



Otipemisiwak
Métis Government

HEALTH
DEPARTMENT

NISHTOHTAMIHK LI KAANSYR
UNDERSTANDING CANCER

**CANCER
SCREENING
SURVEY
REPORT**



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A Message from the President

Cancer continues to have an impact on the people closest to us, affecting our community in many ways. As the President of the Otipemisiwak Métis Government: the Government of the Métis Nation within Alberta (MNA), I am pleased to share our cancer screening survey community report: *Nishtohtamihk li kaansyr (Understanding Cancer): Cancer Screening Survey Report*.

This report presents results from a cancer screening survey that aims to gather a baseline understanding of cancer screening prevalence, behaviours, and the barriers and facilitators that our community experiences with cancer screening. This information is essential in understanding the challenges Métis Albertans experience while accessing cancer screening programs, as well as opportunities we can leverage to address existing gaps and barriers to improve cancer screening rates in our community. Through this project, the MNA will continue to build knowledge related to cancer screening and collaborate with partners in the cancer system to promote cancer screening, hence contributing to reducing cancer incidence and mortality, and improving cancer outcomes for Métis people in Alberta.

I would like to thank our academic partners at the University of Calgary, Cancer Care Alberta, Cancer Prevention & Screening Innovation (Provincial) Population and Public Health, and Alberta Health Services Screening Programs for their support and partnership with this project.

Andrea Sandmaier
President, Otipemisiwak Métis Government





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Introduction

Otipemisiwak – Those Who Govern Themselves

The Métis are one of three constitutionally recognized Indigenous Peoples in Canada, originating from the unions between European fur traders and First Nations women in the 18th century.¹ The Métis represent a distinct group of people with their own culture, traditions, and way of life that are different from other Indigenous Peoples in Canada. Despite the negative impacts of colonization, Métis people remain strong and resilient, with a strong sense of community and cultural connection, thus supporting their self-determination.

Métis concepts of health and well-being take a holistic approach by focusing on connections between the mind, body, and spirit. Community and culture are assets that support Métis health and well-being, including connection to the land and traditional teachings on the land which provide opportunities for Métis people to gather and connect.

The Otipemisiwak Métis Government: the Government of the Métis Nation within Alberta (MNA) is the governing body for Métis people in Alberta. Representing over 68,000 Métis Citizens, the MNA strives to advance the self-determined priorities of Métis Albertans.² In 2019, the MNA signed a Métis Government Recognition and Self-Government Agreement with the Government of Canada, taking action towards recognition as a government for its Citizens.³ More recently, in November 2022, an overwhelming percentage (96.9%) of voters ratified the MNA Constitution, to further advance the journey to self-government and recognition of the MNA and Métis people in Alberta.⁴

MNA – Health Department

The MNA's Health Department is committed to developing policies and implementing programs and services that improve the health outcomes of Métis Albertans. The primary goal of the MNA's Health Department is to provide culturally appropriate and self-directed health and wellness opportunities addressing the unique needs of Métis Albertans and their communities. In April 2023, the Health Department released the *Alberta Métis Cancer Strategy*, a document that provides a clear path for the MNA to

respond to the cancer journey needs of Métis Albertans.⁵ The strategy was informed by engagement sessions in 2018 and 2019, an epidemiological report, a literature review, and an environmental scan. It centers on the self-determined priorities of Métis Albertans and their loved ones who have been impacted by cancer. One of the actions for the MNA, outlined in the strategy, is to “collect data specific to the experiences of Métis Albertans on a cancer journey.”⁵ Specifically, this strategy calls on the MNA to collect Métis-specific data on cancer screening to understand the barriers and facilitators, the uptake of cancer screening services, and the cancer screening rates among Métis Albertans.

Cancer Screening as a Community Priority

Despite improvements in treatments and therapies today, cancer continues to be the leading cause of death in Canada. Cancer screening can improve health outcomes by detecting cancer at an earlier stage, therefore improving treatment outcomes, and decreasing the burden of cancer. A 2021 scoping review suggests that Métis people experience reduced rates of cancer screening (specifically cervical, breast, and colorectal cancer) and increased cancer incidence compared to the overall Canadian averages and non-Indigenous Canadians.⁶ The most recent Canada-wide study also determined that Métis people were less likely to participate in cancer screening (cervical, breast, and colorectal) compared to non-Indigenous persons.⁷ However, there is a paucity of Métis-specific research on cancer and cancer screening, meaning a significant knowledge gap exists on the cancer screening rates, behaviours, barriers, and facilitators in the Métis population. This prevents the creation of culturally meaningful programs and services to address cancer risk factors and barriers to care.

A recent epidemiological report released by the MNA revealed that breast and cervical cancer rates are higher in Métis Albertans relative to non-Métis Albertans,⁸ which demonstrates a need to ensure access to cancer screening programs in Alberta (Mammograms and Pap smear tests, respectively). Additionally, a study conducted in Calgary, Alberta, found that Métis people were 86% less likely to have colorectal cancer screening compared to other ethnic groups (recent immigrants, First Nations, Chinese and Black minorities).⁹ These studies indicate that breast, cervical, and colorectal cancer may be detected at a later stage in Métis people and contribute to poor cancer outcomes.

Given this, the MNA sought to investigate the barriers and facilitators to cancer screening for breast, cervical, and colorectal cancer among Métis Albertans. In collaboration with academic and health system partners, the project team developed a Métis-specific cancer screening survey to capture this information. The information gathered through the survey will be used to inform interventions that can be implemented to address barriers to cancer screening among Métis Albertans, hence improving access to cancer screening and increasing the likelihood of detecting cancer at an earlier stage.

Methods

Study Design

A cross-sectional survey design was used to capture participant behaviours and experiences with cancer screening at the time the survey was taken. The survey was available online from September 12, 2022, to December 2, 2022, and consisted of three sections:

1. Background and cancer screening history
2. Barriers and facilitators to screening
3. Demographics

Study Population

The target population included Métis Albertans who are eligible for breast, cervical, and colorectal cancer screening. Following Alberta's clinical practice guidelines, the recommended age for breast cancer screening is age 45–74,¹⁰ cervical cancer screening is age 25 to 69,¹¹ and colorectal cancer screening is age 50–74 (depending on personal history and healthcare provider recommendation).¹³ Hence the targeted age range for participation in this survey was ages 25–74, encompassing the recommended age range for breast, cervical, and colorectal cancer screening.

Recruitment Strategy

Survey participants were recruited through a multimodal strategy used by the MNA for community consultations, including advertising the survey on MNA social media platforms (Twitter, Facebook, and Instagram) and biweekly newsletters/Citizen email lists — the recruitment poster can be found in Appendix A. The anonymous survey included a section that asked participants to consent to participating in this project. As an incentive, and to show gratitude for participation, survey respondents could submit their contact information on the MNA website for a chance to receive one of five \$100 prepaid Visa cards. The incentive was offered separately to the questionnaire to retain the anonymity of survey responses.

Survey Questionnaire

In collaboration with the University of Calgary, a scoping review of the existing literature was conducted on cancer screening questionnaires for cervical, breast, and colorectal cancer. The identified articles were then characterized and summarized to create a Métis-specific cancer screening questionnaire to identify the various barriers and facilitators to cancer screening.

For each eligible article, information was gathered on:

1. The cancer screening questionnaire used in the project
2. The validity of the cancer screening questionnaire
3. The population for which the questionnaire was made, including Indigenous populations
4. Relevant cancer-screening related findings from each study

The information compiled from each article was used to inform the development of the Métis-specific cancer screening questionnaire.

An analysis was then performed on the included articles and six themes were identified based on the findings. The six themes included *knowledge, attitudes, beliefs, behaviours, barriers, and facilitators*. Of the included articles, those studying Indigenous populations were targeted for further analysis to provide insight into

questions relevant to characterizing barriers and facilitators. Under each identified theme, sub-themes were developed to identify emerging patterns.

Based on this scoping review and the various identified themes, the focus of the newly developed questionnaire was on barriers and facilitators to cancer screening for Métis Albertans. Due to very limited Métis-specific research on cancer screening topics, no Métis-specific cancer screening instrument exists to our knowledge. Therefore, to develop a cancer screening instrument for the Métis population of Alberta, the main topics found in the scoping review had to be tailored to this population. During the development of the questionnaire, cancer screening-focused questions were selected or adapted from various pre-existing surveys, including the *Canadian Community Health Survey (CCHS 2020)*, the *Cervical Cancer Knowledge Prevention Questionnaire (CCKP-64)*, and the *Indigenous Cancer Screening Scoping Review*. Additional questions were also created by the MNA Health Department and the project team. The full survey questionnaire can be found in Appendix B.

Statistical Analysis

Survey responses were collected on a Research Electronic Data Capture (REDCap) database held on a secure server at the University of Calgary. Descriptive analyses summarised the survey responses for each question in tables that included the frequencies or counts and/or percentages in each category. For a few questions, data from different categories were combined to ensure at least 10 data values were in every category, and if this was not possible, then only the percentages are shown, or the data is not presented. This was done to ensure individuals could not be easily identified, even though responses were collected anonymously.

