COMMUNITY HEALTH ASSESSMENT
2009

Working together for the better health of everyone we serve
# Churchill Community Health Assessment Table of Contents

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Executive Summary
Executive Summary

Introduction

Each Regional Health Authority (RHA) is required by Manitoba Health to undertake a comprehensive Community Health Assessment (CHA) of their region every five years. This document represents the third Community Health Assessment completed by the Churchill Regional Health Authority.

For this Community Health Assessment, Manitoba Health required that each Regional Health Authority report on a "Core" set of 96 indicators. Beyond this core set of indicators, each RHA could report on other important indicators based on their unique needs and priority areas. Our region is limited in that in some cases the "Core" indicators were suppressed due to small numbers, so we could not always report as required. Where possible, we have used other data sources and community consultation information to fill in where the standard data sources were suppressed. We have also chosen many other indicators beyond the core set to paint the most comprehensive picture of our region possible.

This Community Health Assessment is the basis for the Region’s planning and decision-making. We have gathered information through i) community consultations with residents and RHA staff and health care providers, ii) local administrative data, and iii) data provided through Manitoba Health’s Community Health Assessment Network. Through this process, we have gained a clearer picture of both the health beliefs of residents, how these beliefs affect health and which determinants of health are the most significant predictors of health outcomes in the region. How the Churchill RHA can play a role in improving those outcomes will remain ongoing work.

About our Region

The Churchill RHA has a significant role in northern health delivery, health policy innovation and northern health research. The Churchill RHA is also a major contributor to the local economy, employing over 100 people.

The RHA delivers a broad range of services to the residents Churchill. As well, a significant proportion of services are provided to people from Nunavut who are referred to Churchill to access services. Churchill RHA continuously seeks opportunities to broaden its scope of service provision in keeping with the Nunavut government’s expressed desire to engage services “closer to home” and create a sustainable health care system. Continued dialogue with Nunavut, emphasizing the strengths and skills the Churchill RHA can provide, will be necessary if this key linkage is to be preserved. It is important to note, however, that while the relationship with Nunavut is an important focus for the ongoing operations of the Churchill RHA, the primary focus of this Community Health Assessment is on the health of Churchill residents only. This means that, although we provide many services to residents of Nunavut, information about the health and service utilization of these residents is not included in this report.
Key Findings

Throughout this Community Health Assessment we identified many areas of strength particularly around:

- Community members’ satisfaction with the services provided by the Churchill RHA.
- Community members’ satisfaction with access to local services (both acute care and community based).
- Community members are less likely to report high levels of "life stress" than other Manitobans.
- Staff satisfaction in the work place.
- Readiness to learn - Churchill reported higher than average rates of children being "very ready" to learn in the areas of Physical Health and Well-being, Social Competence, and Emotional Maturity. Overall, 55 per cent of Churchill children were "very ready" in two or more areas of development compared to 46 per cent of Manitobans.
- We have high rates of Families First screening, which means we can identify families who may need additional supports.
- Immunization rates among children are improving for most age groups, and in some age groups we now have one hundred per cent coverage.
- Immunization rates among all seniors for influenza and pneumococcal are comparable to provincial averages, and rates among First Nations seniors living in Churchill are much higher than provincial rates.

Areas which have been identified for change and improvement are:

- Socio-economic factors
- Lifestyle choices
- Maternal Health and Family Risk Factors
- Mental Health and Addictions
- Diabetes and Complications
- Injury, Premature death and Life expectancy

Socio-Economic Factors

Socio-economic factors were also identified as a priority area through the 2004 CHA and although there has been some improvement, this area continues to be one where improvement is needed. Some areas where we would like to see improvement include unemployment rates, income and numbers of families receiving social assistance as well as education levels and retention rates (students who must repeat a grade).

- According to the 2006 Census, the unemployment rate in Churchill is 15.4 per cent compared to 5.5 per cent for all of Manitoba.
- Labour force participation and employment rates have declined since our last community health assessment.
- More than one in five children in our region live in families who are receiving income assistance, and median income in single parent families is among the lowest the in province at less than $25,000 per year.
• Forty-three per cent of Churchill residents do not have a high school certificate, diploma or degree compared to 29 per cent of Manitobans. However, we are seeing improvement over rates in 1996 (46.2%) and 2001 Census (46.2%).
• Churchill has one of the highest rates of retention for children in grades Kindergarten to 8 with about 14 per cent of students needed to repeat one year of schooling.

Lifestyle Choices

Smoking
• More than one in three residents age 12 or older report that they smoke "daily" or "occasionally", and almost 20 per cent of non-smoking adults are exposed to second hand smoke in the home. Combined, this means that about one half of Churchill adults are exposed to the harmful effects of tobacco.
• Thirty-nine per cent of youth age 12 to 19 are "current daily" or “occasional smokers” (compared to 13.7% in Manitoba).
  o Rates among youth are increasing: 22.5 per cent in 2003 and 25.3 per cent in 2005

Physical Activity
• About one-half of residents self-report that they are moderately or physically active. These rates are very similar to the provincial average, but there has not been a great deal of improvement in these rates since 2003.
• Just over one in five students are inactive (22% of grades 6-8 and 21% of grades 9-12).
• Approximately one in three students is moderately active but research has shown that this level of physical activity is not enough for health benefits.
• On the positive side, 84 per cent of students indicated that their families either “strongly encourage” (23%) or “encourage” (61%) them to participate in physical activities. In addition, over 90 per cent indicated that their families provide support for these activities (such as driving them to activities).

Nutrition
• Less than one-third of residents consume at least five servings of fruits and vegetables daily. However, this may be less about "choice", and more related to cost and availability. For example, the cost of a Nutritious Food Basket in Churchill is $223.97, which is much higher than comparison communities in Manitoba.

Body Mass Index (BMI)
• More than sixty per cent of adults meet the criteria for being overweight or obese, which is among the highest in the province.
• Self-rated BMI rates among children (age 12-17) shows that only 63.8 per cent had weights and heights that resulted in a "normal BMI". This is lower than the provincial rate of 71.8 per cent, as well as the Canadian rate of 74.6 per cent.
• Children (age 12-17) with BMIs in the “Overweight” or “Obese” categories was 29.2 per cent, compared to 19.3 per cent of Manitoba children and 17.9 per cent of Canadian children.

• The highest obesity rates in the province.

Heavy Drinking

• More than one in five adults who drink alcohol meet the criteria for "heavy drinking". In comparison, 18.1 per cent of Manitoba youth age 12 to 19 meet the criteria for "heavy drinking".

• Some Churchill data were suppressed, but concern expressed about use of alcohol among youth during community consultations.

Complete Physician Exam

• There has been a significant decrease in residents who have had a complete physical exam from 27.3 per cent to 24.3 per cent between 1988/89-1995/96 and 1996/97-2003/04. The current rate is much lower than the most recent provincial rate of 39.8 per cent.

• Churchill ranks lowest in the province for this indicator, but this may be less about choice and more about availability of physicians to spend the time required for a complete physical exam.

Cervical Cancer Screening

• The rate of cervical cancer screening increased from 346.9 to 409.2 per 1,000 residents between 2002-2005 and 2005-2008. However, our rate remains lower than Manitoba at 546.1 per 1,000.

Breast Cancer Screening

• Breast cancer screening rates increased between 2002-2004 and 2006-2008 from 128.3 to 140.6 per 1,000 women, but our rate remains lower than Manitoba rates.

Immunization

• In 2007, Churchill had the highest coverage rates in the province for children aged 1,2 and 11; however, we among the lowest coverage rates for children aged 7 and 17.
Maternal Health and Family Risk Factors

Almost all babies born to Churchill residents have been screened through the Families First Program between 2003 and 2006. This is very good coverage of screening for families who may have risk factors and need additional support.

- The proportion of births that screened “positive” (higher risk) increased from 33.3 per cent to 58.8 per cent of births between 2003 and 2006. Risk factors of particular concern included the use of alcohol during pregnancy, low levels of education, and financial concerns. This rate ranks the highest in the province, and is much higher than the Manitoba average of 22.8 per cent in 2006. However, this is based on a small number of births.
- Families can decline the services offered through the Families First Program. Seventy-five per cent of eligible families declined services in 2005, while no families did so in 2006. This may be related to a variety of issues, including the connection that the Families First staff member was able to make with the new parent.
- Seven and a half per cent of children were living in foster care between 2001/02 and 2003/04. While this is much higher than Manitoba rate of 3.3 per cent, the rate has decreased over time.
- Between 1998/99-2000/01 and 2001/02-2003/04, the proportion of children aged 0 to 17 years living in families receiving protective or support services decreased from 22.0 per cent to 12.4 per cent. This is very similar to the provincial average of 11.5 per cent.

Mental Health and Addictions

Mental health and addictions was an area of concern identified through our community consultation process, as well as in the 2004 CHA. Many residents may receive services through community-based care (meaning that there is no physician visits, so we do not have the data to report); however there are some areas for improvement that we have identified through our administrative data.

- Almost 10 per cent of Churchill residents have been treated by a physician for substance abuse. While this rate has decreased significantly over time, we are still among the highest ranked regions in Manitoba (and about double the provincial rate).
- About 13 per cent of residents have been treated for depression. While this is among the lowest in the province, the rate has increased over time. This reflects that more people sought help for depression, and it may be positive in that people with depression are seeking the treatment that they need.
- While attempted suicide is a very rare event and numbers are very small, the rate in Churchill has increased. We will want to look further at what is leading people to self-injure, and how they can be provided with the supports they need in the community.
Diabetes and Complications

- Risk factors for diabetes include obesity, poor nutrition, lack of physical activity and stress. Churchill residents have high rates of some of these risk factors.
- The standardized rate of new diabetes cases is 10.9 new cases per 1,000 residents, compared to Manitoba at 5.4. Although this is much higher than the provincial rate, the higher rate in our region reflects that we have made a concerted effort to identify people with diabetes so that they can receive the treatment they need. Although there also appears to be an increase in the numbers of people living with diabetes (currently almost 15 per cent of residents), this is also related to our work in screening people for diabetes, and we do not expect to see a continued increase in the numbers of new cases.
- Residents with diabetes are 3.3 times more likely to be hospitalized than those without.
- Residents with diabetes see the doctor 2.2 times more than those who do not have diabetes.
- Residents with diabetes are 2.0 times as likely to die within five years as those who do not have diabetes.
- Residents of Burntwood/Churchill have the highest rates of lower limb amputations of people living with diabetes. However, because our data are combined with Burntwood, it is unclear as to how many of these cases are Churchill residents.
- About one in four Churchill residents with diabetes have had an eye exam. This is the lowest rate in the province, and due to the significant complications that can occur with vision, this is a measure that we would like to work toward improving.

Injury, Premature Death and Life Expectancy

- Injury hospitalization rates are among the highest in the province for Churchill men, while they are among the lowest for women. About 12 per cent of hospitalizations for Churchill men are due to injury, compared to about four per cent of hospitalizations for females.
- The leading cause of injury hospitalization for both men and women is falls, followed by assaults and self-inflicted injuries. Rates for falls are much higher than for any other cause.
- Between 2002 and 2006, injury accounted for 13 per cent of all deaths among Churchill females (compared to 5% of Manitoba females), and 20 per cent of deaths among males (compared to 8% of Manitoba males). This represents a significant increase over the previous time period, but still accounts for a relatively small number of deaths.
- The leading cause of injury deaths for Churchill residents was motor vehicle accidents, followed by poisoning.
- Overall, Churchill residents have among the highest rates of premature deaths (deaths before age 75) in the province, and the trend appears to be increasing for both numbers of deaths and numbers of potential years of life lost. If we can work toward decreasing preventable deaths, such as those due to injury,, a decrease in premature death rates should follow.
- As with the previous CHA in 2004, respiratory disease as a cause of death continues to be a priority area. Potential years of life lost due to this disease were the highest in the province for men, and the second highest for women.
- Lower life expectancy was also identified in the 2004 CHA as a priority area. Life expectancy for Churchill females has increased to 79 years, and has improved from being the lowest in the province to the third lowest. Life expectancy for Churchill males has decreased to 72.1 years and is the second lowest in Manitoba.
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1. INTRODUCTION

How healthy are we? What makes us sick? What factors play a role in determining how healthy we are? How do we use the services that are offered when we become ill?

These are some of the questions to be answered in this report. This report will not provide in-depth answers as to how all of these issues should be addressed – but it will serve to highlight the important and relevant issues that need to be addressed by Churchill Regional Health Authority, our partners, and the community at large. It will also point out which priority issues need to be further explored, and act as a baseline and focus for future reports.

This report paints a picture of our region. Each reader will focus on different pieces of the report, but we must keep in mind that this picture is painted with broad strokes and is not intended to reveal every level of detail. In the end, we hope that this report will provide an overall picture of our health.

Let us start by defining what is meant by a Community Health Assessment (CHA):

Community may refer to more than just a geographic location. There are communities of interest, or groups of people who share common ideas or characteristics. People who are Aboriginal or people who have diabetes could be considered a community. Most of the information presented in this report is at a regional level, although some data are reported according to particular areas of the region or communities.

Health is defined by the World Health Organization as a state of complete physical, spiritual, mental and environmental health. It is a resource for everyday life – and not the objective for living. It is also a joint societal responsibility – and not only that of the formal health sector.

Assessment in this report refers to a process of examining the factors that affect our health (determinants of health), the health of the people who live and work in our region, and the use of the health care system delivered by Churchill RHA and the physicians in our region. We strongly believe that this should not be a formal focus only every five years, but an ongoing process of assessing health and all of its determinants in order to steer programming and planning, and address the health needs of the population.
Chapter 1: Introduction

1.1 Goals and Purpose

Through review of our data and consultation with our staff and community members, this Community Health Assessment will be the basis for the Region’s planning and decision-making. Some issues are apparent. Through this process, it will be important to gain a clear picture of both the health beliefs of residents, how these beliefs affect health and which determinants of health are the most significant predictors of health outcomes in the region. How the Churchill RHA can play a role in improving those outcomes will remain ongoing work.

Subsequent to the results of the Community Health Assessment and the work of the 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.

The Churchill RHA will incorporate a population health approach in an attempt to meet the assessed needs of its unique population as well as meeting the parameters associated with core service delivery and stated expectations of Manitoba Health.

This will include:

- The development of a service continuum specific to the needs and traditions of the aboriginal populations.
- Addressing the diverse demonstrated and stated needs of the Nunavut population.
- Provision of high quality care pertaining to respiratory disorders.
- Use of best practices and informed decision making in the preventative and intervention modalities to reduce and manage symptoms of chronic disease such as depression, diabetes, cardiovascular risk, heart failure, and kidney disease.
- Addressing the specific array of issues associated with the complex picture of mental health in the North. This will not only include the need associated with “typical” mental health disorders but also, the multiple underlying issues which ultimately affect overall health and well-being for this population. This includes addictions in its various forms, and post-traumatic stress associated with factors such as climate, isolation, cost of living, abuse, family violence, and anger displacement.
1.2 Process and Methods

For this Community Health Assessment, Manitoba Health requires that each Regional Health Authority report on a "Core" set of 96 indicators. Beyond this core set of indicators, each RHA is free to choose from hundreds of other important indicators based on their unique needs and priority areas. Our region is limited in that in some cases the "Core" indicators were suppressed due to small numbers so that we cannot always report as required. Where possible, we have used other data sources and community consultation information to fill in where the standard data sources were suppressed. We have also chosen many other indicators beyond the core set to paint the most comprehensive picture possible. The indicators are presented throughout this document and summarized in a data table in Appendix A.

We also note that in this CHA we are focusing on the health of our regional residents only. This means that, although we provide many services to residents of Nunavut, information about the health and service utilization of these residents is not included in this report.

It is also important to note that the information in this report is NOT limited to services and utilization only within our region - for example, babies are no longer born in Churchill but babies continue to be born to Churchill mothers. Births are counted for our region regardless of where they occur. The same is true for medical and hospital services. A Churchill resident who is hospitalized or sees a physician in Winnipeg is reported as "Churchill" and not as "Winnipeg".

We used two methods of data collection to gain information about our region. The first "hard data" (administrative and survey data) was obtained through a variety of data sources (see 1.2.1 Primary Data Sources); the second was through a series of consultations with staff and community members.

It is important to note that over half our residents (56%) identified as Aboriginal in the 2006 Census. We know from previous research and reports that Aboriginal people in Manitoba generally have poorer health status than non-Aboriginals. Some particular diseases are more prevalent in this population, such as diabetes, for example than in others. Research indicates that there may be a higher prevalence of risk factors, such as smoking, among Aboriginal people than non-Aboriginal. These reports are generalized to Aboriginal people, but we do not know if this is the case for Aboriginal people in our specific region. Aboriginal residents were invited to participate in our consultation process to provide valuable feedback about their views of health status, risk factors and services in our community. The community consultation feedback is not specified by community group e.g. new mothers, elders, Aboriginal etc. due to the small numbers that attended these focus groups. However, we want to be clear that we did value this information and it is included in our report. Data from the Canadian Community Heath Survey which is used primarily in Chapters 3 and 4, include information from Aboriginal residents of Churchill, but again it is not specified in that detail. Manitoba Health does not collect ethnicity data with its health, hospital or utilization information. Ethnicity data from these sources are limited to geography and to whether an individual lives "on" or "off" reserve. Because we have no reserves in our region, we do not have data specific to First Nations residents. We are committed to communicating back the findings of this document to our residents, and to hearing feedback about whether they believe we have adequately captured their experiences and concerns about health and health services. We will continue to work with all members of our community to ensure that we have an “open door policy” and are available to hear of any concerns or suggestions, particularly in the area of provision of culturally-appropriate services.
This project was lead by Derry Martens, CEO of Churchill RHA and Michel Petit, Director of Community Services & Planning. Ongoing advice and assistance was also provided by Dr. Lisa Richards, Medical Officer of Health for Churchill and Burntwood RHAs. The work to compile the data and write this reported was contracted to Cynthia Carr, an epidemiologist with EPI Research Inc.
1.2.1 Primary Data Sources

There are many data sources used in this document and all of these sources are referenced throughout. However, there are several sources that are used for the majority of statistics in this report. The primary data sources used in this document are:

- Statistics Canada, Canadian Community Health Survey (2003-2008)
- Statistics Canada, 2006 Census
- Manitoba Health, Health Information Management
- Manitoba Health, Communicable Disease Control
- Manitoba Health, Chronic Disease Branch
- Healthy Child Manitoba Office
- Manitoba Centre for Health Policy, Need to Know Project
  - Manitoba Centre for Health Policy, Manitoba RHA Indicators Atlas 2009
  - Manitoba Centre for Health Policy, 2008 Child Health Atlas Update
  - Manitoba Centre for Health Policy, What Works? A First Look at Evaluating Manitoba’s Regional Health Programs and Policies at the Population Level

Statistics Canada, Canadian Community Health Survey

The source for the majority of determinants of health data in this document is the Canadian Community Health Survey (CCHS). Data from this survey are currently available for the years 2003, 2005, 2007 and 2008. Although the CCHS was originally completed every two years, as of 2007 it became an annual survey. Data from 2008 became available at the end of this Community Health Assessment process and although we did not change graphs to reflect these new data, we did add time trend tables to show the most recent data where it was applicable.

The CCHS is an important source of determinant data and self-reported health data; however, the survey is an off-reserve, household survey only (for residents age 12 and older). This means that persons living in an institutional setting (including personal care homes) or on-reserve are not included in this survey. The survey data is then “weighted”\(^1\) (by age group and gender) in an attempt to accurately represent the regional experience.

An important limitation of this survey data is that the Churchill results are combined with Burntwood by Statistics Canada. There are a very small number of respondents from the Churchill Region, which meant that this data could not be reported alone and was rolled up into Burntwood. Although we know that our region is very unique, we believe that our health and lifestyle patterns are similar enough to those experienced in the Burntwood Region that these results will accurately reflect the health status and lifestyle of our residents.

In order to effectively compare health regions with similar socio-economic characteristics, health regions have been grouped into ‘peer groups’. Statistics Canada used a statistical method to

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\(^1\) Unless otherwise noted, all Canadian Community Health Survey data used in this report is directly from Statistics Canada website. This data has been appropriately weighted to populations and includes peer group comparisons.
achieve maximum statistical differentiation between health regions. Twenty-four variables were chosen to cover as many of the social and economic determinants of health as possible, using data collected at the health region level mostly from the Census of Canada. Concepts covered include:

- basic demographics (i.e., population change and demographic structure),
- living conditions (i.e., socio-economic characteristics, housing, and income inequality), and
- working conditions (i.e., labor market conditions)

Churchill and Burntwood are classified by Statistics Canada as “Peer Group F”\(^2\). This Peer Group consists of five regions that account for 0.4 per cent of the Canadian population. These regions are characterized as:

- Northern and remote regions
- Very high Aboriginal population
- Very low employment rates
- Low proportion of immigrants

The regions making up Peer Group F are:

- Région de Nunavik
- Région des Terres-Cries-de-la-Baie-James
- Burntwood/Churchill
- Mamawetan/Keewatin/Athabasca
- Nunavut

In many cases throughout this chapter, Peer Group F has been included for comparison, in addition to Manitoba and the other provincial regions. In this way, we can compare our data to our own province and provincial RHAs (that are in the province but are very different from our own), as well as other regions across Canada that are not in our province but are more similar to our region.

To view a map that illustrates the geographic areas of Peer Group F, please see: [http://www.statcan.gc.ca/pub/82-221-x/2009001/tmap-tcarte/hr-rs/ca07-eng.pdf](http://www.statcan.gc.ca/pub/82-221-x/2009001/tmap-tcarte/hr-rs/ca07-eng.pdf).

For more information about the Canadian Community Health Survey, please visit Statistics Canada website at: [www.statcan.ca](http://www.statcan.ca). A listing of the specific data tables with the associated data can be found at: [http://www.statcan.gc.ca/pub/82-221-x/2009001/tbl-eng.htm](http://www.statcan.gc.ca/pub/82-221-x/2009001/tbl-eng.htm).

\(^2\) Burntwood and Churchill were in Peer Group C in 2001 CCHS but have been changed to F in 2003. Therefore, 2001 Peer Group F data will not included Burntwood/Churchill. This will impact our ability to make inferences about changes over time within this Peer Group.
Statistics Canada, 2006 Census

The 2006 Census data are used to report on the majority of indicators related to demographics and socioeconomic factors in our region. The majority of data from the Census are from the year 2006. However, there are some economic variables (such as annual median income) where the data being reported is actually from the year 2005 (that is, in 2006 people were asked about their income in the preceding full year).

Data that are identified as "20% sample data" refer to information that was collected using the long census questionnaire. For the most part, these data were collected from 20 per cent of the households; however they also include some areas, such as First Nations communities and remote areas, where long census form data were collected from 100 per cent of the households.


Manitoba Health, Health Information Management

Manitoba Health provided an extensive amount of data in their "Community Profile" document (data set) on a variety of health services. These data include information about screening for disease, injury, certain chronic and communicable diseases as well as mortality data. Data from Manitoba Health was also used for certain population estimates (which are released in June of each year and are based on the numbers of individuals who are active in the Manitoba Health Registry), as well as the standard Medical and Hospital Reports which are released yearly.

This information is often provided by age group and gender and is usually presented as a "crude rate". That is, unlike the Manitoba Centre for Health Policy (MCHP) data, these data are not standardized to allow for comparisons between regions that take into account different age structures. However, these data are appropriate in that they illustrate the true situation in each region, from this we can determine numbers of people accessing and requiring services. When standardized data is presented, it will be clearly identified as standardized. If there is no description of data as “standardized”, the reader can assume the data presented are crude rates.

For more information about Manitoba Health and information that is available, please visit: http://www.gov.mb.ca/health/.

Manitoba Health, Communicable Disease Control

Although communicable disease data were provided as part of the standard Community Profile, Communicable Disease Control also provided some Ad Hoc reports for our region with more specific time trend and gender information.

For more information about Manitoba Health Healthy Living, Communicable Disease Control and information that is available, please visit: http://www.gov.mb.ca/health/publichealth/cdc/.
Manitoba Health, Chronic Disease Branch

Diabetes and Chronic diseases are important diseases in our region. This branch provided an extensive amount of information in its "Diabetes in Manitoba, 1998 to 2006" PowerPoint Presentation.

For more information about Manitoba Health, Chronic Disease Branch and information that is available, please visit: [http://www.gov.mb.ca/healthyliving/chronic.html](http://www.gov.mb.ca/healthyliving/chronic.html).

Healthy Child Manitoba Office

Healthy Child Manitoba provided a great deal of data for the Early Development Instrument scores which gave us a great deal of information about Readiness to Learn. These data were collected in the spring of 2005, 2006 and 2007 by Kindergarten teachers who fill out information sheets on each student. The data are then submitted to Healthy Child Manitoba who works with McMaster University in analysing the data.

We also received data from the Families First Screening Program that screens all women who have given birth in Manitoba. These screening data provide us with information about women who might have engaged in risky behaviour during pregnancy (such as drinking and smoking), and who might require support in parenting.

For more information about Healthy Child Manitoba and information that is available, please visit: [http://www.gov.mb.ca/healthychild/](http://www.gov.mb.ca/healthychild/).

Manitoba Centre for Health Policy (MCHP), Need to Know Project

Regions have been provided an extensive amount of statistical information through the Manitoba Centre for Health Policy (MCHP), Need to Know Project. Some of the MCHP data sources we used most extensively throughout this document are:

1. **Manitoba RHA Indicators Atlas 2009**
   Fransoo R, Martens P, Burland E, The Need to Know Team, Prior H, Burchill C

   Martens P, Fransoo R, The Need to Know Team, Burland E, Prior H, Burchill C, Romphf L, Chateau D, Bailly A, Ouelette C

   Brownell M, De Coster C, Penfold R, Derksen S, Au W, Schultz J, Dahl M

The MCHP provides data primarily based on service utilization. As with the data from Manitoba Health, these data are dependent on quality reporting by service providers. For example, if salaried physicians do not "shadow bill" to Manitoba Health, our data about the health service utilization patterns of our residents will not be accurate. MCHP is rarely provided by age group
or gender (unless looking at targeted issues such as immunization among seniors), so there is usually just one measure provided for the whole region. In addition, data are generally standardized to take into account age differences among regions. Standardization does allow for more accurate comparisons between regions, however, it masks the true situation (crude rates) in the region and is more difficult to use for program planning. Finally, although MCHP did provide analysis on many variables from the CCHS, Churchill data were not combined with Burntwood and, due to small numbers, were almost always suppressed. CCHS data analyzed by MCHP is not directly comparable to the data we obtained directly from Statistics Canada because the Centre often combines several years of data (so that they can provide more detailed levels of information and have more stable rates, but this limits the time trend aspect of the data). In addition, it is not clear if MCHP uses the same weighting and boot-strapping methodologies that are used by Statistics Canada.

For more information about the Need to Know Project and the data that are available, please visit: http://www.rha.cpe.umanitoba.ca/index.html.

**Manitoba Status of Women, Women's Health Strategy Regional Consultation Report, 2009.**

Manitoba Health is in the process of reviewing and updating the Women’s Health Strategy³ (2001). To support this work and help inform the current Community Health Assessments process, ten regional consultations were held between January and May 2009. The Women’s Health Clinic was contracted for this project. Approximately 200 people participated in the face-to-face consultations and key informant interviews or provided written submissions. Regional reports that summarize the comments from each of the consultations, along with an Excel file that contains the flip chart notes that were recorded at each session, were provided to each of the RHAs.

The consultation with Churchill residents occurred in February 2009 and eight women attended this meeting. Key themes from this consultation are included throughout the report.


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1.3 Community Consultation Process and Methods

Community Consultations with Churchill residents occurred in the spring of 2009. The following groups were consulted:

- Youth
- Elders
- Community members
- Families R Us participants
- Inter-Faith Groups
- RCMP
- Business leaders
- Teachers
- Churchill Board members
- Churchill RHA management
- Churchill RHA program staff

All community consultation occurred in person as focus groups with the exception of the Churchill RHA Board Members Focus group which was conducted by teleconference.

The materials developed included letters of invitation, consent forms, mini surveys and focus group questions. Please see APPENDIX B to review these materials.

In total, 65 people participated in the community consultation process.
1.4 Strategic Plan

The Strategic Plan yearly review is an extension of the Strategic Plan 2005, which builds upon changing health and social dynamics in our region. It is aimed at continually improving the health and wellbeing of people we serve, through greater self-determination and more culturally-sensitive and accessible health and social services.

Goal 1: Support and enhance a safe environment for our clients, staff and visitors

- Improve the effectiveness, transparency and coordination of communication for the safety of clients, visitors and service providers
- Ensure our medication administration is safe
- Create a work-life and working environment which supports safe delivery of care
- Reinforce policies and procedures to reduce and control infections and manage security issues
- Evaluate the falls prevention strategy
- Continue our review of our risk management practices through the Healthcare Insurance Reciprocal of Canada Risk Management Self-Appraisal Modules (HIROC RMSAM).

Goal 2: Provide extended Mental Wellness services

- Develop a centre of excellence in Mental Health for the Churchill RHA
- Enhance & promote community outreach and inclusion in all mental health services
- Reduce drug and alcohol abuse:
  - Increase awareness through education
  - Early intervention
  - Explore new and effective ways to address these problems through better inter-agency communication centered on clients needs
- Strive to eliminate all forms of abuse/violence
  - Develop an integrated program to address all forms of abuse/violence
  - Evaluate the referral process between RCMP and Churchill RHA
  - Early intervention and education with respect to all forms of abuse
  - Provide a safe environment for victims to disclose information
  - Provide a safe shelter for victims of abuse
  - Make use of the rapid response team

Goal 3: Establish the Churchill RHA as a centre of excellence in the management of chronic diseases

- Develop, enhance and implement chronic disease prevention (Diabetes, Respiratory Disease, Cardiovascular, Cancer and Renal Disease) and management plan:
  - Educate, monitor and evaluate
  - Utilizing the Best Practice Models
  - Chronic Disease Self Management

Goal 4: Plan and implement a sustainable health promotion and wellness strategy with other stakeholders in the region
• Building a community awareness of healthy living options
• Promote healthy families
• Develop and implement health promotion and disease prevention activities:
  ▪ Tobacco control
  ▪ Healthy Nutrition
  ▪ Physical Activity Promotion

Goal 5: Create and maintain a dynamic recruitment and retention environment

• Morale building activities
• Team building
• Review and evaluate staff input

Goal 6: Enhance community and outreach services

• Partner with other agencies to promote, develop and implement community programs to meet individual needs
• Plan for a sustainable system to meet emergency needs
• Promote the inclusion of family, natural supports and spiritual care

Goal 7: Review and enhance existing communication strategies

• Maintain protocol for sharing information under FIPPA, PHIA and other legislation that directs the use of personal information
• Promote usage of Telehealth technology
• Maintain and enhance communication with Nunavut stakeholders
• Improve communications with all populations to gain a better understanding of needs:
  ▪ Foster multicultural understanding
  ▪ Be inclusive of all relevant cultural groups in the planning process
• Revisit the communication strategies to monitor progress and make changes as necessary

Goal 8: Maintain and enhance inpatient services

• Acute care services
• Mental health services
• Dental surgery program
• Pediatric respiratory illness
• Long term care services
Goal 9: Maintain and enhance Primary Care Services

- Including:
  - Home Care
  - Palliative Care
  - Assisted Bathing Program
  - Adult Day Program
  - Meals on Wheels

Goal 10: Enhance the education strategy for Churchill RHA

- Facilitate the annual staff education needs assessment
- Provide mandatory education as part of staff orientation
- Encourage staff, Board members and community members to attend educational sessions

Goal 11: Enhance and evaluate quality improvement initiatives

- Develop and monitor indicators
- Implement and review required operational practices (ROP)
- Establish benchmarks
- Annual Failure Mode Effects Analysis (FMEA) review
1.5 Description of Board Ends

POLICY: As part of the Churchill RHA strategic planning process, the Board of Directors shall define ENDS statements in keeping with its Mission Statement (Mega END):

“Working together for the better health of everyone we serve.”

1. The people served by Churchill RHA live in environments conducive to good health.
   1) Healthy People:
      • Enhance chronic disease management through the promotion of the self management model to reduce the impact of chronic disease.
      • Develop and enhance existing health promotion and disease prevention programs.
   2) Healthy Communities:
      • Provide public education on healthy lifestyle practices and resources.
      • Partner with the community to promote involvement in activities that promote personal well being.

2. The organization strives to maintain a stable human resource base.
   1) Create and maintain a dynamic recruitment/retention environment.
   2) Develop a human resource plan that includes a staff education strategy.
   3) Promote staff awareness of cultural diversity.
   4) Implement programs for staff recognition and wellness.

3. The people of Churchill and Nunavut have optimal access to quality services.
   1) Enhance Primary Care services across the lifespan.
   2) Maintain the administration of the Northern Patient Transportation program.
   3) Facilitate access to clinical consultation through the use of telehealth technology.
   4) Implement the recommendations of the Churchill Task Force Report.
      • Maintain acute care services.
      • Enhance and expand mental wellness services for Churchill and Nunavut clients by providing treatment programs for mental illness, substance abuse and support for victims of family violence.
      • Repatriation of select Nunavut clients to Churchill for convalescent care.

4. The organization strives to maintain excellence in patient safety and quality care.
   1) Best Practice standards are maintained and monitored throughout the organization.
Chapter Two: Region Profile
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2.0 Churchill Region Profile

Situated just above the 58th parallel and located on the western shore of Hudson Bay, Churchill is the most northerly populated area of Manitoba. The Churchill RHA provides a comprehensive spectrum of health and social services locally and also provides health services to all regions of Nunavut.

This section provides an overview of some of the distinguishing characteristics of the Region, including climate, wildlife, geography, the economy and its history. Finally, an overview of the Churchill RHA Inc. organization and programming is provided.

2.1 Climate and Wildlife

Due to its northerly location on the shore of Hudson Bay, Churchill experiences extreme weather conditions. The number of hours of daylight in Churchill ranges from 50 hours in December to 280 hours in July.\(^1\) Average temperature in July is 12 degrees Celsius with an average January temperature of –26.7 degrees Celsius. Churchill has an annual average snowfall of 191 cm and an annual rainfall of 241 mm. High winds are a fact of life for residents of Churchill. The average wind speed is 20.5 km per hour. This compares to Winnipeg with a 16.9 km/h. It is not uncommon for Churchill residents to experience three to four days of almost constant winds with average speeds of 30 km per hour and gusts up to 70km per hour.

While Churchill is internationally known as the ‘Polar Bear Capital of the World’, the Churchill area is home to a diverse range of wildlife. Given its location in the Taiga, a transition zone between the northern boreal forest and the arctic tundra, Churchill attracts arctic and boreal species of wildlife, birds and plants. Wildlife such as arctic and red foxes, arctic hare, lemming and caribou are commonly seen. Churchill is also home to over 200 bird species, including gyrfalcons, snowy owls, snow geese and ptarmigan. Thousands of beluga whales can also be seen as they move into the Churchill, Nelson and Hayes estuaries to feed in July and August.\(^{ii}\)
2.2 History

Churchill’s history dates back almost 4,000 years when the Dene, Cree and Inuit came to this area hunting wild game for sustenance and furs. Human presence in the Churchill area dates as far back as 1700 B.C. Physical reminders of their presence is evident in such artifacts as tent rings, food caches and the kayak stands of the indigenous people that used the area as seasonal hunting grounds.

The first Europeans to arrive in Churchill sought the fabled Northwest Passage to the Orient. The first expedition to spend the winter in Churchill was led by Jens Munck, a Danish navigator.

The area’s significance as a place for trade and commerce continued when the Hudson's Bay Company built Fort Prince of Wales in 1717. It became a trading post that traded goods primarily with the Dene. It also became the departure point for the first overland journey made by a European, Samuel Hearne, to the Arctic Ocean in his attempt to find minerals. The fort was eventually taken by French warships and razed in 1782, and a new fort was built a short distance upriver. Due to its distance from the lands of heavy competition between the North-West Company and the Hudson's Bay Company, it maintained a relatively stable but modest source of furs.

Churchill was in a period of decline and obsolescence as the fur trade declined in importance. By the late 1920s, however, Western Canadian provinces looked to Churchill for a prairie port, and eventually this resulted in construction of the Hudson Bay Railroad and the Port of Churchill. The last spike of the railroad was driven in 1929 and the first two ships loaded with grain left the port in 1931.

The Churchill area also became a militarily strategic site in North America. Fort Churchill, located five miles east of Churchill, was first established in 1942 by the United States Air Force as part of the Crimson Route, an overseas air support route to Europe. After the Second World War, Canada and the United States jointly sponsored a training and experimental centre in Churchill.

In the mid-1950s, Churchill was identified as an ideal location to observe the upper atmosphere. In 1957, the Churchill Rocket Research Range opened. During its 30 years of operations, over 3,000 sounding rockets would be launched in the process of conducting atmospheric research and collecting data on the Aurora Borealis (Northern Lights).

In the early 1970s, public housing and a large Town Centre Complex were constructed as part of a redevelopment project financed by the Provincial and Federal governments. While the military presence has disappeared, Churchill still benefits from operations at the Port of Churchill, tourism, the Regional Health Authority and the Northern Studies Centre with its focus on climate change and northern ecology.

The current focus of the Town of Churchill is the formulation of an integrated development plan which will address the community’s future infrastructure needs and opportunities and aspirations for growth.
### 2.3 The Town of Churchill

The unique characteristics of the community in which we live have a significant impact on how healthy we are and our ability to manage our own health. The community characteristics also impact health service planning and delivery. In addition, the general population served by CRHA is comparatively young and employable. Churchill has historically been a unique community in Manitoba due to the transient nature of the local population. Major health concerns in Churchill center around chronic disease management, mental wellness and the need to have healthier lifestyles in order to prevent illness and disease.

A large percentage of individuals in Churchill are of aboriginal ancestry although it is important to note that unlike the neighboring Burntwood Regional Health Authority, there are no First Nation Reserves in the Churchill Region.

Employment in Churchill does tend to be seasonal, particularly in the tourism industry and the Port of Churchill. That fact is reflected in an unemployment rate that is higher than the provincial average. The labor force in Churchill has two distinct characteristics with a highly skilled workforce involved in the research, education and health sectors while there are lower skilled positions in tourism and transportation. The Town of Churchill has a small but very robust business sector.

As a transportation hub for the north, the town has a busy rail line and airport. It is the only inland saltwater port in Canada. Goods from the south are brought in by air or rail and shipped by barge or sea going vessel to numerous points throughout the north. The rail line was built primarily to link western wheat lands to the port, but it has also proven to be a key transportation route for northern Manitoba and the Central Arctic region. The Port of Churchill provides Manitoba with the ability to provide direct access to the sea. Churchill provides the Prairie Provinces with a much shorter route to European markets than the St. Lawrence Seaway. Churchill acts as the “gateway to the North” with many supplies and products being shipped via Churchill to Nunavut. The Port of Churchill continues to operate 6 months of the year. In the 2007 and 2008 shipping seasons, import shipments of fertilizer from Russia for Western Canadian farmers arrived. Both Calm Air and Kivalliq Air provide daily flight service from Winnipeg to Churchill.

The area has a strong scientific research presence, with scientists from many disciplines examining the impacts of climate change on the arctic ecology using Churchill Northern Studies Centre as a base for their studies.

Perhaps the largest of all the unique industries in Churchill is its tourism sector. Positioned on a major migratory flyway and containing the nesting grounds for some rare avian species, from late May to August the area is an ideal location for bird watching. The months of July and August are Beluga whale season in Churchill, as thousands of the white whales move into the Churchill River. From late September to November, Churchill is the “Polar Bear Capital of the World”. Hundreds of bears gather in the area waiting for the onset of winter and the freeze-up of the Hudson Bay. Polar bear season is the most important part of the tourism economy in Churchill; people from all around the world identify Churchill with polar bears.

Throughout the winter months, tourists arrive to view the spectacle of the Northern Lights. Churchill is situated under the highest concentration of this phenomenon in the Northern
hemisphere. Many small businesses in Churchill cater directly to the influx of tourists through the provision of accommodations, meals, transportation and organized tours.

While the weather and the remoteness of Churchill can make living in the community challenging, the people who are attracted to and thrive in this environment are unique individuals and share a common bond in their spirit of adventure, resourcefulness and resilience. This sense of kinship provides important social supports which can counteract the isolation that can be felt in a remote northern community. It also is an important contributor to the health and well-being of residents, and improves their ability to cope.
2.4 The Churchill Regional Health Authority (RHA)

The Churchill RHA delivers a broad range of services to the residents Churchill. A significant proportion of services are provided to people from Nunavut who are referred to Churchill to access services. It is important that Manitoba and the Town of Churchill continue to forge new partnerships and maintain current ones with Nunavut. Churchill RHA continuously seeks opportunities to broaden its scope of service provision in keeping with the Nunavut government’s expressed desire to engage services “closer to home” and create a sustainable health care system. Continued dialogue with Nunavut, emphasizing the strengths and skills the Churchill RHA can provide will be necessary if this key linkage is to be preserved. It is important to note, however, that while the relationship with Nunavut is an important focus for the ongoing operations of the Churchill RHA, the primary focus of this Community Health Assessment is on the health of Churchill residents only.

The Churchill RHA is a major facilitator of northern health delivery, health policy innovation and northern health research. The Churchill RHA is also a major contributor to the local economy, employing over 100 people.
2.4.2 Programming

All of the services and programs provided by the Churchill RHA are geographically co-located in the Town Complex which allows for a multidisciplinary approach to service delivery and interdisciplinary case management.

Programs and Services provided include:

- Emergency Medical Services
- Primary Care Clinic
- Consultant Specialist Services
- Acute Care
- Dental Surgery
- Chronic Disease Management
- Diagnostics
- Long Term Care
- Pharmacy
- Dental Clinic
- Health Information Services
- Manitoba Telehealth
- Physiotherapy

Community Services available include:

- **Mental Health Community Wellness** including individual and group counseling, crisis stabilization and critical incident debriefing sessions.
- **Addictions programs** include individual and group counseling, prevention and education programs, and assessments for residential treatment
- **Children’s Centre** offers child care for infants, preschool and school aged children
- **Child and Family Services Agency** provides services to families including child protection, children in care, residential care and adoption.

Public Health programs include:

- Immunizations
- Travel Health
- Reproductive Health
- Rabies Prevention
- Tuberculosis Control
- Sexually Transmitted Infections
- Communicable Disease Control

Health Promotion programs include:

- Pre-natal Classes
- School Health
- Asthma Education
- Community Health Promotion
- Diabetic Education
Home Care services include:

- Nursing Care
- Home Support
- Supplies and Equipment
- Personal Care Home Placement

Family Medicine and Consultant Specialist Services are provided through the J.A. Hildes Northern Medical Unit in the Department of Community Medicine at the University of Manitoba. Three Family Medicine physicians provide primary and acute care supplemented by itinerant specialist services in the following areas:

- Anesthesia
- Orthopedics
- Surgery
- Geriatrics
- Internal Medicine
- Gynecology
- Ophthalmology
- Otolaryngology
- Pediatrics
- Colposcopy
- Psychiatry
- Urology
2.5 Demographics

The most recent population data is from Manitoba Health Healthy Living (July 2008 population report). According to this report, the population of Churchill RHA is 934, which represents a slight decline from 2004 when our population was reported to be 976 residents. According to the Statistics Canada 2006 Census the population decreased between the last two Census cycles by 4.2 per cent (from 963 in 2001 to 923 in 2006).

Our population is equally divided among men and women, and children under the age of 15 account for 22.3 per cent of the population (more than one in five residents).
2.5.1 Population Density

The Churchill RHA geographic area covers 54 square kilometers. Our small population combined with this small land area results in a population density of 17.1 persons per square kilometer compared to the provincial population density of 2.1 persons per square kilometer\textsuperscript{vii}.

- Due to changes (decline) in population, between 1996 and 2006, our population density decreased from 21.4 persons per square kilometre to 17.1 persons per square kilometre in 2006.

Figure 2-1  Population density by RHA, 2006.

Source: Statistics Canada, 2006 Community Profiles.
NOTE: Winnipeg RHA population density is 1088.1 per kilometer and was not included on the graph due to challenges with scale.
2.5.2 Population by Age Group

The population pyramids in Figures 2-2 and 2-3 illustrate the difference in our population structure compared to the rest of the province.

- In our region, children under the age of 5 account for a higher percentage of residents than they do in Manitoba. We have fewer elderly (or people of "retirement age") residents and more people in what we would consider to be the "working age groups".

- Only 7.2 per cent of our residents are over age 65 compared to 13.8 per cent of Manitobans. This is the second lowest rate in the province. This statistic demonstrates the fact people do not often retire to Churchill but instead may come to Churchill for employment reasons and then leave when they are no longer working (see Figure 2-5).

- Figure 2-4 illustrates the direct comparison between Churchill and Manitoba by age group. The differences in population in the age groups of prime working years are evident.

Figure 2-2 Churchill RHA population pyramid, 2008.

Source: Manitoba Health; July 1, 2008
Figure 2-3. Manitoba population pyramid, 2008.

Source: Manitoba Health, July 1, 2008

Figure 2-4. Comparison of Churchill and Manitoba population structures, all residents 2008.

Source: Manitoba Health, July 1, 2008.
Figure 2-5. Percentage of population over 65 years by region, 2008.

