



# METIS HEALTH STATUS AND HEALTHCARE USE IN MANITOBA

A summary of the report, *Profile of Metis Health Status and Healthcare Utilization in Manitoba: A Population-Based Study* by Patricia Martens, Judith Bartlett, Elaine Burland, Heather Prior, Charles Burchill, Shamima Huq, Linda Romphf, Julianne Sanguins, Sheila Carter, Angela Bailly.

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Manitoba has long been considered the homeland of the Metis. A nation of people who trace their ancestry to 17th-century North American Indians and Europeans, today's Metis comprise just over six percent of the total Manitoba population.

A number of studies have looked at the health of Metis in Canada, but they rarely drill down to the provincial or regional level, nor have they ever been able to compare the entire population of Metis with the rest of Manitobans. Such comparisons could spotlight key differences that might help form health plans tailored to specific regions and needs. With Manitoba's Metis population expected to continue to rise, a provincial population-based study was clearly needed.

## Our research project: a collaborative process

In 2006, the Manitoba Metis Federation (MMF) contacted the Manitoba Centre for Health Policy (MCHP) to determine interest in Metis health services research. At the request of Manitoba Health, MCHP teamed up with MMF to look into the health status, healthcare use and social indicators of health of Metis in ways we've never done before. We used a diverse set of health indicators — measures that tell us about the state of health in a population. We also used the MMF membership registry, the health registry of the province, and other data in the Repository housed at MCHP,

all anonymized. Our analysis compares 90,915 Manitoba Metis with the rest of the Manitoba population of around one million people.

We looked at several geographic boundaries for this study that each provided specific insights: the 11 Regional Health Authorities (RHAs), the 7 MMF Regions, plus 12 smaller sub-regions (Community Areas) of Winnipeg. Figure 1 (next page) shows the overlap between the RHAs and MMF Regions.

**Metis are 21 percent more likely to die before the age of 75 compared to the rest of the population of Manitoba.**

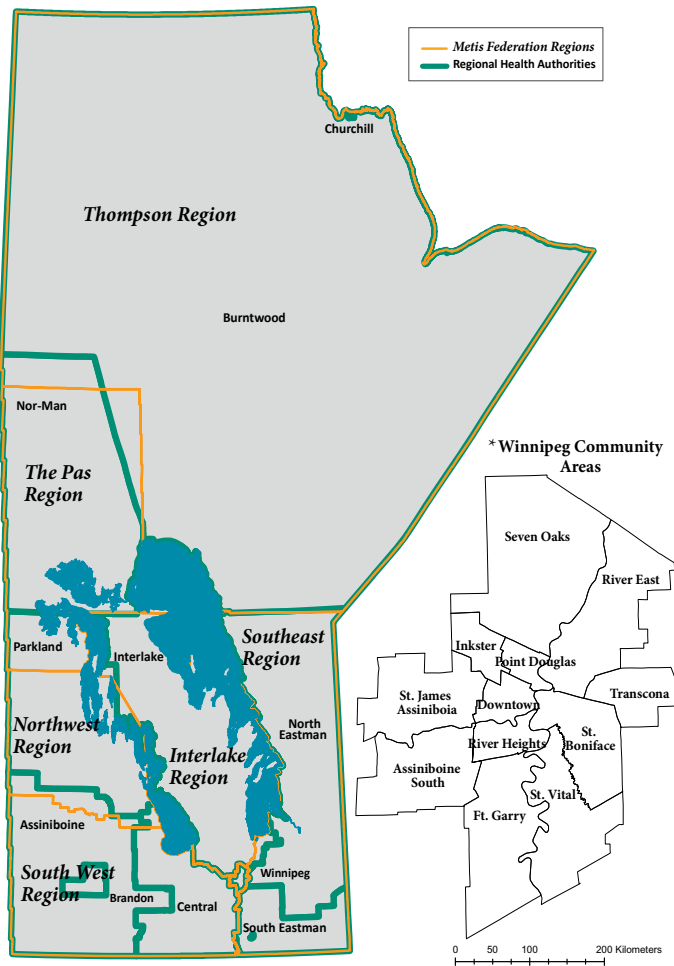
The health and social indicators we analyzed gave us the ability to answer two main questions about Metis health in Manitoba:

1. Are there differences between Metis and other Manitobans based on where they live?
2. Are there differences amongst Metis, based on the Metis Regions where they live?