Tables of results were prepared for the following survey sections:

- » Participants' characteristics (such as average age)
- » Breast, cervical, and colorectal cancer screening history by age groups (45–74, 25–69, and 50–74 years, respectively)
- » Participants' primary location of residence by MNA Region and residence in a city, small town, rural, or remote area

For analysis purposes, and to maintain participant anonymity, two variables were created to compare the results by participants' location:

REGION VARIABLE

- » Region 1, 5, or 6
- » Region 4
- » Region 2, 3, and other/prefer not to say

PLACE OF RESIDENCE VARIABLE

- » City
- » Small town, rural, or remote area

Less than 10 responses from Regions 2 and 3 were received for all questions, therefore, data from these Regions are not presented to protect participant identity. A Likert plot is used to show the response category percentages for each of the 28 questions that asked about distinct barriers and facilitators to cancer screening. All the analyses were carried out using RStudio v3.5.2 and Stata 17.0 statistical software programs.



Survey Results: What We Heard from Métis Albertans




Participant Characteristics

A total of 389 people gave their consent to participate in the survey. Of these 389 participants, 370 self-identified as Métis. Only those who identified as Métis (n=370) were included in this study. Because age and sex criteria exist for cancer screening eligibility, the project team divided participants into age categories for each type of cancer screening (breast, cervical, and colorectal), and asked participants whether they were assigned female at birth, male at birth, or if they were assigned female at birth but have undergone a mastectomy and/or a hysterectomy. Participants who underwent a mastectomy and/or a hysterectomy were therefore not eligible for breast and cervical cancer screening, respectively. Of the 370 participants included in this study, 85% were assigned female at birth, 14% were assigned male at birth, and 1% of the individuals provided either no sex information or indicated that they were assigned female at birth and have undergone a mastectomy and/or a hysterectomy.

Figure 1 illustrates the participant breakdown by sex and cancer screening eligibility.

- » For breast cancer screening (mammography) the total number of eligible participants was 149 (40%), for cervical cancer screening (Pap smear test) the total number of eligible participants was 296 (79%), and for colorectal cancer screening (FIT/poop test or colonoscopy) the total number of eligible participants was 129 (35%).
- » For colorectal cancer screening, 111 eligible participants were female and 18 were male.
- » The number of eligible participants is highest for cervical cancer screening because the recommended age to begin cervical cancer screening is 25,¹¹ while breast cancer screening begins at age 45¹⁰ and colorectal cancer screening begins at age 50.¹³

TABLE 1. **CANCER SCREENING TYPE, SERVICE, AND AGE RECOMMENDATION**

CANCER SCREENING TYPE	SCREENING SERVICE	RECOMMENDED AGE
Breast Cancer https://screeningforlife.ca/breast/get-screened/#who_should_get_screened 	Mammogram	45–74
Cervical Cancer https://screeningforlife.ca/cervical/get-screened/#who_should_get_screened 	Pap smear test	25–69
Colorectal Cancer https://screeningforlife.ca/colorectal/get-screened/#who_should_get_screened 	FIT or colonoscopy	50–74

Note: Individuals may be screened for each type of cancer at an earlier age if recommended by their healthcare provider or if a family history of cancer exists. For this survey, the eligibility criteria are consistent with the age criteria recommendations described on the Alberta Health Services *Screening For Life* website.^{10,11,13}

FIGURE 1. **PARTICIPANT BREAKDOWN BY SEX AND CANCER SCREENING PROGRAM ELIGIBILITY**

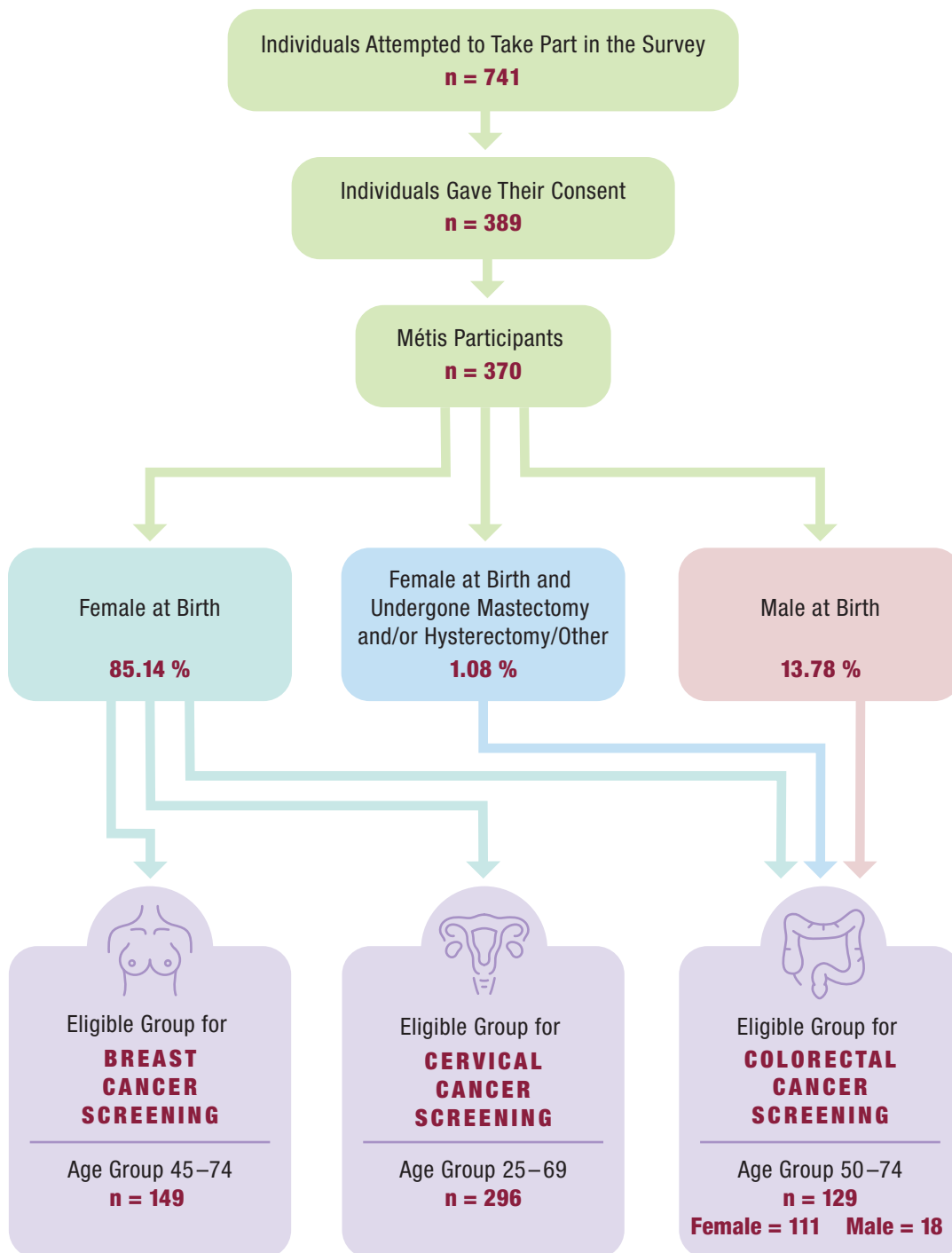


TABLE 2. PARTICIPANT DEMOGRAPHIC INFORMATION

GENDER		
	Frequency (n)	Percentage (%)
Assigned female at birth	315	85.14
Assigned male at birth	51	13.78
Assigned female at birth and have undergone a mastectomy and/or a hysterectomy/prefer not to say/NA	*(n)	1.08

*(n) – Less than 10 is not reported to protect participant identity.

AGE GROUP (YEARS)		
	Frequency (n)	Percentage (%)
<25	10	2.7
25–34	57	15.41
35–44	122	32.97
45–54	75	20.27
55–64	76	20.54
65–74	22	5.95
74+ or NA	*(n)	2.16

*(n) – Less than 10 is not reported to protect participant identity.

HIGHEST LEVEL OF COMPLETED EDUCATION		
	Frequency (n)	Percentage (%)
Primary/elementary school or less	*(n)	0.54
Secondary/ high school	87	23.51
Red Seal/ trades certificate	37	10.0
College or university degree	165	44.59
Graduate or professional degree	43	11.62
I have never been to school/prefer not to say/NA	36	9.73

*(n) – Less than 10 is not reported to protect participant identity.