Source: Manitoba Health, July 1, 2008
### 2.5.2.1 Dependency Ratio

The dependency ratio is 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 usually presented as the number of dependents for every 100 people in the working age population. This measure is important to consider in the context of families as people aged 65 and over in addition to those under age 15 are more likely to be socially and/or economically dependent on working age individuals.

- As Figure 2-6 illustrates, the dependency ratio in the Churchill RHA of 41.7 is the lowest in the province. This is likely related to our smaller population of residents over age 65 as well as the fact that many people come to Churchill to work so are more likely to be between ages 15 and 64.

- Dependency ratios reported in the past three census cycles of 1996 (45.9%), 2001 (43.5%) and 2006 (45.5%) have changed very little and have historically been lower than the provincial average.

---

**Figure 2-6. Dependency ratio by region, 2008.**

![Dependency Ratio Chart](image)

Source: Manitoba Health, July 1, 2008
2.5.3 Change in Population Over Time

Not only is our population structure different from the provincial structure, our population has followed a different pattern of change compared to the provincial population. While our population decreased by 4.2 per cent between the 1996 and 2001 census, the provincial population grew by 2.6 per cent in the same time period.

Figure 2-7 illustrates the population change between 1990 and 2008 by age group. Our population is decreasing as a proportion of the total in every age group until age 30. After age 34, our populations are increasing in every age group. This may seem counter to the information presented earlier in this chapter, but we must also take into account small numbers. When we have very small numbers of residents (for example in the 65 and older age group), small changes (by even one or two people) can result in what looks like a large change. However, as illustrated in this chapter, we do have, and will likely continue to have, a younger population compared to the province but must continue to monitor the change in population structure and plan for the needs of those residents who choose to remain in the community as they become older.

Figure 2-7. Churchill change in population, 1990-2008.

Source: Manitoba Health, July 1, 2008
2.5.4 Population Projections

Population projection data has been provided by the Manitoba Bureau of Statistics. The limitation to this information is that Churchill and Burntwood are combined. It is unclear as to how well the population projections apply to Churchill specifically because Burntwood RHA appears to be changing in a different manner compared to Churchill. For example, the 2006 Census indicates the population of Churchill declined between 2001 and 2006 (by 4.2%) while the population of Burntwood increased by 6.4 per cent which is a much higher rate of growth than the provincial rate of 2.6 per cent.

- According to the Manitoba Bureau of Statistics, Burntwood and Churchill regions will grow by 27.6 per cent by 2035. This is a lower rate of growth than is projected for Manitoba overall (at 40.9%) (see Figure 2-8).

- Figure 2-9 shows the projected rate of population change by age group. The largest increases in the older age groups are on trend with what we have seen historically between 1990 and 2008.

![Figure 2-8. Projected population change by region, 2006-2035.](image-url)

Source: Manitoba Bureau of Statistics.
Figure 2-9. Burntwood/Churchill projected population change by age group, 2006-2035.

Source: Manitoba Bureau of Statistics
2.5.5 Aboriginal Population

Information about the numbers of aboriginal residents in our region is available through the 2006 Census data. This information is "self-reported" as being Aboriginal. These data indicate, over one half of our region self-identifies as Aboriginal (56.4 %) compared to the provincial average of 15.5 per cent of the population. This is an increase over rates reported in the 1996 census (46.3%) as well as the 2001 census (51.8%).

Table 2-1. Aboriginal population, 2006.

<table>
<thead>
<tr>
<th>Aboriginal Population</th>
<th>Churchill Total</th>
<th>Manitoba Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total - All persons</td>
<td>975</td>
<td>1,133,515</td>
</tr>
<tr>
<td>Aboriginal identity population</td>
<td>550 56.4%</td>
<td>175,395 15.5%</td>
</tr>
<tr>
<td>Non-Aboriginal population</td>
<td>425 43.6%</td>
<td>958,120 84.5%</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Community Profiles.
2.5.6 Marital Status

Table 2-2 illustrates the marital status of residents aged 15 and over in Churchill RHA and in Manitoba. As the table illustrates, just over one third of residents aged 15 and over reported being married in 2006. This is lower than the provincial average of 50.2 per cent of the population. Just over 9 per cent of our residents reported being divorced compared to 6.8 per cent of Manitobans overall.

It is interesting to note that the Census also reports on “common-law” relationships (two people of the opposite sex or of the same sex who live together as a couple, but who are not legally married to each other) outside of the “Legal Marital Status” category. According to this data, 36.7 per cent of residents of Churchill RHA live in common-law relationships compared to 10.8 per cent of provincial residents. These data indicate that although fewer regional residents are “legally married”, many residents are in long term committed relationships that involve living with a partner.

Table 2-2. Legal marital status of residents, 2006.

<table>
<thead>
<tr>
<th>Legal Marital Status</th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>Total - All persons, 15+</td>
<td>700</td>
<td>923,225</td>
</tr>
<tr>
<td>Never legally married (single)</td>
<td>315</td>
<td>307,505</td>
</tr>
<tr>
<td>Legally married (and not separated)</td>
<td>255</td>
<td>463,095</td>
</tr>
<tr>
<td>Separated, but still legally married</td>
<td>25</td>
<td>26,215</td>
</tr>
<tr>
<td>Divorced</td>
<td>65</td>
<td>62,865</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Community Profiles.
2.5.7 Family Structure

This section describes what we know about families living in our region. We recognize that due to the way families are defined, we are limited to describing “traditional” family structures at this time.

The 2006 Census indicates there were 245 families living in Churchill RHA in 2006. Forty per cent of families in our region are married couple families which is very different from the province where 72.2 per cent of families are married couple families.

On average, there were 3.9 persons in a married-couple family, 3.5 in a common-law couple family and 3.0 in a lone-parent family. These family sizes are bigger than the provincial average of 3.1 persons in a married-couple family, 2.8 in a common-law couple and 2.6 in a lone-parent family. These family sizes are particularly important in relation to family incomes illustrated in Table 2-3. Family incomes in our region are lower for lone parent families than provincial incomes, and we are taking care of more people with those incomes.

Table 2-3 illustrates some selected characteristics of families in our region with comparison to the province of Manitoba. As Table 2-3 illustrates, the proportion of lone parent families in our region is larger than in the province overall (22.4% versus 17.0%). Within those lone-parent families, the distribution is also somewhat different from what we see in the rest of the province with proportionally more males heading lone parent families in Churchill (45.5% versus 19.3%). The rate of lone parent families has increased since the 2001 Census cycle when 18.2 per cent of families were lone parent families. In 2001 the rate of lone parent families was higher at 27.1 per cent but in this case our data was combined with Burntwood so may not accurately reflect our experience.

Table 2-3 also illustrates the substantially lower income experienced by lone parent families compared to couple families (median family income of $23,619 versus $86,691). This is very important as extensive research has illustrated the relationship between income and health. In communities where the discrepancy between the richest and poorest populations is the greatest, the health is the worst. In populations with the least discrepancy in incomes across the population, health status is the best, regardless of the overall income level.

It is difficult to track changes in income for lone parents over time as Census data is reported differently in each of the past three cycles. In 1996 only the average (as opposed to the median) income was reported ($28,015) and in 2001 median income was reported ($14,779) but this was for Burntwood and Churchill together. The most current median income of just over $23,000 is much higher than that reported in 2001 and likely reflects the real differences between Burntwood and Churchill in populations and income in the community.
Table 2-3. Family structure of residents, 2006.

<table>
<thead>
<tr>
<th>Family Structure</th>
<th>Churchill Total</th>
<th>Manitoba Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of census families</td>
<td>245</td>
<td>312,805</td>
</tr>
<tr>
<td>Number of married-couple families</td>
<td>100</td>
<td>225,875</td>
</tr>
<tr>
<td></td>
<td>40.8%</td>
<td>72.2%</td>
</tr>
<tr>
<td>Number of common-law-couple families</td>
<td>90</td>
<td>33,720</td>
</tr>
<tr>
<td></td>
<td>36.7%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Number of lone-parent families</td>
<td>55</td>
<td>53,210</td>
</tr>
<tr>
<td></td>
<td>22.4%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Number of female lone-parent families</td>
<td>30</td>
<td>42,930</td>
</tr>
<tr>
<td></td>
<td>54.5%</td>
<td>80.7%</td>
</tr>
<tr>
<td>Number of male lone-parent families</td>
<td>25</td>
<td>10,280</td>
</tr>
<tr>
<td></td>
<td>45.5%</td>
<td>19.3%</td>
</tr>
<tr>
<td>Median income in 2005 - All census families</td>
<td>$76,897</td>
<td>$58,816</td>
</tr>
<tr>
<td>Median income in 2005 - Married-couple families</td>
<td>$86,691</td>
<td>$67,013</td>
</tr>
<tr>
<td>Median income in 2005 - Lone-parent families</td>
<td>$23,619</td>
<td>$31,518</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Community Profiles.
2.5.8 Language

- **Tables 2-4 to 2-7** illustrate what we know about language in our region and how we compare to Manitoba as well as the rest of Canada.

- Although over half of our population is of Aboriginal descent, we have a very homogeneous population in terms of language. Almost everyone in our region speaks English at home, and everyone reported that they only speak English at work.

- Slightly less than 10 per cent of our population reports a mother tongue other than English or French, but no one reported a current knowledge of languages other than English or French.

- Rates have changed somewhat over the last three census cycles as in 1996 93.5 per cent of residents indicated that they spoke English most often at home, this decreased to 90.6 per cent in the 2001 census and then increased again in 2006 to 98.5 per cent which is much higher than the current provincial rate of 87.3 per cent.

Table 2-4. Language spoken at home, 2006.

<table>
<thead>
<tr>
<th>Language spoken most often at home</th>
<th>Churchill</th>
<th>Manitoba</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total - All persons</td>
<td>975</td>
<td>1,133,510</td>
<td>31,241,030</td>
</tr>
<tr>
<td>English only</td>
<td>960 (98.5%)</td>
<td>989,215 (87.3%)</td>
<td>20,584,775 (65.9%)</td>
</tr>
<tr>
<td>French only</td>
<td>0 (0%)</td>
<td>19,515 (1.7%)</td>
<td>6,608,120 (21.2%)</td>
</tr>
<tr>
<td>Non-official language</td>
<td>10 (1%)</td>
<td>107,875 (9.5%)</td>
<td>3,472,130 (11.1%)</td>
</tr>
<tr>
<td>Both English and French</td>
<td>0 (0%)</td>
<td>1,820 (0.2%)</td>
<td>94,060 (0.3%)</td>
</tr>
<tr>
<td>English and non-official language</td>
<td>0 (0%)</td>
<td>14,875 (1.3%)</td>
<td>406,455 (1.3%)</td>
</tr>
<tr>
<td>French and non-official language</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>58,885 (0.2%)</td>
</tr>
<tr>
<td>English, French and non-official language</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>16,600 (0.1%)</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Community Profiles.

Table 2-5. Knowledge of official languages, 2006.

<table>
<thead>
<tr>
<th>Knowledge of official languages</th>
<th>Churchill</th>
<th>Manitoba</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total - All persons</td>
<td>975</td>
<td>1,133,510</td>
<td>31,241,030</td>
</tr>
<tr>
<td>English only</td>
<td>945 (96.9%)</td>
<td>1,017,565 (89.8%)</td>
<td>21,129,945 (67.6%)</td>
</tr>
<tr>
<td>French only</td>
<td>0 (0%)</td>
<td>1,925 (0.2%)</td>
<td>4,141,850 (13.3%)</td>
</tr>
<tr>
<td>Both English and French</td>
<td>25 (2.6%)</td>
<td>103,525 (9.1%)</td>
<td>5,448,850 (17.4%)</td>
</tr>
<tr>
<td>Other language</td>
<td>0 (0%)</td>
<td>10,500 (0.9%)</td>
<td>520,385 (1.7%)</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Community Profiles.
### Table 2-6. Mother tongue, 2006.

<table>
<thead>
<tr>
<th>Mother tongue</th>
<th>Churchill</th>
<th>Manitoba</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total - All persons</td>
<td>975</td>
<td>1,133,510</td>
<td>31,241,030</td>
</tr>
<tr>
<td>English only</td>
<td>880 (90.3%)</td>
<td>838,415 (74.0%)</td>
<td>17,882,780 (57.2%)</td>
</tr>
<tr>
<td>French only</td>
<td>15 (1.5%)</td>
<td>43,955 (3.9%)</td>
<td>6,817,650 (21.8%)</td>
</tr>
<tr>
<td>Both English and French</td>
<td>0 (0.0%)</td>
<td>2,630 (0.2%)</td>
<td>98,630 (0.3%)</td>
</tr>
<tr>
<td>Other language</td>
<td>80 (8.2%)</td>
<td>248,510 (21.9%)</td>
<td>6,441,975 (20.6%)</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Community Profiles.

### Table 2-7. Language spoken at work, 2006.

<table>
<thead>
<tr>
<th>Language spoken most often at work</th>
<th>Churchill</th>
<th>Manitoba</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total - All persons</td>
<td>625</td>
<td>658,885</td>
<td>18,418,100</td>
</tr>
<tr>
<td>English only</td>
<td>625 (100.0%)</td>
<td>635,360 (96.4%)</td>
<td>14,064,105 (76.4%)</td>
</tr>
<tr>
<td>French only</td>
<td>0 (0%)</td>
<td>7,275 (1.1%)</td>
<td>3,724,975 (20.2%)</td>
</tr>
<tr>
<td>Non-official language</td>
<td>0 (0%)</td>
<td>11,270 (1.7%)</td>
<td>273,830 (1.5%)</td>
</tr>
<tr>
<td>Both English and French</td>
<td>0 (0%)</td>
<td>1,640 (0.2%)</td>
<td>252,295 (1.4%)</td>
</tr>
<tr>
<td>English and non-official language</td>
<td>0 (0%)</td>
<td>3,260 (0.5%)</td>
<td>86,820 (0.5%)</td>
</tr>
<tr>
<td>French and non-official language</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>5,055 (0.0%)</td>
</tr>
<tr>
<td>English, French and non-official language</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>11,025 (0.1%)</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Community Profiles.
2.5.9 Internal/External Migration

- The majority of our residents were born in Canada and less than five per cent of residents of Churchill are immigrants (see Table 2-8). These rates are a very slight increase over 3.6 per cent reported in the 2001 Census.

Table 2-8. Internal/External migration status, 2006.

<table>
<thead>
<tr>
<th>Immigration Characteristics</th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>Total - All persons</td>
<td>975</td>
<td>1,133,515</td>
</tr>
<tr>
<td>Canadian-born population</td>
<td>935</td>
<td>974,735</td>
</tr>
<tr>
<td>Foreign-born population</td>
<td>40</td>
<td>151,230</td>
</tr>
<tr>
<td>Immigrated before 1991</td>
<td>20</td>
<td>92,535</td>
</tr>
<tr>
<td>Immigrated between 1991 and 2001</td>
<td>0</td>
<td>27,505</td>
</tr>
<tr>
<td>Immigrated between 2001 and 2006</td>
<td>20</td>
<td>31,190</td>
</tr>
<tr>
<td>Non-permanent residents</td>
<td>0</td>
<td>7,545</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Community Profiles.
2.5.10 Mobility Status

Mobility status refers to whether people have moved or lived at the same location in the previous five years. This information is collected through the Census, so for the 2006 Census the question refers to where the person lived in 2001.

Mobility status can provide information about the transience of a population and may provide insight into issues such as housing affordability. People, who have trouble affording and finding stable housing, often move from home to home.

- Within our region, 53.6 per cent of residents lived at the same address in the last 5 years. This is lower than the provincial average of 63.4 per cent of Manitobans, and is the lowest in the province (see Figure 2-10).

- Figure 2-11 shows that 43.1 per cent of our residents moved within the province compared to just 29.9 per cent of Manitobans, and is the highest in the province.

- According to these data, Churchill has a relatively transient population. Churchill residents’ mobility appears to be centered on moving within the community or moving in and out of different Manitoba regions. However, few of our residents tend to move in and out of Manitoba. Figure 2-12 shows that just 3.3 per cent of our residents lived in a different province or territory five years ago. This is very similar to the provincial average of 3.4 per cent.

Figure 2-10. Lived in the same address in last 5 years, 2006.

Source: Statistics Canada, 2006 Community Profiles.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 2-11. Moved within province in last 5 years, 2006.

Source: Statistics Canada, 2006 Community Profiles.
NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 2-12. Lived in different province or territory five years ago, 2006.

Source: Statistics Canada, 2006 Community Profiles.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
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3.0 Introduction to Determinants of Health

There is a growing body of evidence to indicate that increased spending in health care is not the answer to improving the health status of a population.

Instead, the key influences on health are:

- Personal health practices and lifestyle
- Personal resources
- Living and working conditions
- Environmental factors
- Healthy child development
- Biology and genetic endowment
- Culture
- Gender
- Health services

These are referred to as **determinants of health**. Each determinant of health has one or many “indicators” which are a way of measuring the determinant. The determinants of health can be thought of as the “risk factors” - those things associated with health status outcomes. A well-known example of the relationship between a determinant of health and an outcome is smoking (an indicator of personal health practice and lifestyle) and lung cancer (a health status indicator, or outcome). That is, there are much higher rates of lung cancer among people who smoke (or who have smoked) than among people who do not smoke.

Although all the determinants of health are important, we have focused on some more than others for the following reasons. Firstly, data is not currently available at a regional level (and sometimes not even provincial level) for all determinants of health. Secondly, not all determinants of health are easily modifiable or can be reasonably addressed within the parameters of a regional health organization. For example, it will be noted that our Community Health Assessment was able to collect data and address in great detail indicators of personal health practices and coping skills, however, there is very little in our document specifically related to biology and genetic endowment. Gender differences are addressed throughout this document.
3.1 Socioeconomic Conditions

Socioeconomic factors such as income are important because Health Canada reports the following links between low income and health:

- Canadians with low incomes are more likely than Canadians with high incomes to suffer illnesses and to die early.

- Only 47 per cent of Canadians in the lowest income level rate their health as excellent or very good, compared to 73 per cent of Canadians in the highest income group.

- Canadians who live in the poorest neighbourhoods are more likely than residents of the richest neighbourhoods to die at an early age.

- Children in low-income families and neighbourhoods are at higher risk for infant death and low birth weight than children who grow up in families with higher incomes. They are more likely to experience developmental delays and injuries.

- In Canada, approximately one in four children lives in a low-income family. Rates are even higher in Aboriginal and recently-arrived immigrant communities, and in families headed by very young parents and women who are single parents.
3.1.1 Income Inequality

Wide variation in income has been shown to negatively affect health status of communities. In contrast, those communities with people who uniformly have higher incomes enjoy better health status. There is also evidence to suggest that low income people tend to access the health care system less due to a number of reasons, including language/cultural barriers that may exist, a lack of time to go to appointments and a lack of information.

Some indicators of income inequality that we have reviewed include the numbers of children and families living under what Statistics Canada defines as the “low income cut off” (LICO). LICO is the income level at which families or persons spend 20 per cent more than average of their before tax income on food, shelter and clothing. LICO is not an absolute number such as "$15,000 per year" because it is calculated in relation to the average income and spending in the community or area that the person lives. Therefore the LICO in an expensive northern community could be higher in terms of absolute dollars than it is in a more affordable southern community.

- In 2006, 15.5 per cent of children (age 18 and under) living in Churchill lived in a “low income family”. This is lower than the provincial rate of 21.4 per cent but still means that approximately 1 out of 7 children is living in a family facing financial challenges (see Figure 3-1). It is however, a reduction from previous census years as in 1996, 23.3 per cent of children were living in a low income family and in 2001, the rate had declined to 20.8 per cent.

- Overall, in our region 11.3 per cent of all families are considered low income (or living below LICO) families compared to 16.7 per cent of families in Manitoba (see Figure 3-2). The positive news also is that this is a reduction from rates in the previous census years of 1996 where 19.4 per cent of families were low income and 2001 when the rate was 13.6 per cent of families.

- Figure 3-3 shows that it is unattached individuals (people living alone or with others who are not family or common-law partners) who are most vulnerable to living below LICO. In our region, 22 per cent of unattached individuals live below LICO (a reduction from the 1996 census year rate of 26.6% in 1996 but similar to the 2001 rate of 21.8%). The most current rate is the lowest in the province but is still something we need to work on, as it accounts for more than one in five unattached adults in our community.
Figure 3-1. Children aged 18 and under living in a low income family by region, 2006.

Source: Statistics Canada, 2006 Community Profiles.
NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 3-2. All families living below LICO by region, 2006.

Source: Statistics Canada, 2006 Community Profiles.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 3-3. Unattached Individuals with low income by region, 2006.

Source: Statistics Canada, 2006 Community Profiles

NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.1.2 Families Receiving Income Assistance (IA)

The proportion of the population collecting income assistance (IA) benefits is an important indicator of the economic health of families. Those families that are eligible for income assistance have income levels that are low enough that it can negatively impact their health status. A recent Statistics Canada study showed that those families with a combined income of $20,000 a year or less are more likely to experience a decline in self-rated health than people with the highest incomes. The stresses associated with financial problems for lower income families contributed to a decline in self-rated health status.ii

- Within our region, the percentage of families with children aged 0-17 who received income assistance has slightly decreased from 23.9 per cent to 21.1 per cent. Although there has been a slight decrease, this is much higher than the Manitoba average of 13.2 per cent (see Figure 3-4).

- If we look specifically at families that have at least one young adult aged 18-19, we can see that although 24 per cent of these families received IA in the first time period, this declined to zero in the second (see Figure 3-5). This seemingly dramatic change is reflective of the small population of Churchill (for example, there may be only a small number of families with children living at home in this age group).

Figure 3-4. Children aged 0-17 in families receiving IA by region, 1999/2000-2000/01 and 2004/05-2005/06.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
1' indicates area's rate was statistically different from Manitoba average in first time period
2' indicates area's rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
Figure 3-5. Young adults aged 18-19 in families receiving IA by region, 1999/2000-2000/01 and 2004/05-2005/06.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.1.3 Median Individual and Household Incomes

Median individual and household income is a more effective way to show how much income inequality exists in a community. “Median” refers to the point that is exactly halfway between the bottom and the top if you listed each income in order from lowest to highest. Therefore, when we refer to median income we are literally referring to the income that separates the lowest half of the population from the top half. This is an important measure, as research shows that communities where individuals have similar incomes (without a large difference between those at the top end and those at the bottom) generally experience better health status compared to regions with more variations in income.

- Churchill residents have the highest median individual and household incomes in the province.

- According to the 2006 Census, the median household income for Churchill is $55,200, which is higher than the provincial median of $47,875 (see Figure 3-6). This means that in Churchill, one half of the households earn less than $55,200 and one half earns more than this amount.

- Living in the north can be challenging for people living alone. This is not just due to potential feelings of isolation but also due to practicalities such as the cost of housing and other necessities. Within our region the median individual income for Churchill is $30,458, which is higher than the provincial median of $24,194 (see Figure 3-7) and an increase from the 2001 median of $26,325. However, it is much lower than for someone living in a family and individuals often make the choice to share housing with others to help share the burden of the high cost of living in the north.
Figure 3-6. Median household income by region, 2005.

Source: Statistics Canada, 2006 Community Profiles.
NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 3-7. Median individual income by region, 2005.

Source: Statistics Canada, 2006 Community Profiles.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.1.3.1 Income in Single Parent Families

Single parent households often have lower incomes than two parent households. These families can be particularly vulnerable to poor health status with the stress, lack of time and resources to make healthy choices. This indicator can pinpoint more vulnerable households for poorer health status.

- As Figure 3-8 shows, while median household and individual income for Churchill residents is the highest in the province, when we look at single parent families this is no longer the case.

- In fact, the median income in single parent families for Churchill residents is $23,619, which is among the lowest in the province and lower than the provincial median of $31,518. In our 2005 Community Health Assessment we reported that median income in single parent families was $22,592. The new median represents an increase of just over $1,000 in five years which is not positive. By comparison, the median income for Manitoba overall has increased by over $5,000 in this time period.

Figure 3-8. Median income in single parent families by region, 2005.

Source: Statistics Canada, 2006 Community Profiles.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.1.4 Unemployment

Unemployment rates give us information about the numbers of people in our community who are actively looking for work. Although this information is useful, it is important to note that this does not give us information about people who are ‘underemployed’ (for example, working part time when they would prefer to be working full time), people who have become discouraged and given up looking for work as well as people who for other reasons (such as motherhood or age) choose to not seek paid employment.

The unemployment rate, although subject to these limitations, is an important indicator because research has shown that people that are unemployed tend to have poorer health status.iii

- **Figures 3-9 and 3-10** show 2006 unemployment rates for men and women separately.

- While the unemployment rate among Churchill males (15%) and females (14%) is quite similar, there is a larger difference between the rate in men in our region compared to the rate of those in other regions.

- Within our region, the male unemployment rate is 15 per cent compared to the provincial average of 6 per cent. This rate is virtually identical to the rate we reported in our 2005 Community Health Assessment of 14.3 percent and is much lower than the 1996 census year rate of 26.5 per cent.

- Among Churchill Region women, the unemployment rate of 14 per cent is slightly higher than the provincial rate of 11 per cent. Our female unemployment rate has also increased from 12.5 per cent in our last Community Health Assessment; however it is lower than the 1996 census year rate of 15 per cent.

- Unemployment rates among Churchill youth (see Figures 3-11 and 3-12) show similar trends in that there are major differences in rates between our region and other regions in Manitoba. In fact, the unemployment rates for young females in our region are more than double the provincial rate of 10.5 per cent.

- Youth unemployment rates are different from adult unemployment rates in our region in that there is a larger difference between female (25%) and male (20%) unemployment rates. In addition, it is young women in our region who are experiencing higher unemployment rates than young men.
Figure 3-9. Male unemployment rate by region, 2006.

Source: Census 2006.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 3-10. Female unemployment rate by region, 2006.

Source: Census 2006.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 3-11. Male youth unemployment rate by region, 2006.

Source: Census 2006.
NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 3-12. Female youth unemployment rate by region, 2006.

Source: Census 2006.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.1.5 Labour Force Participation

Those that are employed generally have fewer health difficulties than those who are unemployed. Labour force participation is an important indicator of social belonging and contribution to society. Not being in the labour force can be isolating resulting in fewer social supports and can affect health and well being in a negative way.iv

Labour force participation rates include both people who are employed as well as those who are unemployed. These rates are meant to reflect the population that is engaged in the labour force either by working or looking for work.

- Within our region in 2006 there were 735 Churchill residents age 15 and older. Of these, 585 indicated that they were working or looking for work meaning that they were part of the "Labour Force". The total labour force participation rate therefore was 79.6 per cent of residents age 15 and older. This is much higher than the provincial rate of 67.3 per cent.

- As Table 3-1 illustrates, although our participation rate is much higher than the provincial average, employment rates among Churchill and Manitoba men in general are similar. It is our unemployment rates that are much higher than the provincial rates and these people who are seeking work result in a higher labour force participation rate for our region.

- A review of our 2005 Community Health Assessment document also indicates that labour force participation rates have decreased over time. In 2005 we reported that our rate was 84.4 per cent (87.5% for men and 81.2% for women). In addition, the employment rate was higher at 73.6 per cent (71.0% for females and 73.6% for males).

**Table 3-1. Labour force indicators by gender, 2006.**

| Labor force | Churchill | | | | Manitoba |
|-------------|-----------|-----------|-----------|-------------|-----------|-----------|-----------|-----------|
| | Total | Male | Female | | Total | Male | Female | | Total | Male | Female |
| Participation | 79.6% | 81.1% | 78.1% | | 67.3% | 72.8% | 62.0% | | |
| Employment | 67.3% | 67.6% | 67.1% | | 63.6% | 68.8% | 58.7% | | |
| Unemployment | 15.4% | 15.0% | 14.0% | | 5.5% | 5.5% | 5.4% | | |

Source: Statistics Canada, 2006 Community Profiles.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.1.6 Occupation

Better paying jobs, as well as those with more autonomy and ability to make decisions generally have a positive impact on health and well being. However, there are some jobs (regardless of pay) which have inherent dangers or exposure to environmental risk factors which may negatively impact health status.

Occupation is the kind of work done by persons aged 15 and over. Occupation is based on the type of job the person holds and the description of his or her duties regardless of the work setting. For example, someone might work in the Industry of Healthcare but as a "Manager"; in this case, the occupation is "Management Occupation" as opposed to "Health Occupation".

- According to the 2006 Census, the most common occupation in the Churchill Region is “Sales and Service Occupations” which account for just over one in every three jobs in our region. The second most common category of work is “trades, transport and equipment operators and related occupations” accounting for 17 per cent of the work force. Management occupations were the third most common at 16 per cent.

- Health occupations account for just four per cent of major occupations in our region (see Figure 3-13).

Figure 3-13. Churchill major occupations, 2006.

Source: Statistics Canada, 2006 Community Profiles.
3.1.7 Industry

Industry is not necessarily the type of work a person does but it refers to the business in which a person is employed. In our region, "Health and Education" and "Business Services" together employ almost half of our working population (see Figure 3-14).

- As Table 3-2 illustrates, Churchill is very different from the rest of Manitoba in that agriculture and manufacturing are not major industries as they are in many parts of Manitoba.

- Within our region, more than one in three women are employed in the Health and Education Industry, while Business Services is the major industry for men in our region.

Figure 3-14. Churchill labour force by major industry, 2006.
Table 3-2. Employment by major industry, Churchill and Manitoba, 2006.

<table>
<thead>
<tr>
<th>Employment</th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Male Female</td>
<td>Total Male Female</td>
</tr>
<tr>
<td>Agriculture and other resource-based industries</td>
<td>0.0% 0.0% 0.0%</td>
<td>7.9% 11.1% 4.3%</td>
</tr>
<tr>
<td>Manufacturing and construction industries</td>
<td>4.4% 3.3% 0.0%</td>
<td>15.8% 23.6% 7.1%</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>19.3% 19.0% 16.1%</td>
<td>14.7% 14.9% 14.5%</td>
</tr>
<tr>
<td>Finance and real estate</td>
<td>2.6% 0.0% 7.1%</td>
<td>5.2% 3.9% 6.7%</td>
</tr>
<tr>
<td>Health and education</td>
<td>23.7% 10.3% 37.5%</td>
<td>20.5% 9.4% 32.8%</td>
</tr>
<tr>
<td>Business services</td>
<td>23.7% 34.5% 14.3%</td>
<td>15.8% 18.9% 12.4%</td>
</tr>
<tr>
<td>Other services</td>
<td>27.2% 32.8% 19.6%</td>
<td>20.1% 18.2% 22.2%</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Community Profiles

NOTE: Churchill rates should be interpreted with caution due to small numbers.
### 3.1.8 Housing Affordability

Households that spend 30 per cent or more of their total household income on housing (whether it is owned or rented) are an indicator of unaffordability. By allocating almost one third or more of income simply toward housing, people then have less money for other basic necessities such as healthy foods, warm clothing and health care and medication costs. People who rent their home, as opposed to owning, often are more likely to face the issue of unaffordable housing. This is because people often rent because they do not have the financial resources to own (either due to being young and new to the labour force or due to ongoing low paying or lack of employment). These people are starting off with lower incomes and then can be subject to “supply and demand” issues, particularly in the north, and this can result in higher rental rates.

Participants at the Women’s Health Strategy consultation indicated that housing is a significant issue in Churchill. There are few private homes in the community and many are owned by Manitoba Housing Authority or the RHA. There was the perception among participants that past disagreements with Manitoba Housing may make it difficult or impossible to be approved for future rentals. Additionally, the housing authority has very specific rental requirements including references which preclude many new renters from accessing accommodations. Housing was also recognized as an issue by our Community Health Assessment focus group participants. While cost and availability of suitable housing was sited as a concern, some participants also indicated that people need to take care of, and take pride in their homes and not expect other people to take care of them.

- Within our region, the average value of a home that was owned by a resident was $112,357 in 2006; this is lower than the provincial average of $153,307 (see Figure 3-15).

- In our region, the median amount of money spent on monthly rent was $541 and the median amount spent on an owned property was slightly lower at $517 per month.

- For housing affordability specifically, in our region 18.8 per cent of people who rent their housing spend at least 30 per cent of their household income on rent. This is actually much lower than the provincial rate of 35.3 per cent. However, although median income is higher in Churchill and housing values are lower than the provincial average in our region, 16.1 per cent of owners spend at least 30 per cent of their household incomes on their homes (the highest ranked in the province) compared to 11.4 per cent of Manitobans. (See Figures 3-16 and 3-17).
Figure 3-15. Average value of owned home by region, 2001 and 2006.

Source: Statistics Canada, 2006 Community Profiles
Note: Churchill 2001 value suppressed due to small numbers.

Figure 3-16. Proportion of tenant-occupied households spending 30% or more of household income on rent by region, 2006.

Source: Statistics Canada, 2006 Census (20% sample).
NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 3-17. Proportion of owner households spending 30% or more of household income on owner’s major payments by region, 2006.

Source: Statistics Canada, 2006 Census (20% sample).

NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.1.9 Educational Attainment

Education, along with income, is one of the main indicators of socio-economic status and an important determinant of health. A direct relationship has been found between education and health status. Information about educational achievement can also give us information about the relative age of the population because access to higher education has improved significantly in recent years.

- Table 3-3 shows that more than 40 per cent of Churchill residents age 15 and older have not graduated from high school. This rate is much higher than the provincial rate of 29 per cent. Rates among Churchill females (48%) are higher than among males (37%).

- According to the 1996 Census, at that time 46.2 per cent of Churchill residents had not completed high school (46.9% of males and 46.2% of females) and in 2001 this was slightly higher at 48.5 per cent (but in the year our data were combined with Burntwood). Thus, although rates of incompletion of high school are high, they do appear to be slowly improving.

- Another positive is that one in ten residents has a university certificate, diploma or degree. While this is lower than the provincial rate of 15 per cent, Churchill females have a rate of 15 per cent which is the same as the provincial rate. Churchill males, on the other hand, are much less likely to have a university education, with only 4 per cent having attained this level of education.

Table 3-3. Proportion of population with highest education, 2006.

<table>
<thead>
<tr>
<th>Education</th>
<th>Churchill</th>
<th>Manitoba</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Male</td>
</tr>
<tr>
<td>No certificate, diploma or degree</td>
<td>43%</td>
<td>37%</td>
</tr>
<tr>
<td>High school certificate or equivalent</td>
<td>18%</td>
<td>22%</td>
</tr>
<tr>
<td>Apprenticeship or trades certificate or diploma</td>
<td>16%</td>
<td>22%</td>
</tr>
<tr>
<td>College, CEGEP or other non-university certificate or diploma</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>University certificate or diploma below the bachelor level</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>University certificate, diploma or degree</td>
<td>10%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Census Community Profiles (20% sample).  
NOTE: Churchill rates should be interpreted with caution due to small numbers.

- If we look at lack of completion of high school by age group, we see that within our region almost three out of every four residents ages 15 to 24 has not graduated from high school (or equivalent). This is much higher than the provincial rate of 47.6 per cent. However, it is important to note that some of these residents would still be attending high school; particularly those age 15 to 18 or 19.

- Rates of high school incompletion are 18 per cent for Churchill residents age 25 to 34 (compared to Manitoba at 16.4%) and are one in three (33.3%) for Churchill adults age 35 to 64 (compared to Manitoba at 16.4%).
• For Churchill, high school incompletion rates are higher for females than males in every age group, while the opposite is true for Manitoba overall. It is possible that higher teen pregnancy and birth rates have impacted the ability for teen mothers to return to and successfully complete high school after the birth of their baby (see Table 3-4).

Table 3-4. Population (age 15+) with less than high school certificate, 2006.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Churchill</th>
<th></th>
<th>Manitoba</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>15-24</td>
<td>72.4%</td>
<td>52.9%</td>
<td>84.6%</td>
<td>47.6%</td>
</tr>
<tr>
<td>25-34</td>
<td>17.9%</td>
<td>20.0%</td>
<td>22.0%</td>
<td>16.4%</td>
</tr>
<tr>
<td>35-64</td>
<td>33.3%</td>
<td>30.2%</td>
<td>35.3%</td>
<td>21.6%</td>
</tr>
<tr>
<td>All residents age 15+</td>
<td>43.1%</td>
<td>36.9%</td>
<td>47.9%</td>
<td>29.5%</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Census Community Profiles.
3.1.10 Unpaid Work

The demands of both paid and unpaid work have been shown to increase overall stress in individuals, which lead to greater health problems. Longer paid and unpaid work hours increase the risks of cancer, heart disease, hypertension, diabetes and other serious illnesses.\textsuperscript{vii} For those individuals who spend a disproportionate amount of time on unpaid work such as home maintenance, meal preparation, and child care, the time spent on these tasks also limits their ability to exercise or access other recreation, training and education opportunities.\textsuperscript{viii} More and more people are finding themselves in the position of looking after young children and teenagers, as well as aging parents while also working full time. This results in high stress levels for the person who is in the caretaking role (often the mother in the family).

Focus group participants identified that supports for seniors as well as more child care and supports for parents, were important priorities to consider in the community.

- **Table 3-5** shows that almost all residents participate in some type of unpaid work and the most common type is housework. These trends were very similar to the provincial trends. However, over one half of females and almost one half of Churchill men, engaged in unpaid child care which is slightly higher than the provincial averages. In addition, more than one in five Churchill residents spends time providing unpaid assistance to seniors – very similar to the prevalence in the provincial population as a whole.

<table>
<thead>
<tr>
<th></th>
<th>Churchill</th>
<th></th>
<th>Manitoba</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>All unpaid work</td>
<td>92.5%</td>
<td>91.9%</td>
<td>94.4%</td>
<td>90.8%</td>
</tr>
<tr>
<td>Unpaid housework</td>
<td>87.8%</td>
<td>86.5%</td>
<td>90.3%</td>
<td>89.7%</td>
</tr>
<tr>
<td>Unpaid childcare</td>
<td>49.7%</td>
<td>47.3%</td>
<td>54.2%</td>
<td>38.4%</td>
</tr>
<tr>
<td>Unpaid assistance to seniors</td>
<td>21.8%</td>
<td>21.6%</td>
<td>20.8%</td>
<td>20.3%</td>
</tr>
</tbody>
</table>

Source: Statistics Canada, 2006 Community Profiles

NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.2 Environmental Factors

3.2.1 Exposure to Second Hand Smoke

Exposure to second-hand smoke can cause a variety of chronic conditions including heart disease, as well as several different types of cancers such as lung, throat, pancreas, and leukemia. A number of respiratory conditions can result from second hand smoke exposure including chronic bronchitis, and pneumonia. In children, it can cause respiratory symptoms, Sudden Infant Death Syndrome, bronchitis, pneumonia and other lower respiratory tract infections, asthma exacerbation, middle ear disease, and restrict fetal growth (including low birth weight and small-for-gestational age).ix

The good news is that most Canadian families agree they should avoid exposure to SHS in their home and car. Currently, four out of five (82%) Canadian homes already restrict smoking in some way.x Parents also report that the primary reason they want to cut back on the amount of SHS in their home is because of their children.xi

- According to the combined 2007 and 2008 CCHS data, 18 per cent of Churchill (and Burntwood) residents who do not smoke are exposed to second hand smoke in their home. This is much higher than the provincial rate of 8 per cent, and ranked the highest in the province, reflecting the high smoking prevalence in the region.

- It is also important to note that these rates are for people who are age 12 and older only. We know that rates of exposure to second hand smoke by non-smokers decreases with increasing age as adults who choose not to smoke will often not allow smoking in their homes. However, children do not have the ability to choose who they live with or to dictate whether people smoke in their homes.

Figure 3-18. Residents who are exposed to second hand smoke in the home, by region, 2007/08.

Source: Statistics Canada, Canadian Community Health Survey (CCHS), 2007.
Table 3-6 illustrates changes in rates of exposure to SHS between 2003 and 2008. The source for these data is the Canadian Community Health Survey.

These data show that for Manitoba overall, rates of exposure are slowly declining. However, they also show that while rates of exposure to SHS for all Manitobans over age 12 was 7 per cent, when we look only at children and youth age 12 to 19, these rates increase to one in five (this is among the non-smoking population only).

Within our region, 13.3 per cent of non-smoking residents age 12 and older were exposed to SHS inside of their home in 2008. Due to small sample size (which is impacted by the fact that these are NON-SMOKING adults only and we have high rates of smoking in our region, thus limiting the sample size for this question), the rates in our region go up and down from year to year and it is difficult to determine if there are any trends. However, one very important trend is that, as with Manitoba as a whole, rates of exposure to SHS are much higher among children and youth than among the general population. For example, in two of the three years for which we have data approximately one-half of non-smoking children and youth age 12-19 were exposed to SHS inside of their own home. We become very concerned when we see that smoking rates among this age group are at about 25 per cent, and yet there exists almost double this rate of youth who chose not to smoke but who are being exposed to SHS by friends and family within their homes.


<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitoba</td>
<td>10.7%</td>
<td>8.6%</td>
<td>8.9%</td>
<td>7%</td>
</tr>
<tr>
<td>Manitoba 12-19 year olds only</td>
<td>22.9%</td>
<td>20%</td>
<td>16.5%</td>
<td>19.3%</td>
</tr>
<tr>
<td>Burntwood/Churchill</td>
<td>22.2%</td>
<td>14.7%</td>
<td>22.3%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Burntwood/Churchill 12-19 year olds only</td>
<td>49%</td>
<td>39.2%</td>
<td>52.4%</td>
<td>Suppressed due to small sample size</td>
</tr>
</tbody>
</table>

3.3 Personal Resources

Personal resources refer to a number of non-medical determinants of health in which an individuals’ personal circumstances contribute to their health status. Enhancing individual coping abilities and bolstering social supports are two important ways to improve the mental and physical health of individuals. The following section will look at indicators which try to measure the coping skills of individuals through self-reported life stress and life satisfaction. This section will also examine school readiness.
3.3.1 Life Stress

Life’s stresses, whether chronic or brought on by major life events, can impact a person’s health and immune system. While stress does not directly cause illness, a complex range of factors including genetics, external resources, personal resources and emotional support can increase the risk of illness. Sources of life stresses can range from financial worries, work, unemployment, parenting, health problems, aging and care giving/elder care.

Stress does not always cause illness. A person’s reaction to a stressor will influence its effect on his or her health. External resources (money and education), personal resources (sense of control over one’s life) and emotional support can influence whether life stress causes health difficulties.

- Within our region, 16.7 per cent of residents report experiencing "quite a lot" of life stress. This is lower than both provincial (19.4%) and Canadian (22.5%) proportions.

Figure 3-19. Residents who report “quite a lot” life stress by region, 2007.
3.3.2 Life Satisfaction

People’s assessment of their own well being is another key perspective to determine the health status of individuals. Those who report being satisfied or very satisfied with their life enjoy better physical and mental health.xiv

- People in our region appear to be very satisfied with their lives. According to combined 2007 and 2008 CCHS data, over 93 per cent of Burntwood/Churchill residents indicated that they were “satisfied or very satisfied” with their lives (see Figure 3-20). This is slightly higher than the provincial rate of 92.1 per cent.

- Rates of life satisfaction are very similar among males (94.1%) and females (93.6%) in our region.

Figure 3-20. Residents who self rated “satisfied or very satisfied” with life by region, 2007/08.

Source: Statistics Canada, Canadian Community Health Survey (CCHS), 2007.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.3.3 School Readiness

School readiness is a measure which gauges the ability of children to meet the daily demands of school, such as a willingness and curiosity to learn, asking questions, listening to the teacher, following rules and playing and working with other children. In short, it is the ability to benefit from the educational activities that are provided by the school.

Early Development Instrument (EDI) measures are an important gauge of the health and well being of children, and are strongly linked to income levels and parental involvement in the child’s early learning.

The EDI is a checklist that Kindergarten teachers complete for each child in their class. It is a holistic measure of children’s development across five areas:

1. physical health and well-being
2. social competence
3. emotional maturity
4. language and cognitive development
5. communication skills

Teachers complete the EDI in February, after they have had several months of interaction with their Kindergarten class.

- **Table 3-7** shows the numbers of Kindergarten children from Churchill who participated in the EDI and for whom we have valid responses. The numbers are very small which may limit our ability to review this information in as much detail as we would like.

<table>
<thead>
<tr>
<th></th>
<th>Total number of children</th>
<th>Number of children with valid EDI responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill</td>
<td>15</td>
<td>21</td>
</tr>
</tbody>
</table>

Source: Healthy Child Manitoba Office.

**Tables 3-8 and 3-9** present the EDI results for two years of children attending Kindergarten with the value representing the percentage of children who are ‘not ready’ or ‘very ready’ for each category of development. There is also a summary of the percent of children who are not ready in at least one or at least two areas of development. It is of note that while rates for Manitoba didn’t change very much for each component between each year, rates in Churchill change dramatically. This is simply a result of the fact that we have very few children in Kindergarten each year so that a change of one or two children and types of responses will result in what looks like big differences from one year to the next.
The first table shows children who are not ready to learn by each area of development. It is very difficult to infer any trends from these data but overall it appears that Churchill children are not very different from Manitoba children overall. There may be more need in the area of Language and Cognitive Development but the other areas appear to be similar to, or lower than, Manitoba averages.

On the positive side, we can see that between 75 and 84 per cent of our Kindergarten children were evaluated as being ‘very ready’ to learn in one or more areas of development. This is higher than the provincial averages of between 62 and 64 per cent. Again, it is the area of Language and Cognitive Development where there may be need for attention as Churchill children appear to be least likely to be ‘very ready’ in this area.

