemployment rate remains an issue for several reasons including the seasonal nature of employment in Churchill.

General levels of income are potentially “two- tiered” in that a percentage of the population earn higher than average incomes whereas the remainder of the population earn less than the provincial average.

Education levels for the non-aboriginal population are slightly greater than the average, but for those of aboriginal descent less than high school education is an issue for more than 50% of the aboriginal population of Churchill.

There are relatively fewer elderly within the population and greater numbers of children. The rate of dependency in the family structure implies issues within the socio-economic factors framework.

Chronic physical diseases, especially metabolic, respiratory and endocrine disorders are a current issue and will continue to impact of the general health of the population. Many of these relate to increased incidence in those of aboriginal descent.

Incidence is somewhat greater for select cancers, such as breast cancer, and less than average statistically for others such as prostate cancer.

Mental wellness and addictions is a major concern identified by the community in interviews and evidenced statistically.

The rate of accidental injury is a major issue especially for males and an ongoing part of a historical pattern.
Total rates of mortality, again especially for the male population, exceed provincial averages. Life expectancy is resultantly comparatively shortened.

**Health System Performance**

The overall cost factors of the Churchill Regional Health Authority is, per capita, greater than the provincial average. However a large percentage of services are provided to “out of province” residents from Nunavut. According to the Churchill RHA patient statistics for 2003-04, the total number of emergency visits consist of 19% “out of province” patients and 65% Manitoba patients. The total number of surgical visits were 94% “out of province” clients and 6.4% Manitoba clients. This reality is not given consideration in statistics used in this report.

Although administrative costs are demonstrated to be higher when compared to other Regional Health Authorities, the cost of travel, accommodations, etc., borne by the Churchill Regional Health Authority are factors not experienced by other Regional Health Authorities at the same level. In fact, the number of administrative positions associated with management are less than with any other Regional Health Authority.

The percentage of resources allocated to Acute Care as opposed to Community Programs is greater than the provincial average.

Chronic disease incidence and management is a major issue being addressed by the Churchill Regional Health Authority. Rates of diabetes, circulatory disease and respiratory illness are of ongoing concern.

The Churchill Regional Health Authority is actively involved in an array of preventative services and programs, although in select instances (e.g. vaccination rates, rate of breast cancer screening) it is evident that efforts will need to be further enhanced.

Access to the services of a physician/nurse practitioner and specialty consultants is statistically better for recipients of service in Churchill than other Manitobans.

The relative proximity of all related services in one complex facilitates a multidisciplinary approach to service delivery and interdisciplinary care management.

Subsequent to the results of the Community Health Assessment and work of Churchill Task Force, the organization will plan strategically to meet the identified health needs of the population(s) served.

This will involve enhancement of screening processes for various anomalies (e.g. cervical cancer, breast cancer, diabetes, etc.), as well as augmenting education pertaining to preventative measures, and effective intervention at an “as early as possible” stage in all cases.
Utilizing a population health approach, the Churchill Regional Health Authority will, as well as meeting the parameters associated with Core Service delivery and stated Manitoba Health Deliverables, attempt to meet the additional assessed needs of somewhat unique population it serves.

This will include:

- The development of a service continuum specific to the needs and traditions of the aboriginal populations served by the Regional Health Authority.

- Addressing the diverse demonstrated, and stated needs of the Nunavut population served by the Health Authority. This may include treatment and/or accommodation services for “hard to treat populations”.

- Provision of high quality care pertaining to respiratory disorders.

- Use of Best Practices in the preventative and intervention modalities associated with diabetes screening and management.

- Address the specific array of issues associated with the complex mental health picture of Churchill. This will encompass not only need associated with “typical” mental health disorders but as well the multiple underlying issues which ultimately affect overall health and well-being for this population. Encompassed will be addictions in its various forms, Post-traumatic stress associated with factors such as abuse, family violence, and anger management.
Community and Client Characteristics

The People

Churchill is a place where people have come to meet for almost 4,000 years. First Nation’s People’s (Dene, Cree and Inuit) came to this area to take advantage of the rich sources of wild game and furs.

The area’s significance as a place for cultural and commodity exchange continued when the Hudson’s Bay company built Fort Prince of Wales in 1717, and again in the early 1940s when a collaborative operation was created by the Canadian and USA military. This operation continued until the early 1980s.

Currently Churchill acts as the “gateway to the North” with many supplies and products being shipped via Churchill to the Nunavut region. The Port of Churchill (one of the main reasons for the continued existence of the town) continues to operate 4 months of the year.

Consideration is currently being given regarding formal expansion of trade roles with the Russian Republic. If this were to become a reality there would, by default, be substantial expansion of resources and population in Churchill.

Population

The population density of the area served by the Churchill Regional Health Authority is 18 people per square kilometer; statistically making Churchill the second most densely populated Regional Health Authority in Manitoba, after Brandon RHA.

![Figure 1: Population Density](source: Statistics Canada, available at www.statcan.ca)
The population of Churchill, although there is some degree of fluctuation, has remained static at around 1,000 people for the past several decades.

![Figure 2: Population by Gender in 2001](chart)

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population by Gender in 2001</td>
<td>51.30%</td>
<td>48.70%</td>
</tr>
</tbody>
</table>

*Source: Statistics Canada, available at www.statcan.ca*

In 2001, the town of Churchill had a population of 963. This represents a decline of 11.6% from 1996 when the population of the town was 1,089. The Manitoba Health Population Report dated June 1, 2003 lists the population of Churchill as being 1027.

The population is comprised of slightly more males than females. This has been a long standing historic pattern owing to the typical nature of employment in the area.

The Migration Rate refers to the percentage of people who lived in a different Canadian municipality one year prior to the 1996 Census of Canada. Internal migrants are people who resided in a different Census Sub Division one year earlier. External migrants are people who resided outside of Canada one year earlier.

![Figure 3: One Year Internal/External Migration Into Manitoba](chart)

<table>
<thead>
<tr>
<th></th>
<th>Churchill 1996</th>
<th>Manitoba 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>10</td>
<td>4.2</td>
</tr>
</tbody>
</table>

*Source: Manitoba Centre for Health Policy, available at www.umanitoba.ca/centres/mchp*
Churchill’s rate of migration was noted to be the highest in the province in 1996, and this trend continues. This is owing to the season specific tourist trade, the short shipping season, and a high turnover rate of staff regarding local employment.

Churchill demonstrates a higher rate of mobility than Manitoba as a whole. In Churchill, 10.5% of the population had moved within one year of the 1996 Canadian Census, compared to 4.7% of all Manitobans. As well, 29.5% of Churchill residents had moved within five years of the 1996 Census of Canada, compared to 13.8% of all Manitobans.

Figure 4: Churchill Population Pyramid
2001/02

Source: Manitoba Centre for Health Policy, available at www.umanitoba.ca/centres/mchp

Churchill’s population distribution demonstrates, as with other locales in the North, a relative lack of elderly in the population and enhanced numbers of children fourteen and under.

Further, pertaining to the activities of the Churchill Regional Health Authority, consideration must be given to the fact that a large percentage of individuals who receive service are from “out of province” (specifically the Kivalliq Region of Nunavut), as will be discussed later in this document.
**Dependency Ratio**

The Dependency ratio represents the ratio of the combined child population (aged 0 to 14) and elderly population (aged 65 and over) to the working age population (aged 15 to 64).

This ratio is presented as the number of dependants for every 100 people in the working age population.

**Figure 5: Dependency Ratio 2001-2002**

<table>
<thead>
<tr>
<th></th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio</td>
<td>42.4</td>
<td>52.6</td>
</tr>
</tbody>
</table>

*Source: Manitoba Centre for Health Policy, available at www.umanitoba.ca/centres/mchp*

The Churchill RHA has a lower dependency ratio than Manitoba as a whole.

In 2001/02, there were 42.4 people of non-working age for every 100 people of working age in the Region.

This has potential implications regarding the need for a type and availability of medical and social services as compared to other locales.
The Socioeconomic Factor Index

The SEFI is a provisional projection of needs based upon standardized indicators.

There has been a change in the SEFI scale over a 5-year period (1991-1996) for residents of Churchill.

Although the majority of Manitoba locales have been moving towards a more positive balance regarding the SEFI, Churchill has seemingly moved towards the “higher risk” area. The etiologic issues affecting this are assumed to be complex.
Aboriginal Population

Aboriginal people are those persons who reported identifying with at least one Aboriginal group (e.g. North American Indian, Métis or Inuit) and/or those who reported being a Treaty Indian or a Registered Indian as defined by the Indian Act and/or those who were members of an Indian Band or First Nation.

There is no First Nations reserve in or near Churchill.

Nonetheless, historically as well as currently, the aboriginal population served by the Churchill Regional Health Authority substantially exceeds the provincial average.
The Environment

Location

Situated just above the 58th parallel, Churchill is the most northerly populated area of Manitoba.

Located where the Churchill River empties into the sea, on the south-western shore of Hudson’s Bay, Churchill receives only 50.3 hours of daylight in December, less than half of the number of daylight hours of Winnipeg. In July, the sun is up for almost 20 hours of the 24 hours in a day – yet Churchill receives only 280.5 hours of sunlight compared to Winnipeg’s 317 hours.

Figure 8: Average Daylight Hours

<table>
<thead>
<tr>
<th>Location</th>
<th>Average December Hours of Sunlight</th>
<th>Average July Hours of Sunlight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winnipeg</td>
<td>100.3</td>
<td>317.5</td>
</tr>
<tr>
<td>Thompson</td>
<td>69.0</td>
<td>279.4</td>
</tr>
<tr>
<td>Churchill</td>
<td>50.3</td>
<td>280.5</td>
</tr>
</tbody>
</table>

As a transportation hub for the North, the town has a busy rail line and airport. The Port of Churchill is a fully functioning seaport, capable of shipping most bulk commodities and many other import and export products.

The area has a strong research presence. Many scientific professionals use The Churchill Northern Studies Centre and the Institute of Arctic Ecophysiology, as a home base for their studies.
Climate


Churchill has an annual snowfall of about 195.5 cm, an annual rainfall of 221 mm, and averages 76 frost free days.

High winds are a fact of life for residents of Churchill. The average wind speed is 20.5 km/hour. This compares to Winnipeg with a 16.9 km/h. It is not uncommon for Churchill residents to experience 3 to 4 days of almost constant winds with average speeds of 30km an hour and gusts up to 70km an hour.