CURRENT RELATIONSHIP STATUS		
	Frequency (n)	Percentage (%)
Single	60	16.22
Separated	17	4.59
Divorced or widowed	26	7.03
In a relationship/married, living apart	24	6.49
In a relationship/married, living together	211	57.03
Prefer not to say/NA	32	8.65

HOUSEHOLD INCOME (LAST YEAR)		
	Frequency (n)	Percentage (%)
Less than \$49,000 per year	87	23.51
\$50,000 to \$74,000 per year	69	18.65
\$75,000 to \$100,000 per year	58	15.68
Over \$100,000 per year	88	23.78
Prefer not to say/NA	68	18.38

RESIDENCE LOCATED IN REGION *		
	Frequency (n)	Percentage (%)
Region 1, e.g., Lac La Biche	14	3.78
Region 2, e.g., Bonnyville	25	6.76
Region 3, e.g., Calgary	79	21.35
Region 4, e.g., Edmonton	174	47.03
Region 5, e.g., Slave Lake	12	3.24
Region 6, e.g., Peace River	32	8.65
Unsure/prefer not to say/NA	34	9.19

* 6 participants chose more than one Region as their regular place of residence, so the project team assigned these individuals to the geographic area with the smaller population size.

REGULARLY LIVE *		
	Frequency (n)	Percentage (%)
In a city	192	51.89
In a small town	89	24.05
In a rural area	71	19.19
In a remote area/prefer not to say/NA	18	4.86

* 18 participants indicated they live in both a city and a small town/rural or remote area, so these individuals were assigned to the group with less responses (small town, rural or remote area).

CURRENT HOUSING SITUATION		
	Frequency (n)	Percentage (%)
Living in a home/apartment you own or rent	296	80.0
Living in a home/apartment a family member owns or rents	34	9.19
Couch surfing, using a shelter, or rough sleeping/ prefer not to say/NA	40	10.81

CURRENT EMPLOYMENT SITUATION		
	Frequency (n)	Percentage (%)
In university	13	3.51
Retired	42	11.35
Self-employed	29	7.84
Part-time employment	37	10.0
Full-time employment	153	41.35
Homemaker/full-time parent	31	8.38
Unemployed before the COVID-19 outbreak and seeking work	*(n)	1.89
Employed before COVID-19 outbreak but laid off during the pandemic	13	3.51
Prefer not to say/NA	45	12.16

*(n) – Less than 10 is not reported to protect participant identity.

CURRENT OR MOST RECENT MAIN AREA OF OCCUPATION		
	Frequency (n)	Percentage (%)
Professional (health, physical/earth science/engineering professionals, teacher/university professor, business/sales and marketing professional, software developer, legal, law enforcement, author, journalist, performing arts)	123	33.24
Manager (chief executive, administrative manager, production and sales, hospitality, and retail)	26	7.03
Technical or associate professional (in field of health, engineering, business, legal, social, or information/communication)	21	5.68
Clerical support worker (office clerk, secretary, customer service clerk)	57	15.41
Service and sales worker (travel agent, cook, hairdresser/barber, retail sales, cashier, personal care worker)	34	9.19
Skilled agricultural, forestry, or fishery worker	*(n)	0.54
Craft and related trades worker (builders, machinists, electricians, printing, food processing)	19	5.14
Plant and machine operator and assembler (includes truck drivers)	10	2.7
Elementary occupations (cleaner, helper, agricultural laborer, transport laborer, street vendor, refuse worker)	*(n)	1.35
Fishing or trapping	*(n)	0.27
Homemaker (stay at home parent)	22	5.95
Prefer not to say/NA	50	13.52

*(n) – Less than 10 is not reported to protect participant identity.



Breast Cancer Screening Among Métis Albertans

For breast cancer screening, we considered eligible female participants from age 45–74. The Alberta Breast Cancer Screening Committee recommends regular breast cancer screening (mammograms) every two years from age 45–74 as part of an individual's regular healthcare routine.¹⁰ Among 315 survey participants who were assigned female at birth, for the age group 45–74, 149 were eligible for breast cancer screening.

ELIGIBLE PARTICIPANT RESPONSES

When eligible female participants (n=149) were asked if they ever had a mammogram (breast x-ray), one individual did not answer this question, reducing the eligible number of participants to 148.

Of these 148 participants, 138 (93.24%) individuals answered “yes” to this question.

AGE VARIABLE

- » Of participants who have had a mammogram (n=138):
 - 23.91%** (n=33) were aged 45–49,
 - 76.09%** (n=105) were aged 50–74.

REGION VARIABLE

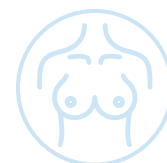
- » Of eligible participants (n=148):
 - 22.97%** (n=34) resided in Regions 1, 5 or 6,
 - 41.89%** (n=62) resided in Region 4.

When evaluated by region:

- **94.12%** (n=32/34) of eligible participants who resided in Region 1, 5 or 6 indicated they have had a mammogram,
- **95.16%** (n=59/62) of eligible participants who resided in Region 4 indicated they have had a mammogram.

PLACE OF RESIDENCE VARIABLE

- » Of eligible participants (n=148):
 - 47.30%** (n=70) lived in a city,
 - 46.62%** (n=69) lived in a small town, rural or remote area.



When evaluated by place of residence:

- **94.29%** (n=66/70) of eligible participants who lived in a city indicated they have had a mammogram
- **92.75%** (n=64/69) of eligible participants who lived in a small town, rural, or remote area indicated they have had a mammogram.

MAMMOGRAM “YES” RESPONSES

When asked to indicate when they last had a mammogram, participants who answered “yes” to having a mammogram (n=138) provided the following responses:

LESS THAN 2 YEARS AGO:

- » **84.85%** (n=28/33) from the age group 45–49 years,
81.90% (n=86/105) from the age group 50–74 years.
- » **87.50%** (n=28/32) from Regions 1, 5, or 6,
83.05% (n=49/59) from Region 4.
- » **81.82%** (n=54/66) lived in a city,
84.38% (n=54/64) lived in a small town, rural or remote area.

MORE THAN 2 YEARS AGO:

- » **15.15%** (n=*) from the age group 45–49 years,
18.10% (n=19/105) from the age group 50–74 years.
- » **12.50%** (n=*) from Region 1, 5, or 6,
16.95% (n=10/59) from Region 4.
- » **18.18%** (n=12/66) lived in a city,
15.63% (n=10/64) lived in a small town, rural or remote area.

(n=*) – Less than 10 is not reported to protect participant identity.



Of the participants who had a mammogram (n=138), the majority (60.14%) indicated they had one as part of a regular check-up/routine cancer screening.

Other common responses were because of a family history of breast cancer (41.30%), age (40.58%), it was recommended by their family doctor (36.96%), or because of a detected lump (21.74%).

A variety of other responses were also recorded, such as due to hormone replacement therapy, breast problem, or participants preferred not to say (10.14%). Participants could select more than one response.

TABLE 3. **FREQUENCY (PERCENTAGE) OF REASONS PARTICIPANTS HAD THEIR LAST MAMMOGRAM**

Reason	Frequency (n)	Percentage (%)
Part of regular check up/routine screening	83	60.14
Family history of breast cancer	57	41.30
Age	56	40.58
Recommended by my doctor	51	36.96
Previously detected lump	30	21.74
Other responses (on hormone replacement therapy, breast problem, prefer not to say, other)	14	10.14

Cervical Cancer Screening Among Métis Albertans

For cervical cancer screening, we considered eligible female participants from age 25–69. The Alberta Towards Optimized Practice clinical practice guideline recommends that individuals with a cervix have a Pap smear test every three years starting at age 25.¹¹ Among 315 individuals who were assigned female at birth, for the age group 25–69, there were 296 eligible participants for cervical cancer screening.



ELIGIBLE PARTICIPANT RESPONSES

When eligible female participants (n=296) were asked if they ever had a Pap smear test, nine individuals did not answer this question, reducing the eligible number of participants to 287.

Of these 287 participants, 277 (96.52%) individuals answered “yes” to this question.

REGION VARIABLE

- » Of eligible participants (n=287):
17.77% (n=51) resided in Regions 1, 5 or 6,
48.43% (n=139) resided in Region 4.

When evaluated by Region:

- **98.04%** (n=50/51) of eligible participants who resided in Regions 1, 5 or 6 indicated they have had a Pap smear test,
- **97.12%** (n=135/139) of eligible participants who resided in Region 4 indicated they have had a Pap smear test.

PLACE OF RESIDENCE VARIABLE

- » Of eligible participants (n=287):
52.61% (n=151) lived in a city,
44.25% (n=127) lived in a small town, rural or remote area.

When evaluated by place of residence:

- **97.35%** (n=147/151) of eligible participants who lived in a city indicated they have had a Pap smear test,
- **96.06%** (n=122/127) of eligible participants who lived in a small town, rural or remote area indicated they have had a Pap smear test.



PAP SMEAR TEST “YES” RESPONSES

When asked to indicate when they last had their Pap smear test, participants who answered “yes” to ever having a Pap smear test (n=277) provided the following responses:

1 YEAR OR LESS:

- » **35.74%** (n=99/277) from the age group 25–69 years.
- » **38.0%** (n=19/50) from Regions 1, 5, or 6,
33.33% (45/135) from Region 4.
- » **38.10%** (n=56/147) lived in a city,
33.61% (n=41/122) lived in a small town, rural, or remote area.

1 TO 3 YEARS AGO:

- » **45.49%** (n=126/277) from the age group 25–69 years.
- » **46.00%** (n=23/50) from Regions 1, 5, or 6,
48.89% (n=66/135) from Region 4.
- » **43.54%** (n=64/147) lived in a city,
48.36% (n=59/122) lived in a small town, rural, or remote area.