Table 3-8. Children ‘not ready’ for School, 2005/06-2006/07.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Health and Well-Being</td>
<td>8.3%</td>
<td>0.0%</td>
<td>11.3%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Social Competence</td>
<td>0.0%</td>
<td>15.0%</td>
<td>9.9%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Emotional Maturity</td>
<td>8.3%</td>
<td>5.0%</td>
<td>10.6%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Language and Cognitive Development</td>
<td>0.0%</td>
<td>35.0%</td>
<td>12.5%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Communication Skills and General Knowledge</td>
<td>0.0%</td>
<td>0.0%</td>
<td>11.1%</td>
<td>11.0%</td>
</tr>
<tr>
<td>One or more areas of development</td>
<td>16.7%</td>
<td>35.0%</td>
<td>28.3%</td>
<td>27.7%</td>
</tr>
<tr>
<td>Two or more areas of development</td>
<td>0.0%</td>
<td>15.0%</td>
<td>14.6%</td>
<td>13.9%</td>
</tr>
</tbody>
</table>

Source: Healthy Child Manitoba Office.

Table 3-9. Children ‘very ready’ for School, 2005/06-2006/07.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Health and Well-Being</td>
<td>8.3%</td>
<td>52.6%</td>
<td>32.1%</td>
<td>33.6%</td>
</tr>
<tr>
<td>Social Competence</td>
<td>25.0%</td>
<td>45.0%</td>
<td>33.9%</td>
<td>34.8%</td>
</tr>
<tr>
<td>Emotional Maturity</td>
<td>33.3%</td>
<td>65.0%</td>
<td>28.2%</td>
<td>28.5%</td>
</tr>
<tr>
<td>Language and Cognitive Development</td>
<td>0.0%</td>
<td>15.0%</td>
<td>30.0%</td>
<td>32.5%</td>
</tr>
<tr>
<td>Communication Skills and General Knowledge</td>
<td>58.3%</td>
<td>35.0%</td>
<td>33.9%</td>
<td>36.0%</td>
</tr>
<tr>
<td>One or more areas of development</td>
<td>83.3%</td>
<td>75.0%</td>
<td>62.4%</td>
<td>64.8%</td>
</tr>
<tr>
<td>Two or more areas of development</td>
<td>33.3%</td>
<td>55.0%</td>
<td>43.3%</td>
<td>45.5%</td>
</tr>
</tbody>
</table>

Source: Healthy Child Manitoba Office.
3.3.4 Retention Rates

School retention rates show the number of students who were held back at least once from the next grade between Kindergarten and Grade eight.

- As Figure 3-21 shows, retention rates are much higher in northern Manitoba than in the rest of the province. The good news is that within our region, retention rates decreased from 14.4 to 13.3 per cent of students; however these rates are still much higher than the provincial rate of 3.0 per cent in 2001/02-2005/06.
3.3.5 School Changes

School changes measures the number of students who are in Grade three who have not had a school change in the previous four years. In most cases, this means that the student has been at the same school from Kindergarten to Grade three (not taking into account students who are retained).

- In our region, there has historically been quite a bit of consistency in that most students stay in the school for at least four years. This is because, unless a child leaves the school for home schooling or because they are leaving the community; there are no other options for attending alternate schools.

- We have seen some change in this trend. In the first time period (1997/98-2000/01), 90 per cent of our Grade three students had no school changes. This decreased to 80 per cent in the second time period which is very similar to the provincial average. It is important to note again that, due to our small numbers, a change made by one or two students can make it look like there has been a major change in values.

Figure 3-22. Grade 3 Students with No School Changes by region, 1997/98-2000/01 and 2002/02-2005/06.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
1’ indicates area’s rate was statistically different from Manitoba average in first time period
2’ indicates area’s rate was statistically different from Manitoba average in second time period
T’ indicates change over time was statistically significant for that area
# 3.4 Health Behaviours

Personal health practices and coping skills refer to those actions by which individuals can take to prevent diseases and promote self-care, cope with challenges, develop self-reliance, solve problems and make choices that enhance health.

## 3.4.1 Active Living

People need to be physically active to be healthy! In fact, according to Health Canada, being physically inactive is as dangerous to our health as smoking. Active living is an important component in preventing a number of diseases, reducing mental health difficulties, improving fitness, maintaining a healthy weight and continuing independent living in later life.

Concern about physical activity was reflected in the focus group sessions held in Churchill. Participants in the focus group cited stress in families and lack of time as key obstacles to why people in their community are not as physically active as they need to be in order to be healthy. The lack of volunteers to run programs (“the same people volunteer over and over”), and lack of recreational facilities and variety of programming in their community, was also seen as barriers to a healthy community. However, it is important to note that other focus group participants praised the recreational facilities available in Churchill, and indicated that it was not the lack of facilities that was the issue but the lack of motivation on the part of individuals to engage in exercise programs as part of a healthy lifestyle.

Focus group participants also pointed out that there are very real issues with respect to safety in participating in outdoor activities at certain times of the year because of the danger of encountering polar bears. Without enough indoor facilities for physical activity and a safe way to get to the facilities, community members may be more likely to stay in their homes.

Focus group participants also expressed the need for more opportunities for physical activity for older residents. There was a suggestion that swimming was one of the best activities for these residents, and that the lift for the pool was needed to be returned to working condition so that these residents could use the pool again.

- Although there has been concern expressed about the opportunity for, and participation in physical activity according to the 2008 Canadian Community Health Survey (CCHS), 50.6 per cent of Churchill residents over age 12 meet the criteria for being physically or moderately active. Although there is definitely room for improvement, this rate is very similar to the provincial average of 52.8 per cent and slightly higher than the Canadian average of 50.4 per cent (see Figure 3-23).
In the Canadian Community Health Survey (CCHS), levels of physical activity were measured by calculating an average daily energy expenditure. This was calculated by multiplying the number of times an activity was performed by the average length of time of the activity by the energy cost (kilocalories per kilogram of body weight per hour) of the activity. Respondents were classified as: 3.0 kcal/kg/day or more were considered physically active, 1.5 - 2.9 kcal/kg/day were considered moderately active and less than 1.5 kcal per day was considered physically inactive.

It is also important to note that some research has shown that the measure of "moderately physically active" does not involve enough physical activity to result in real health benefits. Although the Manitoba Centre for Health Policy has broken out the CCHS data to show "moderately active" separately from "physically active", the numbers for Churchill were too low and were suppressed. Thus, we are limited to the data retrieved directly from Statistics Canada which combines Burntwood and Churchill as well as the two categories of physical activity levels.

Figure 3-23. Residents who are moderately or physically active by region, 2007.

Source: Statistics Canada, Canadian Community Health Survey, 2007
Table 3-10 shows rates of physical activity for Manitoba and Burntwood/Churchill.

It is clear for both Manitoba and the Burntwood/Churchill regions that physical activity levels are NOT increasing, but rather, staying very much the same with about half of the population engaging in at least moderate levels of physical activity.

The only area where there has been any improvement of note is for northern females whose rates of engagement in physical activity increased from 39.1 per cent in 2003 to 50.5 per cent in 2008. Nonetheless, half of the population remains inactive.


<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2008</th>
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</thead>
<tbody>
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<td>51.3%</td>
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<td>53%</td>
<td>52.8%</td>
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<tr>
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<td>51.5%</td>
<td>47%</td>
<td>47.2%</td>
</tr>
<tr>
<td>Manitoba Males</td>
<td>54.8%</td>
<td>51.4%</td>
<td>54.5%</td>
<td>53.9%</td>
</tr>
<tr>
<td>Manitoba Males Inactive</td>
<td>45.2%</td>
<td>48.6%</td>
<td>45.5%</td>
<td>46.1%</td>
</tr>
<tr>
<td>Manitoba Females</td>
<td>47.9%</td>
<td>45.8%</td>
<td>51.6%</td>
<td>51.7%</td>
</tr>
<tr>
<td>Manitoba Females Inactive</td>
<td>52.1%</td>
<td>54.2%</td>
<td>48.4%</td>
<td>48.3%</td>
</tr>
<tr>
<td>Burntwood/Churchill All</td>
<td>47.2%</td>
<td>52.3%</td>
<td>52.6%</td>
<td>50.6%</td>
</tr>
<tr>
<td>Burntwood/Churchill All Inactive</td>
<td>52.8%</td>
<td>47.7%</td>
<td>47.4%</td>
<td>49.4%</td>
</tr>
<tr>
<td>Burntwood/Churchill Males</td>
<td>55%</td>
<td>57.4%</td>
<td>51.6%</td>
<td>50.6%</td>
</tr>
<tr>
<td>Burntwood/Churchill Males Inactive</td>
<td>45%</td>
<td>42.6%</td>
<td>48.4%</td>
<td>49.4%</td>
</tr>
<tr>
<td>Burntwood/Churchill Females</td>
<td>39.1%</td>
<td>47.1%</td>
<td>53.8%</td>
<td>50.5%</td>
</tr>
<tr>
<td>Burntwood/Churchill Females Inactive</td>
<td>60.9%</td>
<td>52.9%</td>
<td>46.2%</td>
<td>49.5%</td>
</tr>
</tbody>
</table>

3.4.2 Healthy Eating

Healthy eating is fundamental to good health and is a key element in healthy human development, from the prenatal and early childhood years to later life stages. Healthy eating is equally important in reducing the risk of many chronic diseases.

Poor nutrition can be a risk factor in developing cancer, diabetes, heart disease, and a number of other poor health outcomes. There is currently a great deal of concern and media attention regarding the issue of trans fat in our diet. In August 2005, the interim report of the Trans Fat Task Force was released and according to Minister of Health Ujjal Dosanjh, "Canadians' consumption of trans fats is one of the highest in the world xv.

Focus group participants recognized the importance of a good diet in contributing to people's health. In fact diet and nutrition were some of the most common themes throughout the focus groups. Participants noted the challenges in making good dietary choices in their community given the expense and lack of access to healthy choices. There was also a particular concern with the dietary choices of children and how the stressed and busy lifestyles of families contribute to a poor diet. Several focus group participants remarked on the fact that children are often seen eating chips and drinking pop at meal time and that, due to the cost of health foods, this may be the only option that a family has. Another focus group participant remarked that the business of families was also an issue.

"It does take time and planning to eat healthy."  
(Focus Group Participant)

Participants generally looked to the schools as particularly important in promoting better nutrition. Several participants noted that school Breakfast Programs are beneficial in both providing nutrition but also in providing incentive for children to come to school in the morning.

The participants in the Women's Health Strategy consultation process also highlighted the challenges of accessing fresh, healthy food in the region. Participants noted that The Northern Store is the only grocery store in Churchill so it can set prices. The women suggested that the government consider setting prices on necessities or subsidizing the freight costs. There are also challenges of produce freezing on the train trip to Churchill and expired food products being sold in the store.

Canada's Food Guide to Healthy Eating1 advises Canadians to choose lower fat dairy products, leaner meats and foods prepared with little or no fat. The Food Guide also advises that people age four and older consume five to ten servings of fruit and/or vegetables daily. We can significantly reduce our intake of saturated and trans fats by avoiding commercially fried foods and high fat bakery products. Eating more vegetables and fruit, whole grain breads and cereals, peas, beans, lentils and nuts, will also result in lower intakes of both saturated and trans fats.

1 The Guide can be viewed on the internet at:  
• In 2007, 29.4 per cent of Burntwood/Churchill residents consumed at least five servings of fruits and/or vegetables per day. This is lower than both the provincial (37.2%) and national (43.9%) rates (see Figure 3-24).

Figure 3-24. Residents who consume at least 5 servings of fruits and/or vegetables per day by Region, 2007.

Table 3-11 shows the time trend data available from the CCHS from 2003 to 2008

• Regional level data was not available in 2005, but what is apparent from these data is that, like physical activity levels, there really has been no improvement in consumption of fruits and vegetables over time.

• Currently, only approximately one in three Burntwood/Churchill residents consumes at least five or more servings of fruit and/or vegetables daily. However, the positive side is that this is similar to the provincial average, even though it is more difficult to consistently obtain good quality and affordable produce in Churchill.

Table 3-11. Consumption of 5 or more servings of fruit and/or vegetables per day, Manitoba and Burntwood/Churchill, 2003-2008.

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitoba</td>
<td>36.6%</td>
<td>34.5%</td>
<td>37.2%</td>
<td>34.5%</td>
</tr>
<tr>
<td>Burntwood/Churchill</td>
<td>29.1%</td>
<td>n/a</td>
<td>29.4%</td>
<td>33.9%</td>
</tr>
</tbody>
</table>

3.4.2.1 Cost of Nutritious Food Basket

Our ability to make healthy food choices is influenced not only by our knowledge of healthy eating, but also by the cost and availability of nutritious foods. The cost and availability of nutritious foods was sited many times by focus group participants as a real barrier to healthy eating in Churchill.

The nutritious food basket consists of forty items that are purchased in sufficient quantity to feed a family of four. Stores are surveyed for the cost and availability of each item. Some items in the nutritious food basket include:

- milk
- yogurt
- bread
- pasta
- cereal
- rice
- eggs
- peanut butter
- ground beef

Although we do not have provincial-wide data for comparison, Figure 3-25 presents data from selected communities throughout Manitoba. As this figure illustrates, the cost of a nutritious food basket in Churchill in 2009 was just under $224, which is much higher than the next highest community (Winnipeg) at $180.

Figure 3-25. Total cost of nutritious food basket, 2009.

Source: Churchill RHA and the Heart and Stroke Foundation

NOTE: The cost of Thompson’s food basket is impacted by the fact that five items were listed as “unavailable”.

3.4.3 Body Mass Index

Body Mass Index (BMI) is a ratio of weight to height, and is considered to be the most useful indicator of population health risks associated with being both overweight and underweight. Obesity is a major risk factor for a number of chronic diseases.

Aside from the concern about the health of our population and the impact of obesity on quality and quantity of life, focus group participants also discussed the impact of unhealthy weights on health services.

"As our population continues to increase in weight as well as age, we will likely see more and more people requiring health services, more frequently."

(Focus group participant)

Focus group participants seemed to agree that it is very important to concentrate at the community level to make strides in reversing this trend towards obesity in our population. There was a great deal of discussion about partnerships between organizations within the community (such as local stores and the dietician for healthy food and cooking tours; or between the school and the RHA) that would be sustainable and effective in supporting community members who want to live a healthy life. In many of the focus groups, there was discussion about the role of personal responsibility and that people need to make a decision to live a healthy lifestyle without expecting the RHA to solve all of their problems.

- According to the 2007 CCHS, 64.7 per cent of Burntwood/Churchill residents are overweight or obese, which is much higher than Manitoba (55.6%) and Canada (50.8%). It is important to note that this survey is based on self-reported height and weight, and thus tends to underestimate the prevalence of obesity and overweight.
Figure 3-26. Residents who are overweight or obese by region, 2007.

- Table 3-12 shows the changes in the rates of residents who are overweight or obese (based on self-reported height and weight).

- As with trends in physical activity and nutrition, until 2007 there has been almost no change in the prevalence of overweight and obesity among our residents.

- The only area where there has been a change appears to be for females, and this change is not positive. Self-reported rates of being overweight or obese have increased from 50.6 per cent of adults (over age 18) in 2003 to 70.6 per cent of adults in 2008.

- The prevalence of overweight or obesity appear to be much higher among our residents than for Manitobans in general, and this trend does not appear to be to changing.

Table 3-12. Residents who are overweight or obese (self-reported), Manitoba and Burntwood/Churchill 2003-2008.

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2008</th>
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<tbody>
<tr>
<td>Manitoba</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>55%</td>
<td>54.6%</td>
<td>55.6%</td>
<td>54.5%</td>
</tr>
<tr>
<td>Males</td>
<td>62.9%</td>
<td>62.3%</td>
<td>62.7%</td>
<td>61.2%</td>
</tr>
<tr>
<td>Females</td>
<td>46.8%</td>
<td>46.9%</td>
<td>48.3%</td>
<td>47.7%</td>
</tr>
<tr>
<td>Burntwood/Churchill</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>62.8%</td>
<td>61.3%</td>
<td>64.7%</td>
<td>72.4%</td>
</tr>
<tr>
<td>Males</td>
<td>73.8%</td>
<td>71.8%</td>
<td>71.1%</td>
<td>73.8%</td>
</tr>
<tr>
<td>Females</td>
<td>50.6%</td>
<td>49.4%</td>
<td>57%</td>
<td>70.6%</td>
</tr>
</tbody>
</table>

3.4.4 Alcohol Use

Heavy alcohol use can lead to several chronic diseases and toxic effects to the body (e.g., tissue damage leading to liver cirrhosis, acute brain damage, or long-term effects, such as cancer, caused by continuous exposure). Alcohol use can impact one's ability to parent for the family to function in a healthy way. We also know that alcohol use is a major contributor to suicide.\(^5,6,7\)

"Many people use alcohol to numb emotion and pain"

(Focus Group Participant)

Alcohol use and abuse was described as being very prevalent within our region by Focus Group participants both for our Community Health Assessment as well as those who participated in the community consultation for the Women's Health Strategy Report.

Alcohol use and its associated impacts such as drunk driving, negligent parenting and crime, was identified as the most important problem within our region. Several participants felt that the significance of alcohol use, and its impact on babies, families and the community in general, was not taken seriously. There was also concern expressed about whether there are enough, and appropriate, supports for people who really want to quit drinking. It is particularly difficult for residents who need treatment that cannot be provided in the region. This means that they must leave their jobs and families and go to Winnipeg for treatment. Due to costs such as travel, accommodation, stress on the family and worry about loss of employment, residents may decline to accept the type of treatment that they need. In addition, there is concern that even if a resident does successfully complete a treatment program outside of the region, if there are not adequate supports within the community, the person will often return to drinking upon return to the familiar community environment.

"People who I've dealt with know they are addicts and say they want help, but don't know how to get it"

(Focus Group Participant)

Seasonal employment and lack of full time work were cited as possible causes of excessive alcohol use.

Focus group participants noted that it was important that people take personal responsibility for all aspects of their health, including addictive behaviour. While Churchill RHA must continue to work towards putting supports in place for people who are addicted to alcohol or other substances, community members must also make a commitment to change and to support each other in achieving healthy lifestyles.

- According to the CCHS, "heavy alcohol use" is defined as having five or more drinks on one occasion at least once per month over the course of a year. Again, we are limited in that our data is combined with Burntwood RHA data.

- Within Burntwood/Churchill, 21.6 per cent of residents report having 5 or more drinks on one occasion. This is higher than both the provincial (18.9%) and national rates (17.2%) (See Figure 3-27).
Figure 3-27. Residents who have 5 or more drinks on one occasion by region, 2007.

![Bar chart showing residents with 5 or more drinks on one occasion by region in 2007.]

NOTE: Churchill rates should be interpreted with caution due to small numbers.

Table 3-13 shows changes in rates of heavy drinking as reported by the Canadian Community Health Survey.

- As with other lifestyle data we have reviewed, there has not been a great deal of change or improvement in this area. In 2008, just over one in four adults living in Burntwood/Churchill meet the criteria for heavy drinking this is much higher than the provincial rate of one in five adults.


<table>
<thead>
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<th>2003</th>
<th>2005</th>
<th>2007</th>
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</tr>
</thead>
<tbody>
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<td>17%</td>
<td>17%</td>
<td>18.9%</td>
<td>19.6%</td>
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<td>Manitoba Males</td>
<td>24.9%</td>
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<td>25.9%</td>
<td>27.9%</td>
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<tr>
<td>Manitoba Females</td>
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</tr>
<tr>
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<td>27.5%</td>
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<td>26.1%</td>
</tr>
<tr>
<td>Burntwood/Churchill Males</td>
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<td>41.1%</td>
<td>26%</td>
<td>31.4%</td>
</tr>
<tr>
<td>Burntwood/Churchill Females</td>
<td>18.1%</td>
<td>13.4%</td>
<td>16.3%</td>
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</tr>
</tbody>
</table>

3.4.5 Smoking

According to the Canadian Cancer Society, more than 47,500 Canadians die each year of tobacco-related disease. Eliminating tobacco use is identified as one of the most effective ways to reduce the number of Canadians who will be diagnosed with cancer. Cigarette smoking causes about 30 per cent of cancers in Canada and more than 85 per cent of lung cancers. Smoking is also associated with other poor health outcomes such as heart disease, other lung diseases and stroke.

According to the Women’s Health Bureau of Health Canada, smoking affects women differently than it does men. For example, smoking among women is linked to lower fertility, cancer of the cervix, osteoporosis, and menstrual and menopausal problems. Smoking during pregnancy has been found to be associated with lower birth weight babies, and recent research suggests a link between secondhand smoke and breast cancer.

Residents noted that more and more young people appear to be smoking and that better education and perhaps partnerships between the RHA and the school could result in discouraging children from smoking.

- Within the Burntwood/Churchill regions, just over one in three residents over age 12 was a "current smoker" in 2007 (35.1%). This is much higher than both the provincial (22.5%) and Canadian (22.0%) off-reserve rates (Figure 3-28).

Figure 3-28. Residents who are current smokers by region, 2007.

Table 3-14 shows changes in rates of daily and occasional smoking as reported by the Canadian Community Health Survey between 2003 and 2008.

- As with other lifestyle data we have reviewed, there has not been a great deal of change or improvement in this area in the Burntwood/Churchill regions or Manitoba as a whole. In 2008, 41.3 per cent of residents age 12 and older were daily and occasional smokers which are very similar to the rate of 43.9 per cent reported in 2003.

- While there appeared to be a decline in smoking rates among females living in Burntwood/Churchill, the most recent data indicated that this may not be the case. We will continue to monitor smoking rates as well as work with community members in an attempt to improve these trends.


<table>
<thead>
<tr>
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<tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>22.8%</td>
<td>20.5%</td>
<td>22.5%</td>
<td>24.2%</td>
</tr>
<tr>
<td>Males</td>
<td>23.2%</td>
<td>21.8%</td>
<td>25.1%</td>
<td>27.3%</td>
</tr>
<tr>
<td>Females</td>
<td>22.4%</td>
<td>19.1%</td>
<td>20%</td>
<td>21.2%</td>
</tr>
<tr>
<td>Burntwood/Churchill</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>43.9%</td>
<td>35.4%</td>
<td>35.1%</td>
<td>41.3%</td>
</tr>
<tr>
<td>Males</td>
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<td>38%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Females</td>
<td>41.8%</td>
<td>33.8%</td>
<td>31.6%</td>
<td>40.1%</td>
</tr>
</tbody>
</table>


### 3.4.6 Complete Physical Exam

Completing a physical exam is an important element in health prevention and promotion activities for individuals, as it can lead to early detection of diseases and conditions which can lead to better overall health status.

- The proportion of Churchill residents who had a complete physician exam within a one year period decreased from 27.3 per cent to 24.3 per cent between 1988/89-1995/96 and 1996/97-2003/04. This is a significant decrease over time and is much lower than the most recent provincial rate of 39.8 per cent (see Figure 3-29). Churchill also ranks lowest in the province for this indicator.

**Figure 3-29. Residents who have had a complete physician exam by region, 1988/89-1995/96 and 1996/97-2003/04.**

![Graph showing complete physical exam rates by region](image)


NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area’s rate was statistically different from Manitoba average in first time period

'2' indicates area’s rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area

**Figure 3-30** shows the rate of complete physical exams by year for Churchill and Manitoba.

- While the provincial average has remained quite stable (it was 40.1% in 1984/85 and increased slightly to 41.2% by 2003/04), the rate for Churchill residents decreased from just under one in three residents (30.2%) to just over one in five (21.4%) by 2003/04.
• Although difficulty in accessing a physician was not a common theme mentioned by focus group participants, it may be the case that there are limited time slots for complete physical exams due to physician case load. This is something that the Churchill RHA will explore further.

Figure 3-30. Residents who have had a complete physician exam by year, Churchill and Manitoba, 1984/85-2003/04.

3.4.7 Pharmaceutical Use

Pharmaceutical use is increasing substantially in Canada in recent years, and it is becoming increasingly important to monitor and report on pharmaceutical use. While pharmaceuticals can help people avoid hospitalizations and prevent serious illness, overuse of prescription drugs can result in more health complications and use of the health care system generally.

The number of prescriptions that are taken overall, and for specific drugs like statins for cholesterol, ACE inhibitors for blood pressure, and antidepressants for mental illness, is an indicator of appropriateness of care and prescribing. Given the cost to the health care system due to over-prescribing, it will be increasingly important to monitor these indicators for health system performance and health status.

3.4.7.1 Population with at Least One Prescription in a Year

- Within our region, the proportion of residents who had at least one prescription medication dispensed in a fiscal year decreased from 76.7 per cent to 70.9 per cent. Although our rate is somewhat higher than the provincial rate of 66.1 per cent in 2005/06, this was not statistically higher (as it was in the first time period).

Figure 3-31. Residents with at least one prescription in fiscal year by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
1' indicates area's rate was statistically different from Manitoba average in first time period
2' indicates area's rate was statistically different from Manitoba average in second time period
t' indicates change over time was statistically significant for that area
3.4.7.2 Number of Prescriptions per User

- Although the proportion of residents with a prescription has decreased in our region, the average number of different medications dispensed to each resident increased from 4.5 to 4.9 in 2005/06. In fact, we have the highest number of prescriptions per resident in the province (including only those people who had at least one prescription in the fiscal year).

- Both the increase over time and the difference in rates between our region and Manitoba (4.0 prescriptions on average in 2005/06) was statistically significant.

Figure 3-32. Average number of prescriptions used per user by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
'1' indicates area's rate was statistically different from Manitoba average in first time period
'2' indicates area's rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
3.4.7.3 Number of Antibiotic Prescriptions Among Adults

Increasing concern has been expressed about the number of antibiotic prescriptions, specifically the appropriateness of those prescriptions, the costs associated with this kind of drug treatment and how it is contributing to the development of antibiotic resistance for infections.\textsuperscript{xvii} It is important to continue to monitor and measure the number of antibiotic prescriptions to see if efforts to educate physicians about the risks of over-prescribing antibiotics are effective.

- Prescribing rates to Churchill residents were very similar to the provincial rates.
- Within our region, 39.7 per cent of females and 29.1 per cent of males had at least one antibiotic prescription.

![Figure 3-33. Females and males who had at least one antibiotic prescription by region, 2003/04.](image)

Source: MCHP 2005, Sex Differences in Health Status, Health Care Use, and Quality of Care: A Population-Based Analysis for Manitoba’s Regional Health Authorities.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

‘m’ indicates area’s rate for males was statistically different from Manitoba average for males.

‘f’ indicates area’s rate for females was statistically different from Manitoba average for females.

‘d’ indicates difference between male and female rates was statistically significant for that area.
3.4.7.4 Statin Use

The use of statins is an important tool in chronic disease management, lowering cholesterol levels and reducing the risk of cardiovascular disease. While the use of statins in Canada has increased in late 1990s and early 2000s, it appears that the drug is being under-utilized for higher risk patients. It is important for regions to monitor and encourage the use of statins given their positive impacts in lowering the burden of chronic diseases on the health system.

- Within our region, there is not a very substantial difference between males and females in the use of statins (see Figure 3-34).

- Just over 11 per cent of Churchill region females and 12 per cent of Churchill region males had a prescription for statins in 2003/04. Although these rates appear to be higher than the provincial averages (7.45 for females and 9.9% for males), these differences are not statistically significant.

Figure 3-34. Females and males age 20+ with at least one prescription for statins, 2003/04.

Source: MCHP 2005, Sex Differences in Health Status, Health Care Use, and Quality of Care. A Population-Based Analysis for Manitoba’s Regional Health Authorities.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
'm' indicates area’s rate for males was statistically different from Manitoba average for males
'f' indicates area’s rate for females was statistically different from Manitoba average for females
'd' indicates difference between male and female rates was statistically significant for that area
3.4.7.5 ACE Inhibitor Use

ACE (Angiotensin-Converting Enzyme) inhibitors are usually given to people with high blood pressure, congestive heart failure, or people with a high likelihood of developing coronary artery disease. It is another important medication in the treatment of heart disease and has been shown to improve patient outcomes.\textsuperscript{xix} It is important to monitor the use of ACE inhibitors in the region to ensure that a critical chronic disease management tool is being used to improve patient outcomes and reduce the burden of chronic disease on the health care system.

- Prescription rates of ACE inhibitors to Churchill Region residents are very high compared to the province as a whole.

- In 2003/04, 24.1 per cent of males and 20.7 per cent of females were prescribed at last one ACE inhibitor. This is among the highest in the province, and statistically higher than the provincial rates of 10 per cent of Manitoba males and 8.7 per cent of Manitoba females (see Figure 3-35).

Figure 3-35. Females and males age 20+ with at least one ACE inhibitor by region, 2003/04.

Source: MCHP 2005, Sex Differences in Health Status, Health Care Use, and Quality of Care: A Population-Based Analysis for Manitoba’s Regional Health Authorities.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
- ‘m’ indicates area’s rate for males was statistically different from Manitoba average for males
- ‘f’ indicates area’s rate for females was statistically different from Manitoba average for females
- ‘d’ indicates difference between male and female rates was statistically significant for that area
3.4.7.6 Antidepressant Prescriptions

Antidepressant prescriptions have increased substantially among adults in Canada in the late 1990s and early 2000s. The concerns about side effects for these types of medications are not as prominent as those expressed for children. There is evidence that while prescriptions for antidepressants have risen, there are still substantial portions of the adult population who have depression that do not receive any medication.\textsuperscript{xx}

- Mental health concerns and availability of appropriate treatment at the community level, as well as within the hospital facility for those requiring acute care, was a common theme among focus group participants. Participants commented that the long winters had an effect on the mental health of residents resulting in many people feeling depressed at that time of year.

- Participants in the Women's Health Strategy consultation also highlighted mental health and availability of services as a concern. Participants also noted that concerns about privacy may result in some people choosing not to seek treatment.

- Although depression and mental health issues were highlighted as key health issues for our residents, it is interesting to note that the prescribing rate of antidepressants to Churchill residents is actually lower than the provincial average. We note that while the proportion of residents receiving two or more prescriptions for antidepressants in a fiscal year in Churchill increased from 4.4 per cent to 6.6 per cent, this increase was not statistically significant and is very similar to the provincial rate of 6.9 per cent in 2005/06 (see Figure 3-36).
Figure 3-36. Residents with two or more prescriptions for antidepressants by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area’s rate was statistically different from Manitoba average in first time period

'2' indicates area’s rate was statistically different from Manitoba average in second time period

' t ' indicates change over time was statistically significant for that area
3.4.8 Immunization

Immunization is an issue for residents in every age group. Our primary concern, however, is in ensuring that the very young and the older residents of our region are immunized against illness. In this section we review immunization rates among infants and children, adults and our elderly residents, as well as examine influenza immunization rates.

3.4.8.1 Childhood Immunization

Vaccines are one of the most important components of child health programs. Vaccines can prevent disability and death and control the spread of infectious diseases within communities. As a result of immunization programs, vaccine-preventable diseases have gone from being the leading causes of death in the early 1900s to causing less than five per cent of all deaths in Canada. Claire

Certain vaccines are provided at no charge to Manitoba children. These vaccines and the scheduled time at which they should be given are as follows:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Vaccines Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 4 AND 6 MONTHS</td>
<td>One needle at each visit to protect against diphtheria, whooping cough, lockjaw, polio and haemophilus influenza type b; another needle at each visit to protect against pneumococcal infections</td>
</tr>
<tr>
<td>12 MONTHS</td>
<td>One needle to protect against measles, mumps and German measles; one needle to protect against chickenpox, and another needle to protect against meningitis (C type)</td>
</tr>
<tr>
<td>18 MONTHS</td>
<td>Two &quot;booster&quot; needles to continue protection (same vaccines as 2, 4 and 6 months – see above)</td>
</tr>
<tr>
<td>2-6 YEARS (PRESCHOOL)</td>
<td>Booster needles to continue protection against diphtheria, whooping cough, lockjaw, polio; also measles, mumps and German measles and, if the child is still at risk for chickenpox, chickenpox vaccine will be offered</td>
</tr>
<tr>
<td>9-10 YEARS (GRADE 4)</td>
<td>Three-dose series of needles to protect against hepatitis B; also a shot for meningitis (C type) and if the child is still at risk, the chickenpox vaccine will be offered</td>
</tr>
<tr>
<td>11-12 YEARS (GRADE 6)</td>
<td>Three-dose series of needles to protect against the human papillomavirus (HPV). The vaccine is offered only to grade 6 female students.</td>
</tr>
<tr>
<td>14-16 YEARS (GRADE 9)</td>
<td>Booster needle to provide protection against diphtheria, tetanus and whooping cough</td>
</tr>
</tbody>
</table>
Immunization coverage is tracked in more than one way. One important distinction is the coverage rates between those who are “continuously enrolled” and those who are “non-continuous”. Continuous enrolment means that the child has been in the RHA since birth so that we can be confident that we know if the child has had each immunization scheduled. Non-continuous means that the child has not been in the region for the duration of his or her life. For example, the child may have moved to the province or region at age two or may have lived here for a few years, moved away and then moved back. This means that our records about this child may be incomplete. It is important to look at both rates separately because lower rates among non-continuously enrolled children may not reflect the fact that they are not up to date in immunizations. Instead, it may rather mean that we simply do not have all of their information.

- Figure 3-37 presents immunization completeness (that is, the child has had all of the scheduled immunizations) for Churchill and Manitoba by age group. Due to the small numbers of children in the very young age groups, Churchill data should be interpreted with caution.

- As expected, non-continuous immunization rates are much lower than for those with continuous enrolment. Figure 3-37 also shows that for children with continuous enrolment, immunization rates are higher among Churchill residents than for Manitobans overall for children aged 1, 2 and 11. For children aged 7 to 17, Churchill residents have lower immunization rates compared to Manitobans overall.

Figure 3-37. Immunization complete by age and enrolment type, all residents RHA Churchill and Manitoba, 2007.

• **Table 3-15** shows coverage rates (for all residents, continuous and non-continuous) between 2002 and 2007 by age group for Churchill and Manitoba overall. With Churchill numbers being relatively low for each of these age groups, the coverage rates will vary more from year to year compared to provincial rates.

• This table shows that our region has made substantial improvement in our coverage rates for children in the one and two year old age groups, exceeding the provincial rates in both of these age groups in 2007. Our numbers did decrease for two year olds in 2006 and 2007, but this was partially impacted by non-continuous enrolment rates. Coverage rates for 7, 11 and 17 year olds fluctuated, making it difficult to draw conclusions about these rates overall compared to the province as a whole.

• Overall the trends seem to indicate that immunization rates decrease as the child gets older. For example in 2007 in Churchill fewer than one in three youth age 17 had complete immunization.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Churchill)</td>
<td>58.3</td>
<td>86.4</td>
<td>80.7</td>
<td>78.6</td>
<td>81.8</td>
<td>100.0</td>
</tr>
<tr>
<td>1 (Manitoba)</td>
<td>83.5</td>
<td>85.2</td>
<td>79.7</td>
<td>79.0</td>
<td>77.4</td>
<td>76.1</td>
</tr>
<tr>
<td>2 (Churchill)</td>
<td>58.8</td>
<td>76.2</td>
<td>71.4</td>
<td>92.3</td>
<td>77.8</td>
<td>76.2</td>
</tr>
<tr>
<td>2 (Manitoba)</td>
<td>72.5</td>
<td>72.9</td>
<td>67.2</td>
<td>65.5</td>
<td>45.0</td>
<td>58.5</td>
</tr>
<tr>
<td>7 (Churchill)</td>
<td>63.6</td>
<td>100.0</td>
<td>72.0</td>
<td>64.3</td>
<td>76.9</td>
<td>57.1</td>
</tr>
<tr>
<td>7 (Manitoba)</td>
<td>69.3</td>
<td>69.3</td>
<td>64.6</td>
<td>63.4</td>
<td>66.4</td>
<td>68.6</td>
</tr>
<tr>
<td>11 (Churchill)</td>
<td>21.4</td>
<td>31.6</td>
<td>61.4</td>
<td>72.7</td>
<td>47.1</td>
<td>81.3</td>
</tr>
<tr>
<td>11 (Manitoba)</td>
<td>54.1</td>
<td>57.3</td>
<td>57.4</td>
<td>58.1</td>
<td>55.0</td>
<td>54.4</td>
</tr>
<tr>
<td>17 (Churchill)</td>
<td>44.4</td>
<td>28.6</td>
<td>65.9</td>
<td>54.5</td>
<td>18.2</td>
<td>31.3</td>
</tr>
<tr>
<td>17 (Manitoba)</td>
<td>48.6</td>
<td>48.6</td>
<td>51.7</td>
<td>53.5</td>
<td>34.6</td>
<td>41.9</td>
</tr>
</tbody>
</table>


**Table 3-16** presents coverage rates for each type of vaccine (Antigen) by age group and year for Churchill residents.

• While we have achieved very good coverage with Antigens such as Tetanus and HBV, our lowest coverage rate is for Pertussis and Diphtheria. Pertussis rates have dropped substantially and Diphtheria has historically had low coverage rates. We will need to explore further why this is the case.

<table>
<thead>
<tr>
<th>Age Group/Antigen</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 1: Tetanus</td>
<td>79.2</td>
<td>86.4</td>
<td>109.1</td>
<td>78.6</td>
<td>81.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Age 2: Polio</td>
<td>100.0</td>
<td>90.5</td>
<td>100.0</td>
<td>92.3</td>
<td>88.9</td>
<td>90.5</td>
</tr>
<tr>
<td>Age 2 MMR</td>
<td>100.0</td>
<td>85.7</td>
<td>100.0</td>
<td>100.0</td>
<td>88.9</td>
<td>90.5</td>
</tr>
<tr>
<td>Age 7 Pertussis</td>
<td>90.0</td>
<td>100.0</td>
<td>72.2</td>
<td>71.4</td>
<td>76.9</td>
<td>57.1</td>
</tr>
<tr>
<td>Age 7 Measles</td>
<td>90.9</td>
<td>100.0</td>
<td>83.3</td>
<td>64.3</td>
<td>76.9</td>
<td>85.7</td>
</tr>
<tr>
<td>Age 11 HBV</td>
<td>42.9</td>
<td>63.2</td>
<td>43.8</td>
<td>90.9</td>
<td>70.6</td>
<td>87.5</td>
</tr>
<tr>
<td>Age 17 Diphtheria</td>
<td>66.7</td>
<td>42.9</td>
<td>69.2</td>
<td>72.7</td>
<td>27.3</td>
<td>62.5</td>
</tr>
</tbody>
</table>


Figures 3-38 to 3-42 present rates of immunization "completeness" by age group and region for 2007. All residents are included in these rates (continuous and non-continuous).

- In 2007, Churchill had the highest coverage rates in the province for children aged 1, 2 and 11. However, we have the second lowest coverage rates for children age 7 and 17.

Figure 3-38. Complete immunization rates for all infants aged 1 year by region, 2007.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 3-39. Complete immunization rates for all children aged 2 by region, 2007.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 3-40. Complete immunization rates for all children aged 7 by region, 2007.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 3-41. Complete immunization rates for all children aged 11 by region, 2007.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 3-42. Complete immunization rates for all youth aged 17 by region, 2007.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.4.8.2 Influenza Immunization among Residents Age 12 and Older

- Although seniors are the primary targets of influenza immunization campaigns, most practitioners agree that it is a good idea for adults and children to also have a yearly flu shot.\textsuperscript{xxii}

**Figure 3-43** shows complete immunization rates for all residents between the ages of 18 and 64.

- While our region has had some lower rates in some age groups, our immunization rates for this group are the highest in the province at almost one in four residents (24.3%). Again, because this includes both continuous and non-continuous enrollees, the rates are likely higher than what is presented here.

- Self reported data from the Canadian Community Health Survey (2007) is presented in **Figure 3-44**. Residents of Churchill (and Burntwood) report the highest coverage rate for 'flu shots' at almost one in three residents age 12 and older (30.4%). This is higher than the provincial rate of 26.8 per cent and very similar to the Canadian average of 31.6 per cent.

**Figure 3-43.** Complete immunization rates for all residents aged 18-64 years by region, 2007.


NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 3-44. Residents who have influenza immunization (self reported) by region, 2007.

Table 3-17 presents changes in self-reported influenza immunization rates (had the immunization within the preceding twelve months).

- Rates are much higher among females than males and appear to be relatively stable or increasing in Burntwood/Churchill and in the province overall.


<table>
<thead>
<tr>
<th>Region</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitoba</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>20%</td>
<td>28.3%</td>
<td>26.8%</td>
<td>27.1%</td>
</tr>
<tr>
<td>Males</td>
<td>17%</td>
<td>25.5%</td>
<td>23.3%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Females</td>
<td>22.8%</td>
<td>30.9%</td>
<td>30.1%</td>
<td>31.3%</td>
</tr>
<tr>
<td>Burntwood/Churchill</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>16.7%</td>
<td>24%</td>
<td>30.4%</td>
<td>29.2%</td>
</tr>
<tr>
<td>Males</td>
<td>12%</td>
<td>15.9%</td>
<td>26.4%</td>
<td>21.1%</td>
</tr>
<tr>
<td>Females</td>
<td>21.8%</td>
<td>32.2%</td>
<td>35%</td>
<td>38.4%</td>
</tr>
</tbody>
</table>

3.4.8.3 Immunization among Seniors

Provinces and Territories have recognized the importance of immunizing seniors, particularly for influenza and pneumococcal disease. Provinces and territories have set a target of 80 per cent immunization coverage for seniors for influenza and pneumococcal disease. While there have been increases in vaccination rates in this group for influenza, there still needs to be a concerted effort to strengthen public education and awareness to combat misinformation about immunization. In Canada, pneumococcal immunization rates continue to be well below national targets of 80 per cent coverage for adults over 65.xxxii

3.4.8.3.1 Influenza Immunization among 65+ Age Group

It is particularly important for seniors over 65 years of age to be immunized for influenza as they have the highest rate of hospitalization and death from the flu among all age groups. Common complications of the flu for seniors include bacterial infection and pneumonia. On average, about 4,000 to 8,000 people in Canada die each year from complications of influenza, and about 70,000 to 75,000 people with the flu are hospitalized. xxiv Getting the flu shot helps to reduce the risk of serious complications and life-threatening illness.

- Within our region, the influenza immunization rate among seniors is 58 per 100 residents aged 65+, which is very similar to the provincial rate of 58.7 per 100 in 2007. This means that just over half of eligible seniors are being immunized for influenza (see Figure 3-45).

Figure 3-45. Influenza immunization rate among all seniors by region, 2007.

3.4.8.3.2 Pneumococcal Immunization among 65+ Age Group

There are approximately 500,000 cases of pneumococcal disease in Canada each year. Adults aged 65 years and older with certain medical conditions are at increased risk for pneumococcal disease and its complications compared to the general population. Complications include blood poisoning, infection of the fluid surrounding the brain and spinal cord (meningitis), pneumonia, ear or sinus infections (especially in children). Severe or invasive pneumococcal infections can lead to hospitalization and sometimes death.\textsuperscript{xxv}

- Pneumococcal immunization rate among all seniors in Churchill is 60.9 per cent per 100 residents aged 65+, which is very similar to the provincial rate of 63.9 per cent in 2007 (see Figure 3-46).

**Figure 3-46.** Pneumococcal immunization rate among all seniors by region, 2007.


NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.4.9 Cancer Screening

Screening for disease can take a variety of forms with screening programs for certain cancers being most commonly encountered. Screening for cervical cancer through a pap test and breast cancer through mammography, are proven methods within target populations to find disease earlier and reduce deaths. Some types of cancer screening are not as clearly endorsed as pap tests and mammography such as PSA tests for prostate cancer, and Fecal Occult Blood Tests (FOBT) and colonoscopies for colon cancer. In this section we focus on what we know about cervical and breast cancer screening.

3.4.9.1 Cervical Cancer Screening

In 2009, 1,300 Canadian women will be diagnosed with cervical cancer and 380 women will die of cervical cancer. Regular pap smears can prevent or detect early cell changes that can be the precursor to cervical cancer. The introduction of an HPV (Human Papillomavirus) vaccine for population screening in Canadian schools is an important preventative strategy for cervical cancer. Cervical cancer should be dramatically reduced in Manitoba with the introduction of a vaccine for girls and young women. Risk factors associated with cervical cancer include early age of sexual intercourse, sexually transmitted infection, low socio-economic status and smoking. Cervical cancer should be dramatically reduced in Manitoba with the introduction of a vaccine for girls and young women.

Research demonstrates that there are groups of women who tend to participate less in screening, including cervical cancer screening. These women are considered hard to reach or under-served because there are particular obstacles that keep them from accessing this test.

"Sometimes people might avoid coming to the doctor because they think he is too busy... so might avoid preventive appointments such as pap tests, preventive care"

(Focus group participant)

Participants in the Women's Health Strategy community consultation recommended that there be more clinics focused on women's health issues, and that the focus is on prevention. Participants indicated that there had been a nurse practitioner in the community, and that she was a great health care resource. She was proactive about organizing clinics for tests like pap smears, and encouraged women to take advantage of these opportunities. Participants suggested that there is a need to recruit another nurse practitioner to the community. They also suggested that women's health clinics be more frequent and more extensive. Our screening data do illustrate that there is a need for more opportunity and/or more encouragement needed for women to make an appointment for a pap test (cervical screening).
• As Figure 3-47 shows, cervical cancer screening rates among Churchill residents are among the lowest in the province.

