Analytical Document

Fact Sheet

Aboriginal Peoples Survey, 2006 Screening for Chronic Diseases Among Métis



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- . not available for any reference period
- .. not available for a specific reference period
- .. not applicable
- 0 true zero or a value rounded to zero
- os value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded
- p preliminary
- r revised
- x suppressed to meet the confidentiality requirements of the Statistics Act
- use with caution
- F too unreliable to be published
- * significantly different from reference category (p < 0.05)

Screening for Chronic Diseases Among Métis

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Screening for Chronic Diseases Among Métis

Mohan B. Kumar is an analyst who formerly was with the National Aboriginal Health Organization, and Teresa Janz is an analyst with the Health Statistics Division at Statistics Canada.

Background

Screening for diabetes, heart disease and some cancers serves as a valuable tool and strategy for early detection. Many national organizations recommend appropriate age-specific screening for the general population and populations at risk¹ (Ur, Chiasson, Ransom, and Rowe, 2008; Eyre et al., 2004; Heart and Stroke Foundation, 2010; Prostate Cancer Canada, 2010a). The use of disease-specific screening among Métis has not been previously examined.

This fact sheet compares nationally recommended guidelines with self-reported use of screening tests for diabetes, high blood pressure, prostate cancer for men, and breast and cervical cancers for women, as reported in the 2006 Aboriginal Peoples Survey (APS). It focuses on both males and females aged 15 and over who self-identified as Métis (either through a single response or in combination with North American Indian and/or Inuit). Métis are one of three distinct Aboriginal peoples acknowledged by the *Constitution Act*, 1982, section 35(2), which recognizes "Aboriginal peoples of Canada" as Indians, Inuit and Métis. For context, estimates for the non-Aboriginal population aged 15 and older are provided when comparable data were available from the 2008 Canadian Community Health Survey (CCHS).

While many factors may be associated with the use of screening tests, this fact sheet compares people with and without a regular family doctor. Most Métis aged 15 and over (77% for males and 84% for females) reported having a regular doctor (Métis Centre of the National Aboriginal Health Organization, 2009a); this is significantly lower than was observed for the non-Aboriginal population (80% for males and 89% for females) (Statistics Canada, 2008).

Diabetes

Extent and impact of the disease:

- Métis aged 15 and over were almost twice as likely to report having been diagnosed with diabetes as adults compared with the total Canadian population (7% vs. 4%) (Janz, Seto, and Turner, 2009). In 2006, 7% of Métis males (11,000 males), and 7% of Métis females (11,970 females) reported having been diagnosed with diabetes (Métis Centre of the National Aboriginal Health Organization, 2009b).
- The mortality rates associated with diabetes were twice as high among Métis males than non-Aboriginal males aged 25 and over (Tjepkema, Wilkins et al., 2009).
- The mortality rate associated with endocrine diseases (which include diabetes mellitus, thyroid disorders and adrenal disorders) was almost three times higher for Métis females than for non-Aboriginal females aged 25 and over (Tjepkema, Wilkins et al., 2009).

^{1.} Although general screening recommendations were used for comparison purposes in this paper, individuals are advised to discuss personal recommendations with their doctor. Further, screening guidelines may vary based on risk factors such as age, family history, ethnicity and the province or territory where a person lives. Guidelines used in the paper were the ones recommended at the time of data analysis. Since screening guidelines are continually updated (e.g., The Canadian Task Force on Preventive Health Care, 2011), the ones used in this paper may not reflect current recommendations.

If diabetes is not treated or managed properly, it can lead to a variety of complications, including diseases
of the heart, kidney and eye as well as nerve damage (Canadian Diabetes Association, 2010a). Untreated
diabetes during pregnancy may lead to miscarriage, major birth defects that include heart and central
nervous system abnormalities, still births and excessively large infants (Ali and Dornhorst, 2011).