The short answer to both of these questions is yes.



**Figure 1: Map of RHAs and MMF Regions**



\*The MMF Region and provincial RHA for Winnipeg are the same.

This 16-chapter report examines more than 80 health indicators, from physical illnesses to the use of hospital services to the quality of primary care, and even to educational success and the use of social services. There are some good findings — and some that are troubling.

### The importance of continuity of care

Before we look at the results, it is important to review the one critical factor that strongly correlates with health outcome. When we did analyses on who was more likely to receive preventive and screening services like Pap tests for cervical cancer detection, mammography tests for breast cancer detection, and immunizations for both adults and children, one factor kept showing up. If a Metis person was seeing the same physician for at least 50 percent of their visits over a two-year period (we call this continuity of care), they were much more likely to get these preventive and screening services. That's a good thing to note, given that whether the person was Metis or not, whether they lived in a high or low income area or in different regions of the province, continuity of care is closely linked to greater use of preventive and screening services.

## Health trends and disease prevalence

Table 1 (on the next page) gives an overview of selected findings. Metis are 21 percent more likely to die before the age of 75, compared to the rest of the Manitoba population, at an annual premature mortality rate (PMR) of 4.0 deaths per thousand for Metis compared to 3.3 per thousand in the rest of the population. PMR is considered a good overall picture of the health of a population. Metis aged 19 and older are also more likely than all other Manitobans to have chronic diseases like diabetes (11.8 percent compared to 8.8 percent), heart disease (12.2 percent compared to 8.7 percent), and arthritis (24.2 percent compared to 19.9 percent.) Metis who have diabetes are more likely to have an amputation of their leg or foot than other Manitobans who have diabetes (24.1 amputations compared to 16.2 per 1000). Metis also have higher rates of some mental illnesses than you find in the general population.

**Metis aged 19 and older are more likely than all other Manitobans to have chronic diseases.**

On the other hand, most of the quality of care indicators show similar or only slightly lower rates for Metis compared to other Manitobans — similar post-heart attack care (receiving a beta-blocker drug), similar asthma care, and similar follow-up after an antidepressant prescription.

Our data also point to major concern for Metis youth who are at much higher risk than other Manitoba youth. Teen pregnancy is much higher (70.2 compared to 46.4 per 1000 females ages 15-19), and points to a need to address both male and female factors. Metis teens aged 12 to 19 are much more likely to be smokers (26 percent compared to 14 percent). Metis youth are more likely to change schools or to repeat a grade, less likely to pass Grade 12 standardized tests in language arts or math, and less likely to graduate from high school compared to other Manitoba youth. Metis children are also over twice as likely to be living in a family who receives income assistance (28.5 percent compared to 13.1 percent).

However, there's good news on the prevention front — Metis tend to have similar immunization rates for adults and children as other Manitobans, and the same rates of Pap tests for cervical cancer screening. When we analyzed the data further, taking into account factors like income levels and geographical location, we found that Metis women are actually more likely to have Pap tests, and Metis children are more likely to have a complete set of immunizations

## Metis children are more likely to have a complete set of immunizations by age two than the general population.

by age two than the general population. Metis have more doctor visits and hospitalizations than their non-Metis counterparts, which is reasonable given their higher illness burden. Only 49 percent of Metis rate their health as very good or excellent, lower than the rest of the population's rating of 61 percent. Interestingly, Metis tend to rate their life satisfaction levels the same as everyone else, a surprising finding given their higher burden of chronic disease.