• The good news is that rates have increased from 346.9 to 409.2 per 1,000 residents between 2002-2005 and 2005-2008. However they are still much lower than Manitoba at 546.1 per 1,000 residents in 2005-08.

• Figure 3-48 shows cervical cancer screening rates by age group. Many women still believe that if they are past their "child bearing years" or in a stable relationship, they do not need to have a pap test. This is incorrect, women in every age group (starting at 18 or the onset of sexual activity) until at least the age of 65 should have a routine pap test. This figure shows that our screening rates are much lower than provincial rates in every age group with the exception of 15 to 19 year old women. These data also show that, in general, screening rates tend to decrease with increasing age. However in our region we have made improvements in our screening of older women between 2005 and 2008 but we are still screening less than 50 per cent of women in every age group other than 30 to 34 year old women.

Figure 3-47.  Cervical Screening rates by region, 2002-05 and 2005-08.

Source: Manitoba Health Healthy Living (Health Information Management)
NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 3-48. Cervical Screening rates by age group, 2002-05 and 2005-08

Source: Manitoba Health Healthy Living (Health Information Management)
NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.4.9.2 Breast Cancer Screening

23,000 Canadians will be diagnosed with breast cancer and 5,400 will die of the disease.\textsuperscript{xxvii} Screening for breast cancer is important, as most women diagnosed with breast cancer do not have identifiable risk factors such as a family history of breast cancer. Mammography screening with or without clinical breast examination, has been shown in randomized trials to reduce the chance of dying of breast cancer.

- Within our region, breast cancer screening rates increased between 2002-04 and 2006-08 from 128.3 to 140.6 per 1,000 women.

- While our rates continue to be lower than the provincial rate, the last three time periods have shown continual (although small) improvements in our screening rates (see Figure 3-49).

- Screening rates by age group (see Figure 3-50) show that our screening rates are lower than provincial rates in every age group with the exception of 60-64 and 70-74 year old women. Again, caution has to be exercised in interpreting the Churchill rates with our relatively small population.

\textbf{Figure 3-49. Breast Screening rates by region, 2002-04, 2004-06 and 2006-08}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{breast_screening_rates.png}
\caption{Breast Screening rates by region, 2002-04, 2004-06 and 2006-08}
\end{figure}

\textit{Source: Manitoba Health Healthy Living (Health Information Management) Medical Reports.}

\textit{NOTE: Churchill rates should be interpreted with caution due to small numbers.}
Figure 3-50. Breast Screening rates by age group, 2004-06 and 2006-08

Source: Manitoba Health Healthy Living (Health Information Management) Medical Reports.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.5 Child Health

3.5.1 Breastfeeding Initiation

Breastfeeding has been recognized by the World Health Organization and other national bodies as a key contributor to the healthy growth and development of infants. It reduces the incidence of allergies, infections and enhances cognitive development.\textsuperscript{xxviii} Breastfeeding is also a fundamental part of the reproductive process which also contributes to better health status for the mother. Based on evidence gathered to date, exclusive breastfeeding for six months is the optimal way of feeding infants.\textsuperscript{xxx} The Canadian Paediatric Society, Dieticians of Canada and Health Canada recommend exclusive breastfeeding for at least the first four months of life.\textsuperscript{xxx}

- Breastfeeding initiation rates in Churchill stayed very much the same (at about 80 per cent) between 1996/97-2000/01 and 2001/02-2005/06. These rates, while based on very small numbers, are very similar to the provincial rate of 81.6 per cent (see Figure 3-51).

Figure 3-51. Breastfeeding initiation rates by region, 1996/97-2000/01 and 2001/02-2005/06.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period
'2' indicates area's rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
3.5.2 Sexual Activity

Youth sexual activity is an important indicator of child health status given the incidence of Sexually Transmitted Infections (STI) and HIV which contribute to poorer health status for youth. This indicator can illustrate the effectiveness of public health awareness campaigns around the importance of contraception and healthy choices in sexual activity.

Concern was expressed by Women’s Health Strategy community consultation participants, as well as our CHA focus group participants, about sexual activity among youth. There was a strong feeling that many youth in the community are sexually active and that this activity may often occur in concert with alcohol use which can lead to poor decision making (such as lack of contraceptive use). There were recommendations for on-going partnerships between the school and the RHA to continue to provide students with education and opportunities to ask questions and access appropriate contraceptives.

- Within Manitoba, just over 41.9 per cent of youths age 15 to 19 report having had sexual intercourse. Due to small numbers, rates for Churchill have been suppressed. However, based on other data such as teen births, pregnancies, STI rates and focus group participant feedback, we think that our rates are likely as high as those reported in the Burntwood Region at just over 60 per cent (see Figure 3-52).

Figure 3-52. Self-reported rates of youth age 15-19 who have had sexual intercourse, by region, 2003/05.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
‘w’ indicates a warning - rates are highly variable; interpret with caution
‘s’ indicates data suppressed due to small numbers
3.5.3 Teen Pregnancy

Teen pregnancy is considered a major public health issue in many countries. Teens that are pregnant have a greater risk of health problems, including, for example, anemia, hypertension, renal disease, eclampsia and depressive disorders.xxxi

Although not every teen pregnancy is an “unplanned” or “unwanted” pregnancy, teen pregnancy is considered a major public health problem in many countries. This is because research has shown that teenage mothers are less likely to complete their education and are more likely to have limited career and economic opportunities xxxii. In addition, their babies are at increased risk of preterm birth, low birth weight and death during infancy. xxxiii

"There is a need for opportunities for teenage girls to talk about pregnancy prevention."
(Women's Health Strategy Community Consultation participant)

• Between 1996/97-2000/01 and 2001/02 and 2005/06, the teen pregnancy rate in Churchill decreased from 169.7 to 111.1 per 1,000 women aged 15-19. Although this decrease is positive, as with the other two northern regions, our rates remain significantly higher than the provincial average of 49.8 per 1,000 (see Figure 3-53).

Figure 3-53. Teen pregnancy rates by region, born 1996/97-2000/01 and 2001/02-2005/06.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
'1' indicates area’s rate was statistically different from Manitoba average in first time period
'2' indicates area’s rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
3.5.4 Teen Births

Similar to the teen pregnancy rate, teen birth rates are a public health concern because babies born to teen mothers are at increased risk of preterm birth, low birth weight and death during infancy. There are also significant economic consequences to teen births, as teenage mothers are less likely to complete their education and are more likely to have limited career and economic opportunities.

Focus group participants discussed the difficulty for all Churchill residents who give birth as they have to leave Churchill at a safe time in their pregnancy and wait to give birth in another community such as Winnipeg or Thompson. This experience is expensive and can be very lonely and stressful. This situation can be much more difficult for young women who may have very little money and little support away from home when parents and partners need to remain in Churchill due to other family and employment responsibilities.

- Within our region the teen birth rate dropped from 70.8 to 2.0 per 1,000 women aged 12-19 between 1996/97-2000/01 and 2001/02-2005/06. Although teen pregnancy rates are higher, teen birth rates are now lower than the provincial average of 30.1 per 1,000. This extreme change in rates reflects our small population and may not be indicative of a long term trend. We will continue to monitor our teen birth rates as well as ongoing opportunities for education and prevention of unplanned teen pregnancies (see Figure 3-54).

![Figure 3-54. Teen birth rates by region, born 1996/97-2000/01 and 2001/02-2005/06.](image)

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area’s rate was statistically different from Manitoba average in first time period

'2' indicates area’s rate was statistically different from Manitoba average in second time period

‘t’ indicates change over time was statistically significant for that area
3.5.5 Children in Care

The family provides the most significant influence on a child’s development. Families provide both physically for children with food, shelter and clothing, as well as teaching them skills, values and attitudes needed to fully participate in society. By providing these developmental foundations, families enable children and youth to be independent, healthy members of society.\textsuperscript{xxxvi}

Focus group participants expressed concern about families in our region. Participants talked about gambling in particular, and how parents and children are affected by the time and money parents are spending on this activity. In addition, there was discussion about family violence and where mothers and children can go to find safety in this situation. Participants suggested that families need help in parenting and that there are many children who appear not to have had enough to eat, and may need additional support in their homes.

Foster care is provided to children who can no longer be cared for by their family. These children usually come from the most high risk situations and must be taken out of the family home for their continued safety.

- In our region, 7.5 per cent of children were living in foster care between 2001/02 and 2003/04. This is much higher than the provincial rate of 3.3 per cent; however, it is a decrease from the previous time period where over 9 per cent of children were living in foster care (see Figure 3-55).


Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.5.6 Child Protection/Support

As with the number of children in care, the rate of child protection and support services in Canada has risen substantially, and children who receive child protection services are at risk or have been subject to child abuse, neglect and maltreatment. Given that abuse and neglect negatively impacts current and future health status of children, it is important to monitor and act more proactively to encourage family development.

In our focus groups, concern about lack of supervision of children and the need for support in parenting was identified. Participants also expressed the need for modeling, as some parents were not "parented" themselves and really do not know how to form attachments and effectively parent their own children. Building stronger family connections and modeling of positive parenting in the community were identified as key areas that will help improve the overall health and well being of community members.

Child protection and support services for families is provided through Child and Family Services, and focuses on providing supports to enable the family to stay together.

- Between 1998/99-2000/01 and 2001/02-2003/04, the proportion of children aged 0 to 17 years, living in families receiving protective or support services in Churchill decreased from 22.0 per cent to 12.4 per cent. This is very similar to the provincial average of 11.5 per cent (see Figure 3-56).

Figure 3-56. Prevalence of children protection/support by region, 1998/99-2000/01 and 2001/02-2003/04.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
3.5.7  Youth Smoking

According to the Canadian Cancer Society, more than 47,500 Canadians die each year of tobacco-related disease. Eliminating tobacco use is identified as one of the most effective ways to reduce the number of Canadians who will be diagnosed with cancer. Cigarette smoking causes about 30 per cent of cancers in Canada and more than 85 per cent of lung cancers. Smoking is also associated with other poor health outcomes such as heart disease, other lung diseases and stroke. Because we know that the earlier people start smoking, the more likely it is they will continue to smoke, we must continue to focus anti-smoking campaigns at school age children (and their parents). It has been found that 66 per cent of smokers had their first cigarette by 15 years of age.\textsuperscript{xxxvii} Research findings also indicate that if people have not started smoking during their adolescent years, they probably will not smoke at all.\textsuperscript{xxxviii}

Focus group participants remarked on smoking among young people in Churchill. It was suggested that the Churchill RHA and the schools partner together to continue to provide students with information about smoking and incentives and support to help youth quit smoking.

- According to the combined 2007 and 2008 Canadian Community Health Survey (CCHS) data, 39 per cent of Burntwood and Churchill youth age 12 to 19 are "current daily or occasional smokers". This is much higher than the provincial rate of 13.7 per cent but almost identical to our peer group rate of 39.2 per cent.

- This represents an increase in smoking rates which were 22.5 per cent in 2003 and 25.3 per cent in 2005 (CCHS data).
3.5.8 Alcohol Use among Youth

The health effects of excess alcohol consumption started early in life have also been clearly demonstrated for a number of chronic diseases such as cancer, strokes, hypertension and liver disease, but also with social and economic problems. For young people in particular, alcohol use is strongly related to traffic injuries, violence and high risk sexual activity.

- Churchill focus group participants identified alcohol use among young people as a concern. They noted that young people who start drinking heavily may be modelling the behaviour that they see at home. In addition, if parents are not available (because they themselves might be drinking or gambling or just away from the situation for other reasons) to stop the behaviour, the cycle continues. As one focus group participant noted:

  "It is what they see every day and parents don't care if their kids are involved with it"

  (Focus Group Participant)

- It was also noted that there are children in the community with Fetal Alcohol Spectrum Disorder (FASD) which results from alcohol use during pregnancy. Participants questioned whether there was enough support for women who have addictions or binge drink so that they can try not to drink alcohol during pregnancy. Questions were raised specifically about alcohol use among teen girls, and how these girls get support to stop drinking while they are pregnant. There were also questions about whether teens who may become pregnant know about FASD and why it is important to stop drinking as soon as she becomes aware she is pregnant.

- Another concern that was raised specifically was that there was an increase in violence and fighting among young people when they are drinking heavily.

- According to the 2007 and 2008 CCHS survey data, 18.1 per cent of Manitoba youth age 12 to 19 meet the criteria for "heavy drinking" (drinking 5 or more drinks on one occasion at least once per month on the last year). However, data were suppressed for Burntwood and Churchill so we do not currently have any 'hard data' about how many of our youth drink alcohol as well as "drink heavily".
3.5.9 Youth Body Mass Index and Physical Activity

There has been a lot of attention paid to the issue of physical activity and obesity among children. We explore these data further with a focus on children and youth. Most children enjoy physical activity, especially activities that they can do with their friends and which give them a feeling of accomplishment such as building snowmen, skating or swimming. Many children are also involved in organized sports and other activities like hockey, soccer, gymnastics, basketball and dance. However, research is showing that there is a tendency for school-age children to spend more and more of their time in less active pursuits, like watching TV or playing computer/video games\(^4\). In addition, in Churchill there are limited facilities and limited opportunities to participate in many of the organized sport and recreational activities that are readily available in other areas of Manitoba.

Research also shows that there is a relationship between physical activity and healthy eating habits. When children are active, they are more likely to feel good about themselves and to recognize when they are hungry and when they are full. This allows them to eat enough to meet their nutritional needs and have the energy they need to be active. Children who are hungry or who do not eat well are less likely to have enough energy to be active and to get involved in activities that will help them to feel good about themselves.

- According to the recent Youth Health survey of students in grades 6 to 12 at Duke of Marlborough School, 75 per cent of students indicated that they eat two servings or less of fruits and vegetables daily and no students indicated that they ate five or more servings as per Health Canada recommendations.

- In our community consultation process we heard particular concern with the lack of physical activity by youth, and the need for the community and the schools to take a more active role in getting young people to be more physically active. There was a lot of discussion around the need for families to get active together, as well as for youth to take personal responsibility and make a decision to live in a way that will support a healthy and long life.

- Although some people indicated that there were inadequate recreational and exercise facilities, others indicated that the current pool and school/hospital complex provides plenty of opportunity for exercise to anyone who "wants it".

- Self-rated BMI rates among Burntwood/Churchill children (age 12-17) appear to support the concern expressed by community members. Unfortunately these CCHS data are from 2005, but at that time 63.8 per cent of children had weights and heights that resulted in "normal BMI". This is lower than the provincial rate of 71.8 per cent, as well as the Canadian rate of 74.6 per cent (see Figure 3-57).

- At the same time, the proportion of Burntwood/Churchill children (age 12-17) with BMIs in the Overweight or Obese categories was 29.2 per cent (based on small numbers, and must be interpreted with caution). This rate compares to 19.3 per cent Manitoba children and 17.9 per cent of Canadian children (see Figure 3-58) and ranks the highest in the province.
We will need to interpret these results with caution as the Youth Health survey that was done with youth in grades 6 to 12 at the Duke of Marlborough School indicates that students are less likely to rate their weight in the healthy weight range compared to their actual body weight. For example, Figure 3-59 shows that while 28 per cent of students reported that they were overweight, actual body weights show that this is the case for just 15 per cent of students.

Figure 3-57. Self-rated as normal BMI for children aged 12-17 by region, 2005.

Source: Statistics Canada, Canadian Community Health Survey (CCHS 3.1), 2005
NOTE: “E” indicates Use with caution.
Figure 3-58. Self-rated as overweight or obese BMI rates for children aged 12-17 by region, 2005.

Source: Statistics Canada, Canadian Community Health Survey (CCHS 3.1), 2005

NOTE: “E” indicates Use with caution.
   “F” indicates too unreliable to be published.

Figure 3-59. Student comparison between 'actual body weight' and 'perceived body weight', 2008.

Source: Cancer Care Manitoba, Duke of Marlborough School Youth Health Survey Report, January 2009.
• Although 46 per cent of Duke of Marlborough students (between grades 6 and 12) self-rated themselves as a Good Athlete and a further 19 per cent self-rated as Excellent, their physical activity levels are not as high as we would like to see.

• As Figure 3-60 shows, just over one in five students are inactive (22% of grades 6-8 and 21% of grades 9-12). Approximately one in three are moderately active but research has shown that this level of physical activity is not enough for health benefits.

• Eight-four per cent (84%) of students indicated that their families either strongly encourage (23%) or encourage (61%) them to participate in physical activities. Over ninety per cent of students also indicated that their families provide support for these activities (such as through driving to activities).

Figure 3-60. Student physical activity rate, 2008.

Source: Cancer Care Manitoba, Duke of Marlborough School Youth Health Survey Report, January 2009.
Figure 3-61 is interesting as it shows what per cent of students indicate that they learned important things about being physically active at school. For example, while over 70 per cent of students indicated that they had learned in general about the importance of being physically active, less than half were aware of illnesses related to inactive lifestyles or the relationship between television watching and physical activity.

Figure 3-61. Physical activity issues taught in school, 2008.

Source: Cancer Care Manitoba, Duke of Marlborough School Youth Health Survey Report, January 2009.
3.5.10 Prescription Drug Use by Children

Prescription drug use by Canadian children is not a well researched area of child health and well being. While prescription drug use is undoubtedly rising to care for a range of infectious, chronic and mental health illnesses, little is know about the depth and breadth of prescription drug use by children and its impact on health status. A study released in 2003 found that approximately 50 per cent of Canadian children receive a prescription drug during the course of a year—up to 1,400 different medications. The study concludes that some of these drugs may have been dispensed without appropriate research into their effects on children, and without adequate regulatory supervision or assistance.xli

3.5.10.1 Children with at Least One Prescription

- Children aged 0-19 with at least one prescription rate in Churchill decreased from 674.6 to 516.8 per 1,000 children between 2000/01 and 2005/06, this is lower than the Manitoba rate at 551.0 in 2005/06 (see Figure 3-62).

Figure 3-62. Children aged 0-19 with at least one prescription rate by region, 2000/01 and 2005/06.
3.5.10.2 Antibiotic Prescriptions for Children

The rate of antibiotic prescriptions in children has become a concern among Canadian public health authorities, as it has led to antibiotic resistant infections. This has caused infections to be harder to treat, often requiring more treatment and hospitalization. It is important for the region to monitor the rate of antibiotic prescription dispensed to children to ensure that physicians are following practice guidelines and avoiding hospitalizations.

- Children aged 0-19 with at least one antibiotic prescription decreased in Churchill from 477.8 to 363.7 per 1,000 children between 2000/01 and 2005/06. This is lower than the Manitoba rate at 389.9 in 2005/06 (see Figure 3-63).

Figure 3-63. Children aged 0-19 with at least one antibiotic prescription rate by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.
NOTE: Churchill data suppressed due to small numbers

'1' indicates area’s rate was statistically different from Manitoba average in first time period
'2' indicates area’s rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
### 3.5.10.2.1 Number of Antibiotic Prescriptions per Child

As with the number of children prescribed antibiotics, this indicator is important to measure and monitor due to the concern of antibiotic resistant infections. This measure will provide a glimpse on how widespread the use of antibiotics is in children in a given region. If it is determined that too many children are routinely receiving antibiotics to combat infection, it may require further public health education to health care providers around the dangers of antibiotic resistant infections.

- Within our region, the average number of antibiotic prescriptions per child (aged 0-19) decreased from 2.3 to 1.8 between 2000/01 and 2005/06. Our rate is very similar to the provincial rate of 1.9 prescriptions per child in 2005/06 (See Figure 3-64).

![Figure 3-64. Average number of antibiotic prescriptions per child aged 0-19 by region, 2000/01 and 2005/06.](source)

**Source:** Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.

**NOTE:** Churchill data suppressed due to small numbers.

1. Indicates area’s rate was statistically different from Manitoba average in first time period
2. Indicates area’s rate was statistically different from Manitoba average in second time period
3. Indicates change over time was statistically significant for that area
3.5.10.3 Antidepressant Prescriptions for Children

The use of antidepressant prescription in children increased significantly in the 1990s, with the drug often being used to treat conditions other than depression. Overuse of antidepressants, particularly Selective Serotonin Reuptake Inhibitors (SSRIs), was of particular concern given the increased risk in suicide observed by some researchers. This concern prompted the U.S. Food and Drug Administration in 2004 to order drug producers to put labels on all antidepressants that were used with children and youths warning of the increased risk of suicide associated with taking these drugs.xliii

- The number of children from our region who have been prescribed an antidepressant is suppressed due to small numbers.

- **Figure 3-65** illustrates the prescription rates among other regions and Manitoba overall.

- Although we do not have information about antidepressant prescriptions for children, focus group participants indicated that mental health services for children and youth should be a priority area for the RHA. There was concern expressed about the capacity of the RHA to provide acute mental health services for young people in crisis, and suggestions that sometimes the police end up dealing with people who are in the acute stage of mental illness instead of the RHA. Data in further chapters will highlight self-injury behaviour among young people in our region.

Figure 3-65. Children aged 0-19 with at least one antidepressant prescription rate by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.

**NOTE:**

- '1' indicates area's rate was statistically different from Manitoba average in first time period
- '2' indicates area's rate was statistically different from Manitoba average in second time period
- 't' indicates change over time was statistically significant for that area
- 's' indicates data suppressed due to small numbers.
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4. **Introduction to Health Status**

In our determinants of health chapter we examined many factors that have been shown to impact health outcomes. We found that we have relatively high rates of a variety of risk factors (such as smoking and obesity). In this chapter we examine health outcomes and we will make some conclusions about whether the risk factors we’ve identified do in fact appear to be impacting the health status of Churchill Health residents.

As with determinants of health, there are a great number of indicators that we could review to examine the health status of our residents. Although this report may not be an exhaustive review of all health status indicators, it is a comprehensive review of those indicators that we know contribute to the greatest burden of illness and mortality in our population. Although we examined many indicators, we decided to focus on one or two in-depth instead of doing a high level review of many indicators, some of which impact our population less than others.

The broad categories of health status indicators that are covered in this report are:

- Well-being
- Life expectancy and mortality
- Child health
- Chronic diseases
- Cancer
- Injuries
- Communicable diseases
4.1 Well-being

Indicators of well-being include self-rated health, functional health, and activity limitation.

4.1.1 Self Reported Health Status

Self rated physical health is an important health indicator measurement as it can reflect aspects of health not captured in other measures, such as incipient disease, disease severity, aspects of positive health status, physiological and psychological reserves and social and mental function. There is strong evidence from research that self-ratings of health are important independent predictors of new morbidity, decline in functional ability, health care utilization and hospitalization, recovery from illness, and nursing home placement.

- Within our region 56 per cent of Burntwood/Churchill residents self-rated their physical health as "very good" or "excellent" compared to approximately 60 per cent of Manitobans and Canadians over all (see Figure 4-1).

- Table 4-1 shows that ratings of "very good" and "excellent" physical health have consistently been lower than the provincial average, but in 2008 there was an even greater decline in ratings which appear to be related to the rate of only 38 per cent among males.

Figure 4-1. "Very good" or "Excellent" self rated physical health by region, 2007.

Source: Canadian Community Health Survey, 2007 (Cycle 3.1)

NOTE: Churchill rates should be interpreted with caution due to small numbers.
Table 4-1. Changes in self-reported physical health as "very good" or "excellent", Manitoba and Burntwood/Churchill 2003-2008.

<table>
<thead>
<tr>
<th>Location</th>
<th>All</th>
<th>Males</th>
<th>Females</th>
<th>All</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitoba</td>
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<td></td>
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<td></td>
<td></td>
<td>59.1</td>
<td>60.5</td>
<td>57.7</td>
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<td></td>
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<td>60.4</td>
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</tr>
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<td></td>
<td>54.1</td>
<td>55.2</td>
<td>53.1</td>
</tr>
<tr>
<td>Burntwood/Churchill</td>
<td>49.6</td>
<td>56.5</td>
<td>42.2</td>
<td>56.8</td>
<td>57.2</td>
<td>56.4</td>
</tr>
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<td>56</td>
<td>55.2</td>
<td>57.1</td>
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</tr>
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<td></td>
<td>44.2</td>
<td>38.5</td>
<td>50.9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.1.2 Self Reported Mental Health Status

Self-reported mental health provides a general indication of the population suffering from some form of mental disorder, mental or emotional problems or distress not necessarily reflected in self-reported (physical) health. Mental health needs of Churchill residents was a topic that was consistently identified as a priority area by our focus group participants as well as participants of the Women’s Health Strategy consultations.

- In 2007, 69.9 per cent of Burntwood/Churchill residents self-rated their mental health as "very good" or "excellent" compared to 73.5 per cent of Manitobans and 74.8 per cent of Canadians (see Figure 4-2). However, as illustrated in Table 4-2, by 2008 this rate had increased to 72 per cent of Burntwood/Churchill residents which is comparable to the provincial average of 71.5 per cent.

Figure 4-2. "Very good" or "Excellent" ratings of mental health by region, 2007

![Figure 4-2](image)

Table 4-2. Changes in self-reported mental health as "very good" or "excellent", Manitoba and Burntwood/Churchill 2003-2008.

<table>
<thead>
<tr>
<th>Region</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitoba</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>74.6</td>
<td>71.9</td>
<td>73.5</td>
<td>71.5</td>
</tr>
<tr>
<td>Males</td>
<td>74.1</td>
<td>73</td>
<td>73.3</td>
<td>73.5</td>
</tr>
<tr>
<td>Females</td>
<td>75</td>
<td>70.8</td>
<td>73.7</td>
<td>69.5</td>
</tr>
<tr>
<td>Burntwood/Churchill</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>67</td>
<td>74</td>
<td>69.9</td>
<td>72</td>
</tr>
<tr>
<td>Males</td>
<td>66.2</td>
<td>76.2</td>
<td>69.3</td>
<td>67</td>
</tr>
<tr>
<td>Females</td>
<td>67.8</td>
<td>71.7</td>
<td>70.6</td>
<td>77.6</td>
</tr>
</tbody>
</table>

4.1.3 Functional Health Status – Mental Health

Functional health status with a focus on mental health is an important indicator, as it can yield some important information about the overall health status of individuals. There are instances where mental health status figures can provide better, more consistent information about what contributes to the overall health status of a region than more traditional indicators of health status such as income, schooling level. ii

- As Figure 4-3 illustrates, the predicted score on the general mental health scale for Churchill residents is 82.5 which is the lowest in the province (100 would be a perfect score) and lower than the provincial average of 84.

Figure 4-3. Predicted scores on general mental health scale by region, 2007.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
‘1’ indicates area’s rate was statistically different from Manitoba average in first time period
4.2 Mortality

Mortality rates indicate the overall health of the population, and are similar to what is measured by life expectancy. That is, regions with high mortality rates will also have lower life expectancy statistics. It is helpful to review the mortality rates, as it gives us a solid basis from which to measure changes over time. While life expectancy measures do not change a great deal in the short term, some mortality rates can be significantly reduced in short periods of time. Examples are the reduction in SIDS related mortality that has been evident since the implementation of “Back to Sleep” and other education campaigns. Other examples would be suicide or other injury prevention programs that can have an immediate impact on risky behaviors.

Mortality rates that take longer to change include cancer-related mortalities as they respond to certain treatment and often occur as a result of risk factors engaged in over a lifetime. For example, lung cancer mortality rates are impacted by smoking behaviors over decades. Therefore, smoking cessation campaigns that occur today will not immediately have an impact on lung cancer mortality rates.

It is important to look at mortality both in terms of all deaths and what is causing them. It is also important to focus on deaths that occur at younger ages as these deaths are more likely to be preventable. In looking at deaths that occur at "younger ages", we will be presenting data on premature mortality rates, as well as Potential Years of Life Lost. Both of these measures focus exclusively on deaths that occurred before the age of 75.
4.2.1 Life Expectancy

Life expectancy is perhaps the most widely used indicator of the health of a population, and the overall effectiveness of the health care system; however, it is important to note that life expectancy measures quantity rather than quality of life.

Life expectancy is the number of years a person would be expected to live, starting from birth (for life expectancy at birth) and similarly for other age groups, if the age- and sex-specific mortality rates for a given observation period (such as a calendar year) were held constant over the estimated life span. This means that someone who was born in 1890 would have a lower life expectancy at birth than someone who was born in 2008. The reason for this is that in the 1800’s people died earlier from many preventable causes of death (particularly vaccine-preventable illnesses) so the life expectancy in that time period was lower than for those people who were living in the late 1990’s and early 2000’s.

- Female life expectancy for Churchill residents increased from 75.6 to 79.0 years between 1996-2000 and 2001-2005, lower than the Manitoba average of 81.5 years in 2001-2005 (see Figure 4-4).

- Male life expectancy for Churchill residents decreased from 73.4 to 72.1 years between 1996-2000 and 2001-2005 which is substantially lower than the Manitoba average of 76.3 years (see Figure 4-5).

Figure 4-4. Female life expectancy by region, 1996-2000 and 2001-2005.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: ‘1’ indicates area’s rate was statistically different from Manitoba average in first time period
‘2’ indicates area’s rate was statistically different from Manitoba average in second time period
‘t’ indicates change over time was statistically significant for that area
Figure 4-5. Male life expectancy by region, 1996-2000 and 2001-2005.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: '1' indicates area's rate was statistically different from Manitoba average in first time period
      '2' indicates area's rate was statistically different from Manitoba average in second time period
4.2.2 Premature Mortality Rate (PMR)

Many health researchers consider Premature Mortality Rate (PMR), which counts all deaths that occur prior to the age of 75, as the **best single indicator** of the health status of a population. Populations with higher PMR’s tend to have poorer health overall and higher need for, and utilization of, health services.

- As illustrated by Figure 4-6, premature mortality rates in Churchill increased from 3.8 to 4.6 deaths per 1,000 residents between 1996-2000 and 2001-2005. This is higher than Manitoba at 3.3 deaths per 1,000 in 2001-2005, and is among the highest rate in the province.

![Figure 4-6. Premature mortality rates by region, 1996-2000 and 2001-2005.](image)

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

**NOTE:** Churchill rates should be interpreted with caution due to small numbers.

- ‘1’ indicates area’s rate was statistically different from Manitoba average in first time period
- ‘2’ indicates area’s rate was statistically different from Manitoba average in second time period
- ‘t’ indicates change over time was statistically significant for that area
4.2.3 Potential Years of Life Lost (PYLL)

The most useful measurement for premature mortality is "Potential Years of Life Lost" (PYLL). This is calculated by looking specifically at deaths that occurred before the age of 75 and subtracting that age from 75. For example, a death at age 5 would account for 70 PYLL while a death at age 73 would only account for 2 PYLL.

This information is usually grouped by cause of death for comparison with cause-specific death rates. Where we have data, we will look specifically at causes of death which are predominant with the general population such as cancer, circulatory disease, and respiratory disease. The report will also focus on cause of death groupings which are more common among young people and include unintentional injuries and suicide. It is important to focus on causes of death for young people in particular because the impact of suicides and injuries can have a greater impact on the PYLL data than causes of death affecting older people such as cancer and circulatory disease.

- Within our region, the overall rate of PYLL for all deaths before the age of 75 decreased from 77.9 years per 1,000 residents to 63.0 years per 1,000 between 1996-2000 and 2001-2005. While this decrease is positive, our rates remain higher than Manitoba at 50.9 per 1,000 in 2001-2005 (see Figure 4-7).

![Figure 4-7. Potential years of life lost rates by region, 1996-2000 and 2001-2005.](image-url)
4.2.3.1 PYLL Due to Cancer

Cancer is typically a disease of older people, so although deaths due to cancer certainly occur, the impact on young people is still not as great as it is for other causes such as injury. However, there are certain cancers (such as breast cancer) where we might see a higher burden of deaths on young people compared to other types.

- Between 2000 and 2006, there were no cancer deaths for females under the age of 75 from our region. The average PYLL for Manitobans is 5.2 per 1,000 females.

- Figure 4-8 shows that for males, the PYLL due to cancer in Churchill is 10.3 per 1,000 in 2000-2006, which is lower than Manitoba at 14.8 years per 1,000 residents.

Figure 4-8. Male potential years of life lost due to cancer by region, 2000-2006 average.
4.2.3.2 PYLL due to Circulatory Disease

Deaths due to circulatory disease typically occur in older people.

- Within our region, there were no premature deaths among males due to circulatory disease between 2000 and 2006.

- Among Churchill females, PYLL due to circulatory disease was 7.5 per 1,000 in 2000-2006, which is higher than Manitoba at 4.5 years per 1,000 residents (see Figure 4-9).

Figure 4-9. Female potential years of life lost due to circulatory disease by region, 2000-2006 average.

Source: Manitoba Health Healthy Living, RHA Profiles 2008.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
4.2.3.3 PYLL Due to Respiratory Disease

- The average PYLL for Churchill females between 2000 and 2006 was 34.5 per 1000 residents, which is much higher than the provincial average of 10.5 years (see Figure 4-10). For men, the average PYLL in this time period was 27.0 years per 1,000 residents which is also much higher than the provincial average of 14.4 years (see Figure 4-11).

- These rates are among the highest in the province, and may be partially attributable to the high smoking prevalence in our region.

Figure 4-10. Female potential years of life lost due to respiratory disease by region, 2000-2006 average.

Source: Manitoba Health Healthy Living, RHA Profiles 2008.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 4-11. Male potential years of life lost due to respiratory disease by region, 2000-2006 average.

Source: Manitoba Health Healthy Living, RHA Profiles 2008.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
4.2.3.4 PYLL Due to Unintentional Injuries

- Between 2000 and 2006, there were no premature deaths due to unintentional injuries for Churchill females or males. In this time period, the Manitoba average was 6.5 PYLL per 1,000 females and 1.6 per 1,000 males.

4.2.3.5 PYLL Due to Suicide

- Between 2000 and 2006, there were no premature deaths due to suicide for Churchill females.

- In this time period, the PYLL due to suicide for Churchill males was 15.9 years per 1,000 which is slightly higher than the provincial rate of 13.1 years per 1,000 but not significantly different (see Figure 4-12).

Figure 4-12. Male potential years of life lost due to suicide by region, 2000-2006 average.
4.2.4 Overall Mortality

Mortality rates are calculated as the total number of deaths among all residents (all ages and all causes) per 1,000 residents in the region.

- As Figure 4-13 illustrates, total mortality rates in Churchill decreased from 13.7 to 11.9 per 1,000 residents between 1996-2000 and 2001-2005. However, our mortality rates remain higher than Manitoba at 8.0 per 1,000 in 2001-2005, but are not significantly different.

Figure 4-13. Total mortality rates by region, 1996-2000 and 2001-2005.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period
4.2.4.1 Leading Causes of Death

- Between 1992 and 2006 there were 73 deaths among Churchill residents (36 females and 37 males).

- Tables 4-3 and 4-4 illustrate the leading causes of death for residents in our region and the proportion of deaths that they account for.

- Between 2002 and 2006, Diseases of the Circulatory System accounted for one in three deaths among Manitoba females, and were the leading cause of death. In the same time period, they accounted for only 14.3 per cent of deaths among Churchill females (the third leading cause of death). Cancer and injury were the leading cause of death among females in Churchill for the most recent time period, and were equal in prevalence. It is important to note however, that due to the small numbers of deaths each year it is difficult to determine if differences in patterns of deaths between Manitoba and Churchill are meaningful, as patterns for Churchill females are different in each five-year period (see Table 4-3).

Table 4-3. Leading Causes of Death, Churchill and Manitoba Females.

<table>
<thead>
<tr>
<th>RHA</th>
<th>Cause Of Death</th>
<th>As percentage of all deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitoba Females</td>
<td>Diseases of the Circulatory System</td>
<td>42.1%</td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
<td>26.0%</td>
</tr>
<tr>
<td></td>
<td>Respiratory Diseases</td>
<td>9.0%</td>
</tr>
<tr>
<td></td>
<td>Endocrine and Nutritional Disorders</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>External Causes (injury)</td>
<td>3.8%</td>
</tr>
<tr>
<td></td>
<td>All Other Causes</td>
<td>15.9%</td>
</tr>
<tr>
<td>Churchill Females</td>
<td>Cancer</td>
<td>31.3%</td>
</tr>
<tr>
<td></td>
<td>External Causes (injury)</td>
<td>6.3%</td>
</tr>
<tr>
<td></td>
<td>Endocrine and Nutritional</td>
<td>18.8%</td>
</tr>
<tr>
<td></td>
<td>Diseases of the Circulatory System</td>
<td>18.8%</td>
</tr>
<tr>
<td></td>
<td>Abnormal Symptoms Not Elsewhere</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Classified</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All Other Causes</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

Source: Manitoba Health Healthy Living, 2008 Regional Profile.

- Among Churchill RHA males, Diseases of the Circulatory System, Cancer, Diseases of the Digestive System, and External Causes (injury), respectively, account for the most deaths between 2002 and 2006. Our males are similar to those of Manitoba in that Diseases of the Circulatory System consistently account for the most deaths. Our men are very different though in that injury accounts for a much higher proportion of deaths compared to Manitoba males overall. Again, we must interpret our data with caution due to the small numbers of deaths overall.

- It is also important to note that although reporting on suicides is a core indicator, according to the Manitoba Centre for Health Policy, there were no suicides in Churchill in their reporting time period. So we are limited to the PYLL rate suicide data presented in the previous section of this report, to inform us of the mortality associated with suicide.
### Table 4-4. Leading Causes of Death, Churchill and Manitoba males.

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitoba Males</td>
<td>Diseases of the Circulatory System</td>
<td>39.2%</td>
<td>36.3%</td>
<td>32.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
<td>27.4%</td>
<td>27.6%</td>
<td>28.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respiratory Diseases</td>
<td>9.4%</td>
<td>9.2%</td>
<td>8.6%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>External Causes (injury)</td>
<td>7.6%</td>
<td>8.1%</td>
<td>8.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Endocrine and Nutritional Disorders</td>
<td>2.8%</td>
<td>3.5%</td>
<td>5.2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All Other Causes</td>
<td>13.6%</td>
<td>15.2%</td>
<td>17.1%</td>
<td></td>
</tr>
<tr>
<td>Churchill Males</td>
<td>Diseases of the Circulatory System</td>
<td>35.0%</td>
<td>20.0%</td>
<td>25.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
<td>10.0%</td>
<td>20.0%</td>
<td>16.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diseases of the Digestive System</td>
<td>0.0%</td>
<td>0.0%</td>
<td>16.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>External Causes (injury)</td>
<td>35.0%</td>
<td>20.0%</td>
<td>16.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respiratory Diseases</td>
<td>10.0%</td>
<td>20.0%</td>
<td>8.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diseases of Skin and Related Tissue</td>
<td>0.0%</td>
<td>0.0%</td>
<td>8.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Abnormal Symptoms Not Elsewhere Classified</td>
<td>0.0%</td>
<td>20.0%</td>
<td>8.3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All Other Causes</td>
<td>10.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Manitoba Health Healthy Living, 2008 Regional Profile.
4.2.4.2 Five Year Mortality among Residents (age 19+) with and Without Certain Chronic Diseases

In this section, we present comparisons of mortality rates of residents with certain chronic diseases to mortality rates for those without that disease. Both groups were followed for five years, to compare cumulative mortality rates for all causes combined.

Although we present graphs to show the comparisons between Churchill and the other regions in Manitoba, the most important point is to note the increased risk for death within five years based on whether an individual has a certain disease. The differences between mortality rates of Churchill residents with and without these diseases is the more important comparison as opposed to how these rates compare with other regions or Manitoba overall.

4.2.4.2.1 Total Respiratory Morbidity (Respiratory Diseases)

- In our region, the mortality rate among residents with respiratory disease was 18.8 per cent within five years compared to 8.3 per cent of residents without the disease. Our rates of death for residents with respiratory disease is higher than the provincial average of 7.8 per cent but it is not statistically significant, likely due to our small numbers of deaths overall (see Figure 4-14).

Figure 4-14. Mortality rates among residents with and without total respiratory morbidity by region, 2001/02-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
*y* indicates area's rate for those with TRM was statistically different from Manitoba average with TRM
*n* indicates area's rate for those without TRM was statistically different from Manitoba average without TRM
'd' indicates difference between groups is statistically significant for that area
4.2.4.2.2 Arthritis

- According to Figure 4-15, mortality rates due to arthritis appear to be higher for Churchill residents than for residents of other regions in Manitoba, but this difference was not found to be statistically significant.

- In the case of Churchill, the five year mortality rate for people with arthritis was 8.9 per cent compared to the provincial rate of 5.6 per cent. In this peer group (the total group that was used to compare five year mortality rates); the death rate was the same among people who did not have arthritis.

Figure 4-15. Mortality rates among residents with and without arthritis by region, 2001/02-2005/06.
4.2.4.2.3 Diabetes

- Five year mortality comparisons for diabetes (Figure 4-16) shows just how important it is for us to stop the increase in diabetes incidence, as well as to do a better job in helping people manage the disease if they already have it. In every region, mortality rates are significantly higher among residents with diabetes than among those without diabetes.

- In our region, 23.4 per cent of residents in the group with diabetes that were followed over five years died within that time period compared to 7.3 per cent of Churchill residents in that comparison group. This was a statistically significant difference.

- In the province overall, the mortality rate among those with diabetes was 11.7 per cent, which is about half of the rate of Churchill residents with diabetes.

Figure 4-16. Mortality rates among residents with and without diabetes by region, 2001/02-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
‘y’ indicates area’s rate for those with diabetes was statistically different from Manitoba average with diabetes
‘n’ indicates area’s rate for those without diabetes was statistically different from Manitoba average without diabetes
‘d’ indicates difference between groups is statistically significant for that area
4.2.4.2.4 Hypertension

- In the case of hypertension, we had an unexpected finding in that the mortality rates among residents with Hypertension was 5.8 per cent but the mortality rate for residents without Hypertension was higher at 6.3 per cent. This was not a statistically significant difference (see Figure 4-17).

- We think that these results occurred due to the small number of deaths in this group. It is also important to note that deaths among the 'non-hypertension' group in Churchill were actually statistically higher than the provincial rate of 4.4 per cent for that same group.

Figure 4-17. Mortality rates among residents with and without hypertension by region, 2001/02-2005/06.
4.2.4.2.5 Ischemic Heart Disease (IHD)

- For ischemic heart disease, mortality rates among Churchill residents within five years was 10.8 per cent compared to 8.3 per cent of residents in their comparison group which was not a statistically significant difference (see Figure 4-18).

- As with hypertension, mortality rates for Churchill residents without IHD (8.3%) were statistically higher than the provincial rate of 4.6 per cent of residents.

Figure 4-18. Mortality rates among residents with and without IHD by region, 2001/02-2005/06.
4.2.4.3 Unintentional Injury Deaths

Unintentional death rates measures long-term success in reducing deaths due to unintentional injuries, compared with other regions or jurisdictions. It measures the adequacy and effectiveness of injury prevention efforts, including public education, community and road design, prevention, emergency care, and treatment resources.

- Figures 4-19 and 4-20 present the death rates due to unintentional injury for males and all residents.

- In Churchill the unintentional injury death among males increased from 53.3 per 100,000 to 129.6 per 100,000 between 1993-1999 and 2000-2006. This rate is much higher than the provincial rate of 42.5 per 100,000 in 2000-2006, and ranks highest in the province (see Figure 4-19).

- Among all residents of Churchill, the unintentional injury death rate increased from 26.3 to 123.6 per 100,000 between 1993-1999 and 2000-2006. Again this rate is much higher than provincial rate of 35.7 per 100,000 between 2000 and 2006 and again ranks highest in the province (see Figure 4-20).

- Trends for both males and females indicate a substantial increase over the two time periods. Although caution has to be exercised in interpreting these rates due to small numbers of deaths due to injury in Churchill, the trend suggests that the community could benefit from some injury prevention initiatives, which will be further explored.

- In Churchill the leading causes of injury deaths for both males and females were Motor Vehicle Accident followed by Poisoning.
Figure 4-19. Male unintentional injury death rate by region, 1993/99 and 2000/06.

Source: Manitoba Health Healthy Living (Health Information Management).
NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 4-20. Total unintentional injury death rate by region, 1993/99 and 2000/06.

Source: Manitoba Health Healthy Living (Health Information Management).
NOTE: Churchill rates should be interpreted with caution due to small numbers.
4.3 Child Health

Child health is an important priority, as a number of significant inequalities exist in the health status of Canadian children and youth. Some young people are more likely to be injured, others to experience physical and mental health challenges. Without appropriate action, these health inequalities are likely to persist into adulthood. On both a personal and societal level, the downstream consequences of these early experiences can be considerable.

Many of the adverse health outcomes for children can be prevented. In addition, it is now accepted that the health status of young people in Canada is influenced by a wide range of social, cultural, physical and economic determinants, many of which lie outside the traditional health sector.

Due to our small population and small numbers of events (such as infant and child deaths), we are limited in our ability to report on many child health indicators. The following indicators were suppressed due to either small numbers or no cases:

- Childhood diabetes treatment prevalence (suppressed)
- Attention Deficit Hyperactivity Disorder treatment prevalence (suppressed)
- Autism treatment prevalence (suppressed)
- Congenital heart defects (suppressed)
- Infant mortality (no cases in time period)
- Childhood mortality (no cases in time period)

We know that the leading causes of infant and child mortality are often injuries, and we know that injury is an important cause of death among adults in our population. We will therefore continue our public health injury prevention efforts and target these efforts at our entire population. We also know that we have high, and increasing, rates of diabetes in our region. We also have presented risk factors for diabetes in Chapter 3 of this report and we know that the eating and exercise habits of children in our region could put them at risk for developing diabetes. Again, this will be a priority area for our RHA even without specific data on the rates of diabetes in children of our region.
4.3.1 Preterm Birth Rate

Preterm birth has traditionally been identified as one of the most important prenatal health problems in industrialized nations, and accounts for a significant portion of all prenatal mortality in Canada. Given the trend towards earlier obstetrical intervention to reduce mortality, results from this indicator have become a more complex story reflecting both population prenatal health status and prenatal health care services. Because residents must leave our region in order to give birth, preterm birth rate is an important indicator for us to follow.