**Figure 9: Average Temperatures**

<table>
<thead>
<tr>
<th>Location</th>
<th>Average January Temperatures (Celsius)</th>
<th>Average July Temperatures (Celsius)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winnipeg</td>
<td>-17.8°C</td>
<td>19.5°C</td>
</tr>
<tr>
<td>Thompson</td>
<td>-24.9°C</td>
<td>15.8°C</td>
</tr>
<tr>
<td>Churchill</td>
<td>-27.5°C</td>
<td>11.8°C</td>
</tr>
</tbody>
</table>

Health Determinants

Income and Social Status

Median income for Churchill is substantially higher than the provincial average ($26,325 as compared to $20,469). However, this is a somewhat distorted value owing to the high number of professionals with enhanced incomes, as compared to the general population.

```
<table>
<thead>
<tr>
<th></th>
<th>Median Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill</td>
<td>$26,325</td>
</tr>
<tr>
<td>Manitoba</td>
<td>$20,469</td>
</tr>
</tbody>
</table>
```

*Source: Statistics Canada, Churchill (Town) Manitoba, available at www.statcan.ca*

It was not feasible to segregate these two entities for the sake of comparison.

The Aboriginal population in Churchill earned minimally enhanced incomes when compared to the rest of the province. This may be the result of higher than typical employment rates and rates of pay for key employers in the town.
Since income status is a major determinant of health the median couple and single parent family incomes provides a better picture of how families are doing in Churchill.

Median couple income is much higher than the provincial average ($67,456 vs. 55,885).
This represents a 17% difference and may be the result of the high number of professionals employed in the town.

Single parents in Churchill are not doing as well as the Manitoba average ($22,592 vs. $26,469). This represents a 14% difference and is an important area of concern. Since most single parents are female with one or more children to provide for, their reduced income limits their access to adequate amounts of food, shelter and clothing.

**Earnings**

A greater proportion of total income came from earnings in Churchill than in the province as a whole (85.7% for Churchill residents, compared to 75.3% in Manitoba). The types of employment (tourist and seasonal) may explain these differences. Many people come to Churchill to earn income and then they leave. Government transfers represent 10.5% of income compared to 13.4% for the province and other sources of income are 3.4% in Churchill and 11.3% in the province. The 7.9% difference in other sources of income may be a result of residents having limited employment choices compared to residents in the rest of the province.

**Employment and Working Conditions**

According to the 2001 census data, Churchill residents were much more likely to participate in the labour force than the province as a whole. The total labour force participation rate for Churchill in 2001 was 84.4% (87.5% for males and 81.2% for females) compared to only 67.3% (73.6% for males and 61.4% for females) in the province as a whole.

![Figure 13: Labour Force Participation Rate 2001](http://www.statcan.ca)

<table>
<thead>
<tr>
<th></th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>81</td>
<td>62</td>
</tr>
<tr>
<td>Male</td>
<td>89</td>
<td>74</td>
</tr>
<tr>
<td>Both</td>
<td>84</td>
<td>68</td>
</tr>
</tbody>
</table>

*Source: Statistics Canada, available at www.statcan.ca*
Similarly, the employment rate in Churchill in 2001 was 73.0% (73.6% for males and 71.0% for females), compared to just 63.3% (69.0% for males and 57.9% for females) in the province as a whole.

Churchill, however, continued to have a much higher unemployment rate than for the whole of Manitoba: 12.6% (14.3% for males and 12.5% for females) compared to just 6.1% (6.3 for males and 5.7% for females) provincially. It is important to note that the relatively young age of the Churchill population, as well as the seasonal nature of employment, may help to explain these differences, at least to some extent.

Employment in Churchill proves challenging for a number of reasons. Many employment opportunities are seasonal. For example, the Port of Churchill operates for four months out of the year. Port employees earn a good wage, but they are required to work very long hours for a limited time period. Employment in the retail and service sectors revolves around the very limited tourist season. In the Regional Health Authority and the education system, recruitment and retention remain issues.

**Major Individual Employers (Figure 14)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Product / Service</th>
<th># of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill Regional Health Authority</td>
<td>Health care</td>
<td>120</td>
</tr>
<tr>
<td>Hudson Bay Port Company</td>
<td>Shipping</td>
<td>70</td>
</tr>
<tr>
<td>Town of Churchill</td>
<td>Municipal government</td>
<td>32</td>
</tr>
<tr>
<td>Calm Air</td>
<td>Air freight and passenger service</td>
<td>24</td>
</tr>
<tr>
<td>Northern Store</td>
<td>Groceries and other products</td>
<td>15</td>
</tr>
<tr>
<td>Gypsy’s Bakery and Restaurant</td>
<td>Bakery and restaurant</td>
<td>10</td>
</tr>
<tr>
<td>Fuel Tank Farm</td>
<td>Fuel Supply</td>
<td>10</td>
</tr>
</tbody>
</table>

*Source: Manitoba Intergovernmental Affairs, Community Profiles, available at www.communityprofiles.mb.ca*
### Employment Characteristics (Figure 15)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total - Experienced labour force</td>
<td>585</td>
<td>310</td>
<td>275</td>
</tr>
<tr>
<td>Agriculture and other resource-based industries</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Manufacturing and construction industries</td>
<td>20</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>60</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Finance and real estate</td>
<td>20</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Health and education</td>
<td>150</td>
<td>40</td>
<td>110</td>
</tr>
<tr>
<td>Business services</td>
<td>175</td>
<td>135</td>
<td>40</td>
</tr>
<tr>
<td>Other services</td>
<td>145</td>
<td>85</td>
<td>65</td>
</tr>
</tbody>
</table>

### Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total - Experienced labour force</td>
<td>585</td>
<td>310</td>
<td>275</td>
</tr>
<tr>
<td>Management occupations</td>
<td>75</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>Business, finance and administration occupations</td>
<td>70</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td>Natural and applied sciences and related occupations</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Health occupations</td>
<td>45</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>Social science, education, government service and religion</td>
<td>50</td>
<td>15</td>
<td>35</td>
</tr>
<tr>
<td>Art, culture, recreation and sport</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Sales and service occupations</td>
<td>155</td>
<td>75</td>
<td>85</td>
</tr>
<tr>
<td>Trades, transport and equipment operators and related occupations</td>
<td>140</td>
<td>130</td>
<td>10</td>
</tr>
<tr>
<td>Occupations unique to primary industry</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Occupations unique to processing, manufacturing and utilities</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2001 Community Profiles: Churchill RHA

Although the employment characteristics chart was created in 2001 by Statistics Canada, the information is not very accurate. The number of people that worked in a health occupation in 2001 was reportedly only 45 people; however the Churchill Regional Health Authority employed 211 people in 2001. The average number of people employed at any given time in 2001 was 120 people.
Education

Churchill offers public education from Pre-school to Senior 4 via the Duke of Marlborough School, Frontier School Division. Post-Secondary education is also available through the University College of the North.

There are unusual disparities in the education levels in Churchill as evidenced in the graph below. There are 50% of aboriginal people in Churchill with a less than a high school education. This is 27.5% higher than the total province average for individuals with a less than high school education. The total population of Churchill with a less than high school education is 28.6% which is 6.1% higher than the provincial average.

Of Churchill’s aboriginal population, 5.6% have a high school diploma which is 27.5% less than the Manitoba average. The total population of Churchill with a high school diploma is 26.3%, 6.9% less than the total Manitoba population.
Interestingly, 40.7% of aboriginal people in Churchill have Trade/College education compared to 26% of the Manitoba population which is a difference of 14.7%. The total population of Churchill with Trade/College education is 30.9%, 4.9% higher than the provincial average.

The aboriginal population of Churchill with a university education is 3.7% whereas the provincial average is 18.4%. The total population of Churchill with a university education is 11.9%, 6.5% less than the Province of Manitoba.
Healthy Child Development

Birthweights - High and Low Birthweight Babies and Preterm Births

High birthweight babies refers to the percentage of live infants born weighing more than 4000 Grams to the number of births (birthweight known and greater than 500 gm.)

Due of the low actual number of births in the Churchill region during the 1996/97 to 2001/02 period, high percentage rates are not reliable and cannot be compared to other regions or to Manitoba as a whole.

Low birthweight babies refers to the percentage of live infants born weighing less than 2500 grams to the number of births (birthweight known and greater than 500 gm). Low birthweight has been identified as a principal risk factor associated with infant mortality.

Factors associated with low birthweight include smoking, poor diet during pregnancy, low weight prior to pregnancy, poverty and pregnancy at very early or late ages. ( Provincial Health Indicators Report, 1999)

Due of the low number of births in the Churchill region during the 1996/97 to 2001/02 period, percentages of low birth rates are not reliable and should not be compared to other regions or to Manitoba as a whole.

Breastfeeding

![Figure 17: Breastfeeding Rates](source: Manitoba Centre for Health Policy, The Manitoba RHA Indicators Atlas, available at www.umanitoba/centres/mchp)
It is observed that Churchill’s breastfeeding initiation rate was above the provincial average for the period 1991 to 1995.

Initiation rates have diminished statistically since the 1996-2000 period, although this represents a variation of only nine individuals.

**Immunization**

The overall childhood immunization rate when compared to the provincial average has been consistently good. For children born from 1993-1995 and from 1998-2000, the rate has remained slightly above the provincial average.

![Figure 18: DaPT/HiB Immunizations Two Year Olds](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>53</td>
<td>77</td>
</tr>
<tr>
<td>2001</td>
<td>79</td>
<td>75</td>
</tr>
<tr>
<td>2002</td>
<td>68</td>
<td>75</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, The Manitoba RHA Indicators Atlas, available at www.umanitoba/centres/mchp

A variance is noted in the DaPTP/Hib Immunization rate regarding two year olds. Averaged, this rate is typically slightly less than the provincial average for the period from 2000 to 2002. As a result of added efforts by CRHA on a number of fronts this rate has increased to 77.8% for the year ended December 31, 2003.

At ages 10, 12 and 13 years, a lower percentage of Churchill children had been immunized for Hepatitis B compared to all Manitoba children. At ages 9 and 11 years, a higher percentage of Churchill children had been immunized for Hepatitis B compared to all Manitoba children. The number of children receiving Hepatits B immunizations has been increasing since 2000 because the school and the Churchill Regional Health Authority has arranged for a Public Health Nurse to visit the school to immunize the Grade 4 class.
The Td Immunization Rates for teens were noted to be below the provincial average. Various attempts have been made to encourage attendance regarding immunizations by this age group.

Source: Manitoba Centre for Health Policy, The Manitoba RHA Indicators Atlas, available at www.umanitoba/centres/mchp

Source: Manitoba Centre for Health Policy, The Manitoba RHA Indicators Atlas, available at www.umanitoba/centres/mchp
Influenza vaccination rates for 2000-2001 are above the provincial average, at 58%. The rate was further enhanced to 71.7% for the 2003 year. (CRHA health data)

The 7-year immunization rate for Churchill is below the provincial average for the 1999-2002 period. Due to additional efforts by staff of CRHA, a 100% immunization rate was reached for the period ended December 31, 2003. (CRHA health data)

**Teen Pregnancy**

The teen pregnancy rate in Churchill is noted to be statistically twice the provincial average.