3 TO 4 YEARS AGO:

- » **6.50%** (n=18/277) from the age group 25–69 years.
- » **6.0%** (n=*) from Regions 1, 5, or 6,
7.41% (n=10/135) from Region 4.
- » **8.16%** (n=12/147) lived in a city,
4.10% (n=*) lived in a small town, rural, or remote area.

**MORE THAN 4 YEARS AGO:**

- » **12.27%** (n=34/277) from the age group 25–69 years.
- » **10.0%** (n=*) from Regions 1, 5, or 6,
10.37% (n=14/135) from Region 4.
- » **10.20%** (n=15/147) lived in a city,
13.93% (n=17/122) lived in a small town, rural, or remote area.

(n=*) – Less than 10 is not reported to protect participant identity.

Among the 277 participants who answered “yes” to ever having a Pap smear test, 81.95% indicated they had their last Pap smear test as part of their regular check-up/routine screening.

Other common reasons for having a Pap smear test included a recommendation given by their doctor (28.88%), age (19.86%), previously detected abnormality (17.69%), having a family history of cervical cancer (10.83%), a cervix problem (4.69%), or other reasons (4.69%). Participants could select more than one response.

TABLE 4. **FREQUENCY (PERCENTAGE) OF REASONS PARTICIPANTS HAD THEIR LAST PAP SMEAR TEST**

Reason	Frequency (n)	Percentage (%)
Part of regular checkup/routine screening	227	81.95
It was recommended by my doctor	80	28.88
Age	55	19.86
Previously detected abnormality	49	17.69
Family history of cervical cancer	30	10.83
Cervix problem	13	4.69
Other	13	4.69



HPV VACCINE RESPONSES

When eligible female participants (n=296) were asked if they ever heard about the vaccine to prevent cervical cancer (human papillomavirus [HPV] vaccine, Gardasil®), nine individuals did not respond to this question, reducing the number of eligible participants to 287.

Of these 287 participants, 251 (87.46%) individuals answered “yes” to this question.

REGION VARIABLE

- » Of eligible participants (n=287):
 - 17.77%** (n=51) resided in Regions 1, 5, or 6,
 - 48.43%** (n=139) resided in Region 4.

When evaluated by Region:

- **82.35%** (n=42/51) of eligible participants who resided in Regions 1, 5, or 6 indicated they have heard of the HPV vaccine,
- **89.93%** (n=125/139) of eligible participants who resided in Region 4 indicated they have heard of the HPV vaccine.

PLACE OF RESIDENCE VARIABLE

- » Of eligible participants (n=287):
 - 52.61%** (n=151) lived in a city,
 - 44.25%** (n=127) lived in a small town, rural, or remote area.

When evaluated by place of residence:

- **90.73%** (n=137/151) of eligible participants who lived in a city indicated they have heard of the HPV vaccine,
- **85.83%** (n=109/127) of participants who lived in a small town, rural, or remote area indicated they have heard of the HPV vaccine.



When asked if they have ever received the HPV vaccine, 251 participants who answered “yes” to having heard about the HPV vaccine provided the following responses:

- » **78.09%** (n=196/251) said “no” to having received the HPV vaccine,
13.94% (n=35/251) said “yes” to having received the HPV vaccine.
- » **85.71%** (n=36/42) of participants who live in Regions 1, 5, or 6 have never received the HPV vaccine,
75.20% (n=94/125) of participants who live in Region 4 have never received the HPV vaccine.
- » **78.10%** (n=107/137) of participants who live in a city have never received the HPV vaccine,
79.82% (n=87/109) of participants who live in a small town, rural, or remote area have never received the HPV vaccine.

Participants (n=214) who answered “no” or “unsure” to having received the HPV vaccine (excluding those who did not answer this question) were asked if they would take the HPV vaccine if they were eligible. The following responses were recorded:

- » **50.47%** (n=108/214) indicated they would be willing to take the HPV vaccine, if eligible.
- » **56.41%** (n=22/39) of participants who live in Regions 1, 5, or 6 indicated they would be willing to take the HPV vaccine,
54.90% (n=56/102) of participants who live in Region 4 indicated they would be willing to take the HPV vaccine.
- » **56.64%** (n=64/113) of participants who live in a city indicated they would be willing to take the HPV vaccine,
43.88% (n=43/98) of participants who lived in a small town, rural, or remote area indicated they would be willing to take the HPV vaccine.



Colorectal Cancer Screening Among Métis Albertans

For colorectal cancer screening survey questions, eligible participants included males and females ages 50 to 74 years old. The Alberta Towards Optimized Practice clinical practice guideline recommends yearly colorectal cancer screening between these ages as part of a regular healthcare routine.¹³ A total of 129 participants were eligible for colorectal cancer screening (111 females and 18 males). Due to low responses from male participants, only results from female responses are reported to protect participant identity. Given this, the number of eligible participants for this section is 111.

ELIGIBLE PARTICIPANT RESPONSES

When eligible female participants (n=111) were asked if they ever had a fecal immunochemical (FIT) or poop test, six individuals did not respond to this question, reducing the eligible number of participants to 105.

Of these 105 participants, 77 (73.33%) individuals answered “yes” to this question.

REGION VARIABLE

- » Of eligible participants (n=105):
 - 21.90%** (n=23) resided in Regions 1, 5 or 6,
 - 43.81%** (n=46) resided in Region 4.

When evaluated by region:

- **69.57%** (n=16/23) of eligible participants who resided in Region 1, 5 or 6 indicated they have had a FIT or poop test,
- **71.74%** (n=33/46) of eligible participants who resided in Region 4 indicated they have had a FIT or poop test.

PLACE OF RESIDENCE VARIABLE

- » Of eligible participants (n=105):
 - 49.52%** (n=52) lived in a city,
 - 47.62%** (n=50) lived in a small town, rural or remote area.



When evaluated by place of residence:

- **67.31%** (n=35/52) of eligible participants who lived in a city indicated they have had a FIT or poop test,
- **78.0%** (n=39/50) of eligible participants who lived in a small town, rural or remote area indicated they have had a FIT or poop test.

FIT OR POOP TEST “YES” RESPONSES

When asked to indicate when they last had their FIT or poop test, participants who answered “yes” to ever having a FIT or poop test (n=77) provided the following responses:

LESS THAN 1 YEAR AGO:

- » **31.17%** (n=24/77) from the age group 50–74 years.
- » **37.50%** (n=*) from Regions 1, 5, or 6,
36.36% (n=12/33) from Region 4.
- » **28.57%** (n=10/35) lived in a city,
30.77% (n=12/39) lived in a small town, rural, or remote area.

1 TO 2 YEARS AGO:

- » **32.47%** (n=25/77) from the age group 50–74 years.
- » **18.75%** (n=*) from Regions 1, 5, or 6,
27.27% (n=*) from Region 4.
- » **34.29%** (n=12/35) lived in a city,
33.33% (n=13/39) lived in a small town, rural, or remote area.

(n=*) – Less than 10 is not reported to protect participant identity.



2 TO 3 YEARS AGO:

- » **12.99%** (n=10/77) from the age group 50–74 years.
- » **12.50%** (n=*) from Regions 1, 5, or 6,
12.12% (n=*) from Region 4.
- » **11.43%** (n=*) lived in a city,
12.82% (n=*) lived in a small town, rural, or remote area.

3 OR MORE YEARS AGO:

- » **19.48%** (n=15/77) from the age group 50–74 years.
- » **25.0%** (n=*) from Region 1, 5, or 6,
21.21% (n=*) from Region 4.
- » **22.86%** (n=*) lived in a city,
17.95% (n=*) lived in a small town, rural, or remote area.

(n=*) – Less than 10 is not reported to protect participant identity.

Among the 77 participants who answered “yes” to ever having a FIT or poop test, the majority (75.32%) indicated they had their last FIT test as part of a regular check-up.

Other responses were because of age (32.47%), signs or symptoms of a possible problem (15.58%), family history of colon cancer (10.39%), and follow-up of a previous problem (5.19%). Participants could select more than one response.

TABLE 5. **FREQUENCY (PERCENTAGE) OF REASONS PARTICIPANTS HAD THEIR LAST FIT OR POOP TEST**

Reason	Frequency (n)	Percentage (%)
Part of regular checkup/routine screening	58	75.32
Age	25	32.47
Signs or symptoms of a possible problem	12	15.58
Family history of colon or rectal cancer	*(n)	10.39
Follow-up of a previous problem	*(n)	5.19

*(n) – Less than 10 is not reported to protect participant identity.



COLONOSCOPY “YES” RESPONSES

When eligible female participants (n=111) were asked if they ever had a colonoscopy, six individuals did not respond to this question, reducing the number of eligible participants to 105.

Of these 105 participants, 54 (51.43%) individuals answered “yes” to this question.

REGION VARIABLE

- » Of eligible participants (n=105):
21.90% (n=23) resided in Regions 1, 5 or 6,
43.81% (n=46) resided in Region 4.