- Between 2002/03 and 2006/07 the percentage of preterm births to Churchill Region residents decreased from 10.5 per cent in 2002/03 to 7.1 per cent in 2006/07. However, because of the small number of births there is no consistent trend.

- In order to compare our rates to other regions, we are using the five year average annual rate (see Figure 4-21). Our five year average annual rate was 11.4 per cent of all births compared to the provincial average of 8 per cent and ranks highest in the province. However, it is important to note that this five year average is influenced by an increase in one of the five years and then rates decreased again.

- It will be important for us to continue to monitor these rates to ensure that there is no continued trend toward an increase in preterm birth rates.

Figure 4-21. Preterm births rate by region, 2002/03-2006/07.

Source: Manitoba Health Healthy Living (Health Information Management)
4.3.2 Low Birth Weight Infants (LBW)

Low birth weight is a key determinant of infant survival, health, and development. Low birth weight infants are at greater risk of having a disability, and for diseases such as cerebral palsy, visual problems, learning disabilities and respiratory problems. 

There are two broad categories of risk factors for low birth weight infants (see Table 4-5). Although numbers of low birth rates infants are very low (and in some years we have none), we can see from the information presented in Chapter 3 that we do have high rates of several risk factors in our region.

Table 4-5. Risk factors for low birth weight infants.

<table>
<thead>
<tr>
<th>SOCIAL RISK FACTORS</th>
<th>PERSONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Poverty</td>
<td>• Smoking</td>
</tr>
<tr>
<td>• Single parent</td>
<td>• Alcohol and other drug use</td>
</tr>
<tr>
<td>• Teenage parent</td>
<td>• Poor nutrition before and during pregnancy</td>
</tr>
<tr>
<td>• Little or no prenatal care</td>
<td>• Limited stress-relief strategies</td>
</tr>
<tr>
<td>• Living with a violent partner</td>
<td></td>
</tr>
<tr>
<td>• Generally stressful life</td>
<td></td>
</tr>
<tr>
<td>• Workplace conditions</td>
<td></td>
</tr>
<tr>
<td>• Type and amount of work</td>
<td></td>
</tr>
</tbody>
</table>

- **Figure 4-22** shows the average annual rates of LBW infants by region between 2002/03 and 2006/07. Although the average annual rate for Churchill of 7.6 per cent of births appears to be much higher than other regions and Manitoba overall, it is based on a very small number of births which occurred primarily in one out of the five years. In fact, although we do not know if the infants are the same, this is the same year in which the numbers of preterm births was also higher.
Figure 4-22. Low birth weight rates by region, 2002/03-2006/07.

Source: Manitoba Health Healthy Living (Health Information Management)

NOTE: *Rates are unstable due to small counts; statistical testing is not possible.
4.3.3 High Birth Weight Infants (HBW)

Research has shown an increased risk of developing Type 1 diabetes for high birth weight (HBW) infants\textsuperscript{vii}. In addition, Health Canada advises that HBW infants are at greater risk of infant mortality than are normal weight infants. Pregnant women who are diagnosed with gestational diabetes are at higher risk for delivery of a high birth weight infant.

- Between 2002/03 and 2006/07 the percentage of high birth weight infants born to Churchill Region residents increased from 21.1 per cent in 2002/03 to 42.9 per cent in 2006/07. This is higher than the provincial rate of 16.1 per cent; however, Churchill rates should be interpreted with caution due to the small numbers of births in each year (see Figure 4-23).

Figure 4-23. High birth weight rates, 2002/03-2006/07.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Percentage of live births</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/03</td>
<td></td>
</tr>
<tr>
<td>2003/04</td>
<td></td>
</tr>
<tr>
<td>2004/05</td>
<td></td>
</tr>
<tr>
<td>2005/06</td>
<td></td>
</tr>
<tr>
<td>2006/07</td>
<td></td>
</tr>
</tbody>
</table>

Source: Manitoba Health Healthy Living (Health Information Management)
NOTE: Churchill rates should be interpreted with caution due to small numbers.

- In this time period, the average annual rate of HBW infants to Churchill residents was 25.3 per cent of births which appears to be higher than the provincial average annual rate of 16.5 per cent. However, statistical testing was not possible due to the small numbers of HBW infants (see Figure 4-24).
Figure 4-24. High birth weight rates by region, 2002/03-2006/07.

Source: Manitoba Health Healthy Living (Health Information Management)

NOTE: *Rates are unstable due to small counts; statistical testing is not possible.
### 4.3.4 Asthma

Asthma is one of a number of chronic respiratory diseases in which incidence rates continue to climb for Canadians. While incidence and prevalence are generally higher among children below the age of 11, it is common among all age groups, requiring health care interventions that help to manage asthma symptoms on an ongoing basis. viii

- Asthma rates for children in Churchill increased from 13.7 per cent to 16.0 per cent between 1999/2000-2000/01 and 2004/05-2005/06. This rate is higher than the provincial rate of 13.9 per cent in 2004/05-2005/06, and ranks highest in the province although not significantly different from the provincial average (see Figure 4-25).

- It is important to also note that while provincial rates stayed almost the same, and in many regions rates decreased, Churchill appears to be showing one of the highest rates of increase in asthma rates. This trend might be partially attributable to the higher smoking prevalence in our region and exposure to SHS in the home as presented in Chapter 3. We will continue to address this high smoking prevalence in the region, as asthma is linked to exposure to SHS in the home.

**Figure 4-25. Asthma rates by region, 1999/00-2000/01 and 2004/05-2005/06.**

![Asthma rates by region](chart.png)

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

1. '1' indicates area’s rate was statistically different from Manitoba average in first time period
2. '2' indicates area’s rate was statistically different from Manitoba average in second time period
4.3.5 Dental Extractions in Toddlers and Children

Oral care is often overlooked when identifying indicators for overall health status. However, tooth decay is the most common chronic disease of childhood in Canada. While research in this area is lacking, there is now evidence to suggest that oral diseases can be correlated with some chronic diseases such as diabetes. There is also anecdotal evidence to suggest that vulnerable populations, such as those with a low socio economic status and Aboriginal peoples have more challenges with oral health. ix

- The dental extraction rate among Churchill children increased from 12.3 to 33.7 per 1,000 children between 1996/97-2000/01 and 2001/02-2005/06. This is much higher than the provincial average (14.2 per 1,000 in 2001/02/2005/06), and the increase in rate over time is statistically significant (see Figure 4-26).

![Figure 4-26. Dental extractions rate by region, 1996/97-2000/01 and 2001/02-2005/06.](source)

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area
4.4 Chronic Diseases and Complications

Although chronic diseases are among the most common and costly health problems facing Canadians, they are also among the most preventable. Examples include cardiovascular diseases (heart disease and stroke), cancer, diabetes, arthritis, asthma, and mental illness.

According to the World Health Report 2002, the major risk factors for individuals in developing a chronic disease include:

- tobacco
- alcohol
- blood pressure
- physical inactivity
- cholesterol
- overweight
- unhealthy diet

4.4.1 Diabetes

Diabetes is a significant chronic disease which can have a major impact on the health of Canadians and on the health care system itself. According to Health Canada, forty percent of Canadians with diabetes develop long-term complications such as high blood pressure, vision loss and kidney disease. Health Canada also reports that there are a disproportionate number of First Nations people who are being diagnosed with Type 2 diabetes. Rates among Aboriginal people in Canada are three to five times higher than those of the general Canadian population.

Health Canada identifies several risk factors for Type 2 diabetes:

The more risk factors an individual has, the greater his/her likelihood of developing Type 2 diabetes.

- **Obesity**
  An excessively high body weight increases diabetes risk. A BMI greater than 27 indicates a risk for developing Type 2 diabetes.

- **Apple-shaped figure**
  Individuals who carry most of their weight in the trunk of their bodies (i.e., above the hips) tend to have a higher risk of diabetes than those of similar weight with a pear-shaped body (excess fat carried mainly in the hips and thighs).

- **Age**
  Age increases the risk of Type 2 diabetes. Canadian data for 1996/97 show that the prevalence rate of diabetes in those aged 65 and over (10.4%) is three times as high as the rate in those 35 to 64 (3.2%).

  While most diabetes occurs in older persons, the appearance of Type 2 diabetes in children is increasingly being reported in the medical literature. In Canada, the problem is particularly apparent among Aboriginal children, mainly girls. In some communities, the prevalence of Type 2 diabetes among Aboriginal females aged 10 to 12 years has been reported to be 3.6 per cent.
• **Sedentary lifestyle**
  Being overweight - another risk factor for Type 2 diabetes can be prevented by regular physical activity. A second, independent benefit of regular physical activity is improved blood sugar control in persons who already have type 2 diabetes.

• **Family History**
  The genetic link for Type 2 diabetes is stronger than the genetic link for type 1. Having a blood relative with Type 2 diabetes increases the risk. If that person is a first-degree relative (e.g., a parent, sibling or child), the risk is even higher.

• **History of Diabetes in Pregnancy**
  Nearly 40 per cent of the women who have diabetes during their pregnancy go on to develop Type 2 diabetes later, usually within five to ten years of giving birth.

• **Impaired Glucose Tolerance**
  Impaired glucose tolerance or impaired fasting glucose can precede the development of Type 2 diabetes.

• **Ethnic Ancestry**
  Being of Aboriginal, African, Latin American or Asian ethnic ancestry increases the risk of developing of Type 2 diabetes. Risk levels for these groups are between two and six times higher than for Canadians of Caucasian origin.

• **High Blood Pressure**
  Up to 60 per cent of people with undiagnosed diabetes have high blood pressure.

• **High Cholesterol or other fats in the blood**
  More than 40 percent of people with diabetes have abnormal levels of cholesterol and similar fatty substances that circulate in the blood. These abnormalities appear to be associated with an increased risk of cardiovascular disease among persons with diabetes.

• Between 1998/99-2000/01 and 2003/04-2005/06, the prevalence rate of people living with diabetes increased among Churchill residents from 13.1 per cent of residents to 15.6 per cent. This is much higher than the provincial rate of 8.7 per cent, and among the highest prevalence rates in the province (see Figure 4-27).

• **Figure 4-28** shows the numbers of residents living with diabetes in our region between 2004/05 and 2007/08. These numbers have increased from 52 residents to 83 residents in just four years.

• Much of the important data about deaths, hospitalizations and physician visits among people living with diabetes in our region was combined with the Burntwood Region. We will not present these data in detail but take from it the following important points that we will use in planning for the needs of our residents:
  
  o Burntwood/Churchill residents who were diagnosed with diabetes were 2.0 times more likely to die within five years than their comparison group without diabetes.

  o Burntwood/Churchill and residents who were diagnosed with diabetes had 3.32 times more days in the hospital compared to their comparison group without diabetes.

  o The rate of physician visits among Burntwood/Churchill residents with diabetes was 2.23 times higher than their comparison group without diabetes.
Lower limb amputation rates are much higher among residents of Burntwood and Churchill than they are among residents of other regions (see Figure 4-29). We must examine further if this is due to lack of appropriate community level programs in our region to help Churchill residents manage their diabetes before it comes to the point of permanent damage to their limbs and other nerves in the body.

Figure 4-30 shows that while there has been an increase in the numbers of Churchill residents with diabetes who have had an eye exam (from 21.1% to 23.5% between 2000/01 and 2005/06) this rate remains lower than the provincial average of 33.5 per cent. In fact, our rate is the lowest in the province. Access to eye exams is very important for people living with diabetes due to the increased risk of eye disease and permanent loss of vision.
Figure 4-28. Number of Churchill residents living with diabetes, 2004/05-2007/08.

Source: Churchill RHA.

Figure 4-29. Lower limb amputation crude and age adjusted rates among people living with diabetes by region, 1999/2000-2003/04.

Source: Manitoba Health & Healthy Living, Diabetes and Chronic Diseases Unit.

NOTE: Age-standardized lower limb amputation rates were significantly higher than the Manitoba rate in Burntwood/Churchill, NOR-MAN and Parkland. They were significantly lower in Brandon and South Eastman.
Figure 4-30. People living with diabetes who have had an eye exam by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area
4.4.2 Hypertension

Hypertension is the medical name for high blood pressure, a major risk factor for heart attack, stroke and other cardiovascular problems. Normal blood pressure in adults is defined as a reading of 120 over 80, while hypertension is any reading of 140 over 90 or higher. Health Canada estimates that up to 60 per cent of persons with undiagnosed diabetes have high blood pressure.

- Hypertension treatment prevalence rate in Churchill increased from 31.1 per cent to 34.5 per cent of residents between 2000/01 and 2005/06. These rates are very high (one in three of our residents), and are statistically higher than the provincial rate of 23.7 per cent in 2005/06 (see Figure 4-31).

- It is interesting to note that the self-reported rates of hypertension according to the 2007 Canadian Community Health Survey was only 14.3 per cent. We are unsure if this difference is due to the fact that our data are combined with Burntwood, or if it is because people may not recognize the term "hypertension" and may not realize that they have this illness.

Figure 4-31. Hypertension treatment prevalence rate by region, 2000/01 and 2005/06.

![Hypertension treatment prevalence rate by region, 2000/01 and 2005/06.](image)

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

1' indicates area's rate was statistically different from Manitoba average in first time period
2' indicates area's rate was statistically different from Manitoba average in second time period
\( t \) indicates change over time was statistically significant for that area
4.4.3 Osteoporosis

In Canada, about one out of four women and one out of eight men over 50 years of age have osteoporosis. This chronic disease can have a devastating effect on people’s lives, causing painful fractures, disability or deformity. Incidence data for this disease can be an indicator of the relative success of osteoporosis prevention measures by primary care physicians and specialists.

Osteoporosis is a disease characterized by low bone mass and deterioration of bone tissue. This leads to increased bone fragility and risk of fracture (broken bones), particularly of the hip, spine and wrist. Osteoporosis is often known as "the silent thief" because bone loss occurs without symptoms. One in four women over the age of 50 has osteoporosis and at least one in eight men over 50 also has the disease.

- The osteoporosis treatment prevalence rate in Churchill decreased from 14.9 per cent to 9.7 per cent of adult residents between 1998/99-2000/01 and 2003/04-2005/06. This is lower than the provincial rate of 12.7 per cent in 2003/04-2005/06 (see Figure 4-32).

Figure 4-32. Osteoporosis treatment prevalence rate by region, 1998/99-2000/01 and 2003/04-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
'1' indicates area's rate was statistically different from Manitoba average in first time period
'2' indicates area's rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
4.4.4 Arthritis

According to the Canadian Community Health Survey, arthritis and other rheumatic conditions affect nearly 4 million Canadians aged 15 years and older - approximately 1 in 6 people. Two-thirds of people with arthritis are women, and nearly 3 of every 5 people with arthritis are younger than 65 years of age.\textsuperscript{xii} Compared with people with other chronic conditions, those with arthritis experienced more pain, activity restrictions and long-term disability. Those with arthritis were more likely to need help with daily activities, reported worse self-rated health and more disrupted sleep and depression, and more frequently reported contact with health care professionals in the previous year.\textsuperscript{xiii}

- Within our region, the treatment prevalence rate for arthritis has decreased from 30.0 per cent to 10.0 per cent of residents between 1999/2000-2000/01 and 2004/05-2005/06. Our rate is now much lower than the provincial rate of 20.2 per cent, and lowest in the province; however, we will need to continue to monitor our data to see if this trend continues (see Figure 4-33).

- The most recent treatment prevalence rate is similar to the self-reported rate of arthritis on the 2007 Canadian Community Health Survey where 13.2 per cent of residents of Burntwood/Churchill indicated that they had been diagnosed with arthritis (compared to 15.7 per cent of Manitobans).

**Figure 4-33. Arthritis rate by region, 1999/2000-2000/01 and 2004/05-2005/06.**

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area.
4.4.5 Ischemic Heart Disease (IHD)

Cardiovascular disease is the leading cause of death for both men (32.3%) and women (34.1%) in Canada. It accounts for 18 per cent of hospitalization cases. It is also Canada’s most costly disease that puts the greatest burden on our health care system.

Ischemic heart disease (e.g. narrowing of the arteries, angina), acute myocardial infarction (heart attack), congestive heart failure and stroke are examples of cardiovascular disease. Many of the risk factors for cardiovascular disease are common to type 2 diabetes and many cancers (such as obesity, physical inactivity, stress). In turn, type 1 and type 2 diabetes are significant risk factors for cardiovascular disease.

- As Figure 4-34 shows, the IHD treatment rate in Churchill decreased from 13.1 per cent to 11.4 per cent between 1996/97-2000/01 and 2001/02-2005/06. However, this rate remains higher than the provincial rate of 8.5 per cent in 2001/02-2005/06, and is among the highest rates in the province. This pattern is likely related to the high prevalence of diabetes and smoking in the region.

**Figure 4-34. IHD treatment prevalence rate by region, 1996/97-2000/01 and 2001/02-2005/06.**

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

‘1’ indicates area’s rate was statistically different from Manitoba average in first time period
‘2’ indicates area’s rate was statistically different from Manitoba average in second time period
‘t’ indicates change over time was statistically significant for that area
4.4.6 Respiratory Morbidity

Six million Canadians live with chronic respiratory diseases which places a significant burden on hospital treatment resources. According to the 2008 Canadian Institute of Health and Information (CIHI) report entitled *The Cost of Acute Care Hospital Stays by Medical Condition in Canada, 2004-2005*, of the total $17 billion share of acute care inpatient costs, 45.5 per cent can be attributed to the treatment or complexities of respiratory diseases.\(^{xxi}\) Hospitalization data on respiratory disease treatment is also an important indicator of the effectiveness of primary care management of those conditions, as well as a reflection of the socioeconomic status, smoking rates and the relative quality of the environment.\(^{xvi}\)

- Within our region, the total respiratory morbidity treatment rate decreased significantly from 10.4 per cent to 2.7 per cent of residents between 2000/01 and 2005/06. Our most current rate is now significantly lower than Manitoba (11.6% in 2005/06) (see Figure 4-35).

- Due to the risk factors identified for our region (such as smoking rates), it will be important for us to continue to monitor this indicator to determine if this decrease in rates continues, or if it was simply a reflection of the variability in rates that can occur with such a small population.

Figure 4-35. Respiratory morbidity treatment prevalence by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE. Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area
### 4.4.7 Asthma

While asthma is often considered a children's disease, it is common among Canadians of all age groups and accounts for approximately 80 per cent of chronic respiratory disease in Canada. Children and teens do have the highest prevalence of asthma and the highest hospitalization rates. In terms of number of people affected, however, the disease affects more adults than children. Asthma rates and hospitalization rates can be an indicator of the effectiveness of asthma management strategies, smoking rates and the relative quality of the environment.

- According to the Canadian Community Health Survey, 8.5 per cent of residents of Burntwood/Churchill are living with asthma compared to 7.2 per cent of Manitobans (see Figure 4-36).

![Figure 4-36. Self-reported asthma prevalence rates by region, 2007.](source: Canadian Community Health Survey, 2007(Cycle 3.1))

NOTE: Churchill rates should be interpreted with caution due to small numbers.
4.4.8 Renal Failure

Diabetes was the leading cause of end-stage renal (kidney) failure, accounting for 35 per cent of new kidney failure cases in 2006. Given the usual slow progression of kidney disease, the treatment prevalence for renal failure can be an indication of the effectiveness of chronic disease prevention strategies including healthy living messages and chronic disease management plans.

- Within our region, the renal failure treatment prevalence rate among males is 5.1 per cent, which is twice the provincial rate of 2.5 per cent of residents, and ranks the highest in the province (see Figure 4-37). Although this higher rate is consistent with our increase prevalence of diabetes, it should be interpreted with caution due to small numbers.

- The treatment prevalence rate among Churchill females was suppressed due to small numbers.

Figure 4-37. Renal failure treatment prevalence for males and females aged 20+ by region, 2003/04.

Source: MCHP 2005, Sex Differences in Health Status, Health Care Use, and Quality of Care: A Population-Based Analysis for Manitoba’s Regional Health Authorities.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'm' indicates area's rate for males was statistically different from Manitoba average for males

'f' indicates area's rate for females was statistically different from Manitoba average for females

'd' indicates difference between male and female rates was statistically significant for that area

's' indicates data suppressed due to small numbers
4.5 Cancer

There are many known risk factors for cancer. Some risk factors cannot be modified and they include age, gender and heredity. Lifestyle risk factors can be modified, reducing the risk for cancer. These risk factors include:

- **Smoking**
  Tobacco use is the cause of an estimated 30 per cent of fatal cancers in Canada and the overwhelming cause of lung cancer;

- **Poor diet**
  At least 20 per cent of cancer deaths are linked to a poor diet - including consumption of alcohol. Fruit and vegetable consumption is protective for a variety of cancers, whereas a diet high in red meat, processed meat, and saturated fat has been linked to an increased risk of several cancers;

- **Sunlight**
  Skin cancer is the most commonly occurring cancer. One of the main causes of skin cancer is exposure to the sun's ultraviolet (UV) rays.

- **Alcohol consumption**
  Excessive alcohol consumption is a risk factor for a number of health complications including cancer

4.5.1 Cancer Prevalence

- Between 2000 and 2005 the prevalence rate of cancer among Churchill females increased from 3,669 to 4,011 per 100,000. This rate is slightly higher than the provincial rate of 3,678 in 2005 (see Figure 4-38)

- Among men, the Churchill prevalence rate of cancer increased from 3,720 to 3,867 per 100,000 between 2000 and 2005. This is lower than the provincial rate of 4,811 per 100,000 residents (see Figure 4-38).

- Figures 4-39 and 4-40 show the cancer prevalence rates (the rates of people currently living with cancer) for males and females by region for 2005. While the cancer prevalence rates are just slightly higher among Churchill females than the Manitoba average, Figure 4-40 shows that more than half of the RHAs have higher cancer prevalence rates than Churchill females. Our cancer prevalence rates among males are lower than the provincial average and higher than just two other regions in 2005 (see Figure 4-39). Again, due to small numbers these data should be interpreted with caution.
Figure 4-38. All cancer prevalence 2000-2005.

Source: CancerCare Manitoba

NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 4-39. Male all cancer prevalence by region, 2005.

Source: CancerCare Manitoba

NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 4-40. Female all cancer prevalence by region, 2005.

Source: CancerCare Manitoba

NOTE: Churchill rates should be interpreted with caution due to small numbers
4.5.2 Cancer Survival

- **Figures 4-41 to 4-48** present cancer survival rates over time for all cancers, colorectal cancer, lung cancer, breast cancer and prostate cancer.

- Although Burntwood and Churchill data are combined, we do think that this information is valuable to review and will assist us in planning for the needs of people both living with, and in remission from, cancer.

- Although there has been variation from year to year due to relatively small numbers, overall the cancer survival rate for Burntwood/Churchill females has not changed between 1985-89 and 2000-04 (see **Figure 4-41**). The current survival rate is 54 per cent of females diagnosed with cancer which is lower than the provincial rate of 59 per cent.

- The trend among Churchill and Burntwood men appears to be more stable and **Figure 4-42** shows that there has been a steady increase from 42 per cent to 51 per cent between 1985-89 and 2000-04. Although this increase is positive, our survival rate remains lower than the provincial rate of 58 per cent.

- For colorectal cancer, survival rates have increased for both females (from 56% to 64%) and males (from 44% to 61%), and both are higher than the provincial rates (see **Figures 4-43 and 4-44**).

- **Figures 4-45 and 4-46** present lung cancer survival rates for females and males. Great variability is evident in these rates, so we are hesitant to interpret too much from these trend data. In general it does appear that survival rates are decreasing among Burntwood/Churchill females (from 19% to 10%) but are increasing among males (from 17% to 21%).

- Regardless of the variability in lung cancer survival rates between time periods, an important message to take note of is that survival rates for lung cancer are MUCH LOWER than for many other cancers. Given that many cases of lung cancer are preventable due to choices around exposure to tobacco smoke, and that it is very hard to treat once detected, it will be important for us to continue to focus our efforts on smoking cessation (and encouraging young people not to start).

- Survival rates for both female breast cancer and male prostate cancer appear to be steadily increasing for residents of our region, although both remain lower than the provincial averages (see **Figures 4-47 and 4-48**).
Figure 4-41. Female survival rate for all cancers by year, 1985-89 to 2000-04.

Source: CancerCare Manitoba

Figure 4-42. Male survival rates for all cancers by year, 1985/89 to 2000/04.

Source: CancerCare Manitoba
Figure 4-43. Female colorectal cancer survival rates by year, 1985/89 to 2000/04.

Source: CancerCare Manitoba

Figure 4-44. Male colorectal cancer survival rates by year, 1985/89 to 2000/04.

Source: CancerCare Manitoba
Figure 4-45. Female lung cancer survival rates by year, 1985/89 to 2000/04.

Source: CancerCare Manitoba

Figure 4-46. Male lung cancer survival rates by year, 1985/89 to 2000/04.

Source: CancerCare Manitoba
Figure 4-47. Female breast cancer survival rates by year, 1985/89 to 2000/04.

Figure 4-48. Male prostate cancer survival rates by year, 1985/89 to 2000/04.
4.5.3 Leading Causes of Cancer Deaths

- **Figures 4-49 and 4-50** illustrate the leading types of cancer for those cancer cases that result in deaths. As previously discussed, lung cancer has one of the lowest survival rates of all cancers and this is reflected in our mortality data.

- Among females from Burntwood/Churchill, lung cancer accounts for 28.7 per cent of all cancer deaths that occurred between 2000 and 2005 followed by breast cancer at 14.4 per cent. This is similar to the pattern for the province as a whole, except colorectal cancer deaths are more prevalent than breast cancer deaths (see **Figure 4-49**).

- Among Churchill males, lung cancer was also the leading cause of cancer deaths accounting for almost one out of every three deaths (31.7%) between 2000 and 2005. This is followed by deaths due to prostate cancer at 11.7 per cent. Provincially, we see a similar pattern, except colorectal cancer deaths exceed prostate cancer deaths (see **Figure 4-50**).

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**Figure 4-49.** Female leading five causes of cancer deaths, Burntwood/Churchill and Manitoba, 2000-2005.

Source: CancerCare Manitoba

NOTE: Churchill rates should be interpreted with caution due to small numbers
Figure 4-50. Male leading five causes of cancer deaths, Burntwood/Churchill and Manitoba, 2000-2005.

Source: CancerCare Manitoba

NOTE: Churchill rates should be interpreted with caution due to small numbers
4.6 Injury

Injury is a serious public health issue having a major impact on the lives of Canadians. Injuries are the leading cause of death for children, youth, and young adults, aged 1-24. Injuries rank fourth among the causes of death across all age groups and genders, and are among the leading causes of hospitalization for children, young adults, and seniors. Injuries have a major economic impact in terms of direct costs of treatment, care, and rehabilitation, and indirect costs of lost productivity associated with injury. Injuries have a major economic impact in terms of direct costs of treatment, care, and rehabilitation, and indirect costs of lost productivity associated with injury. Injuries have a major economic impact in terms of direct costs of treatment, care, and rehabilitation, and indirect costs of lost productivity associated with injury. Injury is also a major cause of long and short-term impairment and disability for Canadians.

Injuries can be either intentional or unintentional:

- **Intentional injuries** are either self-directed (such as suicide, or self harm) or directed at others (family violence, child abuse, assault, murder).
- **Unintentional injuries** are just that – unintended, and result from such events as motor vehicle collisions, falls, fires and poisonings.

Injuries are different from other diseases in that they have an immediate onset. This is why, for example, Self-Rated Health cannot be used to predict outcomes such as death – young men may feel that their health is great, but by engaging in risky behavior they can shorten or reduce the quality of their life in an instant. The most important factor with respect to injuries is that they are preventable through safe and appropriate activities and lifestyle choices.

4.6.1 Injury Hospitalization

- Within our region, male injury hospitalization rates increased from 9 per cent to 12 per cent between 1993/99 and 2000/06. These rates are much higher than the provincial rate of 7 per cent in 2000/06, and are among the highest in the province (see Figure 4-51).

- Among Churchill RHA females, the injury hospitalization rate remained the same at 4 per cent between 1993/99 and 2000/06. This is very similar to the provincial rate of 5 per cent in 2000/06 and is among the lowest rates in the province (see Figure 4-52).
Figure 4-51. Male injury hospitalization rates by region, 1993/99 and 2000/06.

Source: Manitoba Health (Health Information Management)
NOTE: Churchill rates should be interpreted with caution due to small numbers

Figure 4-52. Female injury hospitalization rates by region, 1993/99 and 2000/06.

Source: Manitoba Health (Health Information Management)
NOTE: Churchill rates should be interpreted with caution due to small numbers.
4.6.1.1 Causes of Injury Hospitalization

- Falls are by far the leading causes of injury hospitalization for Churchill residents (see Figure 4-53). Hospitalizations due to falls increased slightly from 1,022 per 100,000 residents between 1993 and 1999 to 1,108 per 100,000 between 2000 and 2006.

Figure 4-53. Total causes of injury hospitalizations, Churchill residents, 1993-99 and 2000-06.

- The leading causes of injury hospitalizations are presented in Figures 4-54 for Churchill females and Figure 4-55 for Churchill males. While falls are the leading cause of injury hospitalizations for both males and females, rates have increased among males and are currently higher than among females (where the rate has decreased).

- It is also important to note that injury hospitalization rates for self inflicted injury among Churchill females has increased from 80.5 per 100,000 between 1993 and 1999 to 274.2 per 100,000 between 2000 and 2006. Caution has to be exercised in interpreting this change, though, due to small numbers.
Figure 4-54. Churchill females leading causes of injury hospitalization, 1993-99 and 2000-06.

Source: Manitoba Health (Health Information Management)

Figure 4-55. Churchill males leading causes of injury hospitalization, 1993-99 and 2000-06.

Source: Manitoba Health (Health Information Management)
4.7 Mental Health

Approximately 3.4 million Canadians are affected by depression and anxiety, with more than two-thirds of people opting not to seek help for these mental health conditions given the stigma that still is attached to mental illness. Mental illness can seriously impact on a person’s ability to function effectively over a long period of time. Depending on the illness, a person may have a serious disturbance in thinking, mood or behaviour. Schizophrenia, personality, mood and anxiety disorders, and suicidal behaviour are of particular concern to the health care system due to their high prevalence rates, the considerable impact on people’s health and the social and economic impact. It is important to note that increases in treatment prevalence may be an indicator of improved mental health programs and supports for those suffering with mental illness.

In a 2003 survey conducted by Canadian Mental Health Association, two-thirds of Canadian adults were found to have experienced depression and anxiety or have had a relationship with someone who has. In addition, the 2001/02 Canadian Community Health Survey (CCHS) found that depression was a significant chronic disease with as many Canadians suffering from major depression as from other leading chronic conditions, such as heart disease or diabetes. At that time, four per cent of people interviewed in the survey reported having experienced symptoms or feelings associated with major depression, compared with five per cent with diabetes, five per cent with heart disease and six per cent with a thyroid condition.

As discussed throughout this document, mental health was consistently identified by participants in our community consultation process as a priority area for the region.

The specific mental health conditions reviewed in this section include:

- Cumulative Mental Health Disorder
- Anxiety Disorders
- Depression
- Substance Abuse
- Personality Disorders
- Schizophrenia
4.7.1 Cumulative Mental Health Disorders

"Cumulative Mental Health Disorders" include anxiety disorders, depression, substance abuse, schizophrenia and personality disorders.

- As illustrated by Figure 4-56, the prevalence (number of people living with) of cumulative mental health disorders in Churchill decreased slightly from 23.2 per cent to 21.1 per cent of residents between 1996/97-2000/01 and 2001/02-2005/06. Although this rate is slightly lower than the provincial rate of 24.4 per cent, it still means that approximately one in five residents has been treated for a cumulative mental health disorder.

Figure 4-56. Treatment prevalence for cumulative mental health disorders by region, 1996/97-2000/01 and 2001/02-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

1' indicates area's rate was statistically different from Manitoba average in first time period
2' indicates area's rate was statistically different from Manitoba average in second time period
1' indicates change over time was statistically significant for that area
### 4.7.2 Anxiety Disorders

- Within our region the prevalence rate of anxiety disorders has increased from 2.5 per cent of residents to 3.8 per cent between 1996/97-2000/01 and 2001/02-2005/06. These rates are the lowest in the province and are significantly lower than Manitoba at 7.4 per cent of residents between 2001/02 and 2005/06.

#### Figure 4-57. Treatment prevalence for anxiety disorders by region, 1996/97-2000/01 and 2001/-02-2005/06.

<table>
<thead>
<tr>
<th>Area</th>
<th>1996/97-2000/01</th>
<th>2001/02-2005/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churchill (1,2)</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Burnwood (1,2,4)</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Central (1,2,4)</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Interlake (1,2,4)</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Assiniboine (1,2,4)</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>South Eastman (1,2,4)</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Brandon (2,3)</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Parkland (1)</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>North Eastman (2)</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Winnipeg (1,2,4)</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>NORMAN (1,2)</td>
<td>13%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
- ‘1’ indicates area's rate was statistically different from Manitoba average in first time period
- ‘2’ indicates area's rate was statistically different from Manitoba average in second time period
- ‘t’ indicates change over time was statistically significant for that area
4.7.3 Depression

- Treatment prevalence rates for depression among Churchill residents increased from 9.5 per cent to 13.6 per cent between 1996/97-2000/01 and 2001/02-2005/06. Although this is a statistically significant increase, these rates are significantly lower than the Manitoba average (19.1% in 2001/02-2005/06) and are the lowest in the province.

- Depression was an on-going theme as a key priority area during the community consultation process. Thus, it is somewhat surprising to see that our treatment prevalence rates appear to be low compared to the rest of Manitobans. However, it is important to note that often disorders such as depression and addictions occur together (otherwise known as "Co-Occurring Disorders"), and physicians may be more likely to be providing the diagnostic code for substance abuse (or other additions) as opposed to depression (as there is room for only one diagnostic code when submitting the paperwork for billing to Manitoba Health).

Figure 4-58. Treatment prevalence for depression by region, 1996/97-2000/01 and 2001/-02-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
1' indicates area’s rate was statistically different from Manitoba average in first time period
2' indicates area’s rate was statistically different from Manitoba average in second time period
‘t’ indicates change over time was statistically significant for that area
4.7.4 Substance Abuse

- Although treatment prevalence rates for substance abuse for Churchill residents are among the highest in the province, these rates have decreased significantly over time.

- As Figure 4-59 shows, rates have decreased from 14.0 per cent to 9.0 per cent between 1996/97-2000/01 and 2001/02-2005/06. These rates do remain significantly higher than the provincial average of 4.9 per cent.

Figure 4-59. Treatment prevalence for substance abuse by region, 1996/97-2000/01 and 2001/02-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area
4.7.5 Schizophrenia

- Approximately one in one hundred Churchill residents have been treated for schizophrenia between 1996 and 2006. Figure 4-60 illustrates that our treatment prevalence rate had been the highest in the province at 1.3 per cent of residents between 1996/97-2000/01 but this has decreased to less than one per cent in 2001/02-2005/06. The provincial rate has remained stable at about 1.1 per cent of Manitobans.

- Although schizophrenia is an important mental health issue, these rates account for a relatively small number of residents. As well, our rates appeared to have been higher than the provincial average, but this difference was not statistically significant.

Figure 4-60. Treatment prevalence for schizophrenia by region, 1996/97-2000/01 and 2001/-02-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
1' indicates area's rate was statistically different from Manitoba average in first time period
2' indicates area's rate was statistically different from Manitoba average in second time period
4.7.6 Personality Disorders

- As with schizophrenia, treatment prevalence for personality disorders is also relatively rare (see Figure 4-61).

- Within our region, the treatment prevalence rates have decreased slightly from 1.0 per cent to 0.7 per cent of residents between 1996/97-2000/01 and 2001/02-2005/06. In Manitoba, the treatment prevalence has remained relatively stable at approximately 0.9 per cent of residents (less than one per 100 residents).

Figure 4-61. Treatment prevalence for personality disorder by region, 1996/97-2000/01 and 2001/-02-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area
4.7.7 Seasonal Affective Disorder (SAD)

- Due to the weather and daylight patterns in the north (cold winters and short periods of sun), Season Affective Disorder (SAD) was identified as an area of concern by RHA staff. Data was requested from Manitoba Health about hospitalizations due to SAD. These data are presented in Figure 4-62.

- Rates of hospital admissions for SAD have varied from year to year, but as many as five residents in one year have been ill enough to require admission to hospital. These rates appear to be decreasing but the RHA will continue to monitor this trend, as well as the needs of residents who are suffering from SAD (see Figure 4-62).

Figure 4-62. Number of hospital admission for Seasonal Affective Disorder, 1996/97 to 2006/07.

Source: Manitoba Health (Health Information Management)
4.7.8 Attempted Suicide

- Fortunately, attempted suicides are quite rare among our residents. In Churchill our rate has remained relatively stable at approximately 0.3 per cent of the population in both time periods examined (see Figure 4-63).

- This rate is slightly higher than the provincial rate of 0.2 per cent, but this is not statistically significant and reflects a very small number of events.

Figure 4-63. Attempted suicide rates by region, 1988/89-1995/96 and 1996/97-2003/04.


NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area
4.8 Communicable Diseases

4.8.1 Sexually Transmitted Infections

Sexually Transmitted Infections (STIs) are important disease prevention targets, as Chlamydia, Gonorrhea, and HIV are serious given their complications such as infertility, pelvic inflammatory disease and other serious illness. There have been very few, if any, cases of HIV and Gonorrhea in Churchill RHA residents in recent years so our focus will be Chlamydia.

4.8.1.1 Chlamydia

- Although there have been some peaks in Chlamydia rates among Churchill residents over the last decade, for most years, the rates have been relatively close to provincial rate. Between 1998 and 2008, the rate of new Chlamydia cases increased from 381.3 cases per 100,000 residents to 428.3 per 100,000 (see Figure 4-64).

- While the overall regional rate of Chlamydia infections increased, the rate among males decreased from 538.6 to 426.4 per 100,000. On the other hand, the rate among Churchill females increased substantially from 203.3 to 430.1 per 100,000 (see Figures 4-65 and 4-66).

- Rates among both males and females in our region vary substantially from year to year and it is difficult to determine how much of the change in rates reflect real increases or decreases in actual infections, and how much is related to willingness to be tested for a STI.

Figure 4-64. Total Chlamydia infection rates by year, 1998-2008.

Source: Manitoba Health (Health Information Management), Communicable Disease Control
Figure 4-65. Male Chlamydia infection rates by year, 1998-2008.

Source: Manitoba Health (Health Information Management), Communicable Disease Control

Figure 4-66. Female Chlamydia infection rates by year, 1998-2008.

Source: Manitoba Health (Health Information Management), Communicable Disease Control
In Manitoba, rates of Chlamydia and other STI’s tend to be higher among First Nation as opposed to non-First Nation residents. **Figure 4-67** illustrates the proportion of Chlamydia infections accounted for by First Nations and non-First Nations residents within each RHA for 2008. In the case of Churchill, Chlamydia infections are accounted for equally by aboriginal and non-aboriginal residents.

**Figure 4-67.** Chlamydia cases by First Nation and Non-First Nation status, 2008.

Source: Manitoba Health (Health Information Management), Communicable Disease Control
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xiii Canadian Institute of Health Information, The Cost of Acute Care Hospital Stays by Medical Condition in Canada, 2004-2005, p.40


xv Ibid.


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5.0 Health System Characteristics

We have already reported on the Characteristics of our Region (Chapter 2), the Determinants of Health (Chapter 3), and Health Status (Chapter 4) of residents living in our region. The indicators for this chapter provide an important snapshot of how well the health system is performing with a focus on utilization of our health care resources.

The data below can illustrate how timely services are being provided to residents as well as how integrated and coordinated the health care system is. The interaction between the primary, acute, and long term care systems are analyzed in greater detail in this chapter. These indicators can also provide important health policy and planning information. The data can point to whether adjustments are needed in key areas of health care services such as diagnostics, mental health, primary care or home care. It can help identify those aspects of a region’s health care system that require more resources or more targeted use of existing resources. This chapter also provides some indications of how well a region is doing in its health promotion and prevention initiatives and whether the acute care system is being used less in favour of more community-based health care services.

5.1 The Community Wellness Program and Nunavut Residents

Health services to Nunavut residents account for a significant proportion of clients served by the Churchill RHA. An important program accessed by Nunavut clients is the Community Wellness Program. This program is focused on providing treatment for mental health issues, addictions and co-occurring disorders (a mental health diagnosis as well as an addiction). Clients can attend this program as an inpatient if required (generally only if the client is suicidal), or on an outpatient basis (Nunavut residents have a 35-person capacity boarding home in Churchill). The following data includes both in- and outpatients.

- Figures 5-1 and 5-2 illustrate the level of acceptance and satisfaction with the Community Wellness program as evidenced by increased numbers of clients over the past four years.
Churchill RHA 2009 Community Health Assessment

Figure 5-1. Number of Community Wellness Program client sessions, 2005/06-2008/09.

Source: Churchill RHA.

Figure 5-2. Number of Community Wellness Program client intakes/new referrals, 2005/06-2008/09.

Source: Churchill RHA.
5.2 Utilization

Hospital and physician utilization patterns offer important information about health care service use whether patients are being provided care in the appropriate setting. Physician visits can be an effective way to manage chronic diseases. If there is not sufficient access to physicians, health problems can often become more acute, leading to costly hospitalizations. Because hospitalizations outside our region may cause financial hardship for Churchill residents, we would like to provide as much care at the community level as possible and avoid hospitalizations.

5.2.1 Physician Visit Rates by Cause

- While physician visit rates to address health issues related to the respiratory (lung) and the circulatory system (heart), continue to be the 1st and 2nd leading reasons for visiting a physician in Manitoba, mental illness related visits went from 6th in 2000/01 to 3rd in 2005/06 (see Table 5-1).

- It is notable that while mental illnesses are a major concern among Churchill residents and represent the 2nd highest hospital days (see Table 5-4), it appears relatively few northern residents are visiting their physician for mental illness (see Table 5-1). An explanation for this is that physicians in Churchill are not the gatekeepers for this program and many patients self-refer. No shadow billing is done on self-referrals. Another factor may be that from 2004 until 2008 there were no permanent physicians and local residents may have not had the comfort level with locums to share mental health concerns.

- Table 5-1 illustrates that in the North, reasons for visits to physicians have remained relatively stable with the leading reason being for Respiratory Diseases followed by Injury & Poisoning. These two reasons combined accounted for almost one in four physician visits in the North in both time periods examined. It is important to note that, although common in the North, Injury and Poisoning is not a leading reason for a visit to a physician in Manitoba, and illustrates our increased burden of illness due to injury in the region.
Table 5-1. Physician Visits by Cause, 2000/01 and 2005/06.

<table>
<thead>
<tr>
<th>Cause</th>
<th>2000/01 Per Cent</th>
<th>Cause</th>
<th>2005/06 Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manitoba</td>
<td></td>
<td>North (Burntwood, Churchill and NOR-MAN)</td>
<td></td>
</tr>
<tr>
<td>Respiratory Disease</td>
<td>14.0%</td>
<td>Respiratory Disease</td>
<td>12.1%</td>
</tr>
<tr>
<td>Circulatory Disease</td>
<td>9.1%</td>
<td>Injury &amp; Poisoning</td>
<td>9.0%</td>
</tr>
<tr>
<td>Musculoskeletal Disorders</td>
<td>8.5%</td>
<td>Ill-Defined</td>
<td>8.7%</td>
</tr>
<tr>
<td>Nervous System</td>
<td>8.5%</td>
<td>Musculoskeletal Disorders</td>
<td>8.9%</td>
</tr>
<tr>
<td>Ill-Defined Conditions</td>
<td>8.4%</td>
<td>Ill-Defined Conditions</td>
<td>8.0%</td>
</tr>
<tr>
<td>Mental Illness</td>
<td>8.2%</td>
<td>Health Status &amp; Contact</td>
<td>8.0%</td>
</tr>
<tr>
<td>Health Status &amp; Contact</td>
<td>7.3%</td>
<td>Nervous System</td>
<td>7.7%</td>
</tr>
<tr>
<td>Injury &amp; Poisoning</td>
<td>6.4%</td>
<td>Endocrine &amp; Metabolism</td>
<td>6.0%</td>
</tr>
<tr>
<td>Genitourinary &amp; Breast</td>
<td>6.2%</td>
<td>Injury &amp; Poisoning</td>
<td>5.8%</td>
</tr>
<tr>
<td>Disorders of Skin</td>
<td>5.3%</td>
<td>Genitourinary &amp; Breast</td>
<td>5.7%</td>
</tr>
<tr>
<td>Other</td>
<td>18.2%</td>
<td>Other</td>
<td>19.0%</td>
</tr>
</tbody>
</table>

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
5.2.2 Physician Visits for Mental Illness

- Figures 5-3 and 5-4 illustrate average annual physician visit rates for mental illness specifically between 2003/04 and 2007/08 for females (1137.8 visits per 1,000 residents) and males (785.1 visits per 1,000 residents).