![Figure 21: Teenage Pregnancy Rates (Aged 15 to 19 Years)](image)

<table>
<thead>
<tr>
<th></th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregancies</td>
<td>115.4</td>
<td>53.1</td>
</tr>
</tbody>
</table>

*Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp*

This however is somewhat misleading, as in fact the real numbers remain the same at five affected individuals. A minor fluctuation in the population over all (decreased for the years 1996-2000) effectively may explain this rate.

Nonetheless, the Community Health Assessment survey respondents indicated very strongly that early pregnancy was an issue (34 out of 55 respondents). Most respondents felt additional education regarding contraception and child care would be of benefit.
**Family Structure**

A dramatic disparity is noted between the number of female single parents compared to male single parents. Both genders combined are greater than the Manitoba average.

In fact, these rates are more than double the average for both genders. Anecdotal evidence and comments made in the Community Health Assessment Survey suggests that family violence is another reason for the increased number of single parents. Other reasons for family breakup may be related to the stress of living in an isolated community and financial stress.

<table>
<thead>
<tr>
<th></th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Parent</td>
<td>115.4</td>
<td>53.1</td>
</tr>
<tr>
<td>Male Parent</td>
<td>13</td>
<td>3</td>
</tr>
</tbody>
</table>

*Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp*

Since it is known that most single parents are female, receive less remuneration, and tend to have fewer supports, this has obvious implications regarding a variety of social issues.

Community respondents (21 of 55) felt that difficulty with parenting skills was an inherent issue. Respondents suggested the teaching of parental skills and/or support would be a benefit.

**Family Violence**

In the Community Health Assessment Survey, 80% of respondents felt that family violence was either a very serious or somewhat serious issue. This perception is not born out by statistics received from the local RCMP detachment over the last three years. Violence against women is often under reported and this may explain the low rates reported the RCMP.
Alcohol and Drug Use

The community survey indicated that problems with health due to alcohol and drug abuse scored very high in both 1997 and 2004. In 2004, 51 of 55 respondents indicated alcohol and drug abuse as a serious issue for the community. Education and awareness were suggested as ways to reduce substance abuse.

The statistics suggest alcohol consumption is above the provincial norm. However this result must be weighed carefully because it utilizes combined statistics from Burntwood and Churchill Regional Health Authority. The demographics of these two groups are known to be different in many regards. The Community Health Assessment Survey indicated that 63% of respondents felt that alcohol is a very serious problem in Churchill.

Burntwood/Churchill male and female residents appear to have been more likely to drink heavily once per week to three times per month (males 24.6%; females 13.9%) than were all Manitobans (males 18.8%; females 6.9%).

The treatment prevalence for substance abuse is noted to be substantially higher than the provincial norm.

Anecdotal evidence suggests there is drug use in the community although it is unclear how much drug use is taking place. The Community Health Assessment Survey indicated that 58% of respondents felt that drugs are a very serious problem in Churchill.

Figure 23: Treatment Prevalence for Substance Abuse 1997-1998 2000-2001

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.4%</td>
<td>5.8%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp
Smoking

According to Statistics Canada the provincial smoking rate for 2003 was 22.6%. Conversely, Churchill’s smoking rate is nearly double at 43.3%. This has obvious implications regarding morbidity and mortality in the longer term.

![Figure 24: Smoking Status](chart.png)

Source: Manitoba Centre for Health Policy, available at [www.umanitoba/centres/mchp](http://www.umanitoba/centres/mchp)

Manitoba Health data suggests that a larger proportion of male residents of Burntwood/Churchill were more likely to smoke (37.5%) than all Manitoba males (29.4%).

Unfortunately nearly half the female respondents of the Community Health Survey indicated that they did not stop smoking during their pregnancy. More than half indicated that someone else smoked in the house during their pregnancy.

Also a larger proportion of female residents of Burntwood/Churchill were more likely to smoke (43.2% smokers) than all Manitoba females (25.3% smokers).

These figures may indicate that residents of Churchill think smoking is a normal activity. In the community health survey respondents did not consider it as much of a problem as alcohol and drug use.

Moving towards a smoke free environment has been endorsed and enforced by the Churchill Regional Health Authority and the Town of Churchill, which will hopefully have a positive impact on reducing smoking rates of Churchill residents.
Gambling

Although there are no statistics available at this time, it is commonly felt that problematic gambling behavior is an inherent issue and becoming more prominent. Although the Community Health Assessment Survey did not ask about gambling activity in the community, anecdotal evidence does suggest that it is a common form of recreation. Comments made in the survey under alcohol and drug abuse and mental health/emotional problems suggested that Video Lottery Terminals be outlawed.

Physical Activity

Churchill residents are almost as physically active as the rest of the province. The percentage of active Churchill residents is 3.8% less than the provincial average as reported by Statistics Canada.

![Figure 25: Physical Activity](image)

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill 46.1</td>
</tr>
<tr>
<td>Manitoba 49.9</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, available at www.statcan.ca

The predominantly inclement weather, coupled with a relative lack of options during winter months, may influence the overall rate of physical activity in the Churchill area.

However, as evidenced by data from Manitoba Health, both males and females in Burntwood/Churchill (males 27.9%; females 21.8%) appear to have been more physically active during their leisure time than all Manitobans (males 21.2%; females 17.4%).
The BMI (Basal Metabolic Index) rates may be a better indicator of the physical health of Churchill residents. BMI is measure of body fat based on height and weight that applies to both adult men and women.

BMI Categories:
- Underweight = <18.5
- Normal weight = 18.5-24.9
- Overweight = 25-29.9
- Obesity = BMI of 30 or greater

High BMI is associated with increased prevalence of high blood pressure, diabetes, high cholesterol levels and certain cancers. (Provincial Health Indicators Report, 1999)

Nutrition

One of the biggest obstacles to a healthy lifestyle in Churchill is the limited access to fresh, varied and reasonably priced food. Respondents of the Community Health Survey (42%) cited the high cost of food and the poor quality of fresh fruits and vegetables as a problem.

Food is acquired through three main sources: The Northern Store, through individual orders placed with food stores such as Safeway in Thompson and through hunting and fishing. Train delays and the extra distance that the food has to travel add to the less than optimum quality.

The comments listed below give some impression of the level of frustration.

- Fruits and vegetables frequently in poor condition.
- Products sold with an approaching or an after the “Best Before” date.
- The higher cost for food especially during the winter season.
- The promotion of less healthy choices through low prices, sales, and location within the store.

While the cost and quality of food is an issue, it is possible to prepare nutritious meals in Churchill. Public Health comments that it takes more time to prepare fresh vegetables and meals from scratch than it does when using more costly precooked and packaged foods. The extra work needed to prepare nutritious meals is for many people, a deterrent to eating properly.
The high rate of diabetes and obesity in the community is not just the result of food costs. It is possible that a “culture” of unhealthy eating habits is present in Churchill as it is in most of North America.

![Figure 27: Rate of Obesity](source)

Unintentional injury

Statically, it can not be demonstrated that unintentional injury rates resulting from ATV and/or snow mobile accidents is an inherent problem. However, it is noted that from 1992 to 2001, an average of 26 potential years of life was lost each year for residents of Churchill, due to deaths from unintentional injuries.

In the Community Health Survey only 30% of respondents indicated that they wear a helmet at all times. Although mandated by provincial law, it would appear the helmet law is traditionally not enforced. Interestingly, fully 22 of 55 respondents felt that they would like further education on safety in this regard.

In the summer of 2004 a town by-law was enacted pertaining to compulsory helmet use for those 16 and under. This obviously remains a contentious issue. The Churchill Regional Health Authority is a strong advocate for full enforcement of the Manitoba Law.

Language

English is the dominate language spoken at home by residents of Churchill (93.5%). Only 3.7% spoke a language other than English or French at home and 0.9% spoke French at home. The percentage of the population speaking English at home appeared to be higher than that for all Manitobans (87.3%). Fewer residents of Churchill appear to speak French at home than all Manitobans (2.0%). Fewer residents of Churchill also appear to speak a language other than English or French at home than all Manitobans (8.6%). The predominant “other” languages spoken are Cree, Dene and Inuitut.

The Churchill Regional Health Authority has two fulltime Inuit interpreters and employs a number of bilingual staff members who will translate upon request. Local interpretive services from community members include, but are not limited to French, Cree, Dene, German, Ukrainian, and Russian.
Physical Environment

Water and Air Quality

While there is no data on water and air quality, compared to large urban centres Churchill has little air, water and soil pollution that would affect the health of its residents. The water filtration plant purifies water to World Health Organization standards and aside from a small garbage dump located outside the main town area there are no known contaminants such as air borne pollution from factories, mines and refineries.

The Port of Churchill is the largest building in town by height. During the shipping season (May to October) the port and the increased rail activity generate some noise pollution. Public Health does note that grain dust is a concern during the shipping season. There is an increase in respiratory ailments at this time of year.

Housing

An important aspect of health and quality of life is the type and condition of housing available to a population. In Churchill housing availability is typically at a premium. Higher costs for building materials, the low number of homes for sale and their high cost, and the number of people who live in subsidized housing are all issues that contribute to low home ownership. More than half the dwellings in Churchill are rented, as they are owned by the Manitoba Housing Authority, the Regional Health Authority or by private enterprise.

<table>
<thead>
<tr>
<th>Number of Dwellings</th>
<th>Owned Dwellings</th>
<th>Rented Dwellings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120</td>
<td>275</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, available at www.statcan.ca
A smaller proportion of renters in Churchill felt that they were living in unaffordable housing compared to all Manitobans (18.3% vs. 40.4%). This may be accounted for, at least in part, as a result of subsidies for housing offered by select employers. A smaller proportion of home owners in Churchill also felt they were living in unaffordable housing compared to all Manitobans combined (9.1% vs. 11.0%).

**Local Transportation System**

There is no public transportation system although taxi service is available. Most roads are paved and it is possible to walk to all services. The Churchill Regional Health Authority ensures employee transport with defined inclement weather as well as during bear season.
Health Status

Morbidity

Diabetes

The prevalence of Diabetes refers to the number of individuals aged 20 and over affected by diabetes during 1998/1999. Data in the below graph is expressed as a rate per 10,000 population.

Churchill men aged 20 years and older had a diabetes prevalence rate of 77.7. The rate for women appears to be higher at 117.4. The combined male/female rate is 19% of the total Churchill population, which is less than 1,000 people.

Due to the low number of community health surveys returned, the number of respondents that indicated they were diabetic did not accurately reflect the Churchill population. There was strong indication in the community health survey that access to healthy diet, an exercise program and additional information/counseling would be a definite benefit.
Circulatory Disease

From 1992 to 2001, an average of 17 potential years of life was lost each year for residents of Churchill, due to deaths from circulatory diseases. For Manitoba as a whole, the average PYLL per year from circulatory diseases was 12,209.