When evaluated by region:

- **39.13%** (n=*) of eligible participants who resided in Region 1, 5 or 6 indicated they have had a colonoscopy,
- **50.0%** (n=23/46) of eligible participants who resided in Region 4 indicated they have had a colonoscopy.

(n=*) – Less than 10 is not reported to protect participant identity.

PLACE OF RESIDENCE VARIABLE

- » Of eligible participants (n=105):
49.52% (n=52) lived in a city,
47.62% (n=50) lived in a small town, rural, or remote area.

When evaluated by place of residence:

- **51.92%** (n=27/52) of eligible participants who lived in a city indicated they have had a colonoscopy,
- **50.0%** (n=25/52) of eligible participants who lived in a small town, rural, or remote area indicated they have had a colonoscopy.

Note: Colonoscopies are recommended by The Alberta Towards Optimized Practice clinical practice guideline as part of an individual’s regular healthcare routine if there is a personal or family history of colorectal cancer or if an abnormality is detected.¹³



When asked to indicate how many times they had received a colonoscopy in their lifetime, participants who responded “yes” to ever receiving a colonoscopy (n=54) provided the following responses:

1 COLONOSCOPY:

- » **44.44%** (n=24/54) from the age group 50–74 years.
- » **33.33%** (n=*) from Regions 1, 5, or 6,
43.48% (n=10/23) from Region 4.
- » **33.33%** (n=*) live in a city,
52.0% (n=13/25) live in a small town, rural or remote area.

2 OR MORE COLONOSCOPIES:

- » **55.56%** (n=30/54) from the age group 50–74 years.
- » **66.67%** (n=*) from Regions 1, 5, or 6,
56.52% (n=13/23) from Region 4.
- » **66.67%** (n=18/27) live in a city,
48.0% (n=12/25) live in a small town, rural or remote area.

(n=*) – Less than 10 is not reported to protect participant identity.

Among the 54 participants who answered “yes” to ever receiving a colonoscopy, 61.11% had their last colonoscopy exam due to signs or symptoms of a possible problem.

Other reasons participants had a colonoscopy were because of a regular check-up (33.33%), their age (16.67%), a family history of colon cancer (20.37%), and because of a follow-up of a previous problem (22.22%).



TABLE 6. **FREQUENCY (PERCENTAGE) OF REASONS PARTICIPANTS HAD THEIR LAST COLONOSCOPY EXAM.**

Reason	Frequency (n)	Percentage (%)
Signs or symptoms of a possible problem	33	61.11
Part of regular checkup/routine screening	18	33.33
Follow-up of previous problem	12	22.22
Family history of colon or rectal cancer	11	20.37
Age	*(n)	16.67

*(n) – Less than 10 is not reported to protect participant identity.

Among the 51 participants who answered “no” to ever having received a colonoscopy, 70.59% indicated they have not had a colonoscopy because their doctor did not think it was necessary.

Other reasons for not having a colonoscopy included feelings of fear or discomfort, lack of access to a doctor, and not being eligible for colorectal cancer screening (21.56%), and the participants did not think it was necessary (13.73%). Participants could select more than one response.

TABLE 7. **FREQUENCY (PERCENTAGE) OF REASONS PARTICIPANTS DID NOT HAVE THEIR LAST COLONOSCOPY EXAM.**

Reason	Frequency (n)	Percentage (%)
Doctor did not think it was necessary/ they never brought it up	36	70.59
Other (feelings of fear or discomfort, don't have a doctor, I am not eligible for colorectal cancer screening, other)	11	21.56
I did not think it was necessary	*(n)	13.73

*(n) – Less than 10 is not reported to protect participant identity.

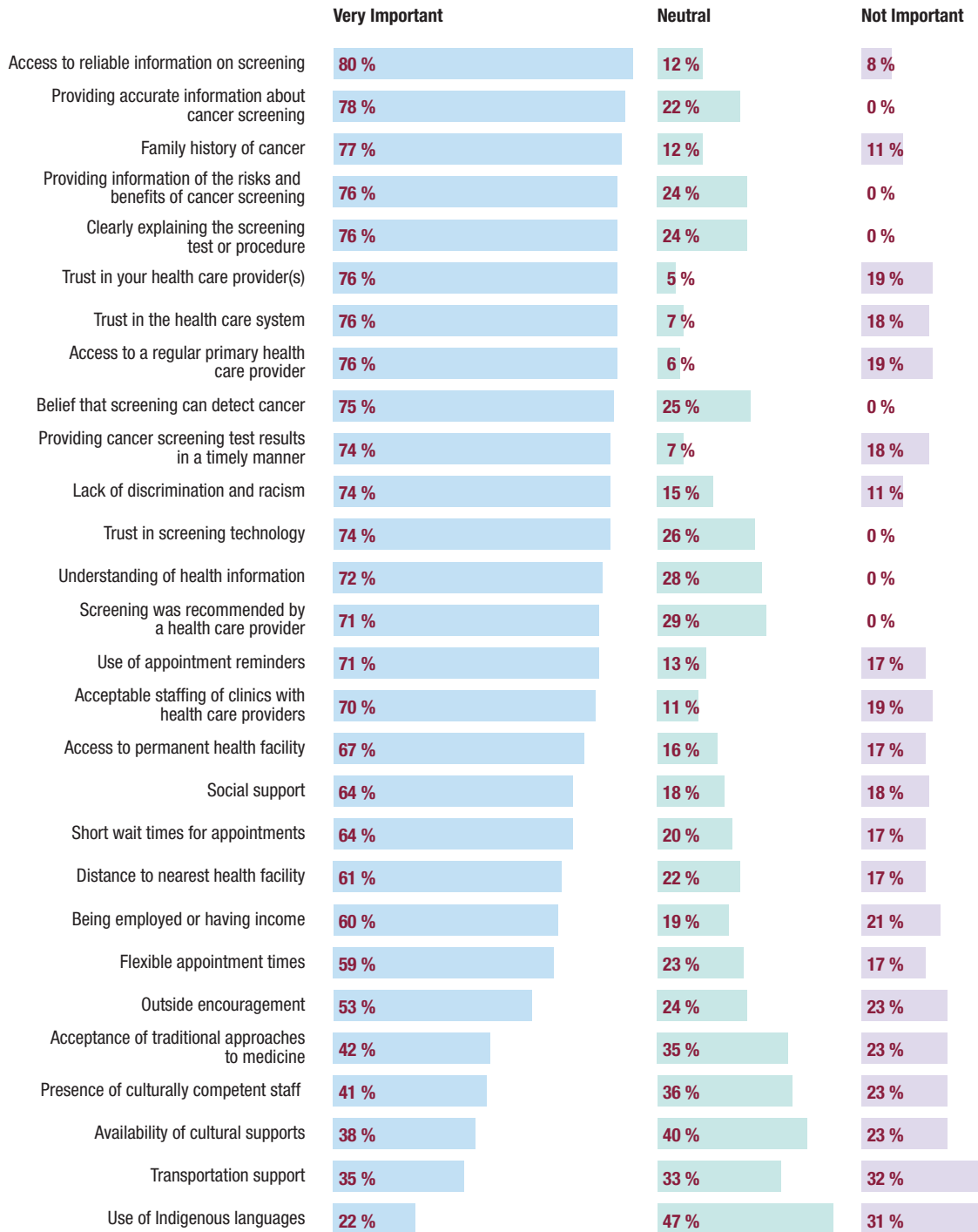
Barriers and Facilitators to Cancer Screening Among Métis Albertans

In this section of the survey, participants were asked about the barriers and facilitators they may have experienced while accessing cancer screening programs. Screening barriers are factors that prevent someone from seeking or receiving cancer screening, while facilitators are factors that improve access to cancer screening or willingness to participate in cancer screening programs. Barriers may hinder access to cancer screening services promptly and contribute to late detection and diagnosis of cancer. Each person will experience barriers unique to their own life experiences. For example, trauma, experiences of racism in healthcare, fear of screening results, and fear of not knowing what will happen next if the results detect cancer. This section included 28 questions (variables) to examine participant experiences around various barriers and facilitators to cancer screening.

Figure 2 illustrates how important the variables were to participants when considering participation in cancer screening.

- » All participants (n=370) were asked to rate the importance of each factor on a scale of 1 to 5 (1=not important, 3=neutral, 5=very important). As shown in Figure 2, more than 50% of participants strongly agreed that 23 of the variables were “very important”.
- » The first three variables shown in the graph were considered the most important to participants; 80% indicated that “Access to reliable information on screening” was very important, 78% of participants indicated that “Providing accurate information about cancer screening” was very important, and 77% of participants indicated that “Family history of cancer” was very important.
- » Participants provided lower but very similar responses for “Acceptance of traditional approaches to medicine” (42% selected “very important”), “Presence of culturally competent staff” (41% selected “very important”), and “Availability of cultural supports” (38% selected “very important”), with 23% of participants selecting “not important” for all three of these variables.
- » For “Transportation support”, responses were evenly dispersed between “not important”, “neutral”, and “very important”. Almost half of the participants (47%) selected a neutral response for the “Use of Indigenous languages”.