Screening guidelines:2

- The Canadian Diabetes Association (CDA) recommends fasting plasma glucose (FPG) testing of adults aged 40 and over for type 2 diabetes once every three years.
- The CDA also recommends that individuals with pertinent risk factors—such as having first degree relatives with type 2 diabetes or being overweight or obese (having a body mass index [BMI] of 25 kg/m² or higher)—should have earlier and/or more frequent FPG or oral glucose tolerance (OGT) testing (Ur, Chiasson et al., 2008).
- Additional risk factors for pregnant females include a previous diagnosis of gestational diabetes, polycystic ovary syndrome (PCOS) and delivery of a high birth weight baby (Canadian Diabetes Association, 2010b).

Diabetes screening:

- About half of Métis males (54%) and females (56%) aged 40 and over met the recommended testing guidelines; that is, they reported being tested for diabetes within the three years prior to the survey in 2006 (Chart 1). However, 40% of males and 38% of females did not meet the guidelines, reporting that they had either never been tested or were tested three or more years earlier.
 - Both Métis males and females aged 40 and over who had a regular doctor were more likely (60%) to have been tested for diabetes within the previous three years than those without a regular doctor (28% of males and 39% of females).
 - Approximately 73% of Métis males and 56% of Métis females aged 40 and over were overweight or obese. Among this group, 58% of males and 63% of females reported they were tested for diabetes within the previous three years, while slightly more than a third of males (37%) and a third of females (32%) indicated they had never been tested or were tested three or more years earlier.

High blood pressure³

Extent and impact of the condition:

- Métis aged 15 and over were more likely than those in the total Canadian population to report that they had been diagnosed with high blood pressure (16% vs. 12%) (Janz, Seto and Turner, 2009).
- In 2006, 17% of Métis males (26,840 males), and 15% of Métis females (27,620 females), reported that they had been diagnosed with high blood pressure (Métis Centre of the National Aboriginal Health Organization, 2009c).
- Among those aged 25 and over, the mortality rate of circulatory system diseases—including heart disease, cerebrovascular diseases, and heart failure—was 1.3 times higher among Métis males and almost twice as high among Métis females compared to non-Aboriginal males and females (Tjepkema, Wilkins et al., 2009).

Screening guidelines:2

• The Heart and Stroke Foundation of Canada recommends having blood pressure checked by a healthcare professional at least once every two years, and those with high blood pressure should be checked at least once a year (Heart and Stroke Foundation, 2010).

^{2.} Guidelines used in the paper were the ones recommended at the time of data analysis, and may not reflect current guidelines.

^{3.} Blood pressure is considered high when it is consistently at the level of, or above, 140/90 mm Hg. For individuals with diabetes or kidney disease, however, blood pressure is considered high at the level of, or above, 130/80 mm Hg. High blood pressure (HBP) is a leading risk factor for heart disease and stroke (Heart and Stroke Foundation, 2010).

Blood pressure screening:

- The majority of Métis males (79%) and Métis females (86%) aged 15 and over had their blood pressure tested within the two years prior to the survey, while 13% of males and 8% of females reported that they had either never been tested or were tested two or more years earlier.
 - In 2006, Métis who had a regular doctor were more likely (85% of males and 91% of females) than those without one (65% of males and 77% of females) to have had their blood pressure checked in the previous two years.
 - Of those Métis aged 15 and older who were diagnosed with high blood pressure, 93% of men and 94% of women indicated that they had been checked for high blood pressure within the previous year.

Prostate cancer

Extent and impact of the disease:

- Less than 0.5% of Métis males aged 15 and over (670 Métis males) reported having been diagnosed with prostate cancer. However, among those who had any type of cancer, almost one in five (16%) had prostate cancer (Métis Centre of the National Aboriginal Health Organization, 2009d).
- Mortality rates for prostate cancer were similar for Métis and non-Aboriginal males aged 25 and over (Tjepkema, Wilkins et al., 2009).