Our report includes a chapter that describes the Metis population's age distribution compared to the rest of the population, and this will help the MMF and provincial government planners and policy makers better understand their needs. The Metis have higher percentages of younger-than-35s, and lower percentages of people older than 35 compared to all other Manitobans. In the two urban centres, a large portion of the Metis are less than 35 years old – 56% in Winnipeg (compared to 44% of the rest of those living in Winnipeg), and 66% in Brandon (compared to 48%). This is a critical area for attention, given the health and social concerns of the youth described earlier.

### Narrowing the focus

These province-level snapshots give us a look at how Metis health compares to all Manitobans, but we take things a step further as we explore regional differences to see where health planners can examine and improve practices and policies. To have relevant data, it was important that we track and attribute data back to where a person lives, rather than where treatment was given. So, for example, if you live in Burntwood but went to Winnipeg for treatment of diabetes or for a hospital stay, those statistics are recorded for the Burntwood region, not for Winnipeg. This allows us to study health and healthcare use patterns within specific areas, no matter where the people in that region received care.

In the report itself, you will find health statistics for RHAs, MMF regions, and Winnipeg Community Areas which shows wide variations by region. For example, PMR varies greatly by where you live as seen in Figure 2 (on the last page). Southeast MMF

Region is the most healthy Metis population (3.1 deaths per thousand), and Thompson MMF Region the least healthy (5.6 deaths per thousand).

So if one area has a better rate for a health or social indicator, planners can ask what policies or programs are in effect there that may be of benefit to another region. Regional rates also serve as baselines to help planners track and evaluate their progress in the future.

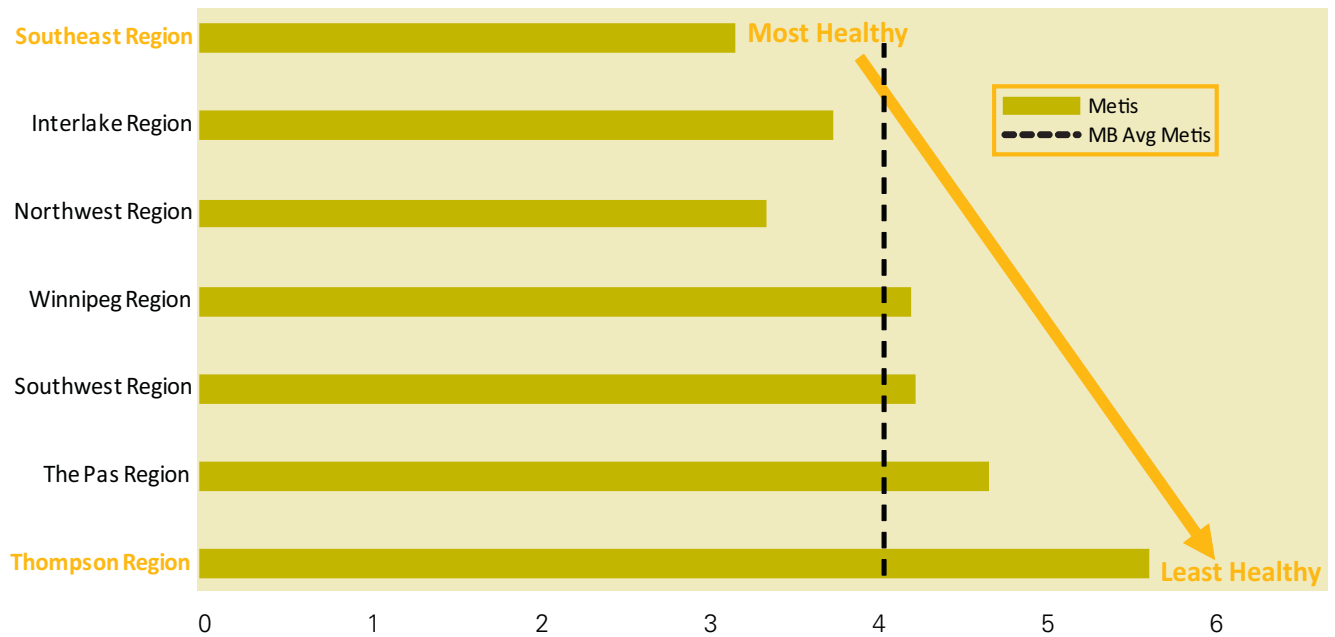
For example, perhaps planners will take a look at Pap screening for cervical cancer, which has higher rates in some regions of the province and see if the programs from these regions might be useful in other regions that have lower Pap screening rates. And in a few years time, rates in both areas can be examined again to see if the gap is closing.