FIGURE 2. LIKERT PLOT



Discussion

Access to cancer screening is essential as part of an individual's regular healthcare routine to detect cancer at the earliest stage possible. Late detection of cancer can lead to increased tumour growth and a poor prognosis. Therefore, cancer screening provides an opportunity for prevention, early detection, and improved treatment outcomes, contributing to decreased cancer mortality. While the survey results indicate that the majority of eligible Métis respondents have participated in breast, cervical, and/or colorectal cancer screening, many face barriers to meeting the recommended guidelines.

Consistent with previous studies that show lower rates of cancer screening among Métis people,^{6,7} the survey results show that approximately one out of five eligible Métis female participants had a mammogram more than two years ago and a Pap smear test more than three years ago. Since breast and cervical cancer rates are higher in Métis Albertans relative to non-Métis Albertans,⁸ this finding provides an opportunity to develop programs and resources that increase access to breast and cervical cancer screening programs. Similarly, the survey results show low numbers of colorectal cancer screening among Métis females in Alberta, where almost two out of three eligible participants had a FIT or poop test more than a year ago. This suggests that the majority of female Métis Albertans are not accessing Alberta's routine colorectal cancer screening program as recommended, thus indicating a need for targeted interventions to improve colorectal cancer screening rates for eligible Métis Albertans.

Additionally, the survey results indicate that access to the HPV vaccine to prevent cervical cancer, *Gardasil*[®], differs according to participants' location. Participants who live in Region 4 or in a city are much more likely to have heard of the vaccine, have taken the vaccine, and have a willingness to take the vaccine. Because a discrepancy exists according to participants' location, this may indicate a lack of access to health information or health services in certain areas of the province. It is also important to note that the HPV vaccine became publicly available in 2008 through public health vaccine programs offered in schools with parental consent.¹² This suggests that the vaccine would not have been offered when the majority of survey respondents attended primary school, hence the lower vaccination rates. However, the HPV

vaccine is currently free of cost to Albertans aged 26 years and younger and can be accessed at a local public health or community health center in Alberta.¹⁴

The barriers and facilitators included in the survey were adapted from previous surveys, with validation and input from the MNA, to ensure relevancy to Métis Albertans. These barriers and facilitators serve as a first step in understanding factors that influence access to cancer screening, and as a result, indicate gaps that need to be addressed to improve cancer screening rates among Métis Albertans and ensure Métis people feel comfortable accessing cancer screening programs. These results also provide an opportunity to leverage identified facilitators for cancer screening to ensure Métis people in Alberta have better access to screening services and health information while accessing safe, quality, and culturally appropriate services. These facilitators include providing access to reliable information on cancer screening, providing accurate information about cancer screening, providing information about the risks and benefits of cancer screening, clearly explaining the screening test or procedure, trusting in healthcare providers, among other factors in the survey that were identified as “very important” to the majority of survey participants. There may be an opportunity to leverage these facilitators to develop meaningful interventions, for example, developing Métis-specific cancer screening toolkits and cancer screening resources to increase awareness and provide screening information that includes benefits, risks, and supports. There is also a need to develop and implement cultural safety training for healthcare providers to ensure Métis Albertans feel safe and comfortable while accessing screening services and to facilitate the development and maintenance of a trusting relationship between healthcare providers and Métis Albertans.

Strengths and Limitations

The survey questionnaire used in this study was created in collaboration with the MNA to ensure it was relevant and specific to the Métis population in Alberta. As the only Métis-specific cancer screening questionnaire that exists (to our knowledge), it provides an opportunity to validate this questionnaire and advance the development of Métis-specific data collection tools, thus filling this gap in health research.

Additionally, the recruitment and promotion of the survey were led by the MNA to ensure the study adhered to all the principles of ethical Métis research and was grounded in the voices and perspectives of the community.

One of the limitations of this study is the low response rate received from participants who live in Regions 2 and 3 and participants who were assigned male at birth. The responses from these categories were excluded from the analysis to protect the identity of respondents. Due to this exclusion, the findings included in this report may not be representative of all Métis Albertans and should therefore be interpreted with caution. Additionally, this survey incorporated very few open-ended questions, thus limiting Métis Albertans from fully sharing their stories and perspectives regarding cancer screening experiences. However, to address this, the MNA will conduct qualitative engagements with Métis Albertans to provide space for the community to share their thoughts, experiences, insights, and stories related to cancer screening. This will facilitate an in-depth understanding of the barriers and facilitators shared in this report and inform the development of interventions to improve cancer screening for Métis people in Alberta.

Conclusion

There is very limited research related to Métis-specific cancer screening rates and behaviours. The lack of information related to cancer screening rates and behaviours among Métis Albertans hinders the development of meaningful interventions to increase participation in cancer screening programs. The results from this report serve as an initial first step to understanding cancer screening behaviours among Métis people in Alberta and inform programming and resource development to improve access to cancer screening information and programs. The results from this survey are also crucial to building on research that examines cancer screening experiences among Métis people in Alberta, hence contributing to filling the gap in Métis-specific health data.

This survey is one of the key action items of the *Alberta Métis Cancer Strategy* “collect data specific to the experiences of Métis Albertans on a cancer journey.”⁵ The next phase of this project is to collect qualitative data to better understand Métis Albertans’ experiences with cancer screening. This will help inform approaches that the MNA can pursue to improve access to cancer screening for Métis Albertans and ensure that screening services and programs are safe, of good quality, and culturally appropriate for all Métis people in Alberta.



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Appendix I: Cancer Screening Survey Recruitment Poster



Appendix II: Cancer Screening Survey Questionnaire

INFORMED CONSENT

Informed consent was required by each participant to access the survey questions. Consent details are summarized in the following text.

Participants were invited to participate in this research study because they are Métis with possible experience accessing cancer screening programs and initiatives in Alberta. The purpose of this study was described as helping to understand their experiences and perspectives with regards to cancer screening programs and initiatives. Detailed information about the objectives, methods, findings, dissemination of findings, voluntary nature of participation, and withdrawal were outlined in the consent forms. Potential risks included emotional distress while answering questions for which several helplines and their contact information were listed. Identifying information was not collected. Compensation was not given for this survey; however, participants could enter a draw for one of five \$100 pre-paid Visa gift cards by clicking a link back to the MNA website. Participants were provided options for assistance to complete the survey online or if they required a language translation to Cree (from English).

The following questions were asked based on specific eligibility criteria for each cancer screening program with skip patterns not shown. All participants were asked to complete the demographic sections as well as barriers and facilitators to cancer screening.

UNDERSTANDING

Do you understand that you have been asked to take part in a research study?

Yes No

Do you understand why this study is being done?

Yes No

Do you understand the potential benefits and risks/discomforts of participating?

Yes No

Do you understand what you will be asked to do should you decide to take part in this study?

Yes No

Do you understand that you are free to leave the study at any time, without having to give reason or without penalty?

Yes No

Do you understand that we will be collecting information about you for use in this study only?

Yes No

Do you feel that you had enough time and opportunity to consider the information provided to you by way of asking questions, having conversations with others and considering your options?

Yes No

TRANSLATOR/INTERPRETER ACKNOWLEDGEMENT (IF APPLICABLE)

This section is to be completed only if the participant requires the assistance of a qualified oral translator/interpreter. The interpreter must be impartial.

Do you require the help of a translator to complete this survey?

Yes No

The informed consent discussion was accurately explained to and apparently understood by the research participant.

Yes No

A slight translation of the consent document was provided by the interpreter as directed by the research staff conducting the consent process.

Yes No

By clicking 'Yes' below, you are consenting to Yes participate in this survey. You are free to withdraw No at any time. Do you wish to continue to the survey?

Yes No

QUESTION SOURCE COLOUR KEY

- MNA (Métis Nation of Alberta)
- CCHS 2020 (Canadian Community Health Survey)
- CCKP-64 (The Cervical-Cancer-Knowledge-Prevention-64 questionnaire)
- Indigenous Cancer Screening Scoping Review
- Project Team

**SECTION A:
BACKGROUND AND CANCER SCREENING HISTORY**

Thank you for your interest in participating in our Cancer Screening Survey!

This survey contains questions where we will ask you about your background and cancer screening history, as well as your personal barriers and facilitators to cancer screening.

You do not need to complete the entire questionnaire and are free to withdraw from the survey at any time without impacting your ability to access health services or your relationship with the MNA.