Screening guidelines:2

- Prostate cancer is curable in the early stages, with cure rates of 90% or higher (Prostate Cancer Canada, 2010b).
- Prostate specific antigen (PSA) tests are used to screen for prostate cancer. Prostate Cancer Canada
 recommends that all males be tested at age 40 to establish a baseline PSA score. If the PSA test result
 is normal, the test should be repeated every five years. Annual PSA testing is recommended for males
 with a family history of prostate cancer or those of African or Caribbean descent.
- All males aged 50 and over should have annual or semi-annual PSA testing (Prostate Cancer Canada, 2010a).

Prostate cancer screening:

- About one-quarter (27%) of Métis males aged 40 to 49 had had a PSA test within the five years before the survey, while 65% had never had a PSA test or had had one five or more years previously.
 - Métis males aged 40 to 49 who reported having a regular doctor were over three times more likely to have had a PSA test within the five years prior to the survey (32%) compared to those without a regular doctor (9%^E).
- About one-third (32%) of Métis males aged 50 years and over had had a PSA test within the previous year, while 60% had never had a PSA test or had had one a year or more prior to the survey.
 - ♦ Métis males who reported having a regular doctor were four times more likely to have had a PSA test within the past year (36%) compared to those without a regular doctor (9%^E) (Chart 2).

Cervical cancer

Extent and impact of the disease:

• Just over 1% of all Métis females aged 15 and over (2,180 Métis females) reported a medical diagnosis of cervical cancer. However, among those who had any type of cancer, almost one-quarter (23%) had cervical cancer (Métis Centre of the National Aboriginal Health Organization, 2009d).

 Mortality rates due to the combined cancers of the uterus (including cervix), ovary and adnexa (fallopian tube and ovaries and supporting tissues) was almost twice as high among adult Métis females as among non-Aboriginal females aged 25 years and over (Tjepkema, Wilkins et al., 2009).

Screening guidelines:2

- In general, cervical cancer is avoidable or treatable if detected early (Public Health Agency of Canada, 2009a). Regular screening is important for early detection. Health Canada indicated that most females who developed cervical cancer were not screened in the three years prior to their diagnosis (Health Canada, 2006).
- The Pap smear test is recommended as part of a routine health examination at age 18 or as soon as a
 woman becomes sexually active. If the test is normal, women should be re-screened every three years
 to age 69 (Health Canada, 2006).

Cervical cancer screening:

- Among Métis females aged 18 to 69, about two-thirds (67%) had a Pap test within the two years⁴ prior to the survey and 28% reported that they never had a Pap test or had one two or more years earlier.
 - Métis females who reported having a regular doctor were more likely to have had a timely Pap test (72%) than those without a regular doctor (51%).

Breast cancer

Extent and impact of the disease:

- Breast cancer is one of the leading causes of cancer-related deaths among Canadian females, and affects about one in nine women (Canadian Cancer Society's Steering Committee on Cancer Statistics, 2011).
- Just over 1% of all Métis adult females aged 15 and over (2,430 Métis females) reported being told by a medical professional that they had breast cancer (Métis Centre of the National Aboriginal Health Organization, 2009d). However, among those who had any type of cancer, 26% had breast cancer.
- Mortality rates from breast cancer were similar for Métis and non-Aboriginal females aged 25 years and over (Tjepkema, Wilkins et al., 2009).

Screening guidelines:2

- Early detection of breast cancer can lead to better treatment options and better chances for a successful recovery.
- Mammograms are recommended for women aged 50 to 69 every two years (Canadian Cancer Society, 2010a).

Breast cancer screening:

- About 57% of Métis females aged 50 to 69 in 2006 had had a mammogram within the past two years, compared to 73% of non-Aboriginal females in 2008. About 39% of Métis females in that age group had never had a mammogram or had had one more than two years prior to the 2006 survey.
 - Higher percentages of Métis and non-Aboriginal females with a regular doctor had a mammogram within the two years prior to the survey. Métis females with a regular doctor were twice as likely to have had a mammogram within the previous two years (61%) compared to those without a regular doctor (31%^E) (Table 1).
 - A larger percentage of non-Aboriginal females with a regular doctor had a mammogram within the previous two years (75% in 2008) than Métis females who also had a doctor (61% in 2006).