**Table 1: Selected Health Indicators Comparing Metis to all other Manitobans**

Health indicator (age and sex adjusted)	Provincial Metis rate	All other Manitobans rate	% difference of Metis compared to all other Manitobans (+ higher / - lower)
Premature mortality rate (PMR: death before age 75)	4.0 per 1,000	3.3 per 1,000	+21%
Percent of the population aged 10+ either completing or attempting suicide	0.11%	0.08%	+38%
Ischemic heart disease, ages 19+	12.2%	8.7%	+40%
Arthritis, ages 19+	24.2%	19.9%	+22%
Diabetes, ages 19+	11.8%	8.8%	+34%
Amputation of a lower limb in people with diabetes, ages 19+	24.1 per 1,000	16.2 per 1,000	+49%
Osteoporosis, ages 50+	12.2%	12.3%	similar*
Anxiety disorders	9.4%	8.0%	+18%
Substance abuse	7.2%	4.9%	+47%
Cervical cancer screening, women ages, 18-69	69.0%	67.8%	similar*
Complete set of immunizations at age 2	72.0%	71.2%	similar*
Teen pregnancy (females ages, 15-19)	70.2 per 1000	46.4 per 1000	+51%
Youth ages, 12-19 who reported being a current smoker	26.2%	14.0%	+87%
High school completion rates within 6 years of enrolling in Grade 9	66.2%	78.4%	-16%
Children in families receiving social assistance	28.5%	13.1%	+118%
Youth ages, 18-19 receiving provincial income assistance	21.1%	9.8%	+115%

\*Statistically significant unless indicated as "similar."

**Figure 2 : Premature Mortality Rate by Metis Region per 1,000 Metis residents aged 0-74 (2002-2006)**



Some other regional findings:

- For adults aged 19 and older, diabetes prevalence is lowest for Metis living in South Eastman RHA (8.3%), and highest for Metis living in Burntwood RHA (17.9%).
- Ischemic heart disease rates are lower for Metis in the Interlake MMF region compared to provincial Metis rates, but they're higher for the MMF Northwest and The Pas Regions.

## Planning for the future

We hope this report will serve as a useful tool to improve the health and well-being of Metis living in Manitoba. MMF, RHA and provincial planners will be able to spotlight regions where new policies and programs are needed the most, and also those regions where policies are proving

to be successful. One chapter of this report describes how this report is being interpreted. The MMF is using a Metis-specific wellness-oriented holistic process with MMF Regions and their affiliated RHAs to interpret study results and develop plans to inform their RHA health planning. Included in this interpretation are Metis citizen perspective about study results, MMF Region social programs and services, RHA healthcare / health promotion programs and services, and what other researchers say about similar results in other populations. Over time and with good communication and strategic policies, health providers, policy makers and the Metis population across the province will benefit from this shared knowledge.



Want the complete report? You can download it from our web site:

<http://mchp-appserv.cpe.umanitoba.ca/deliverablesList.html>

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More information on the Manitoba Metis Federation can be found on the MMF web site:

<http://www.mmf.mb.ca/>

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