PART 1: BACKGROUND

1. Do you identify yourself as Métis?
 - a. Yes
 - b. No
 - c. Unsure
 - d. Prefer not to say

2. Are you a member of the Métis Nation of Alberta?
 - a. Yes
 - b. No
 - c. Unsure
 - d. Prefer not to say

3. What is your age in years?
Scale from 0–100

4. How would you describe yourself?
Note: This is required in order to determine your eligibility for cancer screening.
 - a. Assigned female at birth
 - b. Assigned male at birth
 - c. Assigned male at birth and have been on feminizing therapy for 5+ years in total
 - d. Assigned male at birth, have been on feminizing therapy for 5+ years in total, and have a cervix
 - e. Assigned female at birth and have undergone top surgery (mastectomy), but have a cervix
 - f. Assigned female at birth and have undergone top surgery (mastectomy) and hysterectomy (removal of uterus including cervix)
 - g. Prefer not to say



PART 2: SCREENING HISTORY

The following infographic summarizes the different screening programs that currently exist in Alberta for breast, cervical, and colorectal cancer. The eligibility criteria are also included below, although it should be noted that the frequency of recommended screening may vary by individual and should be discussed with your healthcare provider.

1. Have you been told by a doctor that you are eligible for cancer screening (due to age, family history, or other factors)?
 - a. Yes
 - b. No
 - c. Unsure
 - d. Prefer not to say

When should you be screened for cancer?



Breast Cancer

FEMALES*

Age 50 to 74

Mammogram every 2 years

Or as decided by you and your healthcare provider.



Cervical Cancer

FEMALES*

Age 25 to 69

Pap test every 3 years

Starting at age 25 or 3 years after becoming sexually active, whichever is later (or as decided by you and your healthcare provider).



Colorectal Cancer

EVERYONE

Age 50 to 74

FIT (poop test) every year

Or as decided by you and your healthcare provider.

*Meaning sex assigned at birth.

PART 2a: BREAST CANCER SCREENING HISTORY

What is Breast Cancer Screening?

For most people, breast cancer screening begins when you are between the ages of 50 and 74 and is recommended every 2 years. However, if you have a personal or biological family history that puts you at higher risk of breast cancer, you may have to start screening between the ages of 25 and 40.

A 'screening mammogram' is an x-ray of the breast that is used to find early signs of cancer when there are no noticeable breast problems or symptoms. They can find abnormal changes in the breast that are too small to be noticed by you.

1. Have you ever had a Mammogram, that is, a breast x-ray?
 - a. Yes
 - b. No
 - c. Unsure
 - d. Prefer not to say

2. When was the last time you had a mammogram? Note: we are just looking for your best guess.
 - a. Less than 1 year ago
 - b. 1 year to less than 2 years ago
 - c. 2 to 3 years ago
 - d. More than 3 years ago
 - e. Not sure
 - f. Prefer not to say

3. Why did you have your last mammogram? Select all that apply.
 - Family history of breast cancer
 - Part of regular checkup/ routine screening
 - Age
 - Recommended by my doctor
 - Previously detected lump
 - On hormone replacement therapy
 - Breast problem
 - Prefer not to say
 - Other (please specify):

4. What are the reasons you may **not** have had a mammogram within the recommended timeframe? Select all that apply.
 - Lack of time
 - I did not think it was necessary
 - My doctor did not think it was necessary/ they never brought it up
 - I am worried about discomfort or safety
 - I do not have a doctor
 - I have had a bilateral mastectomy (both breasts were removed)
 - I have had a mammogram within the past 3 years
 - I am not eligible for breast cancer screening
 - I did not know how to access screening
 - Prefer not to say
 - Other (please specify):

PART 2b: **CERVICAL CANCER SCREENING HISTORY**

What is Cervical Cancer Screening?

A Pap test (or Pap smear) is the main screening test for cervical cancer. Anyone between the ages of 25 to 69 with a cervix who has ever been sexually active, regardless of sexual orientation or gender identity, should consider getting regular Pap tests, even if they have been vaccinated against Human Papilloma Virus (HPV). In Alberta, eligible women typically receive a Pap test every 3 years.

Getting regular Pap tests is important to take care of your wellness. A Pap test looks for abnormal cells on your cervix that could lead to cancer before you have any signs or symptoms. Screening can even catch cancer early, when it is easiest to treat, despite you feeling healthy.

1. **Have you ever had a Pap smear test?**
 - a. Yes
 - b. No
 - c. Unsure
 - d. Prefer not to say

2. **When was the last time you had a Pap smear test? Note: we are just looking for your best guess.**
 - 1 year or less
 - 1 to 3 years ago
 - 3 to 4 years ago
 - More than 4 years ago
 - Unsure
 - Prefer not to say

3. **Why did you have your last Pap smear test? Select all that apply.**
 - Family history of cervical cancer
 - Part of regular checkup/routine screening
 - Age
 - It was recommended by my doctor
 - Previously detected abnormality
 - Cervix problem
 - Prefer not to say
 - Other (please specify):

4. **What are the reasons that you may **not** have had a Pap smear test (in the past 3 years)? Select all that apply.**
 - Lack of time
 - I did not think it was necessary
 - My doctor did not think it was necessary/ they never brought it up
 - I am worried about discomfort or safety
 - I don't have a doctor
 - I have had a complete hysterectomy
 - I do not have a cervix
 - I have had a Pap smear within the past 3 years
 - I am not eligible for cervical cancer screening
 - I did not know how to access screening
 - Prefer not to say
 - Other (please explain):

Human papillomavirus (HPV) is a common virus that affects most people at some point in their lifetime. Some types of HPV are considered “high-risk” and can cause abnormal cells to develop in the cervix that can lead to cervical cancer if left undetected.

One of the things you can do to protect yourself against HPV is to get the HPV vaccine before you become sexually active (sexual activity includes any skin-to-skin contact in the genital area). If you’re already sexually active, you may still benefit from getting the vaccine. The vaccine can prevent 7 types of HPV that cause nearly 90% of all cases of cervical cancer.

- 5. Have you heard about the vaccine to prevent cervical cancer (HPV vaccine, Gardasil®)?
 - a. Yes
 - b. No
 - c. Unsure
 - d. Prefer not to say
- 6. Have you ever received the HPV vaccine?
 - a. Yes
 - b. No
 - c. Unsure
 - d. Prefer not to say
- 7. If you were eligible for the HPV vaccine, would you take it?
 - a. Yes
 - b. No
 - c. Unsure
 - d. Prefer not to say
- 8. If you feel comfortable doing so, please share why you may be hesitant to take the HPV vaccine? There are no right or wrong answers, we are simply looking for your opinion:

PART 2c: COLORECTAL CANCER SCREENING HISTORY

What is Colorectal Cancer Screening?

For most people, colorectal cancer screening starts at age 50 until you are 74. However, if you have a personal or family history that puts you at higher risk of colorectal cancer, you may have to start screening at age 40 or younger. In Alberta, eligible individuals are screened once a year, or as decided by you and your healthcare provider.

There are two main types of screening tests available. The type of screening you need to have will depend on your risk of developing colorectal cancer. Your risk is based on your biological family and personal history.

- i. A fecal immunochemical test (FIT) Test (poop test) is a home poop test that looks for traces of blood in your poop that you cannot see that may be from polyps or cancer. You have a bowel movement and use a small plastic stick to collect a small sample of stool and put the stick into a collection container.



- ii. A colonoscopy is an exam in which a doctor inserts a flexible tube into the rectum to examine the entire colon to look for polyps or abnormal growths. A colonoscopy is done in a clinic or hospital. Before the procedure is done, you are usually given medication through a needle in your arm to make you sleepy.
3. Have you ever had a fecal immunochemical test (FIT) or poop test?
- Yes
 - No
 - Unsure
 - Prefer not to say
4. When was the last time you had a poop test done? Note: we are just looking for you best guess.
- Less than 1 year ago
 - 1 to 2 years ago
 - 2 to 3 years ago
 - 3 or more years ago
 - Unsure
 - Prefer not to say
5. Why did you have your last poop test? Select all that apply.
- Family history of colon or rectal cancer
 - Part of regular check-up/ routine screening
 - Age
 - Signs or symptoms of a possible problem
 - Follow-up of previous problem
 - Prefer not to say
 - Other (please specify):

6. What are the reasons that you may **not** have had a FIT or poop test in the past year? Select all that apply.
- Lack of time
 - I did not think it was necessary
 - Doctor did not think it was necessary/ they never brought it up
 - Feelings of fear or discomfort
 - Don't have a doctor
 - Have had a poop test or within the past year
 - I am not eligible for colorectal cancer screening
 - I did not know how to access screening
 - Prefer not to say
 - Other (please specify):

7. Have you ever had a colonoscopy done?
- Yes
 - No
 - Unsure
 - Prefer not to say
8. About how many times in total have you had a colonoscopy in your lifetime? Note: we are just looking for your best guess.
- 1 colonoscopy
 - 2 or more colonoscopies
 - Unsure
 - Prefer not to say

9. Why did you have your last colonoscopy exam? Select all that apply.

- Family history of colon or rectal cancer
- Part of a regular checkup/ routine screening
- Age
- Signs or symptoms of a possible problem
- Follow-up of a previous problem
- Prefer not to say
- Other (Please specify):

10. What are the reasons that you may **not** have had a colonoscopy in the past year? Select all that apply.

- Lack of time
- I did not think it was necessary
- Doctor did not think it was necessary/ they never brought it up
- Feelings of fear or discomfort
- Don't have a doctor
- Have had a colonoscopy within the past year
- I am not eligible for colorectal cancer screening
- Other (please specify):

SECTION B: BARRIERS AND FACILITATORS TO SCREENING

Indigenous peoples can experience barriers or facilitators to cancer screening. Screening **barriers** are factors that may prevent you from seeking or receiving screening, while **facilitators** are factors that may improve your access to screening or willingness to participate in screening programs. The presence of barriers can mean that cancer is not prevented when it could be or that cancer is not caught early when it is easiest to treat. Each person will experience barriers unique to their own life experiences. For example, trauma, past experiences of racism in healthcare, fear of screening results, and fear of not knowing what happens next if the results detect cancer.

