



*Metis Health Knowledge Authority in Manitoba*

## **Ischemic Heart Disease (IHD) and Related Health Care Utilization in Metis in Manitoba Summary Report - 2012**

Bartlett, J. G., Sanguins, J., Carter, S., Mehta, P., Hoepfner, N., and Bassily, M.

### ***What is ischemic heart disease?***

Ischemic Heart Disease (IHD), also known as Coronary Heart Disease (CHD), is a progressive chronic disease. Onset of IHD mostly occurs in mid-life or older. The main cause of IHD is the lack or loss of blood supply to the heart muscle. IHD is often comorbid with hypertension, diabetes, stroke, depression, and/or congestive heart failure.

### ***Why did we do the study?***

This report arose from concerns voiced by Metis citizens about their need for more information on IHD than was available in the first Metis population health report in Canada, the *'Profile of Metis Health Status and Healthcare Utilization in Manitoba'*. That study showed a 40% higher rate of IHD in Metis compared to All Other Manitobans (12.2% vs. 8.7%). Metis in Manitoba had higher rates of overweight/obesity and smoking than did All Other Manitobans and a lower rate of eating five or more fruits/vegetables per day. Inequitable impact of the social determinants of health (limited education, low income, poor housing, poverty, etc.) may influence the overall outcome of Metis health and wellness.

This seven-section report, *'IHD in Metis in Manitoba'*, provides an in-depth examination of IHD in Metis living in Manitoba. We looked at indicators on illness, health services use, high profile cardiac surgeries, and pharmaceutical drug use for Metis in Manitoba.

### ***What did we ask?***

Are there differences between Metis and All Other Manitobans with IHD based on where they live, their age, their sex, and/or their income? Are some Metis better off or worse off than other Metis with different age, sex, household income and geographical areas?

**Provincially, more Metis have IHD compared to All Other Manitobans (10.3% vs. 7.3%)**

### ***Who was studied?***

This population-based study includes every person living in Manitoba who had a provincial health card during the years studied. The Metis Population Database produced in a previous study was used to anonymously identify 73,000 Metis individuals of all ages in Manitoba. Only those who were 19 years of age and older were included in the study for a total of 3000 Metis.

### ***What did we find?***

Provincially, more Metis had IHD compared to All Other Manitobans (10.3% vs. 7.3%). Metis ethnicity, by itself, constituted a risk factor for developing IHD, even after adjusting for factors such as age, sex, income, geographical location, major physical illness and comorbidities. In addition, Metis with IHD had a higher prevalence of diabetes compared to All Other Manitobans with IHD at the provincial level (20.0% vs. 16.5%).

## Selected Health Indicators for Metis with IHD and All Other Manitobans with IHD

Health indicator (age- and sex-adjusted)	Provincial Metis rate	Provincial All Other Manitobans rate	% difference of Metis compared to All Other Manitobans (+ higher / - lower)
<b>Ischemic Heart Disease</b>	10.3%	7.3%	+41%
<b>Diabetes</b>	20.0%	16.5%	+21%
<b>Anxiety Disorders</b>	14.9%	12.8%	+16%
<b>Substance Abuse</b>	10.7%	8.6%	+24%
<b>Drugs to treat IHD use</b>	47.7%	52.1%	-9%
<b>Statin use</b>	36.0%	40.2%	-12%

The table above displays some significant health indicators from our report. It shows that Metis are more likely to have IHD compared to All Other Manitobans in Manitoba. It also shows that Metis with IHD are more likely to have anxiety disorders and substance abuse compared to All Other Manitobans with IHD. Analysis of age- and sex-adjusted IHD prevalence by income quintile demonstrated that Metis had a higher IHD prevalence in every urban and rural income quintile in Manitoba.

Although Metis had higher rates of IHD, it is concerning that Metis with IHD had similar rates of health services use and high profile cardiac surgeries provincially.

Pharmaceutical drug use continues to be important in the primary and secondary prevention of IHD. As our population ages and the obesity epidemic continues, the need for these drugs will rise. Our study demonstrated that Metis used drugs to treat IHD and statins at a lower rate compared to All Other Manitobans with IHD. This highlights an important future research need to study factors behind lower use of drugs to treat IHD among Metis.

### *Where do we go from here?*

It is hoped that this report will assist in improvement of the health and well-being of Manitoba Metis. Our Regional Knowledge Networks, including MMF and Regional Health Authority members, are currently working together to adapt Manitoba Health programs and services to determine priority areas for improving the health of Metis.

We thank the Manitoba Centre for Health Policy staff for their ongoing support, and for use and analysis of data contained in the Population Health Data Repository under project #(H2009: 101) (HIPC #2009/2010-07). Aggregated Diagnosis Groups™ (ADGs™) codes for risk adjustment in logistic models were created using The John Hopkins Adjusted Clinical Group® (ACG®) Case-Mix System version 9. Finally, we thank the Public Health Agency of Canada for their financial support.

**Want the complete report?**  
 You can download the full report from our website:  
<http://health.mmf.mb.ca>  
 or contact the Health & Wellness Department:  
 Email: [hwinfo@mmf.mb.ca](mailto:hwinfo@mmf.mb.ca)  
 Phone: (204) 586-8474 x 378  
 Fax: (204) 927-8341  
 Mail: 201-150 Henry Ave, Winnipeg, Manitoba