Figure 30: PYLL Circulatory Disorders

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>1993</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1994</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1995</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>1996</td>
<td>29</td>
<td>31</td>
</tr>
<tr>
<td>1997</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>1998</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>1999</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>2000</td>
<td>0</td>
<td>27</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba.ca/centres/mchp

Residents of Burntwood/Churchill appear to have a lower rate of hypertension (11.5%) than all Manitobans (15.6%). However, caution should be taken when making this comparison due to the small number of people within the Burntwood/Churchill sample.

Figure 31: Hypertension (Age 12 and Over) Rate 2001

<table>
<thead>
<tr>
<th>Region</th>
<th>Male Rate</th>
<th>Female Rate</th>
<th>Both Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill</td>
<td>10.8</td>
<td>12.1</td>
<td>11.5</td>
</tr>
<tr>
<td>Manitoba</td>
<td>12.8</td>
<td>17.9</td>
<td>15.6</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, The Manitoba RHA Indicators Atlas, available at www.umanitoba.ca/centres/mchp
Cancer

From 1992 to 2001, an average of 5 potential years of life was lost each year for residents of Churchill, due to deaths from cancer. For Manitoba as a whole, the average PYLL per year from cancer was 17,436.

Cancer incidence is based upon age standardized rates of new primary sites of cancer (malignant neoplasm) per 100,000 population, for all cancers.

From 1996 to 2000 residents of Churchill had lower incidences of cancer (males 383.0/100,000; females 393.2/100,000) than did Manitobans as a whole (males 529.8/100,000; females 399.1/100,000).

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp
Male residents of Churchill had lower rates of prostate cancer (119.3/100,000) than all Manitoba males (137.4/100,000) in the period from 1996 to 2000.

The women in Churchill had a higher incidence of breast cancer (164.4/100,000) than did Manitobans as a whole (117.1/100,000) based on a rate per 1000 women aged 50-69 screened by RHA of residence from April 1, 2000 to March 31, 2002.

Rated per 1000 women in Manitoba aged 50-69, Churchill women were less likely to have screening mammography (378.4/1,000) compared to all Manitoba women (476.0/1,000) from April 1, 2000 to March 31, 2002.
Churchill women were less likely (470.8/1,000) than all Manitoba women (595.0/1,000) to have been screened for cervical cancer, utilizing the rate per 1000 women age 15 and older screened over a three year time period, from April 1, 1999 to March 31, 2002.

Source: Manitoba Centre for Health Policy, available at www.umanitoba.ca/centres/mchp
From 1992 to 2001, an average of 2 potential years of life was lost each year for residents of Churchill, due to deaths from respiratory diseases. For Manitoba as a whole, the average PYLL per year from respiratory diseases was 2,373.

**Respiratory Illness**
Figure 37: PYLL - Respiratory Disease

<table>
<thead>
<tr>
<th></th>
<th>1996</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp
Asthma

Churchill residents have a higher prevalence of asthma within a 2-year window ending March 31, 2002 than all Manitobans. The graph evidences that the prevalence of asthma in Churchill males is 21% higher than the rest of the province whereas the prevalence in Churchill females is 12.65% lower than the Manitoba average.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill</td>
<td>83.65</td>
<td>56.13</td>
<td>70.51</td>
</tr>
<tr>
<td>Manitoba</td>
<td>62.65</td>
<td>68.78</td>
<td>65.76</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp

Injuries

Utilizing the crude rates of acute care inpatient hospitalization due to injuries per 100,000 population by cause of Injury, it appears evident that Churchill males aged 55 to 64 years have the highest risk of injury hospitalizations among all Churchill males (14,288/100,000).

This rate was substantially higher than the rate for Manitoba males of the same age group (883/100,000).

<table>
<thead>
<tr>
<th></th>
<th>10 to 14</th>
<th>15 to 19</th>
<th>20 to 24</th>
<th>25 to 34</th>
<th>35 to 44</th>
<th>45 to 54</th>
<th>55 to 64</th>
<th>65 to 74</th>
<th>75 to 84</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchi</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>980</td>
<td>12658</td>
<td>14286</td>
<td>4762</td>
<td>0</td>
</tr>
<tr>
<td>Manitoba</td>
<td>752</td>
<td>1287</td>
<td>1289</td>
<td>1047</td>
<td>863</td>
<td>812</td>
<td>883</td>
<td>1210</td>
<td>2574</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp
Churchill females aged 65 to 74 years had the highest risk of injury hospitalizations among all Churchill females (1,333/100,000). This is higher than the rate for Manitoba females of the same age group (1,320/100,000).

**Figure 40: Female Injury Hospitalizations 2001**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 to 14</td>
<td>3030</td>
<td>507</td>
</tr>
<tr>
<td>15 to 19</td>
<td>0</td>
<td>893</td>
</tr>
<tr>
<td>20 to 24</td>
<td>2500</td>
<td>667</td>
</tr>
<tr>
<td>25 to 34</td>
<td>0</td>
<td>542</td>
</tr>
<tr>
<td>35 to 44</td>
<td>1190</td>
<td>483</td>
</tr>
<tr>
<td>45 to 54</td>
<td>1515</td>
<td>507</td>
</tr>
<tr>
<td>55 to 64</td>
<td>2703</td>
<td>716</td>
</tr>
<tr>
<td>65 to 74</td>
<td>1333</td>
<td>1320</td>
</tr>
<tr>
<td>75 to 84</td>
<td>0</td>
<td>3590</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp

**Mortality**

The total mortality rate for Churchill as compared to the Province of Manitoba overall has increased for both the time periods from 1990 to 1994 as well as from 1995 through 1999 and in fact exceeds the rate for all other Regional Health Authorities.

**Figure 41: Total Mortality Rate**

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-1994</td>
<td>11.32</td>
<td>7.98</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp

When compared to the provincial average it is evident that the life expectancy for Churchill residents, especially the males of the population, is notable shortened.
Premature mortality, although very comparable to the provincial average at present was noted to be substantially increased for the period between 1991-1995. This was related to a specific series of events pertaining to three individuals and is not seen as a trend per se.
Cause of death has been used as an indicator of health status for a long period of time. National and international comparisons are possible. (Provincial Health Indicators Report, 1999). Males in Churchill and in Manitoba as a whole, were more likely to die from problems of circulatory system. The second cause of death for Churchill males is from external causes; for all males in Manitoba it is neoplasms. The third cause of death for both groups is diseases of the respiratory system and the fourth cause of death for Churchill males is from neoplasms compared to external causes for all Manitoba males. There is no data available on the fifth cause of death for Churchill males.

Figure 44: Leading Causes of Death Manitoba Males
1992 to 2001

The four leading causes of death for Churchill males were:
1. Diseases of the Circulatory System
2. External Causes
3. Diseases of the Respiratory System
4. Neoplasms
The first two causes of death for both Churchill and Manitoba females are diseases of the circulatory system and neoplasms. Churchill females differ greatly in the third, fourth, and fifth causes of death compared to Manitoba females. The leading causes of death for Churchill females were diseases of the digestive system, endocrine, metabolic and immunity disorders. The leading causes of death for Manitoba females were respiratory, external causes and digestive system.

The five leading causes of death for Churchill females were:
1. Diseases of the Circulatory System
2. Neoplasms
3. Diseases of the Digestive System
4. Endocrine, Metabolic and Immunity Disorders
5. Diseases of the Respiratory System
Infant Mortality Rate

The Infant Mortality Rate averaged between 1991 and 2000 is somewhat higher than the provincial average for the same period.

![Figure 46: Infant Mortality Rate 1991-2000](image)

<table>
<thead>
<tr>
<th></th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>9.84</td>
<td>6.81</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp

Death from Unintentional Injuries

Referring to the crude rate of death from unintentional injuries per 100,000 population, residents of Churchill were more likely to die as the result of unintentional injuries during this period (males 108.6/100,000; females 23.9/100,000) than were all Manitobans (males 42.7/100,000; females 23.6/100,000).

![Figure 47: Unintentional Injury Deaths 1992-1999](image)

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill</td>
<td>108.6</td>
<td>23.9</td>
</tr>
<tr>
<td>Manitoba</td>
<td>42.7</td>
<td>23.6</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp
Potential Years of Life Lost

Unlike other crude or specific mortality data which count all deaths as an equal unit regardless of age at death, PYLL measurements only consider deaths before age 75 and weights them by age. This allows one to observe and compare death occurrence and causes by their impact on “premature death”. (Provincial Health Indicators Report, 1999)

![Figure 48: PYLL All Causes](chart.png)

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>235</td>
<td>54</td>
</tr>
<tr>
<td>1993</td>
<td>2</td>
<td>131</td>
</tr>
<tr>
<td>1994</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>1995</td>
<td>115</td>
<td>22</td>
</tr>
<tr>
<td>1996</td>
<td>91</td>
<td>31</td>
</tr>
<tr>
<td>1997</td>
<td>73</td>
<td>11</td>
</tr>
<tr>
<td>1998</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>1999</td>
<td>19</td>
<td>75</td>
</tr>
<tr>
<td>2000</td>
<td>2</td>
<td>33</td>
</tr>
<tr>
<td>2001</td>
<td>14</td>
<td>56</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba.centres/mchp

From 1992 to 2001, an average of 99 potential years of life was lost each year among residents of Churchill, due to deaths from all causes. For Manitoba as a whole, the average PYLL from all causes was 66,246.

Although the previously noted anomaly involving three individuals is again evident in the data from 1991 to 1996, as evidenced by the subsequent data from 1996 through 2000 Churchill Males are just slightly above the Manitoba average in regard to Potential Years of Life Lost.
It is noted that the PYLL for Aboriginal males in Churchill is less than the Manitoba average for the period from 1995 through 1999. However the PYLL for “all other” is substantially increased for this same period.
The PYLL for Aboriginal females for the Churchill catchment is seen as at the provincial average.

![Figure 51: PYLL Aboriginal Females 1995-1999](image)

<table>
<thead>
<tr>
<th></th>
<th>Aboriginal</th>
<th>All Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill</td>
<td>101.4</td>
<td>36.11</td>
</tr>
<tr>
<td>Manitoba</td>
<td>103.26</td>
<td>36.47</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba.ca/centres/mchp

**Biology and Genetic Endowment**

The preponderance of aboriginal ancestry in the population of Churchill is a factor in their high levels of diabetes and heart disease, and other anomaly. As in many Canadian centres the increase in diabetes among children is of concern as well, although it is not clear if genetic factors are important and/or the role that lifestyle and eating habits have.
Mental Health and Addictions

There were issues which came out of the community consultations which were of particular concern. These were the topics of mental health and substance abuse. Almost everyone contacted listed these as being among the three most pressing health issues in Churchill.

Twenty of 55 respondents of the community health respondents felt very strongly that mental health/emotional problems were a priority to be addressed by the Churchill Regional Health Authority. The difficulty of clinical turnover was mentioned as was the need for after-hours service.