^{4.} Note that this is not the prior three years as indicated in the recommended guidelines. The 2006 APS question "When was the last time [you had a Pap smear test]?" was a multiple choice question which included the responses: "less than 6 months ago," "6 months to less than 1 year ago," "1 year to less than 2 years ago," "2 years to less than 5 years ago," "5 or more years ago," and "Don't know." The corresponding 2008 CCHS question did not cover the same time frames, therefore only Métis statistics are presented.

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Table 1
Percentage of Métis and non-Aboriginal females aged 50 to 69 years who had a mammogram within the two years prior to the survey, with and without a regular doctor, 2006 and 2008

	Métis females (2006)			Non-Aboriginal females (2008)		
	95% confidence interval		,	95% confidence interv	al	
	Estimate (%)	From	То	Estimate (%)	From	То
Total	57	53	61	73	71	74
With regular doctor	61	57	65	75	74	77
Without regular doctor	31 ^E	19	45	45	39	51

Note: Canadian Community Health Survey (CCHS) data includes both screening and diagnostic mammograms. **Sources:** Statistics Canada, Aboriginal Peoples Survey, 2006; Canadian Community Health Survey, 2008.

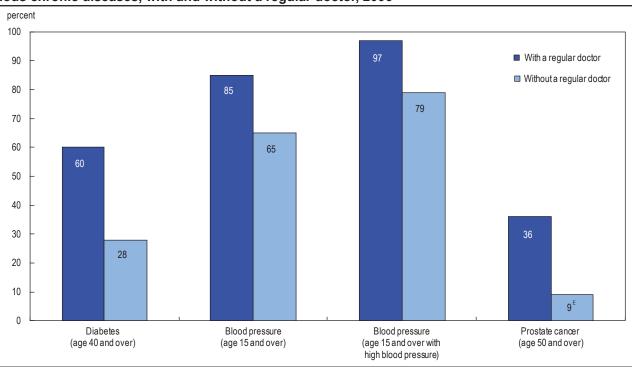
Summary

Having a doctor is important in terms of meeting recommended screening guidelines for several types of chronic conditions (charts 1 and 2). This is true of both Métis men and women aged 15 and older.

More than double the percentage of Métis males with a regular doctor reported that they were screened for diabetes (60%) than those without a regular doctor (28%). For Métis males with high blood pressure, 97% were screened within the recommended time frame when they had a regular doctor, compared with 79% without a doctor. Among Métis men aged 50 and over, 1 in 3 with a regular doctor and about 1 in 10 without a regular doctor were screened for prostate cancer using a prostate specific antigen (PSA) test.

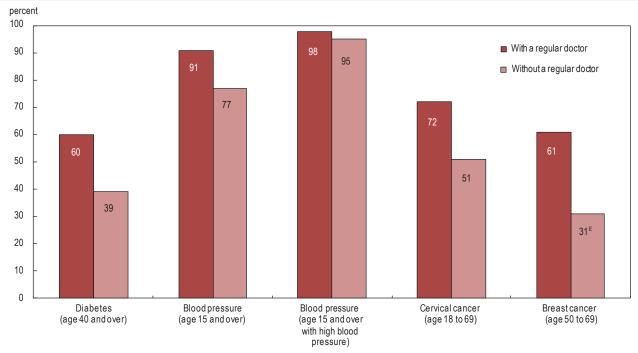
Among Métis women aged 50 to 69, 61% of those with a regular doctor reported that they had been screened for breast cancer, about double the rate of those without a regular doctor (31%). For Métis women aged 40 and older with diabetes, 60% were screened within the recommended time frame when they had a regular doctor, compared with 39% without a regular doctor (Chart 2).