- As illustrated in the preceding summary table, our region was combined with Burntwood and NOR-MAN, physician visit rates for both females and males from Churchill are very low compared to the rest of the province. In fact, for both females and males our physician visit rate is the lowest in Manitoba.

- It is unclear as to whether these low rates of physician visits are due to lack of physician resources and availability, coding for patient visits or lack of willingness by Churchill residents to seek help from a locum physician for mental health needs.


Source: Manitoba Health Healthy Living, Health Information Management, special data run, 2009.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

Source: Manitoba Health Healthy Living, Health Information Management, special data run, 2009.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
5.2.3 Total Hospital Separation Rates

Hospital separation rates are an important indicator to determine the availability of hospital beds, and the effectiveness of the hospital in moving patients through the health care system. Separation rates are also an indicator of the degree to which illness is influencing discharges. For example, long stays may be an indicator of sicker patients. It may also be the result of an inability, for example, of a hospital to move long-term patients into Personal Care Homes. The general trend has been for the number of separations to decline as the health care system moves to managing illness and disease in a primary care setting rather than in a hospital.

- As Figure 5-5 shows, in 2007/08, 48.5 per cent of hospitalizations for Churchill residents occurred in Churchill, and the remaining 51.5 per cent required admission to a facility outside of Churchill.

- The Winnipeg RHA accounted for more than one in three hospital separations for Churchill residents followed by other Manitoba RHAs at 13.1 per cent (see Figure 5-5).

Figure 5-5. Proportion of hospital separations by facility, 2007/08.

Within our region, total hospital separation rates have decreased from 269.0 to 189.1 per 1,000 between 2000/01 and 2005/06. However, our rate remains significantly higher than the Manitoba average of 136.7 per 1,000 in 2005/06 (see Figure 5-6).
Figure 5-6. Total hospital separation rates by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
'1' indicates area's rate was statistically different from Manitoba average in first time period.
'2' indicates area's rate was statistically different from Manitoba average in second time period.
't' indicates change over time was statistically significant for that area.
5.2.3.1 Hospital Episode Rates for Children

Hospital episode rates for children are an important indicator of the effectiveness of injury prevention strategies aimed at children. While Churchill has experienced a reduction in child hospital episode rates, it appears that further health promotion and prevention efforts are needed to align the rate closer to the provincial average.

- Hospital episode rates for Churchill children aged 0-19 decreased from 98.4 to 60.4 per 1,000 children between 2000/01 and 2005/06. This rate remains higher than the Manitoba average of 37.8 per 1,000 in 2005/06 (see Figure 5-7).

Figure 5-7. Hospital episode rates for children aged 0-19 by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
'1' indicates area's rate was statistically different from Manitoba average in first time period
'2' indicates area's rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
5.2.4 Hospital Separation Rates by Cause

Hospital separation data for 2007/08 for Churchill residents show that pregnancy and childbirth is the leading cause for hospital separation (see Table 5-2). This is particularly important for Churchill as women must leave the community two to three weeks prior to giving birth for care. This puts enormous strains on the mother and family with respect to finding care for her other children, arranging employment leave, as well as the psychological stress of being isolated and away from usual social supports. This was identified as a key concern for women in Churchill during our community consultation process as well as through the Women's Health Strategy consultation.

Table 5-2. Hospital separations by diagnostic classification, 2007/08.

<table>
<thead>
<tr>
<th>Diagnostic Classification</th>
<th>Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy, childbirth &amp; puerperal (O00-O99)</td>
<td>19</td>
<td>14.6%</td>
</tr>
<tr>
<td>Disorders of the digestive system (K00-K93)</td>
<td>16</td>
<td>12.3%</td>
</tr>
<tr>
<td>Disorders of the genitourinary system (N00-N99)</td>
<td>12</td>
<td>9.2%</td>
</tr>
<tr>
<td>Disorders of musculoskeletal system &amp; connective tissue (M00-M99)</td>
<td>11</td>
<td>8.5%</td>
</tr>
<tr>
<td>Symptoms signs &amp; abnormal clinical /lab findings (R00-R99)</td>
<td>11</td>
<td>8.5%</td>
</tr>
<tr>
<td>Injury, poisoning &amp; other external causes (S00-T98)</td>
<td>11</td>
<td>8.5%</td>
</tr>
<tr>
<td>Mental &amp; behavioral disorders (F00-F99)</td>
<td>10</td>
<td>7.7%</td>
</tr>
<tr>
<td>Endocrine, nutritional &amp; metabolic disorders (E00-E90)</td>
<td>7</td>
<td>5.4%</td>
</tr>
<tr>
<td>Diseases of the respiratory system (J00-J99)</td>
<td>7</td>
<td>5.4%</td>
</tr>
<tr>
<td>Factors influencing health status &amp; service use (Z00-Z99)</td>
<td>6</td>
<td>4.6%</td>
</tr>
<tr>
<td>Diseases of the circulatory system (I00-I99)</td>
<td>6</td>
<td>4.6%</td>
</tr>
<tr>
<td>Diseases of the skin &amp; subcutaneous tissue (L00-L99)</td>
<td>5</td>
<td>3.8%</td>
</tr>
<tr>
<td>Other (cases&lt;5)</td>
<td>9</td>
<td>6.9%</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Manitoba Health Healthy Living, Health Information Management, 2008 Hospital Report.
• Although just over 48 per cent of all Churchill inpatients were able to remain in Churchill in 2007/08, this was not the case for patients who required interventions. 98.1 per cent of hospital separations which required interventions (such as childbirth and surgery) were outside of Churchill, and just 1.9 per cent were inpatients at the Churchill hospital.

• As would be expected, given that the leading reason for hospitalization among Churchill residents is pregnancy and childbirth, the leading type of procedure (intervention) for Churchill inpatients is "Obstetrical and Fetal Interventions", accounting for 36.5 per cent of all inpatient interventions (see Table 5-3). Interventions on the Musculoskeletal System accounted for the second highest number of interventions for inpatients at 19.2 per cent.

Table 5-3. Hospital separations by procedure classification, 2007/08.

<table>
<thead>
<tr>
<th>Procedure Classification</th>
<th>Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstetrical and Fetal Interventions</td>
<td>19</td>
<td>36.5%</td>
</tr>
<tr>
<td>Interventions on the Musculoskeletal System</td>
<td>10</td>
<td>19.2%</td>
</tr>
<tr>
<td>Interventions on the Digestive and Hepatobiliary Tracts and Other Sites within</td>
<td>8</td>
<td>15.4%</td>
</tr>
<tr>
<td>Interventions on the Cardiovascular System</td>
<td>3</td>
<td>5.8%</td>
</tr>
<tr>
<td>Interventions Male Genital Organs</td>
<td>3</td>
<td>5.8%</td>
</tr>
<tr>
<td>Interventions on the Skin, Subcutaneous Tissue and Breast</td>
<td>3</td>
<td>5.8%</td>
</tr>
<tr>
<td>Interventions Female Genital Organs</td>
<td>2</td>
<td>3.8%</td>
</tr>
<tr>
<td>Interventions on the Nervous System</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Interventions on the Eye and Ocular Adnexa</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Interventions on the Respiratory System</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Interventions on the Urinary System</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Manitoba Health Healthy Living, Health Information Management, 2008 Hospital Report.
5.2.4.1 Hospital Separation Rates for Mental Illness

Due to the importance of this topic among staff and community members of Churchill RHA, we now look specifically at hospital separation rates for mental illness.

- Hospital separation rates for mental illness for both males and females are very high when compared to rates in other Regional Health Authorities (RHAs). In fact Figures 5-8 and 5-9 illustrate that our rates of hospitalization due to mental illness are the highest in Manitoba among both females (93.4 hospitalizations per 1,000) and males (87.6 hospitalizations per 1,000).

- These data help to confirm the observations of Churchill residents who participated in our community consultations - that mental health promotion must be a key priority for the RHA. This includes the development and sustainability of both acute care services at the hospital, as well as community level supports for residents living with mental illness.

Figure 5-8. Hospital separation rate for females with mental illness, 2003/2004-2007/2008.

Source: Manitoba Health Healthy Living, Health Information Management, special data run, 2009.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 5-9. Hospital separation rate for males with mental illness, 2003/2004-2007/2008.

Source: Manitoba Health Healthy Living, Health Information Management, special data run, 2009.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
5.2.5 Total Hospital Days Used

Diseases of the digestive system such as Crohn`s disease and Irritable Bowel Syndrome required the highest number of days in hospital for Churchill residents. While other diseases such as cancer and heart disease generally receive more attention and resources in Canada, digestive system diseases need more attention in Churchill in order that these conditions can be better managed in the community without hospitalization.

- In 2007/2008, Churchill residents spent a total of 644 days in hospital. Just over one half of these days (53.4%) were spent in the Churchill facility while the remaining 46.6 per cent of hospital days were spent at facilities outside of our region.

- While the hospital days associated with child birth does not appear to be very high (see Table 5-4), this is misleading. As was noted in the hospital separation rates section, expectant mothers need to leave Churchill 2 - 3 weeks prior to birth leading to significant family dislocation along with psychological and economic stress. This stress on new mothers and their families generated a great deal of focus group discussion.

- In 2007/08 residents spent 89 days in hospital for treatment of mental and behavioural disorders, (accounting for the 2nd leading number of hospital days) (see Table 5-4). This is an important finding because while mental and behaviour disorders ranked 7th in hospital separations looking at number of individuals, it was ranked 2nd by number of hospital days. This illustrates the severity of mental illnesses and that patients can often require extensive hospital stays. More mental health prevention and treatment strategies will be needed to attempt to prevent lengthy hospital stays.

- For procedures specifically, Churchill residents spent 230 days in hospital in 2007/08. Table 5-5 illustrates that childbirth and Obstetrical and Fetal interventions accounted for 25.2 per cent of all days spent in hospital for interventions. This is followed by Interventions on the Musculoskeletal System accounting for 24.3 per cent of days in hospital.
Table 5-4. Hospital separation days by diagnostic classification, 2007/08.

<table>
<thead>
<tr>
<th>Diagnostic Classification</th>
<th>Days</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disorders of the digestive system (K00-K93)</td>
<td>118</td>
<td>18.3%</td>
</tr>
<tr>
<td>Mental &amp; behavioral disorders (F00-F99)</td>
<td>89</td>
<td>13.8%</td>
</tr>
<tr>
<td>Disorders of musculoskeletal system &amp; connective tissue (M00-M99)</td>
<td>69</td>
<td>10.7%</td>
</tr>
<tr>
<td>Disorders of the genitourinary sys (N00-N99)</td>
<td>62</td>
<td>9.6%</td>
</tr>
<tr>
<td>Pregnancy, childbirth &amp; puerperal (O00-O99)</td>
<td>56</td>
<td>8.7%</td>
</tr>
<tr>
<td>Endocrine, nutritional &amp; metabolic disorders (E00-E90)</td>
<td>46</td>
<td>7.1%</td>
</tr>
<tr>
<td>Factors influencing health status &amp; service use (Z00-Z99)</td>
<td>39</td>
<td>6.1%</td>
</tr>
<tr>
<td>Disorders of the respiratory system (J00-J99)</td>
<td>36</td>
<td>5.6%</td>
</tr>
<tr>
<td>Symptoms signs &amp; abnormal clinical/lab findings (R00-R99)</td>
<td>34</td>
<td>5.3%</td>
</tr>
<tr>
<td>Injury, poisoning &amp; other external causes (S00-T98)</td>
<td>34</td>
<td>5.3%</td>
</tr>
<tr>
<td>Cancer (C00-D48)</td>
<td>20</td>
<td>3.1%</td>
</tr>
<tr>
<td>Diseases of the circulatory system (I00-I99)</td>
<td>14</td>
<td>2.2%</td>
</tr>
<tr>
<td>Other (accounting for less than 10 hospital days)</td>
<td>27</td>
<td>4.2%</td>
</tr>
<tr>
<td>Total</td>
<td>644</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Manitoba Health Healthy Living, Health Information Management, 2008 Hospital Report.
NOTE: Churchill rates should be interpreted with caution due to small numbers.

Table 5-5. Hospital separation days by procedure classification, 2007/08.

<table>
<thead>
<tr>
<th>Procedure Classification</th>
<th>Days</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstetrical and Fetal Interventions</td>
<td>58</td>
<td>25.2%</td>
</tr>
<tr>
<td>Interventions on the Musculoskeletal System</td>
<td>56</td>
<td>24.3%</td>
</tr>
<tr>
<td>Interventions on the Digestive and Hepatobiliary Tracts and Other Sites within</td>
<td>56</td>
<td>24.3%</td>
</tr>
<tr>
<td>Interventions on the Cardiovascular System</td>
<td>18</td>
<td>7.8%</td>
</tr>
<tr>
<td>Interventions Male Genital Organs</td>
<td>16</td>
<td>7.0%</td>
</tr>
<tr>
<td>Interventions Female Genital Organs</td>
<td>8</td>
<td>3.5%</td>
</tr>
<tr>
<td>Interventions on the Skin, Subcutaneous Tissue and Breast</td>
<td>8</td>
<td>3.5%</td>
</tr>
<tr>
<td>Interventions on the Nervous System</td>
<td>5</td>
<td>2.2%</td>
</tr>
<tr>
<td>Interventions on the Respiratory System</td>
<td>2</td>
<td>0.9%</td>
</tr>
<tr>
<td>Interventions on the Urinary System</td>
<td>2</td>
<td>0.9%</td>
</tr>
<tr>
<td>Interventions on the Eye and Ocular Adnexa</td>
<td>1</td>
<td>0.4%</td>
</tr>
<tr>
<td>Total</td>
<td>230</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Manitoba Health Healthy Living, Health Information Management, 2008 Hospital Report.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
5.2.6 Hospital Separation Rates for Short Stays and Long Stays

Hospital separations of less than 14 days are defined as short stays, while hospital separations of greater than 14 days are considered long stays. Churchill saw a slight decrease in short stay rates, and a significant drop in long stays. This is an indicator of more efficient use of hospital resources, as conscious efforts are being made to move patients to more appropriate settings in the community.

- Hospital "short stays" rates in Churchill decreased from 646.3 to 521.2 per 1,000 between 2000/01 and 2005/06. However, our rate remains significantly higher than the Manitoba average of 321.6 in 2005/06 (see Figure 5-10).

- Hospital "long stays" rates in Churchill decreased from 2939.2 to 484.2 per 1,000 between 2000/01 and 2005/06. This was a statistically significant decrease, and our rate is now lower than the provincial average of 608.3 in 2005/06 (see Figure 5-11). However, because we deal with small numbers of events, we will continue to monitor our data to determine if this trend continues or if it was an anomaly in this time period.

Figure 5-10. Hospitalization rates for short stays by region, 2000/01 and 2005/06.
Figure 5-11. Hospitalization rates for long stays by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area
5.2.7 High Profile Procedures

The following are high profile procedures which are monitored as a key indicator of utilization of important diagnostic procedures such as MRI (Magnetic Resonance Imaging) and CT (Computed Tomography) scans, and surgical procedures such as cardiac (heart) and orthopaedic (hip and knee) surgeries. With the increased focus on wait times and strategies to reduce wait times and improve access, it is important to monitor progress in this area and whether the health care system is making the necessary adjustments to improve access to key procedures.

Increases in procedures rates may give rise to issues over appropriateness and whether increases in utilization necessarily mean better patient outcomes. Indicators of appropriateness can be difficult to interpret. There are some cases where an increase in surgery rates, such as for hip and knee replacement, may indicate availability of services. In other cases, such as with cataract surgery, utilization rates may reflect inappropriate use of the procedure.

- It should be noted that indicators for cardiac procedures like angioplasty, coronary stent insertion and percutaneous coronary intervention rates could not be produced for Churchill, as the numbers were suppressed due to small numbers.
5.2.7.1 Cataract Surgery

Cataract surgery is the replacement of the eye lens with an artificial one. It is a key procedure in improving vision.

- Cataract surgery rates in Churchill increased from 32.4 to 45.7 per 1,000 between 1998/99-2000/01 and 2003/04-2005/06, which is higher than the Manitoba average of 26.9 per 1,000 in 2003/04-2005/06 (see Figure 5-12) but not significantly different.

- The key risk factor for developing cataracts is exposure to the sun (ultraviolet rays), and this is common with some Churchill residents who spend extensive periods of time on the land hunting and fishing. As well, having diabetes, and being a smoker are also risk factors. We know, at least, that we have an increasing prevalence of diabetes and smoking, which might account for the larger number of our residents undergoing cataract surgery.

Figure 5-12. Cataract surgery rates by region, 1998/99-2000/01 and 2003/04-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
'1' indicates area's rate was statistically different from Manitoba average in first time period
'2' indicates area's rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
5.2.7.2 Knee Replacement Surgery

Knee replacement surgery is often needed for older patients whose joints are damaged due to arthritis. Knee replacement is also becoming increasingly necessary for obese patients.

- Knee replacement surgery rates were suppressed in the first time period due to small numbers but were 5.0 per 1,000 residents between 1996/97-2000/01 and 2001/02-2005/06. This appears to be higher than the Manitoba average of 2.8 per 1,000 in 2001/02-2005/06 (see Figure 5-13). These data appear to agree with the data previously presented, suggesting that Interventions to the Musculoskeletal System are among the leading reasons for hospitalization of Churchill residents.

Figure 5-13. Knee replacement surgery rates by region, 1996/97-2000/01 and 2001/02-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
‘1’ indicates area’s rate was statistically different from Manitoba average in first time period
‘2’ indicates area’s rate was statistically different from Manitoba average in second time period
‘t’ indicates change over time was statistically significant for that area
‘s’ indicates data suppressed due to small numbers.
### 5.2.7.3 Cardiac Catheterization

Cardiac catheterization is an imaging procedure which allows physicians to evaluate how well the heart is functioning. This procedure can improve cardiac patients’ outcomes and survival rates.

- The Cardiac Catheterization rate for Churchill residents between 1998/99 to 2000/01 was 10.1 per 1,000, which appear to be much higher than the Manitoba average of 6.9 per 1,000 (see Figure 5-14). However, these procedures are not done on a large number of individuals in our region, and our rate is based on these small numbers.

- For the more recent time period of 2003/04 to 2005/06 due to small numbers, Churchill data were suppressed due to small numbers. The Manitoba average of 6.9 per 1,000 remained unchanged from the previous period.

**Figure 5-14. Cardiac catheterization rates by region, 1998/99-2000/01 and 2003/04-2005/06.**

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

**NOTE:** Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area’s rate was statistically different from Manitoba average in first time period

'2' indicates area’s rate was statistically different from Manitoba average in second time period

's' indicates data suppressed due to small numbers.
### 5.2.7.4 Magnetic Resonance Imaging (MRI) Scans

MRIs are becoming an increasingly important diagnostic tool for the health system. Manitoba has been challenged in providing timely access to MRIs, so it is important to continue to monitor the MRI scan rates to see if the health system is responding adequately to the increasing demand for MRIs.

- MRI scan rates among Churchill residents increased from 13.9 to 17.7 per 1,000 between 2001/02-2002/03 and 2004/05-2005/06 (see Figure 5-15). However, our rate is lower than the provincial rate of 22.0 per 1,000 in the most recent time period.

![Figure 5-15. MRI scan rates by region, 2001/02-2002/03 and 2004/05-2005/06.](source)

**Source:** Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

**NOTE:** Churchill rates should be interpreted with caution due to small numbers.

- '1' indicates area's rate was statistically different from Manitoba average in first time period
- '2' indicates area's rate was statistically different from Manitoba average in second time period
- 't' indicates change over time was statistically significant for that area
5.2.7.5 Computed Tomography (CT) Scans

As with MRIs, CT scans are a key diagnostic procedure which have grown in volume considerably over recent years. It is important to monitor scan rates to ensure that Manitoba is able to meet rising demand in a timely manner for patients.

- The CT scan rate in Churchill significantly increased from 40.6 to 58.3 per 1000 between 1998/99-2000/01 and 2003/04-2005/06 but remained lower than the Manitoba average of 66.1 per 1,000 in this period (see Figure 5-16).

Figure 5-16. CT scan rates by region, 1998/99-2000/01 and 2003/04-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area’s rate was statistically different from Manitoba average in first time period

'2' indicates area’s rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area
5.2.8 Home Care

Home care is a critical health care service in Canada as it provides a wide range of health and supportive services which assist individuals with health-related problems to remain in their own homes. Home care can reduce the use of hospital services by preventing hospital admissions, as well as decreasing the length of hospital stays by providing post-acute care services.

5.2.8.1 New Home Care Cases (Incidence)

Home care rates are an important indicator of the home care system’s ability to accommodate new clients, avoiding the need for hospitalization.

- New home care case incidence in Churchill increased from 2.26 per cent to 2.30 per cent between 1999/00-2000/01 and 2003/04-2004/05, which is higher than the Manitoba average of 1.38 per cent in 2003/04-2004/05 and ranks the highest in the province (see Figure 5-17).

Figure 5-17. New home care case rates by region, 1999/00-2000/01 and 2003/04-2004/05.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area’s rate was statistically different from Manitoba average in first time period

'2' indicates area’s rate was statistically different from Manitoba average in second time period

‘t’ indicates change over time was statistically significant for that area
5.2.8.2 Home Care Open Cases (Prevalence)

The number of open home care cases is a key measure for the region in planning for the demands that home care places on the health care system.

- Open home care case rates (that is, the number of residents receiving home care at a given time) in Churchill increased from 5.45 per cent to 6.45 per cent of residents between 1999/00-2000/01 and 2003/04-2004/05. This is significantly higher than the Manitoba average of 3.19 per cent in 2003/04-2004/05, and ranks the highest in the province (see Figure 5-18).

Figure 5-18. Home care open case rates by region, 1999/00-2000/01 and 2003/04-2004/05.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: '1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area
5.2.8.3 Home Care Closing Case Rates

Home care closing rates are also an important tool in determining the appropriate amount of resources needed to adequately meet the demand for home care services in a region.

- Closing home care case rates in Churchill decreased very slightly from 2.78 per cent to 2.61 per cent of residents between 1999/00-2000/01 and 2003/04-2004/05. As with open cases, this rate is significantly higher than Manitoba average of 1.47 per cent in 2003/04-2004/05 and ranks the highest in the province (see Figure 5-19).

Figure 5-19. Home care closing case rates by region, 1999/00-2000/01 and 2003/04-2004/05.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: '1' indicates area’s rate was statistically different from Manitoba average in first time period
'2' indicates area’s rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
5.2.8.4 Average Length of Home Care Cases

The average length of home care cases can indicate the level and extent of home care needs for clients in the region. A reduction in the average length may indicate that there are other non-home care resources that are being utilized to keep clients living independently.

- The average length of home care cases in Churchill increased from 247.5 to 267.9 days between 1999/00-2000/01 and 2003/04-2004/05, which is higher than the Manitoba average of 222.0 days in 2003/04-2004/05 (see Figure 5-20). That is, not only do we serve proportionally more residents, but we are providing services for longer periods of time than is provided on average throughout Manitoba.

Figure 5-20. Average length (days) of home care cases by region, 1999/00-2000/01 and 2003/04-2004/05.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
'1' indicates area’s rate was statistically different from Manitoba average in first time period
'2' indicates area’s rate was statistically different from Manitoba average in second time period
5.2.8.5 Home Care Days Used

Home care days used measure the average annual number of days Home Care cases were open in the program over an approximate two year period. This is another indicator of the extent of home care needs that a client may have.

- Home care days used for females in Churchill was 224.6 days per year in 2003/04, which was higher than the Manitoba average of 215.7 days (see Figure 5-21).

- Home care days used for males in Churchill was 237.0 days per year in 2003/04, which again was higher than the Manitoba average of 193.0 days (see Figure 5-21).

**Figure 5-21. Number of home care days used per year for females and males by region, 2003/04.**

Source: MCHP 2005, Sex Differences in Health Status, Health Care Use, and Quality of Care: A Population-Based Analysis for Manitoba’s Regional Health Authorities.

**NOTE:** Churchill rates should be interpreted with caution due to small numbers.

- ‘m’ indicates area’s rate for males was statistically different from Manitoba average for males
- ‘f’ indicates area’s rate for females was statistically different from Manitoba average for females
- ‘d’ indicates difference between male and female rates was statistically significant for that area
5.2.9 Personal Care Home (PCH) Utilization

There are no Personal Care Homes in Churchill, thus there are no admissions and no wait times. Although we have seven Long Term Care beds in our acute care ward, we are not designated as a Personal Care Home. Some residents of our region who require assisted living do leave the region and are admitted to assisted living facilities in other regions.

Rates of residents age 75 and older who are in Personal Care Homes can provide insight on the level of health care needs for elderly population in a region. While Churchill has a relatively low percentage of residents who are over 75 years old compared to the rest of Manitoba, it appears that the health care needs for this population is very high, given the high proportion in Churchill who are in long term care beds.

- The rate of Churchill residents who are 75 years of age and older in long term care beds increased from 32.7 per cent to 34.4 per cent between 1999/00-2000/01 and 2004/05-2005/06. This is significantly higher than the Manitoba average of 12.7 per cent in 2004/05-2005/06, and ranks highest in the province (see Figure 5-22).

![Figure 5-22. Rate of residents 75 years and older in personal care homes by region, 1999/00-2000/01 and 2004/05-2005/06.](image-url)

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area’s rate was statistically different from Manitoba average in first time period

'2' indicates area’s rate was statistically different from Manitoba average in second time period

'T' indicates change over time was statistically significant for that area
5.3 Fiscal Profile

Fiscal indicators are a very real indicator of a regions' commitment to meet priority areas and to allocate resources to the most urgent health care challenges. While Churchill has begun to slowly shift its resources to health prevention and promotion, a significant percentage of resources are still allocated to acute care.

5.3.1 Ratio between Acute Care and Community Costs

With the growing emphasis on healthy living strategies to improve the health status of residents, it is important to track the relative ratio of spending on acute care versus community-based health care. If there is a change in the ratio more towards community costs, it is tangible evidence of a region that is embracing the importance of primary care and health prevention and promotion strategies, rather than more traditional notions of health care being the provision of acute care services.

- **Figure 5-23** presents the ratio of acute care costs by region for 2007/08. While the ratio of acute care costs appears to be very high in Churchill, and ranks the highest in the province. It should be noted that we have seven long term care beds that are captured as an acute care cost. That said, the percentage of the budget devoted to community costs increased only slightly from 2002/03 to 2007/08. A more substantial shift in resources to meet priority prevention strategies may be needed in future years.

- Although the ratio appears high, the ratio of acute care costs in Churchill decreased from 80 per cent to 77 per cent between 2002/03 and 2007/08 but higher than the Manitoba average of 51 per cent in 2007/08 (see **Figure 5-24**).

- **Figure 5-25** illustrates that the ratio of community care costs were the lowest in the province at 10 per cent in 2007/08. However, as **Figure 5-26** demonstrates the ratio of community care costs have increased from 8 per cent to 10 per cent between 2002/03 and 2007/08, lower than Manitoba at 15 per cent in 2007/08.
Figure 5-23. Ratio of acute care costs by region, 2007/08.

Source: Manitoba Health, Management Information System.

Figure 5-24. Ratio of acute care costs, Churchill and Manitoba, 2002/03-2007/08.

Source: Manitoba Health, Management Information System.
Figure 5-25. Ratio of community costs by region, 2007/08.

Source: Manitoba Health, Management Information System.

Figure 5-26. Ratio of community costs Churchill and Manitoba, 2002/03-2007/08.

Source: Manitoba Health, Management Information System.
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6.0 Health System Performance

Regional Health Authorities are responsible for hospitals, continuing care facilities, community health services and public health programs. They deliver health services in the regions and work with communities to deliver health services to local residents. Although the availability and use of health services are not the only determinants of good health, they are very important factors to consider. Appropriate utilization of physicians or other health professionals can assist in diagnosing diseases before they become serious, helping with management of chronic conditions and maintaining positive mental health.

We have already reported on the characteristics of our Region (Chapter 2), the Determinants of Health (Chapter 3) and Health Status (Chapter 4) of residents living in our region, as well as the characteristics of our Health Care System (Chapter 5).

In this chapter we will focus on performance with an emphasis on reporting on the availability and use of health care professionals as well as quality of health care services. We will provide information about several quality dimensions of health services. These quality dimensions are defined in Table 6-1.

<table>
<thead>
<tr>
<th>Quality Dimension</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>Health services are obtained in the most suitable setting in a reasonable time and distance.</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Health services are provided based on scientific knowledge to achieve desired outcomes.</td>
</tr>
<tr>
<td>Continuity</td>
<td>Patients are provided with an opportunity for continuity of care with the same physician over a period of time.</td>
</tr>
<tr>
<td>Safety</td>
<td>Mitigate risks to avoid unintended or harmful results.</td>
</tr>
</tbody>
</table>

Source: Canadian Institute for Health Information
6.1 Accessibility

One of the five principles of the Canada Health Act is Accessibility. This means that Canadians should have reasonable access to medically necessary hospital and physician services and that this must not be impeded by financial or other barriers. Accessibility is also seen as the ability of patients to obtain health care services at the right place and the right time, based on need.

We review the principle of accessibility by looking at the availability of physicians and contact with health professionals, as well as availability of local acute care services. It should be noted that many organizations deem screening rates (such as mammography and pap tests) to be considered when measuring accessibility. However, the other school of thought is that screening represents a personal health practice and, as such, is a determinant of health. In this report, screening is addressed in the Determinants of Health Chapter (Chapter 3). We consider availability, and use of, health care professionals and acute care to be key indicators of Accessibility and focus on this area.

Access to health care in Canada can have cultural barriers. A Canadian study on immigrant women’s health showed that while immigrant women generally view health and prevention in similar ways to Canadian-born women, they had less access to the health care system and its resources, which they needed to stay healthy. The reasons for this reduced access include: language barriers for those whom French or English is not their first language, a lack of cultural sensitivity among health-care providers, and work-life barriers in which women lack the time to access health care as they work long hours in low-paying jobs, while often trying to care for young children. Immigrants often lack the social supports necessary for healthy living which leads to stress and reduced mental health status.

Access to health care is also an issue for Aboriginal people who live off-reserve, as they are less likely than the overall population (77% compared to 79%) to regularly visit a physician, and more likely to report having unmet health care needs (20% compared to 13%).

In the recent NAHO (National Aboriginal Health Organization) survey, 12.9 per cent of the respondents indicated that one or more of their home care service needs are not being met (NAHO 2004e). More than one-third of respondents (35.9%) believed that they had less access to health care services, in comparison to their Canadian counterparts.
6.1.1 Regular Medical Doctor

Access to primary care services is of significant concern to a region, particularly as we move to a system that emphasizes health prevention and promotion strategies with less reliance on acute care services. If residents do not have regular access to the services of a General Practitioner for their primary care needs, it may result in greater reliance on Emergency Room and acute care services.

Physician to population ratios are used to support health human resource planning. However, the Canadian Institute for Health Information (CIHI) cautions against using total numbers of physicians or ratios alone to determine whether a region has adequate provider resources. This is because there are a number of factors that influence whether the supply of physicians is appropriate. CIHI identifies the following factors:

- distribution and location of physicians within a region or province;
- physician type (i.e., family medicine physicians versus specialists);
- level of service provided (full-time versus part-time);
- physician age and gender;
- population's access to hospitals, health care facilities, technology and other types of health care providers;
- population needs (consider demographic characteristics and health problems);
- and,
- society's perceptions and expectations.iv

Within our region, 41.1 per cent of Burntwood/Churchill residents (compared to 84.9% of Manitobans) indicate that they have a "regular medical doctor". This is not surprising for our community as Churchill routinely uses locum services to ensure ongoing access to physician services (see Figure 6-1).

It is important to note that in our community consultation process, for the most part, Churchill residents indicated that they were very satisfied with their access to medical services, including access to physicians. Participants did note that they did not always get to see the same physician, and that the lack of a relationship with a long term doctor was sometimes a concern (such as the need to repeat medical history for a new doctor), but they did not indicate that there was a lack of access to a physician when needed.

Table 6-2 illustrates that in comparison to other rural and northern RHAs, Churchill RHA has the best ratio of family physicians to residents. Our ratio (not including locums) of one family physician per 1,000 residents is much better than ratios in other northern regions, such as Burntwood at one family physician for every 3,600 residents.
Figure 6-1. Residents who have a regular medical doctor by region, 2007.

Source: Canadian Community Health Survey, 2007.
Table 6-2. Estimated family physician-population ratio in rural and northern Manitoba Regional Health Authorities, 2008.

<table>
<thead>
<tr>
<th>Region</th>
<th>Family Physician FTEs*</th>
<th>Population June 2008¶</th>
<th>Estimated Family Physician-Population Ratio†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assiniboine</td>
<td>55</td>
<td>67,819</td>
<td>1:1,200</td>
</tr>
<tr>
<td>Brandon</td>
<td>38</td>
<td>50,541</td>
<td>1:1,300</td>
</tr>
<tr>
<td>Burntwood</td>
<td>13</td>
<td>46,818</td>
<td>1:3,600</td>
</tr>
<tr>
<td>Central</td>
<td>67.5</td>
<td>104,689</td>
<td>1:1,500</td>
</tr>
<tr>
<td>Interlake</td>
<td>37.5</td>
<td>77,590</td>
<td>1:2,000</td>
</tr>
<tr>
<td>NOR-MAN</td>
<td>20.6</td>
<td>24,090</td>
<td>1:1,200</td>
</tr>
<tr>
<td>North Eastman</td>
<td>24.5</td>
<td>40,994</td>
<td>1:1,700</td>
</tr>
<tr>
<td>Parkland</td>
<td>37</td>
<td>41,569</td>
<td>1:1,100</td>
</tr>
<tr>
<td>South Eastman</td>
<td>38.5</td>
<td>65,383</td>
<td>1:1,700</td>
</tr>
<tr>
<td>Churchill</td>
<td>1</td>
<td>934</td>
<td>1:1,000</td>
</tr>
<tr>
<td><strong>Rural and Northern Manitoba</strong></td>
<td><strong>332.6</strong></td>
<td><strong>520,427</strong></td>
<td><strong>1:1,600</strong></td>
</tr>
</tbody>
</table>

Source: Churchill RHA.

NOTE: * Current as per RHA information March 2009; FTE is “full time equivalent” so a 0.5 FTE would be equivalent to “half time”.
¶ Manitoba Population Report June 2008, MHHL.
† Rounded figures.
6.1.2 Contact with Medical Doctor in Past 12 Months

Regular contact with a medical doctor is necessary in order to ensure that the primary health care needs of residents are being met on a regular ongoing basis. This ensures a level of continuity of primary care which makes those health care interventions more effective.

- The proportion of Churchill residents who reported that they had contact with a medical doctor in 2007 was 68.2 per cent which is lower than the Manitoba average of 76.4 per cent and the Canadian average of 79.1 per cent in 2007 (see Figure 6-2).

- It is important to note however, that for a period of time the Churchill RHA had a nurse practitioner who was very competent at serving the health care needs of our residents. In many cases, the patient may have received care by the nurse practitioner instead of the physician, but this would not be reflected in the CCHS data as the survey respondents were asked specifically about a "Medical Doctor".

Figure 6-2. Residents who contact with a medical doctor in past 12 months by region, 2007.

6.1.3 Hospital Beds per 1,000 Residents

There a total of 21 acute hospital beds at the Churchill Hospital for a rate of 22.5 beds per 1,000 residents. There are also seven Long Term Care Beds in the hospital.
6.1.4 Physician Visits

Physician visit rate data are an important indicator of the access residents have to both general practitioners and specialist services. These data may also be indicators of equity of access, and general attitudes of residents about the importance of physician visits in maintaining good health status.

- According to these data, the physician visit rate among Churchill residents decreased significantly from 88.0 per cent of residents (with at least one visit to a physician) to 38.3 per cent of Churchill residents between 2000/01 and 2005/06. This is a sharp decline, not seen in any other region and brings our rate significantly, lower than the Manitoba average of 82.6 per cent in 2005/06 (see Figure 6-3).

- Upon review of our data and discussion with staff, it appears that due to information technology and data entry issues, the physician statistics were not completely entered for 2005/06 and 2006/07. There is work being done currently to enter these data, but it is not reflected in the information provided for this report.

- A review of more recent, and complete physician billing data (MHHL 2007/08 and 2008/09 Medical Reports, Table 1A) illustrate that in 2007/08, 88 per cent of Churchill residents had at least one physician visit, and in 2008/09 the rate was very similar at 87.4 per cent.

Figure 6-3. Physician visits by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers; Churchill physician data incomplete for 2005/06.
'1' indicates area's rate was statistically different from Manitoba average in first time period
'2' indicates area's rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
6.1.5 Ambulatory Visits

Ambulatory visit rates are a key indicator for how well the health care system is managing chronic care patients outside of a hospital setting. Once again, this in combination with other indicators can be a key insight into how well a region is moving to a more primary care centred model of ongoing care for its residents. While the previous indicator showed the proportion of residents with at least one physician visit, this indicator illustrates the average number of physician visits per resident (who had seen a physician at least once). The term "ambulatory" simply means that the patient was not an in-patient at the hospital, but rather saw a physician through an appointment or outpatient basis.

- Ambulatory visit rates by Churchill residents decreased significantly from 5.9 to 1.4 per resident between 2000/01 and 2005/06, which is significantly lower than the Manitoba average of 5.0 per resident in 2005/06 (see Figure 6-4). However, the 2005/06 data are incomplete and do not reflect actual activity of Churchill residents.

- A review of more recent, and complete physician billing data (MHHL 2007/08 and 2008/09 Medical Reports, Table 1A) illustrates that in 2007/08, the ambulatory visit rate of Churchill residents was 6.8 visits per resident, and it was very similar in 2008/09 at 6.6 visits per resident.

Figure 6-4. Ambulatory visits by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers; Churchill physician billing data incomplete for 2005/06.
1 indicates area’s rate was statistically different from Manitoba average in first time period
2 indicates area’s rate was statistically different from Manitoba average in second time period
t indicates change over time was statistically significant for that area
6.1.5.1 Ambulatory Visit to Specialists

Specialist visit rates are another key component in the movement to a primary care model, and can indicate whether there are the specialist resources necessary to support a multidisciplinary primary health care system. The term “ambulatory” simply means that the patient was not an in-patient when seeing the specialist, but rather the patient visited the specialist on scheduled visit.

Churchill has a unique situation in that specialists from a number of services come to Churchill through the auspices of the Northern Medical Unit. However, Churchill residents must leave the region to access specialist services for any urgent consultations. This can result in hardship for residents who must organize time away from work, family support (such as child care), and often take on a significant part of the cost associated with travel to see the specialist. Because of these challenges, some residents may delay, or even decline entirely, the specialist visit.

- The ambulatory visit rate to specialists by Churchill residents significantly decreased from 0.9 to 0.7 visits per resident between 2000/01 and 2005/06. Again our rate is significantly lower than the Manitoba average of 1.3 per resident in 2005/06 (see Figure 6-5), and is likely related to the need to travel for specialist appointments.

- The decline in the visit rate, between 2000/01 and 2005/06, while statistically significant, is not as dramatic as the reduction in ambulatory visits to physicians illustrated in Figure 6-4. Specialist visits likely occurred outside of the region so that the local IT issues, which impacted data entry of 2005/06 data, was not as much of an issue.

Figure 6-5. Ambulatory visit rates to specialists by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers; Churchill physician billing data incomplete for 2005/06.
'1' indicates area’s rate was statistically different from Manitoba average in first time period.
6.1.5.2 Ambulatory Consultation

Ambulatory consultation rates provide us with important information about how well the primary health care system is providing access and ongoing care and support to patients with chronic health conditions. This indicator is the average number of first referrals per resident to all physicians in a fiscal year. Consultations are a subset of ambulatory visits and they occur when one physician refers a patient to another physician.

- Following the trends shown in the overall ambulatory visit rate, as well as the visits to specialists, the ambulatory consultation rate among Churchill residents decreased significantly from 0.5 to 0.2 consultations per resident between 2000/01 and 2005/06, and is significantly lower than the Manitoba average of 0.3 per resident in 2005/06 (see Figure 6-6).

- Again, note that data from the year 2005/06 is of limited utility due to the incomplete entry of data entry of physician billing data for Churchill residents.

Figure 6-6. Ambulatory consultation rates by region, 2000/01 and 2005/06.
6.1.6 Visit Location Rate per 1,000 Residents

Visit location rate provides information on whether residents in a region are visiting their family physicians in their own region or going outside the region for primary care. This is an important indicator of how accessible family physicians are in the region, and whether there are adequate resources. Traveling for care creates patient stress and dislocation, which can hinder patient care and management of chronic diseases.

- In 2000/01 the visit location rate within district for visits to General Practitioners (GP) was 82.9 per cent, which is very similar to the provincial average in this time period. In this same time period, the Specialist Physicians (SP) visit location within district rate was 48.3 per cent which, as expected, is much lower than the provincial average (see Figures 6-7 and 6-8).

- The 2005/06 data are not available for Churchill due to incomplete data entry. However, more recent and complete data (MHHL 2007/08 and 2008/09 Medical Reports, Table 1A) illustrate that in 2007/08, the visit location rate to GPs within Churchill was 89 per cent, and in 2008/09 this was somewhat lower at 80 per cent.

Figure 6-7. GP visit location within district by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers; Churchill physician billing data incomplete for 2005/06.
Figure 6-8. Specialist visit location within district by region, 2000/01 and 2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers; Churchill physician billing data incomplete for 2005/06.
6.1.7 Traveling to Access Specialist Services

The Northern Patient Transportation Program (NPTP) is intended to provide reasonable access for northern patients to specialist services, primary care clinics, diagnostics, physiotherapy and dieticians. While this access is necessary and important for northern patients, the use and expansion of telehealth services can provide specialist consultation and case planning directly from Churchill (there were 14 clinical sessions in 2007/08). This is an important development, as it will reduce the amount of dislocation and isolation for northern patients by cutting down on travel, while reducing costs for the health care system and patients. NPTP figures can show how well a northern region is performing in providing local services and preventative health measures without the need for patients to travel elsewhere for care.

- The number of medevacs (emergency travel) and elective travel (scheduled visits) for Churchill residents increased over the 2005/06 to 2007/08 period from 27 medevacs in 2005/06 to 36 medevacs in 2007/08 and 356 electives in 2005/06 to 420 electives in 2007/08 (see Figure 6-9).

Figure 6-9. Northern patient transportation per year, 2005/06-2007/08.

Source: Churchill RHA
6.1.8 Families First Program

The Families First Program is offered by Healthy Child Manitoba, and is intended to improve outcomes for infants by providing parents with information and support they need to make their children’s early years happy and healthy. All families living off-reserve are to be "screened" to determine if they are eligible for this program upon the birth of their baby. “Screening” simply means that a variety of questions are asked (such as about depression, education, income, smoking and drinking during pregnancy) and if the family scores within a certain range (for example, saying "yes" to three or more high risk items), they are eligible for services in this program. The family does not have to accept these services. Information collected through this program provides valuable information about the health and wellbeing of parents and to what extent supports and information may be needed for families.

- Almost all babies born to Churchill residents have been screened through the Families First Program in most years from 2003 to 2006 (see Figure 6-10). In fact, in 2006 it appears that there were more screens attributed to Churchill residents than actual numbers of births (this is likely a reporting error). Overall, we can see that we have very good coverage in terms of screening for families that have risk factors and need for additional support.

- In our region, the percentage of births that screened "positive", (that is, being at higher risk and meeting the eligibility requirements for enrollment in the Families First Program) increased from 33.3 per cent to 58.8 per cent of births between 2003 and 2006. This rate appears to be much higher than the Manitoba average of 22.8 per cent in 2006 (see Figure 6-11), but it is important to note that this is based on a small number of births.

- As discussed, families can decline the services offered through the Families First Program. The number of families who do decline services varies from year to year. For example, in our region 75.0 per cent of eligible families declined services in 2005, while no families did so in 2006. This may be related to a variety of issues, including the connection that the Families First staff member was able to make with the new parent (see Figure 6-12).
Figure 6-10. Percentage of births screened for families first program, 2003-2006.

Source: Healthy Child Manitoba, Families First Screening Form 2007.
NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 6-11. Percentage of births screened "Positive" for enrollment to families first program, 2003-2006.

Source: Healthy Child Manitoba, Families First Screening Form 2007.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 6-12. Eligible families who declined families first program service, 2005-2006.

Source: Healthy Child Manitoba, Families First Screening Form 2007.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
No cases for Churchill 2006.
6.1.9 Families First Program Screening - Risk Factors

Having several risk factors based on responses to the Families First screening form is an important predictor of likely outcomes for the child. The Manitoba Centre for Health Policy found that those parents receiving income assistance, having a file with local child protection services, mothers who did not finish high school, and living in a one-parent family with no social support were the strongest predictors of children entering the care of Child and Family Services. It is important to identify those at high risk when targeting Families First programming. While Churchill has experienced a reduction in the prevalence for those with three or more risk factors, our rate remains well above the Manitoba average.

- Within our region, the prevalence rates for three or more risk factors in Churchill decreased from 72.7 per cent of all families who were screened to 56.3 per cent between 2003 and 2006. This appears to be much higher than the Manitoba average of 25.0 per cent in 2006 but again we must remember that these data are based on a small number of births (see Figure 6-13).