Through data derived from both Manitoba Health and the Manitoba Centre for Health Policy it is strongly suggested that although not included as a determinant in the Performance Measurement Framework Dimensions document (to be used as the basis for the preparation of Community Health Assessment Reports) it should be encompassed as a prominent portion of the Churchill report.

![Figure 52: Treatment Prevalence for Substance Abuse 1997-1998 2000-2001](chart)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15.4%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

Resultantly, this data, along with perceptions of the residents of Churchill, has been encompassed where possible as it is seen to be a set of issues which does impact on overall community wellness.

When asked about what they saw as the most pressing health issue facing the community, substance abuse, particularly alcoholism and use of street drugs was on most people’s minds.

In fact almost all participants interviewed felt that one of the biggest issues in Churchill is addictions, with particular concern regarding alcoholism.
On the Community survey, a full 74% of respondents listed “health problems due to alcohol or drug abuse” among the top three issues they felt are the most serious in Churchill, the most common choice by far. 27% of respondents said that there has been no progress made on this issue since the last Community Health Assessment in 1997, though 24.4% said that either some progress or excellent progress has been made since 1997. Interestingly, 41.8% of respondents said they didn’t know if any progress had been made, with the most common explanation being that they didn't live in Churchill at the time of the last Community Health Assessment. This latter point again likely speaks to the transient nature of Churchill’s population.

When asked about what they thought might be the biggest cause of mental illness in Churchill, 80% of survey respondents said alcohol abuse, and 65.4% of respondents said drug abuse. Furthermore, 63.6% of respondents confirmed that alcohol and drug abuse was a very serious problem in Churchill, and 32.7% said it was a somewhat serious problem. Together, fully 96.4% of survey respondents felt that alcohol and drug abuse was either a serious or somewhat serious problem in Churchill.

People offered various theories regarding underlying causes:

- People stated that drinking seems to be just the way it is for many people
- Some commented on how it is a learned behaviour for some families, passed down from generation to generation as an acceptable tool for coping with the many challenges of life
- Many talked about how drinking is a way to deal with the isolation associated with living in the North
- with unemployment
- with cultural dislocation
- Many observers noted how many of the social activities in the North, particularly for men, revolve around alcohol
- Even many sports activities tend to end up at the bar once the game is over.

In addition to alcohol abuse, there were also frequent references to the use of street drugs, with marijuana and cocaine being referred to most often. When those interviewed discussed street drugs they considered intervention as almost exclusively as a law and order issue. There seemed to be a general desire for greater controls to be put on the transportation links into Churchill (air, rail, sea) in an effort to cut of the supply of drugs into town. Others suggested that more education, particularly for younger people was part of the answer. Some also identified a need for group counselling or a clinic for alcohol abusers.
There are references to gambling addiction, though less so. References were usually made when discussing how many people, who reach some level of success at controlling one addiction, simply switch to another. Several people interviewed commented regarding people they knew who were drinking much less, but now showing signs of being addicted to gambling.

Interestingly, references to smoking as an addiction were rare. Despite the fact that current and former smokers in Burntwood/Churchill exceed the provincial average by far this is seemingly not seen by Churchill residents as an addiction on the same level as other behaviors.

Figure 53: Male: Current Drinkers Aged 12 and Over Who Reported Consuming 5 or More Drinks At Least Once in the Past Year – 2001

<table>
<thead>
<tr>
<th>Region</th>
<th>Canada</th>
<th>Manitoba</th>
<th>Wpg</th>
<th>Brandon</th>
<th>N. Eastman</th>
<th>S. Eastman</th>
<th>Interlake</th>
<th>Central</th>
<th>Assiniboine</th>
<th>Parkland</th>
<th>Nor-Man</th>
<th>Burntwood/Churchill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once/Month or less</td>
<td>17.8</td>
<td>36.2</td>
<td>34.2</td>
<td>35.8</td>
<td>28.8</td>
<td>37.7</td>
<td>35.5</td>
<td>31.4</td>
<td>35.5</td>
<td>46.1</td>
<td>39.8</td>
<td>44.0</td>
</tr>
<tr>
<td>Once/Week to 2-3 Times/Month</td>
<td>8.3</td>
<td>18.8</td>
<td>18.5</td>
<td>22.4</td>
<td>19.2</td>
<td>13.0</td>
<td>23.2</td>
<td>11.8</td>
<td>15.7</td>
<td>13.2</td>
<td>30.6</td>
<td>24.6</td>
</tr>
<tr>
<td>Once/Week</td>
<td>4.5</td>
<td>3.4</td>
<td>2.8</td>
<td>5.2 (C)</td>
<td>(F)</td>
<td>(F)</td>
<td>(F)</td>
<td>(F)</td>
<td>(F)</td>
<td>(F)</td>
<td>(F)</td>
<td>(F)</td>
</tr>
</tbody>
</table>

Data with a coefficient of variation (CV) from 16.6% to 33.3% are identified by an (C) and should be interpreted with caution.
Data with a coefficient of variation (CV) greater than 33.3% were suppressed (F) due to extreme sampling variability.

Source: Manitoba Health

There is little doubt that alcoholism and drug abuse is seen as a problem in Churchill. The nature of the issue and the community, are such that there is not adequate statistical data on alcoholism or drug abuse in the community. With respect to alcohol use Churchill and Burntwood data are combined making specific conclusions about Churchill impossible. In the data isolating what is commonly referred to as “binge drinking” (five or more drinks on one occasion, twelve or more times a year) it is evident that this is a predominant pattern in these two regions combined when compared to all other Regions in the province, with the exception of the Nor-Man Region. As a percentage of “current
drinkers”, 40.6% of females in Burntwood and Churchill have consumed five or more drinks less than once a month in 2001, and 13.9% reported having consumed five or more drinks between once a week to two to three times a week.

More striking, however, are the numbers for males in Burntwood/Churchill: as a percentage of “current drinkers”, 44% of males in Burntwood/Churchill have consumed five or more drinks less than once a month in 2001, and 24.6% reported having consumed five or more drinks between once a week to two to three times a week.

Many of the ideas put forward regarding intervention are already in place through the Regional Health Authority. The Churchill Regional Health Authority has an Addictions Coordinator, forming part of the Community Wellness Team, who assists those affected by addictions through counselling to groups or individuals, carrying out various educational programs as well as referrals for treatment and preparing case conferences where the courts have become involved.

The Addictions Coordinator sees about 40 active clients at a time, with January often noted to be the busiest month. On average, there are between two and five cases referred for addictions counselling a month. Referrals are voluntarily.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Churchill</strong></td>
<td>2.84%</td>
<td>4.36%</td>
</tr>
<tr>
<td><strong>Manitoba</strong></td>
<td>4.59%</td>
<td>8.66%</td>
</tr>
</tbody>
</table>

*Figure 54: Treatment Prevelance - Anxiety Disorders 1997-1998 2001-2002*

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp

An addictions support group was attempted recently, however there was only one participant, despite there being many active counselling clients. Attendance at such a group is an issue in a smaller community where everyone knows each other and anonymous treatment is made difficult.

The overall level of services currently being offered by the Churchill Regional Health Authority do not reflect the extent of the problem as it is perceived by the community. The
pervasiveness of the problem, and its impact on other aspects of an individual’s health, family and the community as a whole would suggest that the issue of addictions should figure prominently in the priorities of the Health Authority.

In the survey, 36.3% of respondents identified mental health and emotional problems as one of the three issues they felt to be the most serious in Churchill.

A similar question asked in the 1997 Community Health Assessment also identified mental health and emotional problems as one of three most serious issues.

When asked how much progress has been made since 1997 on this issue, less than 4% said that excellent progress has been made, 20% said some progress has been made, and 16.3% said that no progress has been made.

Interestingly however, the largest response on the survey to this question was “don’t know”: 52.7% said they didn't know how much progress has been made, with the most common explanation being that they weren't living in Churchill in 1997.

There is relatively little data relating to mental health specifically in the North. In referencing the recent Manitoba Centre for Health Policy report it is evident that those classed as being in the Cumulative mental health group as being a predominant client group in Churchill.

<table>
<thead>
<tr>
<th>Figure 55: Cumulative Disorders Mental Health 1997-1998 2001-2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>0.00%</td>
</tr>
<tr>
<td>5.00%</td>
</tr>
</tbody>
</table>

Source: Manitoba Health

There seems to be particular relationship between substance abuse and depression, which is the motivation behind the Co-Occurring Disorders Initiative (CODI), an initiative of Manitoba Health, the Addictions Foundation of Manitoba and the Winnipeg Regional Health Authority. People with co-occurring disorders tend to fall through the cracks of the
system, ending up in the criminal justice, the primary health care system, child protection services, and shelters for women and the homeless.

In the Community Health Survey, respondents felt very strongly that drug and alcohol abuse was instrumental regarding mental health issues. 76% of respondents also felt untreated depression was an issue. Regarding intervention, most felt additional education, information would be a benefit.

76.3% of respondents to the Community Health Assessment Survey said untreated depression was a cause of mental health problems. With respect to pharmaceutical therapy (i.e., prescription of medication), the statistics show that, compared to other Regions in the province, Churchill residents are prescribed anti-depressants at a lesser rate.

![Figure 56: Antidepressant Use](image)

<table>
<thead>
<tr>
<th></th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-1998</td>
<td>2.20%</td>
<td>4.30%</td>
</tr>
<tr>
<td>1999-2001</td>
<td>3.90%</td>
<td>5.50%</td>
</tr>
</tbody>
</table>

Source: Manitoba Health

Similarly, 80% of respondents said alcohol abuse was a cause of mental health problems.

Furthermore, 65.4% of respondents said that drug abuse was a cause of mental health problems.

This seems to support the data from the Manitoba Centre for Health Policy which suggests that, for Churchill, there is less incidence of depression, but greater incidence of
alcoholism. This may explain why the rate of prescription of anti-depressants is markedly lower than in the rest of the province.

More specific data is available in The *Manitoba Community Mental Health Program Caseload Profile*. This document shows that, in 2000, Churchill had 33 mental health cases. Of these, 87.5% were new cases, the highest percentage of any RHA in the province. There may be a number of reasons for this, but the most likely explanation for the high percentage of new cases may simply be the transient nature of the Churchill population: new people come into town and seek help either for new or pre-existing mental health problems.

Particularly striking is the gender of the caseload for Churchill in 2000, which reflects that it had the highest percentage of female cases than any other region in the province with the exception of North Eastman: 34.4% of Churchill's mental health cases were male in 2000, whereas 65.6% were female. By contrast, the case load for Burntwood (a total of 225 cases in 2000) was 44.3% male and 55.7% female, and Winnipeg's (1,798 cases) was 46.4% male and 53.9% female. Data from the Manitoba Centre for Health Policy also suggests that there is a dramatically higher hospitalization rate for females in Churchill for mental illnesses, than elsewhere in the province.