Chart 1
Métis males who met nationally recommended guidelines, by self-reported use of screening tests for various chronic diseases, with and without a regular doctor, 2006



Note: All differences between those with a regular doctor versus those without a regular doctor are significant at a 95% level of confidence. **Source:** Statistics Canada, Aboriginal Peoples Survey, 2006.

Chart 2
Métis females who met nationally recommended guidelines, by self-reported use of screening tests for various chronic diseases, with and without a regular doctor, 2006



Note: All differences between those with a regular doctor versus those without a regular doctor are significant at a 95% level of confidence except for the category "Blood pressure (age 15 and over with high blood pressure)."

Source: Statistics Canada, Aboriginal Peoples Survey, 2006.

What you should know about this fact sheet

The 2006 Aboriginal Peoples Survey (APS)

The 2006 Aboriginal Peoples Survey (APS) provides an extensive set of data about Métis, Inuit and off-reserve First Nations children aged 6 to 14 and adults aged 15 and over living in various locations across Canada in the territories and outside First Nations reserves in the provinces. Not included are people living in institutions. The Aboriginal Peoples Survey was conducted between October 2006 and March 2007. Personal interviews were conducted in Inuit communities, the Northwest Territories (except for Yellowknife) and in other remote areas, while telephone interviews were conducted elsewhere. The overall response rate was 80.1%.

The 2006 APS was developed by Statistics Canada in partnership with the following national Aboriginal organizations: Congress of Aboriginal Peoples, Inuit Tapiriit Kanatami, Métis National Council, National Association of Friendship Centres, and the Native Women's Association of Canada. Federal departments sponsoring the 2006 APS included: Aboriginal Affairs and Northern Development Canada (formerly Indian and Northern Affairs Canada), Health Canada, Human Resources and Skills Development Canada, Canada Mortgage and Housing Corporation and Canadian Heritage.

The Métis Supplement Questionnaire

The Métis Supplement Questionnaire was designed specifically for the Métis population and was administered to APS respondents aged 15 and over. The supplement was developed by Métis organizations in cooperation with Statistics Canada. It asked a wide variety of questions regarding family background, child welfare, social interaction and health. It was not administered in Inuit areas.

For more information, please see the *Aboriginal Peoples Survey 2006 and Métis Supplement*, and the publication *Aboriginal Peoples Survey, 2006: Concepts and Methods Guide* (catalogue number 89-637-X2008003).

The Canadian Community Health Survey (CCHS), 2008

The Canadian Community Health Survey (CCHS) provides a wealth of information on many aspects of the health of Canadians who are 12 years of age or older, including off-reserve First Nations people, Métis and Inuit. In recent years, the survey has included questions on Aboriginal identity. Its geographic coverage does not include reserves, as well as some northern and remote areas.

To provide a context for data from the Métis population, this study makes comparisons with the non-Aboriginal population of Canada using data from the 2008 CCHS. This provided the most recent data at the time of analysis that were comparable to the indicators reported in this fact sheet.

Some comparisons were not possible because either the questions of interest were optional and not included by some jurisdictions, or the wording of the questions or response categories differed between the APS and the CCHS. Furthermore, the APS and CCHS differ in terms of their samples, questions, interview methodologies and the years when they were completed. Such differences between the two surveys may have contributed to the significant differences found between the Métis and non-Aboriginal populations outlined in this fact sheet. Nevertheless, using these two surveys allows for comparisons that would otherwise not be possible—an approach that has been used by other researchers (Garner, Carrière, Sanmartin et al., 2010).

For more information on the 2008 Canadian Community Health Survey, please go to: http://www.statcan.gc.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SurvId=3226&SurvVer=1&InstaId=15282&InstaVer=5&SDDS=3226&Iang=en&db=imdb&adm=8&dis=2.

Analytical notes

Percentages may not add to 100 because the calculation of all estimates included missing data (i.e., don't know, refusal, not stated) and, further, rounded estimates were used to calculate them. In most cases, the proportions of missing data were very small (less than 5 percent), and were therefore not reported.

This report describes only those differences that are significant at a 95% level of confidence.

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