- In an effort to try to stabilize our rates, we also looked at four years of screening data combined. Even with four years of data combined (2003-2006) our rate of over 60 per cent of families with three or more risk factors is much higher than the rest of Manitoba (see Figure 6-14).

- Figure 6-15 shows that while rates of families with three or more risk factors has remained relatively stable in Manitoba at between 23 and 25 per cent of families, our rates have changed in a positive direction from 72.7 per cent in 2003 to 56.3 per cent in 2006.

Figure 6-13. Prevalence rates of three or more risk factors by region, 2006.
Figure 6-14. Prevalence rates of three or more risk factors by region, 2003-2006 combined.

Source: Healthy Child Manitoba, Families First Screening Form 2007.
NOTE: Churchill rates should be interpreted with caution due to small numbers.

Figure 6-15. Prevalence rates of three or more risk factors for Churchill and Manitoba, 2003-2006.

Source: Healthy Child Manitoba, Families First Screening Form 2007.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
6.1.9.1 Alcohol Use During Pregnancy

Maternal alcohol and drug consumption can have health consequences for both the mother and fetus, including fetal alcohol spectrum disorder (FASD). FASD describes a range of conditions linked to prenatal exposure to alcohol, which can have a wide range of effects on the baby that are difficult to diagnose. FASD can impair cognitive, behavioral, developmental, physiological and/or physical functions over the lifespan of a person with FASD.\textsuperscript{vi} FASD patients can require extensive health and child welfare supports.

- Rates of alcohol use by mother during pregnancy in Churchill decreased from 36.4 per cent to 33.3 per cent between 2003 and 2006; however this remains higher than the Manitoba average of 12.7 per cent in 2006, and ranks highest in the province (see Figure 6-16). It means that at least one in three infants has been exposed to alcohol while in the womb.

- The four year combined average of alcohol use during pregnancy by Churchill residents was very similar at 32.2 per cent, and remained the highest in the province (see Figure 6-17).

- Figure 6-18 shows the yearly variation in alcohol use for Churchill and Manitoba residents. While Manitoba rates are quite stable at 12 to 13 per cent, wider variation is seen among Churchill residents. However, in three of four years, the rate remained above 30 per cent of mothers.

![Figure 6-16. Alcohol use by mother during pregnancy by region, 2006.](image)

Source: Healthy Child Manitoba, Families First Screening Form 2007.
NOTE: Churchill rates should be interpreted with caution due to small numbers.

![Figure 6-17. Alcohol use by mother during pregnancy by region, 2003-2006 combined.](image)
Figure 6-18. Alcohol use by mother during pregnancy, Churchill and Manitoba, 2003-2006 combined.

Source: Healthy Child Manitoba, Families First Screening Form 2007.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
6.1.9.2 Smoking During Pregnancy

Mothers who smoked during pregnancy are at increased risk for having smaller children, preterm birth, spontaneous abortion, stillbirth and sudden infant death syndrome (SIDS). There are also a wide range of longer term effects associated with smoking, including behavioral problems such as inattention and attention-deficit/hyperactivity disorder in children. Smoking during pregnancy has also been linked to some childhood cancers, including central nervous system tumors, leukemia and lymphomas. Maternal smoking during pregnancy is also a risk factor for asthma in young children.\textsuperscript{vii}

- On a positive note, the proportion of Churchill RHA mothers who smoked during pregnancy decreased from 54.5 per cent in 2003 to 13.3 per cent in 2006. This rate is now lower than the Manitoba average of 20.8 per cent in 2006, and ranks among the lowest in the province (see Figures 6-19 and 6-20).

![Figure 6-19. Smoking during pregnancy by region, 2006.](image)

Source: Healthy Child Manitoba, Families First Screening Form 2007.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 6-20. Smoking during pregnancy, Churchill and Manitoba, 2003-2006 combined.

Source: Healthy Child Manitoba, Families First Screening Form 2007.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
6.1.9.3 Anxiety and Depression in Mothers of Newborns

Mothers of newborns who suffer from depression can significantly impair family relationships, and increase the risk for children to be maltreated and to be taken into care. An important part of the Families First Program is to provide the coping skills and social supports necessary to deal with mental health challenges that arise with becoming a parent. Given the importance attached by Churchill residents for mental health services in community consultations, it is encouraging to note the significant decrease in the number of mothers suffering from depression or anxiety.

- **Figure 6-21** shows that there has been a wide variation in maternal depression and anxiety reported each year through the Families First Screening process. However, it is positive to note that in the two most recent years, rates of maternal depression have been lower than the provincial average.

- Regional comparisons for rates of maternal depression and anxiety for the years 2003 to 2006 combined can be found in **Figure 6-22**. The combined rate for the Churchill region of 15.3 per cent is just slightly higher than the provincial average of 14.1 per cent. As shown in **Figure 6-21**, our rate in 2003 was quite high compared to the other years, and thus has increased our overall average.

**Figure 6-21. Prevalence of maternal depression and anxiety, Churchill and Manitoba, 2003-2006.**

![Bar chart showing prevalence of maternal depression and anxiety](source: Healthy Child Manitoba, Families First Screening Form 2007.)

NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 6-22. Prevalence of maternal depression and anxiety by region, 2003-2006 combined.

Source: Healthy Child Manitoba, Families First Screening Form 2007.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
6.1.9.4 Mothers with Less than a Grade 12 Education

Education level is positively associated with health status and health behaviors. Educational levels are an important determinant of socio-economic status and income, which are both key determinants of health. Parents’ education level, along with involvement in their child’s school work all contributes to the child’s level of achievement in school and to how long he or she stays in school.\textsuperscript{viii}

- **Figure 6-23** shows that the rate of mothers with less than grade 12 education has consistently been higher among Churchill residents than for Manitobans overall. However, the good news is that our rate has decreased from 54.5 per cent to 28.6 per cent between 2003 and 2006.

- In 2006, 28.6 per cent of new mothers had less than grade 12 education, which ranked among the highest in the province (see Figure 6-24). This is an improvement over our four year average rate of 44.6 per cent of new mothers (see Figure 6-25).

![Figure 6-23. Prevalence rates of mothers with less than grade 12 education, Churchill and Manitoba, 2003-2006.](image)

Source: Healthy Child Manitoba, Families First Screening Form 2007.  
NOTE: Churchill rates should be interpreted with caution due to small numbers.
Figure 6-24. Mothers of newborns with less than grade 12 education by region, 2006.

Figure 6-25. Mothers of newborns with less than grade 12 education by region, 2003-2006 combined.

Source: Healthy Child Manitoba, Families First Screening Form 2007.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
6.1.9.5  Relationship Distress

Having a newborn can be a stressful experience for new parents that can strain even the best of relationships. First-time parents face role changes, lifestyle adjustments, and financial difficulties. Mothers can feel overwhelmed, and fathers isolated and left out. It is important to measure and track the incidence of relationship stress to see where supports and coping skills can best be used to ensure children have the most ideal care and parenting support possible.

Figure 6-26 shows that there has been quite a bit of variation from year to year in the number of Churchill families (with a newborn) who report relationship distress, ranging from zero to 16 per cent. This may be because there was no distress, or it may reflect that the family (or new mom) was not comfortable in disclosing this information. In contrast, for Manitoba, the rate has been relatively steady at approximately 6 per cent.

Figure 6-26. Prevalence rates of relationship distress for Churchill and Manitoba, 2003-2006.

Source: Healthy Child Manitoba, Families First Screening Form 2007.

NOTE: Churchill rates should be interpreted with caution due to small numbers.
6.1.9.6 Domestic Violence

Children who witness domestic violence can suffer from mental health disorders, as well as negatively impacting their physical health. It is also a predictor of child maltreatment, and increases the likelihood of the child being taken into foster care.

- As with Relationship Distress, there has been a wide variation in reporting of Domestic Violence among families with newborns between 2003 and 2006. The percentage of families with newborns which experienced domestic violence in Churchill increased from zero to 15.4 per cent between 2003 and 2006 and is now substantially higher than the provincial average of 2.5 per cent (see Figure 6-27).

Figure 6-27. Prevalence rates of families with domestic violence, Churchill and Manitoba, 2003-2006.

Source: Healthy Child Manitoba, Families First Screening Form 2007.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
6.1.9.7 Social Assistance/Financial Difficulties

Financial challenges related to raising a newborn can occur both because of the costs associated with raising a child and because family income usually declines when a newborn arrives (such as when the mother takes maternity leave and then may decide not to return to work). Those financial stresses can lead to lower child health status, as children with low socio-economic status have poorer coping skills and are more vulnerable to mental disorders.

- On a positive note, the percentage of Churchill families with newborns who received social assistance or have had financial difficulties decreased from 54.5 per cent to 21.4 per cent of families between 2003 and 2006. While this rate remains higher than the provincial average (17.3% in 2006), the trend among our families appears to be in the right direction (see Figure 6-28).

Figure 6-28. Prevalence rates of social assistance or financial difficulties, Churchill and Manitoba, 2003-2006.
6.2 Continuity of Service

Continuity of service is emerging as an important part of health system performance, particularly with the increasing emphasis on primary health care. Continuity of service with a sustained relationship of client and providers is linked to improved adherence to screening and treatment regimens, recognition of unidentified problems, better immunization outcomes, fewer hospitalizations, lower use of emergency rooms, improved patient satisfaction, and a general reduction or avoidance in health care costs. ix

6.2.1 Continuity of Care – Adults

The measure of "continuity of care" for adults is that at least 50 per cent of their ambulatory care visits are with the same physician in a two year period.

- The continuity of care rate for adults in Churchill decreased significantly from 93.7 per cent to 53.9 per cent between 1999/00-2000/01 and 2004/05-2005/06. This rate is lower than the Manitoba average of 67.7 per cent in 2004/05-2005/06 (see Figure 6-29). However, we know that this is more an issue related to data entry and IT issues that impacted the completeness of physician visit data in the second time period. These data on physician visits do not completely reflect actual activity in our region.

Figure 6-29. Adult Continuity of Care rates by region, 1999/00-2000/01 and 2004/05-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
'1' indicates area's rate was statistically different from Manitoba average in first time period
'2' indicates area's rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
6.2.2 Continuity of Care – Children

Similarly with adults, continuity of care helps to improve patient outcomes for children by providing a long term relationship with a physician.

- The continuity of care rate for children in Churchill was 86.7 per cent between 1999/00-2000/01, and ranked highest in the province. However, due to small numbers, the figures for Churchill were suppressed for the 2004/05-2005/06 period (and we know that data was not complete for this year due to IT and data entry challenges). The Manitoba average was 56.2 per cent in 2004/05-2005/06 (see Figure 6-30).

Figure 6-30. Child continuity of care rates by region, 1999/00-2000/01 and 2004/05-2005/06.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas, 2008.

NOTE: Churchill rates should be interpreted with caution due to small numbers. 
- '1' indicates area’s rate was statistically different from Manitoba average in first time period 
- ‘2’ indicates area’s rate was statistically different from Manitoba average in second time period 
- ‘t’ indicates change over time was statistically significant for that area 
- ‘s’ indicates data suppressed due to small numbers
6.2.3 Antidepressant Prescription Follow-Up

Antidepressant prescription follow-up is an important indicator of the quality of primary care and mental health care received in the region. As discussed previously in this document, concerns have been raised about the side effects of antidepressant prescriptions, so it is important to have a physician follow-up and monitor patients to ensure that the medications are effective in treating depression.

“Antidepressant prescription follow-up” is defined as the proportion of patients with a new prescription for antidepressants and a diagnosis of depression within two weeks of each other, who then had three subsequent ambulatory visits within four months of the prescription being filled. Note that "ambulatory visit" means that the patient was not an in-patient at the hospital but saw a physician through an appointment at their office or outpatient clinic.

- The antidepressant prescription follow-up rate for Churchill residents was 54.0 per cent of patients between 1998/99 and 2000/01. However, due to small numbers, the Churchill figures were suppressed for the 2003/04 to 2005/06 period (see Figure 6-31) (again, this is a result of data entry and IT challenges in that time period and is not reflective of actual activity in the region).

Figure 6-31. Antidepressant prescription follow up rate by region, 1998/99-2000/01 and 2003/04-2005/06.
6.3 Effectiveness

Health services are considered to be effective if they are developed and provided based on scientific knowledge to achieve desired outcomes.

6.3.1 Ambulatory Care Sensitive Conditions (ACSC)

Hospitalizations for Ambulatory Care Sensitive Conditions (ACSC) are a very important indicator of the effectiveness of the health care system in providing an appropriate level of access to primary care. While not all admissions for ACSCs are avoidable, it is generally agreed that appropriate prior ambulatory care can prevent admission to the hospital for illnesses, conditions and chronic diseases. An example of an ACSC is diabetes, where if managed appropriately at the primary care level in the community, should not result in progression to a point where hospitalization is required. While there is not yet a level of utilization which is ideal, it is assumed that a high hospitalization rate reflects problems in obtaining access to primary care.  

- The hospitalization rate for ACSCs in Churchill decreased from 31.9 to 28.8 hospitalizations per 1,000 between 2000/01 and 2005/06. However, our rate remains significantly higher than the Manitoba average of 13.5 hospitalizations per 1,000 residents in 2005/06 (see Figure 6-32).

![Figure 6-32. Hospitalization rate for ACSC by region, 2000/01 and 2005/06.](source)

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area's rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

't' indicates change over time was statistically significant for that area
6.3.2 Re-admission Rates for Infants within 28 Days of Birth

Re-admission rates for infants within 28 days of birth can provide information on the access to maternal care through public health programming and services, as well as the effectiveness of obstetrical care in hospital. These rates may also be related to low socioeconomic status of the community or area being studied. High re-admission rates should trigger the re-examination of both hospital care and the provision of public health services for newborns and their mothers.

- The five year average annual newborn readmission rate among Churchill residents was 99.4 per 1,000 from 2001-2005. This is significantly higher than the Manitoba average of 33.0 per 1,000 infants in 2001-2005 (see Figure 6-33). However, it is important to note that because we have a very small number of babies born each year, this rate can vary significantly and in fact, the average annual rate for 1996-2000 was suppressed due to small numbers. We will continue to monitor these trends to identify if there is an increase, and to determine the specific reasons associated with the newborn re-admissions.

Figure 6-33. Newborn readmission rate by region, 1996-2000 and 2001-2005.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas 2008.

NOTE: Churchill rates should be interpreted with caution due to small numbers.

'1' indicates area’s rate was statistically different from Manitoba average in first time period

'2' indicates area's rate was statistically different from Manitoba average in second time period

'1' indicates change over time was statistically significant for that area

's' indicates data suppressed due to small numbers
6.3.3 Caesarean Sections

Caesarean section rates provide information on the frequency of a surgical birth delivery versus all other modes of birth delivery. Unnecessary Caesarean section deliveries have increased the risk of maternal morbidity and mortality, and cost more to the health care system. These rates are often monitored for quality of care in clinical practices, as lower rates of caesarean section are associated with more appropriate and efficient care for mothers and the newborn child. xi

- As Figure 6-34 illustrates, caesarian section rates among Churchill residents increased from 17.1 per cent of births to 21.1 per cent between 1996/97-2000/01 and 2001/02-2005/06. This rate is similar to the provincial rate of 19.5 per cent in 2001/02-2005/06.

Figure 6-34. Caesarean rate by region, 1996/97-2000/01 and 2001/02-2005/06.

Source: Manitoba Centre for Health Policy Need to Know Project, 2009 Data Atlas.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
1 indicates area’s rate was statistically different from Manitoba average in first time period
2 indicates area’s rate was statistically different from Manitoba average in second time period
t indicates change over time was statistically significant for that area
6.3.4 Hysterectomy

Hysterectomy rates and variations in rates can provide some insight on physician practice patterns, appropriateness of care, the demographic profile of a given region and the relative health status of women in that region.\textsuperscript{xii}

- The hysterectomy rate among Churchill residents was 2.1 per 1,000 women aged 25 years of age and older, which is the lowest in the province and lower than the Manitoba average of 3.6 per 1,000 women (see Figure 6-35).

Figure 6-35. Hysterectomy rate by region, 2002/03 - 2006/07 combined.

Source: Discharge Abstract Database.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
6.3.5 Tonsillectomy and Adenoidectomy

The number of tonsillectomies and adenoidectomies performed in a hospital setting can be an indicator of appropriateness of care, as these procedures do not normally need to be performed in hospital. These rates may indicate that community or primary care is not as accessible to patients as it needs to be in ensuring appropriate and efficient delivery of health care.

- Between 1996/97 and 2000/01, the tonsillectomy/adenoidectomy rate for Churchill children was 6.7 procedures per 1,000 children aged 0-14 years. Due to small numbers, Churchill figures for the 2001/02-2005/06 period were suppressed (see Figure 6-36).

Figure 6-36. Tonsillectomy and Adenoidectomy rate by region, 1996/97-2000/01 and 2001/02-2005/06.

Source: Manitoba Centre for Health Policy, Manitoba Child Health Atlas 2008.
NOTE: Churchill rates should be interpreted with caution due to small numbers.
'1' indicates area's rate was statistically different from Manitoba average in first time period
'2' indicates area's rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
6.4 Safety

Adverse events in the health care system are an increasingly important priority for RHAs. Canadian and provincial agencies have been established to address patient safety issues in order to reduce the number of adverse events. It is important to monitor and pinpoint where patient safety measures and messaging need to be improved. There have been no critical incidents at the Churchill Hospital in the past year, and we will continue to monitor for these incidents in our hospital.

6.4.1 Staff Immunization

Staff immunization is a key component in any patient safety initiative. It improves the health of health care workers and is an important tool in infection prevention and control.

- Figure 6-37 shows that Churchill RHA has made ongoing improvements in our staff immunization rates, increasing from 60 per cent of staff in 2005-06 to 80 per cent of staff in 2007/08.

![Figure 6-37. Staff influenza immunization rates, 2005/06-2007/08.](image)
6.4.2 Polypharmacy Rates for Community Dwelling Seniors

Polypharmacy, the consumption of many prescription drugs, is an issue of growing concern for the health care system, particularly among seniors. The risk for negative side effects from drug interactions increases, along with the chances of admission to hospital for seniors who take multiple drugs. Seniors living in the community can be at even higher risk than seniors in long term care, as their drug intake is not monitored as closely.

- Polypharmacy rates for community dwelling seniors in Churchill increased significantly from 5.6 per cent to 17.7 per cent between 1996/97-1999/2000 and 2000/01-2003/04. This rate of 17.7 per cent (almost one in five seniors) is significantly higher than the Manitoba average of 6.3 per cent in 2000/01-2003/04 (see Figure 6-38).


NOTE: Churchill rates should be interpreted with caution due to small numbers.
1' indicates area's rate was statistically different from Manitoba average in first time period
2' indicates area's rate was statistically different from Manitoba average in second time period
't' indicates change over time was statistically significant for that area
6.5 Work Life

An important component for any organization to achieve performance objectives requires employees who are motivated, dedicated and happy with their work environment. The Churchill RHA Work Life survey shows that employees are very satisfied with the work environment, indicating there is good communication and positive feedback.

- Figure 6-39 does indicate that the return rate for our Staff Satisfaction surveys has decreased over time from a high of 54 per cent in 2005-2006 to a low of 26 per cent in 2007-2008. We will continue to work toward motivating employees to participate in these surveys as they provide important feedback to our organization and we will use the results for ongoing efforts at retaining our valuable staff.

Survey respondents indicated that they had the autonomy and the equipment necessary to do their job effectively. Employees seem to particularly like their co-workers and rated them as friendly, easy to communicate with, and effective in their jobs. This was particularly reflected in the survey where staff was asked to describe in greater detail what they liked about working for the Churchill RHA. Some particular highlights are:

- 90.6 per cent of respondents strongly agreed or agreed that staff can have open discussions about work-related issues with their supervisor.

- 65.6 per cent strongly agreed or agreed that a co-worker has recently told them that they have done a good job.
• 78 per cent of respondents strongly agreed or agreed that they have the equipment to do their job properly.

• 84.3 per cent strongly agreed or agreed that there is someone at work they can confide in.

• 75 per cent strongly agreed or agreed that they have the information they need to do their job properly.

Some of the challenges identified in the survey are employee views on senior management. This may require more effective senior management communication directly with staff or through middle management. The number of completed surveys was lower this year, which may also reflect some dissatisfaction with the workplace on the part of some employees.

• 34.3 per cent of respondents neither disagreed nor agreed to the statement that my manager encourages me to improve my workplace.

• 31.3 per cent of respondents neither disagreed nor agreed that they trust the management at the Churchill RHA.

Staff suggested improving ongoing education for staff to make them more effective employees. However, the expense of traveling from a remote community like Churchill makes it difficult to access continuing education opportunities. In the written portion of the survey, staff identified a wide range of education programs they would like to pursue, including computer training, management courses and education related to providing health care. Staff also identified the cold winters and isolation from family and friends were a challenging part of their employment in Churchill. Improving understanding of other cultures and the diversity in the community was also noted as something the RHA could improve on as a way to enhance working conditions and forge a closer connection to the community.

On the whole, employees seem satisfied with the work environment at the Churchill RHA. Some areas for improvement are senior management communication with its employees and the provision of more ongoing educational opportunities for staff.
Churchill Health Community Health Assessment

WORKLIFE
April 1, 2008 – March 31, 2009

WELL-BEING

Flu Shots:
(Total # flu shots) = 80%
(Total # of employees) = 115

WCB Lost Time Incident Rate:
(0 Lost Time Incident) = 0 Lost Time
(115 Employees)

WCB Lost Work Hours Rate:
(0 WCS lost work hours)
(115 Employees)
= 0 Work Hours Lost / Employee

% of Modified Work Accommodations:
(Modification Work Accommodations) = 0 MWA
(115 Employees)

Days Lost Due to WCB Claims:
0 Days Lost

WELL-BEING

EAP Utilization Rates:
(2 of EAP Cases) = 1.9% EAP Rate
(108 Employees)

EAP Expense / Eligible Employee:
$400.00 (EAP $) = $42.86 Eligible Employee
(108 Employees)

Sick Pay Expense Indicator:
$142,000.00 (paid sick time) = 1.8% of Budget
$ 7,600,000.00 (total salary budget)

Average Paid Sick Hours/Employee:
$325.62 pd sick hours) = 40 Hours/Employee
(109 eligible employees)

LEARNING ENVIRONMENT

Average Staff Education Expense:
$24,000.00 (Staff Education $) = $308.00 Employee
(78 Employees)

Total $ Spent on Recruitment
$24,300.00 (Recruitment $) = $24,300.00 / External Hire
(38External Hire)

OPEN COMMUNICATIONS/ PARTICIPATION IN DECISION MAKING

1st Step Grievance Rate:
(# 1st Step Grievances) = 0
(Employee Union Count = 90)

Final Step Grievance Rate:
(# Final Step Grievance) = 6 Final Step
(Employee Union Count = 90
17% Arbitration

ROLE CLARITY / RECRUITMENT

Performance Appraisal Rate:
(78 of 115 Current Evaluations) = 68%

Turnover Rate:
(44 of Separations) = 38% Turnover Rate
(115 Employees)

Vacancy Age Indicator:
30 days or less = 42; 90 days = 2; Over 90 days = 0

Total $ Spent on Recruitment
$ 24,300.00 (Recruitment $) = $24,300.00 / External Hire
(38External Hire)

Exit Interviews
39 staff left
11 exit interviews
28%

Chapter 6: Health System Performance
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ix UBC Centre for Health Services and Policy Research, Continuity of Care, [http://www.chspr.ubc.ca/research/patterns/continuity](http://www.chspr.ubc.ca/research/patterns/continuity)

x Statistics Canada: *Health Indicators – Definitions and Data Sources* [http://www.statcan.gc.ca/pub/82-221-x/4060874-eng.htm](http://www.statcan.gc.ca/pub/82-221-x/4060874-eng.htm)

xi CIHI, *Health Indicators*, p.54.

xii Ibid. p.72.
Appendix A: Indicator Summary
## REGIONAL PROFILE

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
<th>Region Current</th>
<th>Manitoba Current</th>
<th>Data Source</th>
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<tbody>
<tr>
<td>2.5.1 Population density</td>
<td>Population per kilometer</td>
<td>17.1</td>
<td>2.1</td>
<td>2006 Census</td>
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<tr>
<td>2.5.2 Population by age group</td>
<td>% of population over age 65.</td>
<td>7.2%</td>
<td>13.8%</td>
<td>MBH 2008 population</td>
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<td>2.5.2.1 Dependency ratio</td>
<td>Population &lt;15 and &gt;65 to rest of population</td>
<td>41.7</td>
<td>49.4</td>
<td>MBH 2008 population</td>
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<td>2.5.4 Population projection</td>
<td>Projected population growth by 2035 (Burntwood/Churchill)</td>
<td>27.6%</td>
<td>40.9%</td>
<td>Manitoba Bureau of Statistics</td>
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<td>2.5.5 Aboriginal population</td>
<td>% of population that self identifies as Aboriginal</td>
<td>56.4%</td>
<td>15.5%</td>
<td>2006 Census</td>
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<td>2.5.6 Marital status</td>
<td>% of population age 15+ who are legally married</td>
<td>36.4%</td>
<td>50.2%</td>
<td>2006 Census</td>
</tr>
<tr>
<td>2.5.7 Family structure</td>
<td>% of families that are lone parent families</td>
<td>22.4%</td>
<td>17.0%</td>
<td>2006 Census</td>
</tr>
<tr>
<td>2.5.8 Language</td>
<td>% of families that speak only English at home</td>
<td>98.5%</td>
<td>87.3%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>% of population with knowledge of official language is English only.</td>
<td>96.9%</td>
<td>89.8%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>% of population with mother tongue is English only.</td>
<td>90.3%</td>
<td>74.0%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>% of families that speak only English at work</td>
<td>100.0%</td>
<td>96.4%</td>
<td>2006 Census</td>
</tr>
<tr>
<td>2.5.9 Internal/External migration</td>
<td>% of residents who are Canadian born</td>
<td>95.9%</td>
<td>86.0%</td>
<td>2006 Census</td>
</tr>
<tr>
<td>2.5.10 Mobility Status</td>
<td>% of residents who lived at same address 5 years ago.</td>
<td>53.6%</td>
<td>63.4%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>% of residents who move within province in last 5 years.</td>
<td>43.1%</td>
<td>29.9%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>% of residents who lived in different province or territory 5 years ago.</td>
<td>3.3%</td>
<td>3.4%</td>
<td>2006 Census</td>
</tr>
</tbody>
</table>
## DETERMINANTS OF HEALTH AND WELL-BEING

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
<th>Region Current</th>
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<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1.1 Income inequality</td>
<td>% of children&lt;18 living in low income family.</td>
<td>15.5%</td>
<td>21.4%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>% of families living below LICO.</td>
<td>11.3%</td>
<td>16.7%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>% of Unattached Individuals with low income</td>
<td>22%</td>
<td>38%</td>
<td>2006 Census</td>
</tr>
<tr>
<td>3.1.2 Families receiving income assistance</td>
<td>% of children aged 0-17 in family receiving income assistance</td>
<td>21.1%</td>
<td>13.2%</td>
<td>MCHP child health atlas 2008.</td>
</tr>
<tr>
<td></td>
<td>% of young adult aged 18-19 in family receiving income assistance</td>
<td>0.0%</td>
<td>9.1%</td>
<td>MCHP child health atlas 2008.</td>
</tr>
<tr>
<td>3.1.3 Median individual and household income</td>
<td>The midpoint of dollar amount of individual.</td>
<td>$30,458</td>
<td>$24,194</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>The midpoint of dollar amount of household.</td>
<td>$55,200</td>
<td>$47,874</td>
<td>2006 Census</td>
</tr>
<tr>
<td>3.1.3.1 Income in single parent family</td>
<td>The midpoint of dollar amount of family with single parent.</td>
<td>$23,619</td>
<td>$31,518</td>
<td>2006 Census</td>
</tr>
<tr>
<td>3.1.4 Unemployment</td>
<td>Male unemployment rate</td>
<td>15%</td>
<td>5.5%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>Female unemployment rate</td>
<td>14%</td>
<td>10.5%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>Male youth unemployment rate</td>
<td>20.0%</td>
<td>11.7%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>Female youth unemployment rate</td>
<td>25.0%</td>
<td>10.5%</td>
<td>2006 Census</td>
</tr>
<tr>
<td>3.1.5 Labour Force Participation</td>
<td>% of the population aged 15 years and over, who were in the labor force in the week prior to the Census of Canada.</td>
<td>79.6%</td>
<td>67.3%</td>
<td>2006 Census</td>
</tr>
<tr>
<td>3.1.8 Housing affordability</td>
<td>Average value of owned dwelling.</td>
<td>$112,357</td>
<td>$153,307</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>% of tenant spending more than 30%</td>
<td>18.4%</td>
<td>35.3%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>% of owner spending more than 30%</td>
<td>16.1%</td>
<td>11.4%</td>
<td>2006 Census</td>
</tr>
<tr>
<td>3.1.9 Educational attainment</td>
<td>No certificate, diploma or degree</td>
<td>43%</td>
<td>29%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>High school certificate or equivalent</td>
<td>18%</td>
<td>27%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>Apprenticeship or trades certificate or diploma</td>
<td>16%</td>
<td>10%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>College, CEGEP or other non-university certificate or diploma</td>
<td>10%</td>
<td>15%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>University certificate or diploma below the bachelor level</td>
<td>3%</td>
<td>4%</td>
<td>2006 Census</td>
</tr>
<tr>
<td></td>
<td>University certificate, diploma or degree</td>
<td>10%</td>
<td>15%</td>
<td>2006 Census</td>
</tr>
<tr>
<td>3.1.10 Unpaid work</td>
<td>% of residents participate unpaid work</td>
<td>92.5%</td>
<td>90.8%</td>
<td>2006 Census</td>
</tr>
<tr>
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</tr>
<tr>
<td>3.2.1 Exposure to Second Hand Smoke</td>
<td>% of residents exposed to second hand smoke (2007/08).</td>
<td>17.9%</td>
<td>7.9%</td>
<td>Statistics Canada CCHS 3.1</td>
</tr>
<tr>
<td></td>
<td>% of residents exposed to second hand smoke (2008).</td>
<td>13.3%</td>
<td>7%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of residents aged 12-19 exposed to second hand smoke.</td>
<td>suppressed due to small numbers</td>
<td>19.3%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td>3.3.1 Life Stress</td>
<td>% of residents with “quite a lot” life stress.</td>
<td>16.7%</td>
<td>19.4%</td>
<td>CCHS 2007</td>
</tr>
<tr>
<td>3.3.2 Life Satisfaction</td>
<td>% of residents who self rated “satisfied or very satisfied” for life</td>
<td>93.9%</td>
<td>92.1%</td>
<td>Statistics Canada CCHS 2007</td>
</tr>
<tr>
<td>3.3.3 School Readiness</td>
<td>% of children not ready in Physical Health and Well-Being</td>
<td>0.0%</td>
<td>10.9%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children not ready in Social Competence</td>
<td>15.0%</td>
<td>9.6%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children not ready in Emotional Maturity</td>
<td>5.0%</td>
<td>10.1%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children not ready in Language and Cognitive Development</td>
<td>35.0%</td>
<td>11.8%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children not ready in Communication Skills and General Knowledge</td>
<td>0.0%</td>
<td>11.0%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children not ready in One or more areas of development</td>
<td>35.0%</td>
<td>27.7%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children not ready in Two or more areas of development</td>
<td>15.0%</td>
<td>13.9%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children very ready in Physical Health and Well-Being</td>
<td>52.6%</td>
<td>33.6%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children very ready in Social Competence</td>
<td>45.0%</td>
<td>34.8%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children very ready in Emotional Maturity</td>
<td>65.0%</td>
<td>28.5%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children very ready in Language and Cognitive Development</td>
<td>15.0%</td>
<td>32.5%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children very ready in Communication Skills and General Knowledge</td>
<td>35.0%</td>
<td>36.0%</td>
<td>HCMO.</td>
</tr>
<tr>
<td></td>
<td>% of children very ready in One or more areas of development</td>
<td>75.0%</td>
<td>64.8%</td>
<td>HCMO.</td>
</tr>
<tr>
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</tr>
<tr>
<td>% of children very ready in Two or more areas of development</td>
<td></td>
<td>55.0%</td>
<td>45.5%</td>
<td>HCMO.</td>
</tr>
<tr>
<td>3.3.3.1 Retention Rates</td>
<td>Retention rates from Kindergarten to Grade 8</td>
<td>13.3%</td>
<td>3.0%</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.3.3.2 School changes by region</td>
<td>% of Grade 3 students with no school changes.</td>
<td>80.0%</td>
<td>79.8%</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.4.1 Active living</td>
<td>% of residents who are moderately or physically active (2007).</td>
<td>52.6%</td>
<td>53.0%</td>
<td>CCHS 2007</td>
</tr>
<tr>
<td></td>
<td>% of residents who are moderately or physically active (2008).</td>
<td>50.6%</td>
<td>52.8%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of male who are moderately or physically active (2008).</td>
<td>50.6%</td>
<td>53.9%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of female who are moderately or physically active (2008).</td>
<td>50.5%</td>
<td>51.7%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of residents who are physically inactive (2008).</td>
<td>49.4%</td>
<td>47.2%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of males who are physically inactive (2008).</td>
<td>49.4%</td>
<td>46.1%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of females who are physically inactive (2008).</td>
<td>49.5%</td>
<td>48.3%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td>3.4.2 Healthy Eating</td>
<td>% of residents who consume at least 5 servings of fruits and/or vegetables per day (2007).</td>
<td>29.4%</td>
<td>37.2%</td>
<td>CCHS 2007</td>
</tr>
<tr>
<td></td>
<td>% of residents who consume at least 5 servings of fruits and/or vegetables per day (2008).</td>
<td>33.9%</td>
<td>34.5%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td>3.4.2.1 Cost of Nutritious Food Basket</td>
<td>Cost of food shopping for a family of four at local stores. The same foods are compared in each community.</td>
<td>$223.97</td>
<td>$168.61 in comparison communities</td>
<td>Churchill RHA and Heart and Stroke Foundation</td>
</tr>
<tr>
<td>3.4.3 Body Mass Index</td>
<td>% of residents who are overweight or obese (2007).</td>
<td>64.7%</td>
<td>55.6%</td>
<td>CCHS 3.1</td>
</tr>
<tr>
<td></td>
<td>% of residents who are overweight or obese (self-reported, 2008).</td>
<td>72.4%</td>
<td>54.5%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of male who are overweight or obese (self-reported, 2008).</td>
<td>73.8%</td>
<td>61.2%</td>
<td>CCHS 2008</td>
</tr>
<tr>
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</tr>
<tr>
<td>3.4.4 Alcohol Use</td>
<td>% of residents who have 5 or more drinks on one occasion (2007).</td>
<td>21.6%</td>
<td>18.9%</td>
<td>CCHS 3.1</td>
</tr>
<tr>
<td></td>
<td>% of residents who have 5 or more drinks on one occasion (2008).</td>
<td>26.1%</td>
<td>19.6%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of males who have 5 or more drinks on one occasion (2008).</td>
<td>31.4%</td>
<td>27.9%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of females who have 5 or more drinks on one occasion (2008).</td>
<td>suppressed due to small numbers</td>
<td>11.7%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td>3.4.5 Smoking</td>
<td>% of residents who are current smoker (2007).</td>
<td>35.1%</td>
<td>22.5%</td>
<td>CCHS 2007</td>
</tr>
<tr>
<td></td>
<td>% of residents who are current smoker (2008).</td>
<td>41.3%</td>
<td>24.2%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of males who are current smoker (2008).</td>
<td>42.3%</td>
<td>27.3%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of females who are current smoker (2008).</td>
<td>40.1%</td>
<td>21.2%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td>3.4.6 Complete physical exam</td>
<td>% of residents with complete physician exam.</td>
<td>24.3%</td>
<td>39.8%</td>
<td>&quot;What Works&quot; report, 2007.</td>
</tr>
<tr>
<td>3.4.7.1 Population With at Least One Prescription in a Year</td>
<td>% of residents with at least one prescription in fiscal year</td>
<td>70.9%</td>
<td>66.1%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>3.4.7.2 Number of Prescriptions per User</td>
<td>Average number of prescriptions used per user</td>
<td>4.9</td>
<td>4.0</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>3.4.7.3 Number of Antibiotic Prescriptions Among Adults</td>
<td>% of females with at least one antibiotic prescription.</td>
<td>39.7%</td>
<td>37.1%</td>
<td>MCHP 2005, Sex Differences Report</td>
</tr>
<tr>
<td></td>
<td>% of males with at least one antibiotic prescription.</td>
<td>29.1%</td>
<td>30.4%</td>
<td>MCHP 2005, Sex Differences Report</td>
</tr>
<tr>
<td>3.4.7.4 Statin Use</td>
<td>% of females aged 20+ with at least one prescription for statins.</td>
<td>11.2%</td>
<td>7.4%</td>
<td>MCHP 2005, Sex Differences Report</td>
</tr>
<tr>
<td></td>
<td>% of males aged 20+ with at least one prescription for statins.</td>
<td>12.0%</td>
<td>9.9%</td>
<td>MCHP 2005, Sex Differences Report</td>
</tr>
<tr>
<td>3.4.7.5 ACE Inhibitor Use</td>
<td>% of females aged 20+ with at least one ACE inhibitor.</td>
<td>20.7%</td>
<td>8.7%</td>
<td>MCHP 2005, Sex Differences Report</td>
</tr>
<tr>
<td></td>
<td>% of males aged 20+ with at least one ACE inhibitor.</td>
<td>24.1%</td>
<td>10.0%</td>
<td>MCHP 2005, Sex Differences Report</td>
</tr>
<tr>
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</tr>
<tr>
<td>3.4.7.6 Antidepressant Prescriptions</td>
<td>% of residents with two or more prescriptions for antidepressants.</td>
<td>6.6%</td>
<td>6.9%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>3.4.8.1 Childhood Immunization</td>
<td>All infants aged 1 complete immunization per 100.</td>
<td>100.0</td>
<td>76.1</td>
<td>MIMS 2007</td>
</tr>
<tr>
<td></td>
<td>All children aged 2 complete immunization per 100.</td>
<td>76.2</td>
<td>58.5</td>
<td>MIMS 2007</td>
</tr>
<tr>
<td></td>
<td>All children aged 7 complete immunization per 100.</td>
<td>57.1</td>
<td>68.6</td>
<td>MIMS 2007</td>
</tr>
<tr>
<td></td>
<td>All children aged 11 complete immunization per 100.</td>
<td>81.3</td>
<td>54.4</td>
<td>MIMS 2007</td>
</tr>
<tr>
<td></td>
<td>All youth aged 17 complete immunization per 100.</td>
<td>31.3</td>
<td>41.9</td>
<td>MIMS 2007</td>
</tr>
<tr>
<td>3.4.8.2 Influenza Immunization among 12+</td>
<td>% of residents aged 12+ complete Influenza immunization (2007).</td>
<td>30.4%</td>
<td>26.8%</td>
<td>CCHS 3.1</td>
</tr>
<tr>
<td></td>
<td>% of residents aged 12+ complete Influenza immunization (2008).</td>
<td>29.2%</td>
<td>27.1%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of males aged 12+ complete Influenza immunization (2008).</td>
<td>21.1%</td>
<td>22.7%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of females aged 12+ complete Influenza immunization (2008).</td>
<td>38.4%</td>
<td>31.3%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>All residents aged 18-64 complete immunization per 100.</td>
<td>24.3</td>
<td>13.9</td>
<td>MIMS 2007</td>
</tr>
<tr>
<td>3.4.8.3.1 Influenza Immunization among 65+</td>
<td>All seniors aged 65+ complete Influenza immunization per 100.</td>
<td>58</td>
<td>58.7</td>
<td>MIMS 2007</td>
</tr>
<tr>
<td>3.4.8.3.2 Pneumococcal Immunization among 65+</td>
<td>All seniors aged 65+ complete Pneumococcal immunization.</td>
<td>60.9</td>
<td>63.9</td>
<td>MIMS 2007</td>
</tr>
<tr>
<td>3.4.9.1 Cervical Cancer Screening</td>
<td>Cervical cancer screening rate per 1,000</td>
<td>409.2</td>
<td>546.1</td>
<td>MBH (HIM)</td>
</tr>
<tr>
<td>3.4.9.2 Breast Cancer Screening</td>
<td>Breast cancer screening rate per 1,000.</td>
<td>140.6</td>
<td>155.8</td>
<td>MBH (HIM)</td>
</tr>
<tr>
<td>3.5.1 Breastfeeding initiation</td>
<td>% of mom breastfeeding initiation</td>
<td>80.3%</td>
<td>81.6%</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.5.2 Sexual Activity</td>
<td>% of children aged 15-19 who have had sexual intercourse.</td>
<td>suppressed due to small numbers</td>
<td>41.9%</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.5.3 Teen Pregnancy</td>
<td>Teen pregnancy rate per 1,000 females</td>
<td>111.1</td>
<td>49.8</td>
<td>MCHP Child Health Atlas 2008.</td>
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<tr>
<td>3.5.4 Teen Birth</td>
<td>Teen birth rate per 1,000 teens</td>
<td>2.0</td>
<td>30.1</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.5.5 Children in care</td>
<td>Children taken into care rate.</td>
<td>7.5%</td>
<td>3.3%</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.5.6 Child protection/support</td>
<td>Prevalence of children protection/support.</td>
<td>12.4%</td>
<td>11.5%</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.5.7 Youth Smoking</td>
<td>% of children aged 12-19 are &quot;current daily or occasional smokers&quot;.</td>
<td>39%</td>
<td>13.7%</td>
<td>CCHS 2007,2008</td>
</tr>
<tr>
<td>3.5.9 Youth Body Mass Index</td>
<td>% of children aged 12-17 self-rated with normal BMI or lower.</td>
<td>63.8%</td>
<td>71.8%</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td></td>
<td>% of children aged 12-17 self-rated with overweight or obese BMI.</td>
<td>29.2%</td>
<td>19.3%</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.5.10.1 Children With at Least One Prescription</td>
<td>Children aged 0-19 with at least one prescription rate per 1,000.</td>
<td>516.8</td>
<td>551.0</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.5.10.2 Antibiotic Prescriptions for Children</td>
<td>Children aged 0-19 with at least one antibiotic prescription rate per 1,000.</td>
<td>363.7</td>
<td>389.9</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.5.10.2.1 Number of Antibiotic Prescriptions per Child</td>
<td>Average number of antibiotic prescriptions used per children aged 0-19.</td>
<td>1.8</td>
<td>1.9</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
<tr>
<td>3.5.10.3 Antidepressant Prescriptions for Children</td>
<td>Children aged 0-19 with at least one antidepressant prescription rate per 1,000.</td>
<td>suppressed due to small numbers</td>
<td>10.5</td>
<td>MCHP Child Health Atlas 2008.</td>
</tr>
</tbody>
</table>
## HEALTH STATUS

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
<th>Region Current</th>
<th>Manitoba Current</th>
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</tr>
</thead>
<tbody>
<tr>
<td>4.1.1 Self rated physical health</td>
<td>% of residents who self rated physical health good (2007).</td>
<td>56.0%</td>
<td>59.9%</td>
<td>CCHS 2007</td>
</tr>
<tr>
<td></td>
<td>% of residents who self rated physical health good (2008).</td>
<td>44.2%</td>
<td>54.1%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of males who self rated physical health good (2008).</td>
<td>38.5%</td>
<td>55.2%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of females who self rated physical health good (2008).</td>
<td>50.9%</td>
<td>53.1%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td>4.1.2 Self rated mental health</td>
<td>% of residents who self rated mental health good (2007).</td>
<td>69.9%</td>
<td>73.5%</td>
<td>CCHS 2007</td>
</tr>
<tr>
<td></td>
<td>% of residents who self rated mental health good (2008).</td>
<td>72%</td>
<td>71.5%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of males who self rated mental health good (2008).</td>
<td>67%</td>
<td>73.5%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td></td>
<td>% of females who self rated mental health good (2008).</td>
<td>77.6%</td>
<td>69.5%</td>
<td>CCHS 2008</td>
</tr>
<tr>
<td>4.1.3 Functional health status – mental health</td>
<td>Predicted scores on general mental health scale.</td>
<td>82.5</td>
<td>84.0</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.2.1 Life Expectancy</td>
<td>Female life expectancy in years.</td>
<td>79.0</td>
<td>81.5</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td></td>
<td>Male life expectancy in years.</td>
<td>72.1</td>
<td>76.3</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.2.2 Premature Mortality Rate</td>
<td>Premature mortality rate per 1,000.</td>
<td>4.6</td>
<td>3.3</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.2.3 Potential Years of Life Lost</td>
<td>Potential years of life lost rate per 1,000.</td>
<td>63.0</td>
<td>50.9</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.2.3.1 PYLL due to cancer</td>
<td>Female potential years of life lost due to cancer rate per 1,000.</td>
<td>0</td>
<td>5.2</td>
<td>MBH, 2008</td>
</tr>
<tr>
<td></td>
<td>Male potential years of life lost due to cancer rate per 1,000.</td>
<td>10.3</td>
<td>14.8</td>
<td>MBH, 2008</td>
</tr>
<tr>
<td>4.2.3.2 PYLL due to circulatory disease</td>
<td>Female potential years of life lost due to circulatory disease rate per 1,000.</td>
<td>7.5</td>
<td>4.5</td>
<td>MBH, 2008</td>
</tr>
<tr>
<td></td>
<td>Male potential years of life lost due to circulatory disease rate per 1,000.</td>
<td>0</td>
<td>2.2</td>
<td>MBH, 2008</td>
</tr>
</tbody>
</table>
## APPENDIX A: INDICATORS SUMMARY