The average age of a person seeking assistance for a mental health issue in Churchill is younger than elsewhere in the province. While the average age is 43.8 years for mental health clients in the province as a whole, it is 33.4 years in Churchill, the youngest in the province (along with Burntwood, which also showed the same average age).

It is interesting to note some of the issues which people in Churchill feel contribute to mental health problems. Respondents to the survey were invited to “write-in” other causes which weren’t presented as options for them to choose from in the survey question. Answers included “parenting skills”, “stress” and “poor coping skills”, “isolation”, “genetics”, “mental health disorders”, “lack of activities and support”, “violence” and “finances.” These kinds of responses were also heard in the interview and focus groups.

The Churchill Regional Health Authority currently offers a variety of services to those affected by mental health issues through the Wellness Team earlier mentioned, and are currently investigating a number of enhancements to its services.

The Frontier School Division also offers some psychological services to its students who may require them, but also only on an itinerant basis: psychologists travel to Churchill only occasionally.
In summary, there is an apparent contrast between the mental health services available in the community and the level of importance the community placed on mental health during the course of the consultations. However, the Churchill Regional Health Authority is aware a need exists, and seems to be responding quickly with new enhancements that are being implemented now.

Of particular interest is the statistical observation that those afflicted by the “cumulative” disorders group in the recent Manitoba Centre for Health policy document are much more likely to be hospitalized for other medical issues at a much greater rate.
Health System Performance

Services and Programs

The Facility

The Churchill Regional Health Authority overlooks the Hudson Bay with nearly all-patient rooms having access to an excellent view.

A definite strength of the Churchill Regional Health Authority is the housing of all related services within one complex, combining five health care functions: acute inpatient care, long term care, ambulatory care, community services, and administrative services.

The Churchill Regional Health Authority has operated as a Primary Health Care Model since incorporation on January 2, 1996.

The acute inpatient care area is comprised of a twenty-one bed ward, plus a labour and delivery room, operating room, recovery room and a Central Supply Room.

The long term care area consists of seven beds, one of which can be used for respite care.

Ambulatory care services encompass an emergency room, medical clinic, dental clinic, a combined in-house and retail pharmacy, pre-hospital care, and diagnostic services.

Community services provides a comprehensive range of services including: public health, probation/parole services, child day-care, community wellness team including mental health services, home care, child and family services, addiction programs, community counseling and a Receiving Home.

Administrative services provides the additional support services required to operate the facility.

Acute Care Ward

The Acute Care Ward has 9 Medical/Surgical, 2 Obstetrics and 8 pediatric beds.

Approximately 25 deliveries are done annually. The majority of the deliveries are low risk. There are no induction or C-Section facilities. The Churchill Regional Health Authority believes that breast-feeding is the best for the baby and should be encouraged by everyone.
One unique process is custom adoption. This is a traditional Inuit practice and is very common. This adoption is considered legal but does not require any legal documentation. When custom adoption occurs, the birthing mother gives the babe to someone else. Often this person is a relative, such as her mother, an aunt, her grandmother, or another relative. The child may not return to the same community as the mother.

The Operating Room is equipped to facilitate most types of general, gynecology, ENT and emergency surgical procedures. One week each month Dental Surgery is scheduled for the children of Nunavut. The anesthetist and surgeon are flown in from Winnipeg. The Operating Room is staffed by RNs who are brought in from Winnipeg when surgery is scheduled. It is rare that surgery is done between surgical visits.

![Figure 58: Where Residents Went For Hospital Days](image)

Source: Manitoba Centre for Health Policy, The Manitoba RHA Indicators Atlas, available at www.umanitoba/centres/mchp

**Interpreter Services**

Interpreter services are available as follows:

- **Inuktitut** - There are two (2) full-time interpreters covering the hours 0730 - 2100 hours from Monday to Friday with one of them on 24 hour call.

- **Cree** - Services can usually be obtained from an employee.

- **Dene** - Services can usually be obtained from an employee.

**Personal Care Home**

Although the Churchill Regional Health Authority does not have a licensed personal care home facility, seven beds are used for Long Term Care residents. In 1999 renovations were completed and the residents now have a space which is similar to personal care homes elsewhere. There are five private rooms and one double room.

This area was named Dancing Sky, in recognition of the Aurora Borealis.

A full time Activities Worker coordinates activities for long term care as well as for seniors in the community.
Ambulatory Care

The Emergency Room is staffed by the "On-Call" physician and Ward Nurses. The patients are triaged and directed by the Triage Nurse either to the Medical Clinic or the Emergency area.

Physician Services

Physicians are made available through the Northern Medical Unit, Faculty of Medicine, University of Manitoba. The Churchill Regional Health Authority has an allotment for three physicians. Typically one physician works in the medical clinic, one physician is on call for emergencies, with the third physician providing post call service.

During 2003 the Churchill Regional Health Authority had three full-time physicians, however, by summer 2004, there were no permanent physicians remaining.

Currently the Health Authority utilizes two locum physicians as well as one Nurse Practitioner on a rotating basis. This lack of continuity in physician staffing at times leads to difficulties in case management.

It is recognized that the recruitment and retention of physicians experienced here is not isolated to the Churchill Regional Health Authority, as this is a common occurrence especially in rural areas of the province.

In 2003 - 2004, there were 4084 patients seen in the fiscal year. This equates to a physician ratio of 11.18 patients per day.

As evidenced by the data depicted below, Churchill residents accessed more physician services per capita as compared to the rest of the province for the years 1995 - 1996 as well as 2000 - 2001.

![Figure 59: Location of Visits to GP/FP](source)

Source: Manitoba Centre for Health Policy, The Manitoba RHA Indicators Atlas, available at www.umanitoba/centres/mchp
This depiction becomes even more pronounced when consideration is given to the large number of Nunavut clients which are not captured in the Manitoba health data.

Consultants rotate to Churchill on a regular basis throughout the year. These include specialties such as: pediatrics, internal medicine, radiology, ophthalmology, psychiatry, orthopedics, general surgery, plastics, obstetrics and gynecology, ENT, urology, genetics and orthotics.

<table>
<thead>
<tr>
<th></th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-1996</td>
<td>0.85</td>
<td>0.84</td>
</tr>
<tr>
<td>2000-2001</td>
<td>0.86</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, The Manitoba RHA Indicators Atlas, available at www.umanitoba/centres/mchp

**Diagnostic Services**

The Diagnostic Services Unit offers laboratory testing, radiology, EKG, Holter monitoring and Ultrasound. Special radiological studies are done during the Radiologist's visit.

**Pre Hospital Care**

The Churchill Regional Health Authority owns and operates the Emergency Medical Services (Ambulance Service). The service is staffed twenty-four hours per day and is dispatched by the Churchill Regional Health Authority.
**Dental Clinic**

Dental services are provided through contractual arrangement by the Faculty of Dentistry, University of Manitoba. Visits to Churchill occur two weeks per month in isolation of the dental surgeon's visits. All dental emergencies remain the responsibility of the patient.

**Pharmacy**

The Churchill Pharmacy provides services within the facility and as well operates as a retail pharmacy to the residents of Churchill. There is a full time Pharmacist and Pharmacy Technician.

**Community Services**

Community Services strives to provide services that prevent physical/social/emotional difficulties and promote the well being of the individual, family and community. As well statutory functions are carried out regarding Child and Family Services and the Justice systems.

Services are provided in the following areas:

1. **Children's Centre**

The Children's Centre provides licensed Day Care for up to forty (40) children, age eighteen months to twelve years of age. The Centre provides full or part-time childcare services Monday through Friday. The Children's Centre program is designed to enrich each child's development.

2. **Child and Family Services**

This includes family counseling, child protection and in-home family support services.

3. **Receiving / Group Home**

This eight-bed residential care facility provides service children less than 18 years of age. Placements are made through Child and Family Services.
4. Community Wellness Team

Utilizing wellness protocols, this multidisciplinary team includes:

- Community Counsellor
- Mental Wellness Counsellor
- Mental Wellness Nurse
- Addictions Coordinator
- Peer Support Worker

5. Public Health

This program is divided into two sections: clinical and educational.

The clinical component includes:

- Immunization for children, adults, staff health and international travel
- Well-Baby Clinic
- Well-Women Clinic
- Home Care

Source: Manitoba Centre for Health Policy, available at www.umanitoba.centres/mchp

Figure 61: Open Home Care Cases

<table>
<thead>
<tr>
<th></th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994-1996</td>
<td>15.82</td>
<td>20.5</td>
</tr>
<tr>
<td>1999-2001</td>
<td>28.94</td>
<td>25.5</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba.centres/mchp
The rate of open cases per 1000 has increased for the period from 1999 to 2001 as compared to previous periods. This must however be weighted again against the relatively small numbers involved.

![Figure 62: Average Length of Home Care Cases](image)

<table>
<thead>
<tr>
<th></th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994-1996</td>
<td>168.64</td>
<td>195.39</td>
</tr>
<tr>
<td>1999-2001</td>
<td>154.76</td>
<td>208.74</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp

The Home Care program remains involved in case activity for a notably shortened period when compared to the Manitoba average.

- Communicable Disease Management
- Audiology assessments
- Speech and Language Therapy for pre-school children
- Environmental Health
- Palliative Care

The educational component includes:
- Baby First
- Healthy Baby
- DER (Diabetes Education)
- School Health and Safety
- Post-Partum visits
- Family Planning/Reproductive Health
- Asthma Education
- Health Promotion
6. Corrections / Probation

Working within the Provincial Justice System, carries out mandated activities.

Administrative Services

Included in Administrative services are the portfolios for:
- Human Resources
- Housing
- Finance
- Information Systems
- Dietary
- Housekeeping
- Maintenance
- Materials Management
- Health Information Systems
- Medical Library

Telehealth

Churchill is part of a provincial Telehealth network which includes over 21 sites connected either by ground or satellite links.

Kivalliq Liaison

The Kivalliq Region of Nunavut is comprised of the land north of Manitoba on the west coast of the Hudson Bay, and the Southampton and Belcher Islands. There are eight communities varying in population from 250 to 2500 residents.

The Kivalliq communities and their populations (2001 Statistics Canada) are:

<table>
<thead>
<tr>
<th>Community</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arivat</td>
<td>1,899</td>
</tr>
<tr>
<td>Baker Lake</td>
<td>1,507</td>
</tr>
<tr>
<td>Chesterfield Inlet</td>
<td>345</td>
</tr>
<tr>
<td>Coral Harbour</td>
<td>712</td>
</tr>
<tr>
<td>Rankin Inlet</td>
<td>2,177</td>
</tr>
<tr>
<td>Repulse Bay</td>
<td>612</td>
</tr>
<tr>
<td>Sanikiluaq (Baffin Region)</td>
<td>684</td>
</tr>
<tr>
<td>Whale Cove</td>
<td>305</td>
</tr>
</tbody>
</table>

Total 8,241

When Kivalliq residents require investigation or care beyond that which can be provided by their Health Centres, they are referred to the Churchill Regional Health Authority or for tertiary care to Winnipeg hospitals.
System Competency

Appropriateness

Appropriateness refers to the extent to which health services meet the needs of the people while reflecting best practices. Measures can be based in three categories:

- High profile procedures
- Discretionary surgical procedures
- Care Mapping

As previously mentioned, all services are contained within one complex. This ensures ease of access for patients, staff and physicians across the spectrum of services and allows for meaningful reciprocal communication.

Health Information Services holds all patient records for clients seen in all sectors of the Regional Health Facility. This eliminates duplication of client records and allows access to all personnel in accordance with PHIA guidelines.

Access to specialists in Churchill is in fact better than the provincial average.

Figure 63:

<table>
<thead>
<tr>
<th>Specialist</th>
<th>Frequency of Visit</th>
<th>Numbers of clients/year (2003-2004)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiropractor</td>
<td>monthly</td>
<td>421</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>Bi-annually</td>
<td>82</td>
</tr>
<tr>
<td>ENT</td>
<td>Bi-annually</td>
<td>95</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>Annually</td>
<td>2</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>Once annually</td>
<td>18</td>
</tr>
<tr>
<td>Obstetrics/Gynecologist</td>
<td>Bi-annually</td>
<td>37</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>Bi-annually</td>
<td>59</td>
</tr>
<tr>
<td>Orthodics</td>
<td>Annually</td>
<td>9</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>Quarterly</td>
<td>148</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>Bi-annually</td>
<td>30</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>monthly</td>
<td>171</td>
</tr>
<tr>
<td>Plastics</td>
<td>Bi-annually</td>
<td>144</td>
</tr>
<tr>
<td>Podiatry</td>
<td>Quarterly</td>
<td>96</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>Bi-annually</td>
<td>28</td>
</tr>
<tr>
<td>Surgery</td>
<td>Bi-annually</td>
<td>47</td>
</tr>
</tbody>
</table>

Source: Churchill RHA Inc. Patient Statistics
As well as providing access to specialists to the community of Churchill, access is also extended to the approximate 10,000 Nunavut residents served by the Churchill Regional Health Authority. This at times creates scheduling difficulties as a result of high numbers.

Services provided by specialists, can be provided through direct contact, by Telehealth sessions, or via the Northern Patient Transportation Program, which transports patients to Thompson or Winnipeg for other services that are not available locally.

![Figure 64: Ambulatory Consultation Rates](image)

Source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp

1. High Profile Procedures

The Churchill Regional Health Authority as a result of a lack of consistent expertise does not engage in any high profile surgical procedures. Rather, timely referrals are made to alternate resources.

2. Discretionary Surgical Procedures

In 2003-2004, 219 Dental Surgical procedures were facilitated as well as 62 plastic surgeries.

3. Care Mapping

Full spectrum care mapping has been implemented throughout the medical/surgical/long term care sectors. Work is underway to standardize documentation in all other sectors.
Effectiveness

Effectiveness is the extent to which services, interventions, or activities achieve the best results.

Specialist clinics are somewhat hard to access due to the limited number of days per visit/per year.

The average maximum stay for a specialist is 1.5 to 3 days.

Efficiency

Efficiency is the extent to which resources are brought together to achieve the best results with minimal waste and effort.

Client and Community Focus

Communication refers to the extent to which relevant information is exchanged with the client, family and/or community in a way that is understandable, meaningful, consistent and ongoing.

The Churchill Regional Health Authority has implemented a Communication Strategic Plan.

Philosophy

The Churchill Regional Health Authority has identified a series of core values which it uses to guide its planning, and carrying out its day-to-day duties. These values reflect a commitment on the part of the Churchill Regional Health Authority to:

- valuing the consumers of its services
- service to the whole person
- strong leadership, competent governance and management
- working with and supporting its staff, recognized as it greatest resource
- teamwork and building strategic alliances
- openness and communication
- on-going learning, for staff (the Churchill RHA is recognized as a teaching, training and research facility) and consumers of RHA services alike
- innovation and continuous improvements to service quality
- fiscal responsibility and accountability
• recognizing and building upon the unique challenges and opportunities presented to people in Churchill, and the constant need for creativity in providing health services.

The Churchill Regional Health authority is committed to communicating effectively to develop shared understandings by:

• providing regular opportunities for information exchange and mutual education on interests and values;
• being honest and open;
• listening carefully;
• using input from staff and residents of the region to shape health services;
• using plain language;
• providing common messages across a broad range of media; and
• being aware of cultural differences and special needs among our audiences.

Communication Challenges

Some of the challenges to effective communications in our region include:

• working between the Manitoba and Nunavut levels of government;
• low literacy levels;
• the power of rumor and misinformation to negate factual information;
• competing priorities;
• lack of public understanding;
• long distances, high costs, and isolated arctic communities that make communications more difficult;
• diverse health needs and cultures which create a need for many different kinds of health messages and language skills;
• continual staff turnover juxtaposed with recruitment and retention activities; and
• lack of community newspapers or regular news circulars.

Communication Opportunities

• Staff are a key target audience because of their influence with the community both in the actual care they provide and the information they share with clients, friends, and neighbors. If they are happy and well-informed, they can help create a positive and supportive community environment for the RHA;
• Opportunities should be sought to collaborate or form relationships with other organizations working in the region. Many benefits may flow from development of a closer relationship with Education and other agencies. If their staff members are well informed about health services, they can help to leverage our message penetration in the region;
• The Churchill Regional Health Authority Advisory Council offers excellent potential to ensure effective two-way communication with communities in the region;
• The RHA needs to continue its efforts to ensure community leaders and other residents who seek out health-related information are kept well informed;
• Technology, especially the new Telehealth system, offers opportunities for the RHA to overcome delays in communications due to the formidable distances;
• Opportunities should be sought to enhance communication with the communities served in Nunavut and for improved social interaction by patients with their families in their home communities.

Confidentiality

Employees, volunteers, and contract workers are required to sign a Pledge of Confidentiality. A presentation is given during the employee orientation explaining the importance of confidentiality in all matters related to patient information.
Health System Infrastructure

Finances

This section discusses the proportion of total budget going to acute care as compared to the proportion of total budget going to community care.

![Figure 65: Acute Care v/s Community Costs 2001-2002](image)

As compared to the rest of the province more of the total budget is allocated to Primary Care services with Community Programs.

Churchill reported a lower proportion of expenditures on community care than did all Manitoba RHAs.

Medical Utilization costs per capita for the 2001-2002 period are below that of most Regional Health Authorities and the Manitoba average overall.

![Figure 66: Medical Utilization Rates 2001-2002](image)
Although overall percentage of budget dedicated to Administrative costs are greater than the provincial average for the Churchill Regional Health Authority, atypical allocation for issues such as the comparatively high cost of travel and other administrative conditions must be considered.

![Figure 67: Administrative Costs](source: Manitoba Centre for Health Policy, available at www.umanitoba/centres/mchp)

### Human Resources

The Churchill Regional Health system employs approximately 120 people. Professional employees tend to be relatively transient staying an average of two years. Resultantly, recruitment and retention of especially professional employees is an ongoing issue being addressed by the organization and a very effective recruitment and retention plan has been designed and implemented.

### Leadership

The leadership of the Churchill Regional Health Authority is comprised of a Board of Directors, the Churchill Regional Health Authority Advisory Council and the Senior Management Team.

The Board of Directors is made up of five local community members, two representatives from Nunavut, a Manitoba Health Liaison, and the Senior Management Team. The role of the Board of Directors is to govern the facility. The Board meets once a month and the meetings are always open to the public. Minutes from the meetings are posted on the shared computer drive and are posted on an internal bulletin board for the community to access.

The Senior Management Team consists of the Chief Executive Officer, Chief Financial Officer, Director of Clinical Services, Director of Community Programs and Planning,
Human Resources Coordinator, and the Executive Assistant. The Senior Management Team deals with the day-to-day issues of the facility.

The Churchill Regional Health Authority Advisory Council is comprised of the Director of Community Programs and Planning and community representatives. Their responsibility is to make suggestions and recommendations to the Board of Directors and Senior Management Team.

Information and Technology

One of the operating components of the **Quality Improvement Framework** of the Churchill Regional Health Authority is the **Information Management Quality Improvement Committee**. This committee is responsible for monitoring and improving the information and technological needs of the facility. Membership on this committee includes, but is not limited to, the Network Administrator, Chief Financial Officer, Directors, Health Information Services representatives, Telehealth Coordinator, Diagnostic Representatives, and representatives from other departments such as Nursing, Medical Clinic, and Emergency Medical Services.
The Churchill Regional Health Authority has a centrally located Health Information Services Department that manages and stores all patient health records. In 2004, the computerized patient database was upgraded from ICD-9 to ICD-10. This upgrade of technology will allow the organization to collect statistics in-house that may be used to further improve the services to the community.

**Telehealth** has become an increasingly important tool to the Churchill Regional Health Authority. In the summer of 2004, a new Telehealth conference room was built in the facility with an office for the coordinator, a clinic room, and a large conference room equipped with a television, VCR, and projector that are all able to be linked to the existing Telehealth equipment. This new Telehealth room is used for patient/client care as well as for staff education and training. Use of the Telehealth technology provides a wide variety of linkages for people to receive health care consultations and expertise from external resources. Professional networking Tele-educational services, and Tele-visiting for clients and their families are also available.

**Computerized data** is becoming an increasingly important resource to the Churchill RHA. All policy and procedure manuals for the organization are located on a shared computer drive and are accessible to all staff members. This shared drive also includes minutes of a variety of committee including all of the Quality Improvement Committees, various forms used by the departments, a promotional video that was created for the Churchill RHA, an educational calendar for all internal educational sessions, job descriptions, surveys, and links to the organization’s website. In 2004, several computers were upgraded to Windows XP and the number of servers used to store information has been increased from four to six. Information that is stored electronically on the server is backed up daily and stored offsite once a month.
References


Manitoba Centre for Health Policy (2002). The Health and Health Care Use of Registered First Nations People Living in Manitoba: A Population Based Study. Department of Community Health Sciences, Faculty of Medicine, University of Manitoba.

Manitoba Centre for Health Policy (2003). The Manitoba RHA Indicators Atlas: Population-Based Comparisons of Health and Health Care Use. Department of Community Health Sciences, Faculty of Medicine, University of Manitoba.

Manitoba Centre for Health Policy (2004). Patterns of Regional Mental Illness Disorder Diagnoses and Service Use in Manitoba: A Population-Based Study. Department of Community Health Sciences, Faculty of Medicine, University of Manitoba.


APPENDIX I
Churchill Regional Health Authority Vision Statement

Vision

To develop the Churchill RHA Inc. as an internationally recognized model of Northern and Aboriginal health care.