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
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</tr>
</thead>
<tbody>
<tr>
<td>4.2.3.3 PYLL due to respiratory disease</td>
<td>Female potential years of life lost due to respiratory disease rate per 1,000.</td>
<td>34.5</td>
<td>10.5</td>
<td>MBH, 2008</td>
</tr>
<tr>
<td></td>
<td>Male potential years of life lost due to respiratory disease rate per 1,000.</td>
<td>27.0</td>
<td>14.4</td>
<td>MBH, 2008</td>
</tr>
<tr>
<td>4.2.3.4 PYLL due to unintentional injuries</td>
<td>Female potential years of life lost due to injuries rate per 1,000.</td>
<td>0</td>
<td>6.5</td>
<td>MBH, 2008</td>
</tr>
<tr>
<td></td>
<td>Male potential years of life lost due to injuries rate per 1,000.</td>
<td>0</td>
<td>1.6</td>
<td>MBH, 2008</td>
</tr>
<tr>
<td>4.2.3.5 PYLL due to suicide</td>
<td>Female potential years of life lost due to suicide rate per 1,000.</td>
<td>0</td>
<td>2.3</td>
<td>MBH, 2008</td>
</tr>
<tr>
<td></td>
<td>Male potential years of life lost due to suicide rate per 1,000.</td>
<td>15.9</td>
<td>13.1</td>
<td>MBH, 2008</td>
</tr>
<tr>
<td>4.2.4 Overall Mortality</td>
<td>Mortality rate per 1,000</td>
<td>11.9</td>
<td>8.0</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.2.4.1 Leading Causes of Death</td>
<td>% of female deaths due to cancer.</td>
<td>28.6%</td>
<td>26.3%</td>
<td>Manitoba Vital Statistics death data</td>
</tr>
<tr>
<td></td>
<td>% of female deaths due to External causes (injury)</td>
<td>28.6%</td>
<td>4.9%</td>
<td>Manitoba Vital Statistics death data</td>
</tr>
<tr>
<td></td>
<td>% of female deaths due to Endocrine/Nutritional Disorders</td>
<td>14.3%</td>
<td>5.7%</td>
<td>Manitoba Vital Statistics death data</td>
</tr>
<tr>
<td></td>
<td>% of female deaths due to Diseases of the Circulatory System.</td>
<td>14.3%</td>
<td>33.0%</td>
<td>Manitoba Vital Statistics death data</td>
</tr>
<tr>
<td></td>
<td>% of female deaths due to Abnormal Symptoms Not Elsewhere Classified</td>
<td>14.3%</td>
<td></td>
<td>Manitoba Vital Statistics death data</td>
</tr>
<tr>
<td></td>
<td>% of female deaths due to all Other Causes.</td>
<td>0.0%</td>
<td>22.1%</td>
<td>Manitoba Vital Statistics death data</td>
</tr>
<tr>
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<td>% of male deaths due to Diseases of the Circulatory System.</td>
<td>25.0%</td>
<td>32.3%</td>
<td>Manitoba Vital Statistics death data</td>
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<tr>
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<td>% of male deaths due to Cancer.</td>
<td>16.7%</td>
<td>28.5%</td>
<td>Manitoba Vital Statistics death data</td>
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<tr>
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<td>% of male deaths due to Diseases of the Digestive System</td>
<td>16.7%</td>
<td></td>
<td>Manitoba Vital Statistics death data</td>
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<tr>
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<td>% of male deaths due to External Causes (injury)</td>
<td>16.7%</td>
<td>8.3%</td>
<td>Manitoba Vital Statistics death data</td>
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<tr>
<td></td>
<td>% of male deaths due to Respiratory Diseases</td>
<td>8.3%</td>
<td>8.6%</td>
<td>Manitoba Vital Statistics death data</td>
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<tr>
<td>Indicator</td>
<td>Definition</td>
<td>Region Current</td>
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<tr>
<td>-----------</td>
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<td>-------------</td>
</tr>
<tr>
<td>% of male deaths due to Diseases of Skin and Subcutaneous Tissue</td>
<td>8.3%</td>
<td></td>
<td>Manitoba Vital Statistics death data</td>
<td></td>
</tr>
<tr>
<td>% of male mortality due to Abnormal Symptoms Not Elsewhere Classified</td>
<td>8.3%</td>
<td></td>
<td>Manitoba Vital Statistics death data</td>
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<tr>
<td>% of male mortality due to All Other Causes</td>
<td>0.0%</td>
<td>17.1%</td>
<td>Manitoba Vital Statistics death data</td>
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</tr>
<tr>
<td>4.2.4.2.1 Total Respiratory Morbidity (Respiratory Diseases)</td>
<td>Mortality rates among residents with Total Respiratory Morbidity.</td>
<td>18.8%</td>
<td>7.8%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.2.4.2.2 Arthritis</td>
<td>Mortality rates among residents with arthritis.</td>
<td>8.9%</td>
<td>5.6%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.2.4.2.3 Diabetes</td>
<td>Mortality rates among residents with diabetes.</td>
<td>23.4%</td>
<td>11.7%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.2.4.2.4 Hypertension</td>
<td>Mortality rates among residents with hypertension.</td>
<td>5.8%</td>
<td>4.4%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.2.4.2.5 Ischemic Heart Disease (IHD)</td>
<td>Mortality rates among residents with IHD.</td>
<td>10.8%</td>
<td>7.0%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.2.4.3 Unintentional Injury deaths</td>
<td>Male unintentional injury deaths rate per 100,000.</td>
<td>129.6</td>
<td>42.5</td>
<td>MBH</td>
</tr>
<tr>
<td>Total unintentional injury deaths rate per 100,000.</td>
<td>123.6</td>
<td>35.7</td>
<td>MBH</td>
<td></td>
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<tr>
<td>4.3.1 Preterm birth rate</td>
<td>% live births that are preterm birth (less than 37 weeks gestation)</td>
<td>7.1%</td>
<td>8.2%</td>
<td>MBH (HIM)</td>
</tr>
<tr>
<td>4.3.2 Low birth weight infants (LBW)</td>
<td>% of live infants born weighing less than 2500 grams</td>
<td>7.6%</td>
<td>5.3%</td>
<td>MBH (HIM)</td>
</tr>
<tr>
<td>4.3.3 High Birth Weight infants (HBW)</td>
<td>% of live infants born weighing more than 4000 grams</td>
<td>42.9%</td>
<td>16.1%</td>
<td>MBH (HIM)</td>
</tr>
<tr>
<td>4.3.4 Asthma</td>
<td>% of children treated for asthma.</td>
<td>16.0%</td>
<td>13.9%</td>
<td>MCHP child health atlas 2008.</td>
</tr>
<tr>
<td>4.3.5 Dental extractions in toddlers/children</td>
<td>Dental extractions rate per 1,000 children</td>
<td>33.7</td>
<td>14.2</td>
<td>MCHP child health atlas 2008.</td>
</tr>
<tr>
<td>4.4.1 Diabetes</td>
<td>% of residents has diabetes.</td>
<td>15.6%</td>
<td>8.7%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>Diabetes cases</td>
<td>85</td>
<td>Not available</td>
<td>Churchill RHA</td>
<td></td>
</tr>
<tr>
<td>Diabetes cases</td>
<td>85</td>
<td>Not available</td>
<td>Churchill RHA</td>
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</tr>
<tr>
<td>Indicator</td>
<td>Definition</td>
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<tr>
<td>Lower Limb Amputation crude and age adjusted rate per 1,000 with diabetes.</td>
<td>7.3 5.3</td>
<td>3.8 2.2</td>
<td>MBH, Diabetes and Chronic Diseases Unit.</td>
<td></td>
</tr>
<tr>
<td>% of diabetics who had an eye exam</td>
<td>23.5%</td>
<td>33.5%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
<td></td>
</tr>
<tr>
<td>4.4.2 Hypertension treatment prevalence</td>
<td>% of residents with high blood pressure (self-reported).</td>
<td>14.3% 16.2%</td>
<td>CCHS 2007</td>
<td></td>
</tr>
<tr>
<td>% of residents treated for high blood pressure</td>
<td>34.5% 23.7%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4.3 Osteoporosis</td>
<td>% of residents with osteoporosis.</td>
<td>9.7% 12.7%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
<td></td>
</tr>
<tr>
<td>4.4.4 Arthritis</td>
<td>% of residents with arthritis (self-reported).</td>
<td>13.2% 15.7%</td>
<td>CCHS 3.1</td>
<td></td>
</tr>
<tr>
<td>% of residents treated for arthritis</td>
<td>10.0% 20.2%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4.5 IHD treatment prevalence</td>
<td>% of residents treated for IHD</td>
<td>11.4% 8.5%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
<td></td>
</tr>
<tr>
<td>4.4.6 Respiratory Morbidity treatment prevalence</td>
<td>% of residents treated for Respiratory Morbidity</td>
<td>2.7% 11.6%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
<td></td>
</tr>
<tr>
<td>4.4.7 Asthma</td>
<td>% of residents with asthma (self-reported)</td>
<td>8.5% 7.2%</td>
<td>2007</td>
<td></td>
</tr>
<tr>
<td>4.4.8 Treatment prevalence for renal failure</td>
<td>% of females aged 20+ treated for renal failure</td>
<td>suppressed due to small numbers</td>
<td>1.7%</td>
<td>MCHP 2005, Sex Differences Report.</td>
</tr>
<tr>
<td>% of males aged 20+ treated for renal failure.</td>
<td>5.1% 2.5%</td>
<td>MCHP 2005, Sex Differences Report.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.5.1 Cancer Prevalence</td>
<td>Female all cancer prevalence per 100,000.</td>
<td>4,011 3,678</td>
<td>CancerCare Manitoba</td>
<td></td>
</tr>
<tr>
<td>Male all cancer prevalence per 100,000.</td>
<td>3,867 4,811</td>
<td>CancerCare Manitoba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.5.2 Cancer Survival</td>
<td>Female all cancer survival rate.</td>
<td>54% 59%</td>
<td>CancerCare Manitoba</td>
<td></td>
</tr>
<tr>
<td>Male all cancer survival rate.</td>
<td>51% 58%</td>
<td>CancerCare Manitoba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female colorectal cancer survival rate.</td>
<td>64% 60%</td>
<td>CancerCare Manitoba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male colorectal cancer survival rate.</td>
<td>61% 59%</td>
<td>CancerCare Manitoba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female lung cancer survival rate.</td>
<td>10% 22%</td>
<td>CancerCare Manitoba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male lung cancer survival rate.</td>
<td>21% 15%</td>
<td>CancerCare Manitoba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female breast cancer survival rate.</td>
<td>78% 86%</td>
<td>CancerCare Manitoba</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male prostate cancer survival rate.</td>
<td>77% 94%</td>
<td>CancerCare Manitoba</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX A: INDICATORS SUMMARY

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>4.5.3 Leading Causes of Cancer Deaths (female)</td>
<td>Lung cancer mortality rate.</td>
<td>28.7%</td>
<td>25.6%</td>
<td>CancerCare Manitoba</td>
</tr>
<tr>
<td></td>
<td>Breast cancer mortality rate.</td>
<td>14.4%</td>
<td>10.0%</td>
<td>CancerCare Manitoba</td>
</tr>
<tr>
<td></td>
<td>Colorectal cancer mortality rate.</td>
<td>10.3%</td>
<td>10.8%</td>
<td>CancerCare Manitoba</td>
</tr>
<tr>
<td></td>
<td>Pancreas cancer mortality rate.</td>
<td>6.9%</td>
<td>6.6%</td>
<td>CancerCare Manitoba</td>
</tr>
<tr>
<td></td>
<td>Ovary cancer mortality rate.</td>
<td>2.3%</td>
<td>5.0%</td>
<td>CancerCare Manitoba</td>
</tr>
<tr>
<td>4.5.3 Leading Causes of Cancer Deaths (male)</td>
<td>Lung cancer mortality rate.</td>
<td>31.7%</td>
<td>28.9%</td>
<td>CancerCare Manitoba</td>
</tr>
<tr>
<td></td>
<td>Prostate cancer mortality rate.</td>
<td>11.2%</td>
<td>8.0%</td>
<td>CancerCare Manitoba</td>
</tr>
<tr>
<td></td>
<td>Colorectal cancer mortality rate.</td>
<td>10.7%</td>
<td>11.6%</td>
<td>CancerCare Manitoba</td>
</tr>
<tr>
<td></td>
<td>Pancreas cancer mortality rate.</td>
<td>2.2%</td>
<td>5.3%</td>
<td>CancerCare Manitoba</td>
</tr>
<tr>
<td></td>
<td>Bladder cancer mortality rate.</td>
<td>1.3%</td>
<td>3.7%</td>
<td>CancerCare Manitoba</td>
</tr>
<tr>
<td>4.6.1 Injury Hospitalization rates</td>
<td>% of female injury hospitalization to the total hospitalization.</td>
<td>4.0%</td>
<td>5.0%</td>
<td>MBH</td>
</tr>
<tr>
<td></td>
<td>% of male injury hospitalization to the total hospitalization.</td>
<td>12.0%</td>
<td>7.0%</td>
<td>MBH</td>
</tr>
<tr>
<td>4.7.1 Treatment prevalence of cumulative mental health disorder</td>
<td>% of residents treated for a cumulative mental health disorder.</td>
<td>21.1%</td>
<td>24.4%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.7.2 Treatment prevalence of anxiety disorders</td>
<td>% of residents treated for an anxiety disorder.</td>
<td>3.8%</td>
<td>7.4%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.7.3 Treatment prevalence of depression</td>
<td>% of residents treated for depression.</td>
<td>13.6%</td>
<td>19.1%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>Indicator</td>
<td>Definition</td>
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</tr>
<tr>
<td>4.7.4</td>
<td>Treatment prevalence for substance abuse</td>
<td>9.0%</td>
<td>4.9%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.7.5</td>
<td>Treatment prevalence of schizophrenia</td>
<td>1.0%</td>
<td>1.1%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.7.6</td>
<td>Treatment prevalence of personality disorder</td>
<td>0.7%</td>
<td>0.9%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>4.7.7</td>
<td>Treatment Prevalence for Seasonal Affective Disorder (SAD)</td>
<td>1</td>
<td>No comparative data.</td>
<td>MBH</td>
</tr>
<tr>
<td>4.7.8</td>
<td>Attempted suicide</td>
<td>0.3%</td>
<td>0.2%</td>
<td>&quot;What Works&quot; report, 2007.</td>
</tr>
<tr>
<td>4.8.1.1</td>
<td>Chlamydia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female Chlamydia infection rate per 100,000.</td>
<td>430.1</td>
<td>757.2</td>
<td>MBH, CDC</td>
</tr>
<tr>
<td></td>
<td>Male Chlamydia infection rate per 100,000.</td>
<td>426.4</td>
<td>398.6</td>
<td>MBH, CDC</td>
</tr>
<tr>
<td></td>
<td>Total Chlamydia infection rate per 100,000.</td>
<td>428.3</td>
<td>580.4</td>
<td>MBH, CDC</td>
</tr>
<tr>
<td></td>
<td>% of Chlamydia cases that are from First Nations residents</td>
<td>50%</td>
<td>34%</td>
<td>MBH, CDC</td>
</tr>
</tbody>
</table>
### HEALTH SYSTEM CHARACTERISTICS

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
<th>Region Current</th>
<th>Manitoba Current</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2.2 Physician visit rate for mental illness</td>
<td>Medical Separation rates per 1,000 for mental illness (female)</td>
<td>1,137.8</td>
<td>Not provided</td>
<td>MBH (HIM)</td>
</tr>
<tr>
<td></td>
<td>Medical Separation rates per 1,000 for mental illness (male)</td>
<td>785.1</td>
<td>Not provided</td>
<td>MBH (HIM)</td>
</tr>
<tr>
<td>5.2.3 Total hospital separation rates</td>
<td>Total hospital separation rate per 1,000.</td>
<td>189.1</td>
<td>136.7</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.2.3.1 Hospital episode rates for children</td>
<td>Hospital episode rate per 1,000 children aged 0-19.</td>
<td>60.4</td>
<td>37.8</td>
<td>MCHP child health atlas 2008.</td>
</tr>
<tr>
<td>5.2.4.1 Hospital separation rate for mental illness</td>
<td>Hospital Separation rates per 1,000 for mental illness (female)</td>
<td>93.4</td>
<td>Not provided</td>
<td>MBH (HIM)</td>
</tr>
<tr>
<td></td>
<td>Hospital Separation rates per 1,000 for mental illness (male)</td>
<td>87.6</td>
<td>Not provided</td>
<td>MBH (HIM)</td>
</tr>
<tr>
<td>5.2.6 Hospital separation rates for short stays and long stays</td>
<td>Hospital short day stays(&lt;14 days) rate per 1,000.</td>
<td>521.2</td>
<td>321.6</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td></td>
<td>Hospital long day stays(14 days or more) rate per 1,000.</td>
<td>484.2</td>
<td>608.3</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.2.7.1 Cataract Surgery</td>
<td>Cataract surgery rate per 1,000.</td>
<td>45.7</td>
<td>26.9</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.2.7.2 Knee replacement surgery</td>
<td>Knee replacement surgery rate per 1,000.</td>
<td>5.0</td>
<td>2.8</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.2.7.3 Cardiac Catheterization</td>
<td>Cardiac catheterization rate per 1,000.</td>
<td>suppressed due to small numbers</td>
<td>6.9</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.2.7.4 MRI Scan Rate</td>
<td>MRI scan rate per 1,000.</td>
<td>17.7</td>
<td>22.0</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.2.7.5 Computed tomography (CT) scans</td>
<td>CT scan rate per 1,000 residents.</td>
<td>58.3</td>
<td>66.1</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.2.8.1 New Home Care cases (Incidence)</td>
<td>% of residents with a new home care case</td>
<td>2.30%</td>
<td>1.38%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.2.8.2 Open Home Care cases (Prevalence)</td>
<td>% of residents with a open home care case</td>
<td>6.45%</td>
<td>3.19%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.2.8.3 Case closing rates</td>
<td>% of residents with a closed home care case</td>
<td>2.61%</td>
<td>1.47%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
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</table>

A-14
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
<th>Region Current</th>
<th>Manitoba Current</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2.8.4 Average length of home care cases</td>
<td>Average length (days) of home care case.</td>
<td>267.9</td>
<td>222.0</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.2.8.5 Home care days used</td>
<td>Number of days of home care used per year for female.</td>
<td>224.6</td>
<td>215.7</td>
<td>MCHP 2005, Sex Differences Report.</td>
</tr>
<tr>
<td></td>
<td>Number of days of home care used per year for male.</td>
<td>237.0</td>
<td>193.0</td>
<td>MCHP 2005, Sex Differences Report.</td>
</tr>
<tr>
<td>5.2.9 Personal Care Home (PCH) Utilization</td>
<td>% of residents aged 75+ living in PCH for at least one day.</td>
<td>34.4%</td>
<td>12.7%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>5.3.1 Ratio between acute and community costs</td>
<td>% of acute costs.</td>
<td>77%</td>
<td>51%</td>
<td>MIS.</td>
</tr>
<tr>
<td></td>
<td>% of community costs.</td>
<td>10%</td>
<td>15%</td>
<td>MIS.</td>
</tr>
<tr>
<td>Indicator</td>
<td>Definition</td>
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</tr>
<tr>
<td>6.1.1 Regular Medical Doctor</td>
<td>% of residents with a regular medical doctor.</td>
<td>41.1%</td>
<td>84.6%</td>
<td>CCHS 2007</td>
</tr>
<tr>
<td>6.1.2 Contact with medical doctor in past 12 months</td>
<td>% of residents who contact with medical doctor in past 12 months.</td>
<td>68.2%</td>
<td>76.4%</td>
<td>CCHS 2007</td>
</tr>
<tr>
<td>6.1.4 Physician visit rate</td>
<td>% of residents who visited physician.</td>
<td>38.3%</td>
<td>82.6%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>6.1.5 Ambulatory visit rate</td>
<td>Ambulatory visit rate per resident.</td>
<td>1.4</td>
<td>5.0</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>6.1.5.1 Ambulatory visit rate to specialists</td>
<td>Ambulatory visit rates to specialists per resident.</td>
<td>0.7</td>
<td>1.3</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>6.1.5.2 Ambulatory consultation rate</td>
<td>Ambulatory consultation rate per resident.</td>
<td>0.2</td>
<td>0.3</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>6.1.6 Visit location rate per 1,000 residents</td>
<td>% of residents visit general physician within district.</td>
<td>0.0%</td>
<td>82.0%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>6.1.7 Travelling to access specialist services</td>
<td>Northern patient transportation number (Medivacs and Elective).</td>
<td>36</td>
<td>No comparison data</td>
<td>Churchill RHA</td>
</tr>
<tr>
<td>6.1.8 Families First Program - of population screened and % enter program</td>
<td>% of births screened</td>
<td>123.5%</td>
<td>93.9%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td></td>
<td>% of births screened positive</td>
<td>58.8%</td>
<td>22.8%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td></td>
<td>% of eligible families declined service</td>
<td>0.0%</td>
<td>23.6%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td>6.1.9 Families First Program Screening (risk factors)</td>
<td>% of families with 3+ risk factors.</td>
<td>56.3%</td>
<td>25.0%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td>6.1.9.1 Alcohol Use During Pregnancy.</td>
<td>% of moms using alcohol during pregnancy.</td>
<td>33.3%</td>
<td>12.7%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td>Indicator</td>
<td>Definition</td>
<td>Region Current</td>
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</tr>
<tr>
<td>6.1.9.2 Smoking During Pregnancy</td>
<td>% of moms smoking during pregnancy.</td>
<td>13.3%</td>
<td>20.8%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td>6.1.9.3 Anxiety and Depression in Mothers of Newborns</td>
<td>% of moms with maternal depression.</td>
<td>13.3%</td>
<td>15.2%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td>6.1.9.4 Mothers with Less than a Grade 12 Education</td>
<td>% of moms with less than high school education.</td>
<td>28.6%</td>
<td>21.4%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td>6.1.9.5 Relationship Distress</td>
<td>% of moms with relationship distress.</td>
<td>15.4%</td>
<td>6.0%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td>6.1.9.6 Domestic Violence</td>
<td>% moms with a parenting partner and domestic violence.</td>
<td>15.4%</td>
<td>2.5%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td>6.1.9.7 Social assistance/Financial difficulties</td>
<td>% of families with income support or financial difficulties.</td>
<td>21.4%</td>
<td>17.3%</td>
<td>Healthy Child Manitoba, Families First Screening Form 2007.</td>
</tr>
<tr>
<td>6.2.1 Continuity of Care – Adults</td>
<td>% of adults with continuity of care.</td>
<td>53.9%</td>
<td>67.7%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>6.2.2 Continuity of Care – Children</td>
<td>% of children with continuity of care.</td>
<td>suppressed due to small numbers</td>
<td>56.2%</td>
<td>MCHP child health atlas 2008.</td>
</tr>
<tr>
<td>6.2.3 Antidepressant Prescription Follow up</td>
<td>% of patients with a new prescription for antidepressants and a diagnosis of depression within two weeks of each other, who then had three subsequent ambulatory visits within four months of the prescription being filled.</td>
<td>suppressed due to small numbers</td>
<td>58.2%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>6.3.1 Ambulatory Care Sensitive Conditions</td>
<td>Hospitalizations rate per 1,000 for ambulatory care</td>
<td>28.8</td>
<td>13.5</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>6.3.2 Re-admission rates for infants within 28 days of birth</td>
<td>Newborn readmission rate per 1,000 infants.</td>
<td>99.4</td>
<td>33.0</td>
<td>MCHP child health atlas 2008.</td>
</tr>
<tr>
<td>6.3.3 Caesarean Section Rate</td>
<td>% of births which are by caesarean section.</td>
<td>21.1%</td>
<td>19.5%</td>
<td>MCHP Need to Know Project, 2009 Data Atlas.</td>
</tr>
<tr>
<td>Indicator</td>
<td>Definition</td>
<td>Region Current</td>
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</tr>
<tr>
<td>6.3.4 Hysterectomy Rate</td>
<td>Hysterectomy rate per 1,000 aged 25+.</td>
<td>2.1</td>
<td>3.6</td>
<td>Discharge Abstract Database</td>
</tr>
<tr>
<td>6.3.5 Tonsillectomy/adenoidectomy</td>
<td>Tonsillectomy/adenoidectomy rate per 1,000 children aged 0-14.</td>
<td>suppressed due to small numbers</td>
<td>4.7</td>
<td>MCHP child health atlas 2008.</td>
</tr>
<tr>
<td>6.4.1 Staff Immunization</td>
<td>Staff flu immunization rate</td>
<td>80%</td>
<td>No comparison data</td>
<td>Churchill RHA</td>
</tr>
<tr>
<td>6.4.2 Polypharmacy rates for community dwelling seniors</td>
<td>Average annual proportion of community-dwelling seniors age 65+ taking 6 or more different drugs in 121 days</td>
<td>17.7%</td>
<td>6.3%</td>
<td>&quot;What Works&quot; report, 2007.</td>
</tr>
<tr>
<td>6.5 Work Life</td>
<td>Staff satisfaction survey return rate.</td>
<td>26%</td>
<td>No comparison data</td>
<td>Churchill RHA</td>
</tr>
</tbody>
</table>
Appendix B: Community Consultation Materials
Churchill Regional Health Authority

Focus Group Participation
Consent Form

You are being asked to participate in a focus group for Churchill Regional Health Authority to discuss ENTER TOPIC. You will be one of a group of about 8 to 12 participants from your surrounding community. The discussion is taking place on DATE from TIME to TIME.

XX will lead the discussion. BRIEF INFO ABOUT WHO IS THE FACILITATOR. The discussion is expected to last for about two hours.

Your participation in this discussion is completely voluntary, and you may change your mind at any time and decide not to participate. You may also choose not to answer any specific questions that may be asked.

This information will be used by Churchill RHA in its community health assessment. Key themes from this discussion may be used in the Churchill community health assessment. The specific information you give to us in the discussion will remain confidential within our organization. If we choose to reference any of your words used in the discussion, we will attribute them only to “a focus group participant”. Your name, or any other identifying information, will not be used in a final report or in any other document available to the public.

Lunch and refreshments (enter as appropriate) will be served at the discussion. You will not be paid for your participation.

If you have any questions or concerns about your experience in this focus group, please call XX at (204) xxx-xxxx.

Thank you for your participation.

NOTE: each consent form was customized to particular topics, dates and groups.
I have read the statement on the previous attached page regarding my participation in a focus group discussion regarding youth health issues and risk factors.

I understand that:

- My participation is voluntary.
- I may leave at any time.
- I may choose not to answer any of the questions asked of me.
- There are no anticipated harms or known benefits to me resulting from my participation in this focus group.
- Information I give during the discussion may be used in a report published by Churchill RHA but it will be published as "themes" and I cannot be identified.
- My name will not be published.
- My confidentiality will be protected by the focus group facilitators and nothing I say in this forum will be repeated and/or attributed to me after the focus group discussion.
- I will not be paid or otherwise compensated for my participation.

☐ Yes  ☐ No

I agree to participate in this focus group.

☐ Yes  ☐ No

_____________________________________
Printed Name of Participant

_____________________________________
Signature of Participant

_____________________________________
Date
Please take two minutes to fill in this anonymous survey.

1. How long have you lived in Churchill? (please check one)
   - □ Less than one year
   - □ 2-4 years
   - □ 5-7 years
   - □ 8-10 years
   - □ More than 10 years

2. How old are you? (please check one)
   - □ 18-24 years old
   - □ 25-34 years old
   - □ 35-44 years old
   - □ 45-60 years old
   - □ Older than 60 years old

3. Are you (please check one)
   - □ Male
   - □ Female

4. How would you rate overall client satisfaction with accessibility to health care services within Churchill? (please circle one)


Thank you!!
Churchill RHA
2009 Community Health Assessment
Focus Group
Staff and Health Care Providers Mini Survey

Please take two minutes to fill in this anonymous survey.

1. How long have you been employed/worked in Churchill? (please check one)
   - [ ] Less than one year
   - [ ] 2-4 years
   - [ ] 5-7 years
   - [ ] 8-10 years
   - [ ] More than 10 years

2. What category best describes your current role within Churchill RHA? (please check one)
   - [ ] Health care provider
   - [ ] Administrative support
   - [ ] Policy or program staff
   - [ ] Management
   - [ ] Senior management
   - [ ] Other (please specify) ______________________________

3. How would you rate overall client satisfaction with accessibility to health care services within Churchill RHA? (please circle one)

   1. Very unsatisfied
   2
   3
   4
   5. Very satisfied

Thank you!!
Churchill RHA
2009 Community Health Assessment
Anonymous Community Member Focus Group Survey

1. How long have you lived in Churchill?
   -☐ Less than one year
   -☐ 2-4 years
   -☐ 5-7 years
   -☐ 8-10 years
   -☐ More than 10 years

2. How old are you? (please check one)
   -☐ 18-24 years old
   -☐ 25-34 years old
   -☐ 35-44 years old
   -☐ 45-60 years old
   -☐ Older than 60 years old

3. Are you (please check one)
   -☐ Male
   -☐ Female

4. Do you have children? (please check one)
   -☐ Yes
   -☐ No

5. Did you complete high school?
   -☐ Yes
   -☐ No
   -☐ Still in high school

6. How good are health care services in your community? (please circle one)
   1                             2                            3                           4                            5
   Not good at all                    Very good
### 2009 Community Health Assessment
Aboriginal Community Members Focus Group Questions

<table>
<thead>
<tr>
<th>Title</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
</table>

**What Do We Want to Know?**

- What are some key health issues and risk factors among people in your community?
- Are drugs, alcohol and mental health issues a concern in your community?
- Are there enough services and supports available in your community?
- Are we providing services in a culturally sensitive manner?
- What do people in your community need to be healthy?

### Proposed Agenda and Supporting Materials Required

<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Questions for Discussion</th>
<th>Supporting Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Arrive, Meet, Greet, Signing/Collecting Consent Forms and surveys</td>
<td>Facilitator introduces self as well as other staff (co-facilitators and note takers). Participants introduce themselves. Facilitator should note names and location of where participant is sitting so that you can address them by name. Note there should be no more than two facilitators and one note taker at each meeting. Usually there is only one facilitator.</td>
<td>Consent forms and surveys. Notebook for note taker. Tape recorder if wanted. Name tags</td>
</tr>
<tr>
<td>2. Introductions (5 mins)</td>
<td>Lay ground rules: - respecting each other’s opinions - respecting confidentiality - &quot;what is said here, stays here&quot;; &quot;when you make comments, please do not use names (such as &quot;dr. X&quot;, or &quot;my sister Sarah&quot;)</td>
<td></td>
</tr>
<tr>
<td>3. Discussion of Objectives (2 mins)</td>
<td>Focus of this discussion is the health of our community. We want to talk about what you know about health and risk factors and what concerns you most. We also want your suggestions for how the health of community members can be improved, either through our actions and/or through health services.</td>
<td>Hand out with the Agenda Items.</td>
</tr>
</tbody>
</table>
### Agenda Item 4: We want to know what health issues concern you the most. We want to start this discussion by looking at the list of health issues that we think might be important. (HAND OUT LIST) (20 minutes)

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### Agenda Item 5: What does “culturally sensitive” health care mean to you?

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• Do you think that youth in your community use drugs and alcohol? Is it common?  
• Why are people using drugs and alcohol? (is it modelling what older/respected community members are doing, boredom, hopelessness, "something to do" etc).  
• What do people need to help them to make better choices around alcohol use?  
• Is there "gang activity" in this community? If so, why do you think this is happening and how does it impact the community?  
• Is gambling a problem in the community? How does it affect community members?  
• Is violence a problem in the community? Is the issue family violence, community violence etc. That is, who is most likely to be impacted by, involved in, violence? Are there enough resources in the community to help people who are being affected by violence?  
• What do people need to help them to make better choices around drugs/alcohol/violence etc.?  
• Do kids in the community have enough resources/enough to do? What do they need? |
### Agenda Item

#### 7. Do you have concerns about depression and addictions in your community? (15 minutes)

- What is your experience with people who are depressed or hurting themselves or addicted to drugs or alcohol?
- Do you know community members who have tried to hurt themselves?
- Why do you think this is happening?
- What do you have in your community for people who are depressed or need help?
- Where would you go to get help for yourself or a friend if you needed it? (Do you have someone in your community that you can talk to - is it a friend or a healthcare provider?)
- What kinds of things do you need in your community to help people who are depressed or have addictions or who want to hurt themselves?

#### 8. What do people in your community need to be healthy?

- Getting at "health care" vs. "personal responsibility"
- Guide discussion to address both acute care but also community resources, ownership of health, partnerships etc.

#### 9. Conclusion (5 minutes)

- Is there anything else that you would like to tell us or discuss before we end this meeting?
- Thank you’s & explain how we will use this information
### What Do We Want to Know?

- What are some key health issues and risk factors among community members?
- Are drugs, alcohol and mental health issues a concern in your community?
- Are there enough services and supports available in your community?
- What do people in your community need to be healthy?

### Proposed Agenda and Supporting Materials Required

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| 5. Do you have concerns about risk behaviours in your community? (15 minutes) | • What are you most concerned about?  
• How do you think drugs and alcohol affect your community?  
• Do you think that youth in your community use drugs and alcohol? Is it common?  
• Why are people using drugs and alcohol? (is it modelling what older/respected community members are doing, boredom, hopelessness, "something to do" etc).  
• Is there "gang activity" in this community? If so, why do you think this is happening and how does it impact the community?  
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• Is violence a problem in the community? Is the issue family violence, community violence etc. That is, who is most likely to be impacted by, involved in, violence? Are there enough resources in the community to help people who are being affected by violence?  
• What do people need to help them to make better choices around drugs/alcohol/violence etc.?  
• Do kids in the community have enough resources/enough to do? What do they need?  
• **For teachers** - What is your experience with children and youth in the school setting? Do many children seem to have additional needs and are you able to meet those needs in the school setting? Are children showing up for school, well-fed, rested and ready to learn? Do children seem happy and physically active (concerns about obesity? opportunity for physical activity etc). What suggestions do you have for helping kids be best prepared to learn? What do you need to help children in your class succeed? What resources do kids need? |                      |
### Agenda Item

**6. Do you have concerns about depression and addictions in your community?**

**Questions for Discussion**
- What is your experience with people who are depressed or hurting themselves or addicted to drugs or alcohol?
- Do you know community members who have tried to hurt themselves?
- Why do you think this is happening?
- What do you have in your community for people who are depressed or need help?
- Where would you go to get help for yourself or a friend if you needed it? (Do you have someone in your community that you can talk to - is it a friend or a healthcare provider?)
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**Supporting Materials**

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• What kinds of things do you need in your community to help people who are depressed or have addictions or who want to hurt themselves? | |
| 7. What do people in your community need to be healthy? | • Getting at "health care" vs. "personal responsibility"  
• Guide discussion to address both acute care but also community resources, ownership of health, partnerships etc. | |
| 8. Conclusion (5 minutes) | • Is there anything else that you would like to tell us or discuss before we end this meeting?  
• Thank you’s & explain how we will use this information | |
# Churchill RHA
## 2009 Community Health Assessment
### Elders Focus Group Questions

### What Do We Want to Know?
- What are some key health issues and risk factors among elders?
- Are drugs, alcohol and mental health issues a concern in your community?
- Are there enough services and supports available in your community?
- What do people in your community need to be healthy?

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### Agenda Item

**4. We want to know what health issues concern you the most.**

*We want to start this discussion by looking at the list of health issues that we think might be important.*

*(HAND OUT LIST)*

(20 minutes)

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**5. What does "independence" mean to you?**

(20 minutes)

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<tbody>
<tr>
<td>• As an elder, what do you need to help you maintain your independence?</td>
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<td>• How does transportation affect your independence?</td>
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<tr>
<td>• How do you keep active - are there enough resources in Churchill to help you stay active?</td>
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<tr>
<td>• When you need assistance to manage your daily activities, do you know where to go or who to call?</td>
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| 6. What does “culturally sensitive” health care mean to you? | • What does “Culturally sensitive” health care mean to you?  
• Is the RHA doing a good job of providing services in a culturally sensitive manner?  
• How does availability/lack of availability impact you? (i.e. are you less likely to seek services)  
• What suggestions do you have for improvements/or new programs services? | |
| 7. Do you have concerns about risk behaviours in your community? (15 minutes) | • How do you think drugs and alcohol affect your community?  
• Do you think that youth in your community use drugs and alcohol? Is it common?  
• Why are people using drugs and alcohol? (is it modelling what older/respected community members are doing, boredom, hopelessness, "something to do" etc).  
• What do people need to help them to make better choices around alcohol use? | |
| 8. Do you have concerns about depression and addictions in your community? (15 minutes) | • What is your experience with people who are depressed or hurting themselves or addicted to drugs or alcohol?  
• Do you know community members who have tried to hurt themselves?  
• Why do you think this is happening?  
• What do you have in your community for people who are depressed or need help?  
• Where would you go to get help for yourself or a friend if you needed it? (Do you have someone in your community that you can talk to - is it a friend or a healthcare provider?)  
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<td>9. What end of life issues concern you the most? (10 minutes)</td>
<td>• Remaining in community&lt;br&gt;• Availability of palliative care, pain control</td>
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<td>10. What do people in your community need to be healthy?</td>
<td>• Getting at &quot;health care&quot; vs. &quot;personal responsibility&quot;&lt;br&gt;• Guide discussion to address both acute care but also community resources, ownership of health, partnerships etc.</td>
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APPENDIX B: COMMUNITY CONSULTATION MATERIALS

Churchill RHA
2009 Community Health Assessment
Families R Us Focus Group Questions

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**What Do We Want to Know?**

- What are some key health issues and risk factors among people in your community?
- Are drugs, alcohol and mental health issues a concern in your community?
- Are there enough services and supports available in your community for families?
- What do people in your community need to be healthy?

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#### 3. Discussion of Objectives (2 mins)

**Questions for Discussion**

Focus of this discussion is the health of our community. We want to talk about what you know about health and risk factors and what concerns you most. We also want your suggestions for how the health of community members can be improved, either through our actions and/or through health services.

**Supporting Materials**

Hand out with the Agenda Items.

#### 4. We want to know what health issues concern you the most. We want to start this discussion by looking at the list of health issues that we think might be important. (HAND OUT LIST) (20 minutes)

- Please take a few minutes to review this list. Once you have looked at the list, please take three separate sticky notes and on each note, put ONE issue from the list. Please rank the issues as 1, 2 and 3.
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- Discuss why each person prioritized the issues in this way. Is there agreement on the top three?
- What are we missing - i.e. is there anything that wasn't on the list but should be?
- Why do you think these issues are so important?

**Questions for Discussion**

- Sticky notes and pens
- List of health issues that we think might be important.
  List includes:
  - Tuberculosis
  - Smoking
  - Diabetes
  - Lack of education and awareness and services
  - Nutrition and obesity
  - STI/HIV/AIDS
  - Cancer
  - FASD
  - Alcohol and Drugs
  - Lack of traditional medicine
  - Mental Health
  - Mould and mildew
  - Dental needs
  - Better quality of transportation to out of town medical appointments.
## Agenda Item

5. **What are the main concerns of families with young children in your community?**

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<td>• What are your main concerns as parents of young children?</td>
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<td>• Is the RHA doing a good job of providing services that you needed while you were pregnant and that you need now with young children?</td>
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<td>• Are there enough programs and services available for new parents? Do you know who to ask if you have questions about how to care for your baby/children?</td>
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<td>• What suggestions do you have for improvements/or new programs services?</td>
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APPENDIX B: COMMUNITY CONSULTATION MATERIALS
### Agenda Item 6. Do you have concerns about risky behaviours in your community? (15 minutes)

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• Why do you think this is happening?  
• What do you have in your community for people who are depressed or need help?  
• Where would you go to get help for yourself or a friend if you needed it? (Do you have someone in your community that you can talk to - is it a friend or a healthcare provider?)  
• What kinds of things do you need in your community to help people who are depressed or have addictions or who want to hurt themselves? |                      |
| (15 minutes)                                                              |                                                                                                                                                                                                                           |                      |
| 8.  What do people in your community need to be healthy?                   | • Getting at "health care" vs. "personal responsibility"  
• Guide discussion to address both acute care but also community resources, ownership of health, partnerships etc.                                                                                           |                      |
| 9.  Conclusion (5 minutes)                                                | • Is there anything else that you would like to tell us or discuss before we end this meeting?  
• Thank you’s & explain how we will use this information                                                                                                           |                      |
# Staff, Board and Health Care Providers Focus Group Questions

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## What Do We Want to Know?

- How important do you think Access to services is in impacting the health of Churchill residents?
- Where along the continuum of care do you think patients encounter the most difficulty accessing services?
- What do you think makes it difficult for Churchill residents to access these services?
- Are there cultural barriers to accessing services?
- Are there language barriers to accessing services?
- Is the RHA doing enough in making services accessible to its residents?
- What more can the RHA do to ensure accessibility to services?

## Proposed Agenda and Supporting Materials Required

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<td><strong>1. Arrive, Meet, Greet, Signing/Collecting Consent Forms and surveys</strong></td>
<td></td>
<td>Consent forms and surveys. Notebook for note taker. Tape recorder if wanted. Name tags</td>
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<td><strong>2. Introductions (5 mins)</strong></td>
<td>Facilitator introduces self as well as other staff (co-facilitators and note takers). Participants introduce themselves. Facilitator should note names and location of where participant is sitting so that you can address them by name. Note there should be no more than two facilitators and one note taker at each meeting. Usually there is only one facilitator.</td>
<td>Lay ground rules: - respecting each other's opinions - respecting confidentiality - &quot;what is said here, stays here&quot;; &quot;when you make comments, please do not use names (such as &quot;dr. X&quot;, or &quot;my sister Sarah&quot;)</td>
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### Agenda Item

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<td>3. <strong>Discussion of Objectives (2 mins)</strong></td>
<td>Focus of this discussion is Accessibility to services within Churchill RHA. As a staff member/health care provider/board member (insert as appropriate) of Churchill RHA, we want to explore your experiences, concerns and suggestions.</td>
<td>Hand out with the Agenda Items.</td>
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| 4. **We want to know what health issues concern you the most. We want to start this discussion by looking at the list of health issues that we think might be important. (HAND OUT LIST)** | - Please take a few minutes to review this list. Once you have looked at the list, please take three separate sticky notes and on each note, put ONE issue from the list. Please rank the issues as 1, 2 and 3.  
- Once everyone is done have them go to a wall in the room and post all three of their issues. Facilitator will first arrange all issues so that all "1's" go with 1, 2 with 2 etc. After this the group will review to discuss - what are the similarities in ranking? Can we role these issues up into broader headings  
- Discuss why each person prioritized the issues in this way. Is there agreement on the top three?  
- What are we missing - i.e. is there anything that wasn't on the list but should be?  
- Why do you think these issues are so important? | - Sticky notes and pens  
- List of health issues that we think might be important. List includes:  
  - Tuberculosis  
  - Smoking  
  - Diabetes  
  - Lack of education and awareness and services  
  - nutrition and obesity  
  - STI/HIV/AIDS  
  - Cancer  
  - FASD  
  - Alcohol and Drugs  
  - Lack of traditional medicine  
  - Mental Health  
  - Mould and mildew  
  - Dental needs  
  - Better quality of transportation to out of town medical appointments. |
APPENDIX B: COMMUNITY CONSULTATION MATERIALS

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| **5. Discussion:** Thinking of the concept of “Timely and effective access to care” where along the continuum of care do you think residents encounter the most barriers in accessing services? (15 minutes) | • What makes it difficult for residents to access these services?  
  - Is the issue one of “none or limited” accessibility or more a matter of “timeliness” in accessing needed services? (i.e. how does geography/location impact vs. wait times).  
  - What are the challenges in referring patients to services within the RHA?  
  - What can the RHA do to ensure “timely and effective” access to care?  
  - Can the RHA do anything to ensure timely access to care within other regional jurisdictions? | Visual Aid – Continuum of Care |
| **6. Discussion:** Thinking of “culturally sensitive” health care – we would like to discuss some successes and challenges that we are experiencing in our region. (15 minutes) | • Are there examples of where the RHA is doing a good job of providing culturally sensitive health care?  
  - Are there cultural barriers to accessing services? Where can the RHA improve?  
  - Do you think there are particular cultural groups within our region who are not accessing services?  
    - Why do you think this is happening – i.e. is it a choice, are the services provided not appropriate to their needs and/or beliefs, are there language or other issues that are creating barriers to accessibility?  
    - What needs to be done to improve this situation? | |
| **7. Is the RHA doing enough to ensure accessibility to appropriate services in the most appropriate settings?** | • Are there new ways of engaging the community and/or developing partnerships to help identify service needs (appropriateness) as well as enable community members to access services (accessibility).  
  Suggestions as to how the RHA can improve overall to improve client satisfaction with accessibility to services. | |
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| 8. **What do people in your community need to be healthy?** | • Getting at "health care" vs. "personal responsibility"  
• Guide discussion to address both acute care but also community resources, ownership of health, partnerships etc. |                      |
| 9. **Conclusion** (5 minutes) | • Is there anything else that you would like to tell us or discuss before we end this meeting?  
• Thank you’s & explain how we will use this information |                      |
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