Mission

Working together for the better health of everyone we serve.

Values

We value the consumers of our services

We identify our consumers as patients, residents, staff, members of families, volunteers, and visitors to the area. We treat our consumers in humanitarian ways, and with dignity and respect, recognizing their cultural diversity and individual uniqueness.

We value service to the whole person

We see our consumers as having a variety of physical, mental, cultural, social, emotional and spiritual needs. We respect their right to professional, compassionate and confidential care.

We value strong leadership, competent governance and management

We depend on strong, skilled and accountable leadership from the Board of Directors in setting direction and policy, and from executive management in enacting and administering them. Leadership and competence create and promote a dynamic, inclusive and productive working environment for the delivery of quality programs and services.

We value our colleagues

We recognize that our committed and dedicated staff is our greatest strength. We share information, resources and ideas openly. We ensure a co-operative partnership among all members of the team built on mutual trust, respect and dignity. We invite and encourage full participation in making decisions from all sectors of the organization. We work co-operatively and in partnership with our colleagues in the health, social service educational, and justice systems to ensure skilled, sensitive and effective services are provided to our clients.
We value teamwork and strategic alliances

We are proud to provide an inclusive multidisciplinary approach to wellness. We work co-operatively in consultation with the communities we serve, our funders and our colleagues. We recognize the support and reciprocal benefits available from alliances with strategic partners in the provision of health care and social services.

We value openness and communication

We recognize the importance of sharing timely and accurate information. We strive to promote communication between and among all sectors of our organization, and the consumers and communities we serve. We are committed to listening and being responsive to feedback provided.

We value learning

We are proud of our role as a teaching, training and research facility. Recognizing the changing needs of the communities we serve, we promote continuous learning. We provide opportunities for staff and consumers to grow and to develop new knowledge and skills in a manner, which emphasizes education as a key factor in achieving healthy lifestyles, and enhancing preventive health care and wellness.

We value continuous quality improvement and innovation

In our search for excellence, we are committed to continuous evaluation of what we do in the best interests of those we serve. We strive continuously to improve the quality of care that we provide through creative, constructive, and innovation.

We value fiscal responsibility and accountability development

We recognize the need to manage our resources wisely for the benefit of future generations.

We value being different

Our unique geography, ecology, climate and multicultural environment sets us apart. Our organization is constantly challenged to be creative in providing specialized alternatives in care giving.
This survey asks you a few questions about the health of you and your family. Your answers will help the Churchill Regional Health Authority better understand the health needs of Churchill residents, so that we can plan for better programs and services.

Your answers will be reviewed along with those of other Churchill residents and will help us determine what issues we need to examine more closely as part of an ongoing Community Health Assessment project. The results of this project will be presented in a report and discussed with the community in the months ahead, before becoming used in the Health Authority’s strategic planning.

Your participation is voluntary and your answers will be kept strictly confidential.

To begin, please answer the following questions:

To the best of your knowledge, has anyone else in your household already completed this survey?

☐ Yes  ☐ No

Please now continue to complete the rest of the questions on the following pages.

If you have any questions about how to fill out the survey, or how to answer a particular question, please feel free to contact the Churchill Regional Health Authority at 675-8328.
Your Household

1. How old are you? __________ years
2. How many people live in your household? __________ people

Priorities

3. Please look at the list of health-related issues below. In your opinion, what are the three most serious health-related problems in the community?

Please choose THREE issues which you feel are the most serious.

<table>
<thead>
<tr>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family income</td>
</tr>
<tr>
<td>Health problems due to alcohol or drug abuse</td>
</tr>
<tr>
<td>Problems related to childcare</td>
</tr>
<tr>
<td>Family planning and birth control</td>
</tr>
<tr>
<td>Crime and violence</td>
</tr>
<tr>
<td>Chronic illness due or ailments</td>
</tr>
<tr>
<td>Chronic illness due to old age</td>
</tr>
<tr>
<td>High cost of nutritious food</td>
</tr>
<tr>
<td>Accidents and injuries</td>
</tr>
<tr>
<td>Physical impairments (handicaps)</td>
</tr>
<tr>
<td>Mental health/emotional problems</td>
</tr>
<tr>
<td>Other (please specify):</td>
</tr>
</tbody>
</table>

1997 Needs Assessment Survey

In 1997, we asked the community a similar question, and they told us that the most serious health issues at that time were:

- Health problems due to alcohol or drug abuse
- Problems related to parenting and child care
- Mental health/emotional problems
4. How much progress do you think has been made since 1997 in addressing HEALTH PROBLEMS DUE TO ALCOHOL AND DRUG ABUSE?

- No progress has been made.
- Some progress has been made.
- Excellent progress has been made.
- Don’t know.

Please Explain. (e.g., What should have been done? What could have been done differently? What was done right? What was done wrong? etc.)

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

5. How much progress do you think has been made since 1997 in addressing PROBLEMS RELATING TO PARENTING AND CHILDCARE?

- No progress has been made.
- Some progress has been made.
- Excellent progress has been made.
- Don’t know.

Please Explain. (e.g., What should have been done? What could have been done differently? What was done right? What was done wrong? etc.)

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
6. How much progress do you think has been made since 1997 in addressing MENTAL HEALTH/EMOTIONAL PROBLEMS?

- No progress has been made.
- Some progress has been made.
- Excellent progress has been made.
- Don’t know.

Please Explain. (e.g., What should have been done? What could have been done differently? What was done right? What was done wrong? etc.)

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Respiratory Problems

7. Do you suffer from asthma?  
   - Yes  
   - No

8. Do you suffer from bronchitis, or any other breathing problems?  
   - Yes  
   - No

Please state is other than bronchitis: ____________________________
Diabetes

9. What do you think causes diabetes?
   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

10. Do you suffer from diabetes?
    □ Yes
    □ No (please skip to Question 12)

11. If yes, how do you manage it?
    □ Special diet
    □ Daily Exercise
    □ Insulin
    □ Other medication (please identify) __________________
    □ Other (please identify) ___________________________

12. Do you believe a healthy diet could help . . .
    . . . to prevent the start of diabetes? □ Yes □ No
    . . . those who have diabetes to manage it better? □ Yes □ No

13. Do you believe exercise could help . . .
    . . . to prevent the start of diabetes? □ Yes □ No
14. If you wanted to learn more about diabetes, how would you like to get information?

- Written information handouts
- One on one counselling
- Group session
- Other (please identify) ____________________

15. What suggestions do you have to help the CRHA improve its diabetes services?
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

**Mental Health**

16. What does the phrase “mental health problems” mean to you?
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

17. In your opinion, what are some of the biggest causes of mental health problems in Churchill? (check all that apply)
18. If you wanted to learn more about mental health, how would you like to get information?

- Written information handouts
- One on one counselling
- Group session
- Other (please identify) ____________________________

19. In your opinion, how could the CRHA improve its mental health services?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Pregnancy

If you are female and have been pregnant at some point in your life, please answer questions 20, 21, and 22.

If you are male, or a female who has never been pregnant, please skip to Question 23.

20. How old were you when you had your first child? ________ years old

21. Did you use alcohol regularly during any of your pregnancies?

- Yes  
- No

22. a) Did you smoke during any of your pregnancies?  

- Yes  
- No

b) Did others in your household smoke during any of your pregnancies?
Early Pregnancy

23. In your opinion, is early (teen) pregnancy a problem in Churchill?  
☐ Yes ☐ No

24. How could the CRHA better support young mothers and fathers in Churchill?
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Alcohol & Drug Abuse

25. In your opinion, how serious a problem is alcohol abuse in Churchill?  
☐ Very serious  ☐ Somewhat serious  ☐ Not very serious  ☐ Not serious at all

26. In your opinion, what services could help people to deal with problems with alcohol abuse?
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
27. In your opinion, how serious a problem is the abuse of street drugs in Churchill?

☐ Very serious
☐ Somewhat serious
☐ Not very serious
☐ Not serious at all

28. In your opinion, what services could help people to deal with problems with street drugs?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Smoking

29. Do you smoke?  

☐ Yes  ☐ No

30. If yes, at what age did you start smoking regularly?  _____ years old

Family Violence

31. In your opinion, how serious a problem is family violence in Churchill?

☐ Very serious
☐ Somewhat serious
☐ Not very serious
☐ Not serious at all

32. In your opinion, what services could help to prevent family violence in Churchill?

_________________________________________________________________
_________________________________________________________________
33. In your opinion, how could the CRHA better support victims of family violence in Churchill?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Safety

34. Do you occasionally drive an All Terrain Vehicle (ATV) or ‘four-wheeler’?  
   ☐ Yes ☐ No

35. If yes, do you use a safety helmet . . . .
   ☐ Always ☐ Sometimes ☐ Never

36. Do you occasionally drive a snowmobile?  
   ☐ Yes ☐ No

37. If yes, do you use a safety helmet . . . .
   ☐ Always ☐ Sometimes ☐ Never

38. If you, or anyone else in your household, wear helmets only SOMETIMES or NEVER, what do you think are some of the reasons why you don’t wear them more often?

_________________________________________________________________
39. Would you like to learn more about ATV/Four-Wheeler and Snowmobile safety?  
☐ Yes  ☐ No

40. Please complete the following table about the other people in your household (not including yourself), to the best of your knowledge.

<table>
<thead>
<tr>
<th></th>
<th>Person 1</th>
<th>Person 2</th>
<th>Person 3</th>
<th>Person 4</th>
<th>Person 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the age of this person?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does this person suffer from asthma?</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>Does this person suffer from bronchitis, or other breathing related problems?</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>Does this person have diabetes?</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>Does this person drive an ATV or &quot;four-wheeler&quot;</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>When driving an ATV or ‘four-wheeler’, does this person use a safety helmet?</td>
<td>☐ Always ☐ Sometimes ☐ Never</td>
<td>☐ Always ☐ Sometimes ☐ Never</td>
<td>☐ Always ☐ Sometimes ☐ Never</td>
<td>☐ Always ☐ Sometimes ☐ Never</td>
<td>☐ Always ☐ Sometimes ☐ Never</td>
</tr>
<tr>
<td>Does this person drive a snowmobile?</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
<td>☐ Yes ☐ No</td>
</tr>
<tr>
<td>When driving a snowmobile, does this person use a</td>
<td>☐ Always ☐ Sometimes ☐ Never</td>
<td>☐ Always ☐ Sometimes ☐ Never</td>
<td>☐ Always ☐ Sometimes ☐ Never</td>
<td>☐ Always ☐ Sometimes ☐ Never</td>
<td>☐ Always ☐ Sometimes ☐ Never</td>
</tr>
<tr>
<td>safety</td>
<td></td>
<td></td>
<td></td>
<td>helmet?</td>
<td></td>
</tr>
<tr>
<td>--------</td>
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</tbody>
</table>