The following questions are related to different barriers and facilitators that you may have experienced when it comes to cancer screening participation. Although not all of the barriers or facilitators mentioned below will be relevant to you, please answer to the best of your ability.

For each of the following factors please select a number indicating how important this factor is to you (1=not important, 5=very important) when considering participation in cancer screening:

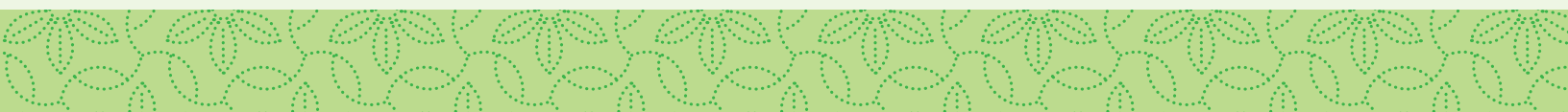
ACCESS TO HEALTHCARE AND HEALTHCARE PROVIDERS					
Access to reliable information on screening	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Distance to nearest health facility	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Access to permanent health facility	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Flexible appointment times (e.g., outside of business hours)	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Acceptable staffing of clinics with healthcare providers	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Short wait times for appointments	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Access to a regular primary healthcare provider	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Providing cancer screening test results in a timely manner	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
TRUST					
Trust in the healthcare system	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Trust in your healthcare provider (s)	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Screening was recommended by a healthcare provider	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Trust in screening technology (safety, accuracy)	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important

RESPECT					
Availability of cultural supports	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Presence of culturally competent staff	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Acceptance of traditional approaches to medicine	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Lack of discrimination and racism	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Use of Indigenous languages	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
COMMUNICATION					
Providing accurate information about cancer screening	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Providing information of the risks and benefits of cancer screening	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Clearly explaining the screening test or procedure	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Use of appointment reminders	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important

INDIVIDUAL FACTORS

Being employed or having income	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Social support (family, friends)	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Family history of cancer	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Understanding of health information	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Outside encouragement (e.g., from friends, family)	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important
Belief that screening can detect cancer	1 Not important	2 Somewhat unimportant	3 Neutral	4 Somewhat important	5 Very important

Are there any factors not listed above that are important to you when it comes to your participation in cancer screening programs? If so, please explain:



SECTION C: DEMOGRAPHICS

1. What is your highest level of completed education?
 - a. Primary/elementary school or less
 - b. Secondary/high school
 - c. Red Seal/Trades certificate
 - d. College or University degree
 - e. Graduate or professional degree
 - f. I have never been to school
 - g. Prefer not to say

1. What is your current relationship status?
 - a. Single
 - b. Separated
 - c. Divorced or widowed
 - d. In a relationship/married, living apart
 - e. In a relationship/married, living together
 - f. Prefer not to say

2. Which of these describe your household income last year?
 - a. Less than \$49,999 per year
 - b. \$50,000 to \$74,000 per year
 - c. \$75,000 to \$100,000 per year
 - d. Over \$100,000 per year
 - e. Prefer not to say

3. Thinking of the Métis Nation of Alberta regions, where is your regular place of residence located? Check all that apply.
 - a. Region 1 – e.g., Lac La Biche
 - b. Region 2 – e.g., Bonnyville
 - c. Region 3 – e.g., Calgary
 - d. Region 4 – e.g., Edmonton
 - e. Region 5 – e.g., Slave Lake
 - f. Region 6 – e.g., Peace River

- g. Unsure
- h. Prefer not to say

4. Do you regularly live? Check all that apply.
 - a. In a city
 - b. In a small town
 - c. In a rural area
 - d. In a remote area
 - e. Prefer not to say

5. Currently, your housing situation is:
 - a. Living in a home/apartment you own or rent
 - b. Living in a home/apartment a family member owns or rents
 - c. Living in a long-term care facility or group home
 - d. Couch surfing, using a shelter, or rough sleeping
 - e. Other: _____
 - f. Prefer not to say

6. What best describes your current employment status?
 - a. In high school
 - b. In University
 - c. Retired
 - d. Self-employed
 - e. Part-time employment
 - f. Full-time employment
 - g. Homemaker/full-time parent
 - h. Unemployed before the COVID-19 outbreak and seeking work
 - i. Employed before the COVID-19 outbreak but laid off during the pandemic
 - j. Prefer not to say

7. What is your current or most recent main area of occupation?
- a. Professional (health, physical/earth science/ engineering professionals, teacher/university professor, business/sales and marketing professional, software developer, legal, law enforcement, clergy, author, journalist, performing arts)
 - b. Manager (chief executive, administrative manager, production and sales, hospitality, and retail)
 - c. Technical or associate professional (in field of health, engineering, business, legal, social, or information/ communication)
 - d. Clerical support worker (office clerk, secretary, customer service clerks)
 - e. Service and sales worker (travel agent, cook, hair dresser/barber, retail sales, cashier, personal care worker)
 - f. Skilled agricultural, forestry, and fishery worker
 - g. Craft and related trades worker (builders, machinists, electricians, printing, food processing)
 - h. Plant and machine operator and assembler (includes truck drivers)
 - i. Elementary occupations (cleaner, helper, agricultural laborer, transport laborer, street vendor, refuse worker)
 - j. Fishing or trapping
 - k. Home-maker (stay at home parent)
 - l. Prefer not to say

The survey is now complete. Thank you for participating! If you would like to be entered into a draw to win a \$100 prepaid Visa card, please click on this link to enter on the MNA website. Note: your contact information will be kept private and cannot be linked to your survey responses.

If you are interested in learning more about cancer screening programs in Alberta, please click the link below:

Alberta Native Friendship Centres – Screening Pathways

- **Breast Cancer**
<https://anfca.com/wp-content/uploads/2021/06/Breast-Cancer-Screening-Pathway.pdf>
- **Cervical Cancer**
<https://anfca.com/wp-content/uploads/2021/06/Cervical-Cancer-Screening-Pathway.pdf>
- **Colorectal Cancer**
<https://anfca.com/wp-content/uploads/2021/06/Colorectal-Cancer-Screening-Pathway.pdf>

Healthier Together Cancer Screening Information

- <https://www.healthiertogether.ca/living-healthy/get-screened/>

If you are experiencing any distress, please contact **MNA Supports and Services Navigator** 780-455-2200, ext. 403.

For additional support, please visit any of the following resources below:

- **Métis Nation of Alberta Wellness Program:** A partnership with Alberta Blue Cross and Homewood Health offers mental health counselling to Métis Nation of Alberta citizens 24/7, free of charge, call 1-844-729-0261.
- **Hope for Wellness Help Line:** Offers immediate mental health counselling and crisis intervention to all Indigenous peoples across Canada 24/7. Visit them at <https://www.hopeforwellness.ca/> or call 1-855-242-3310.
- **Health Link:** 811
- **Mental Health Help Line:** 1-877-303-2642
- **Provincial Help Line:** 211 provides referrals for community, government, and social services.

Appendix III: Glossary

Cancer

A disease characterized by the abnormal growth of cells in the body.

Cancer Incidence

The number of new cancer cases diagnosed in a specific time period.

Cancer Mortality

The number of deaths caused by cancer in a specific time period.

Cancer Screening

Routine testing to find cancer at an early stage before an individual starts experiencing symptoms. Examples include a mammogram (breast cancer screening), Pap smear test (cervical cancer screening), fecal immunochemical test (FIT) or a colonoscopy (colorectal cancer screening).

Colonoscopy

A specialized screening test for colon cancer that allows the doctor to see the lining of the colon and rectum using a camera. Pictures are taken of the lining of the colon and can be seen on a computer screen, which helps the doctor determine if there are any abnormal growths. A colonoscopy is recommended only when there is a family or personal history of colon cancer, or if a person experiences symptoms (such as rectal bleeding).¹³

Epidemiological Report

A report that describes the distribution or spread of a disease across a population.

Fecal immunochemical test (FIT or poop test)

A routine screening test for colon cancer for people aged 50–74 who have an average risk for the disease. FIT checks your stool for traces of blood that you can't see and can be done in the privacy of your own home by ordering a test online or from your healthcare provider. A FIT should be done once per year.¹³

Hysterectomy

The partial or total surgical removal of the uterus, and may also include the removal of the cervix, ovaries, and fallopian tubes. It can be used to treat cancer in the reproductive organs or prevent cancer in the reproductive organs in women who are at high risk.

Mammogram

A routine screening test (x-ray) for breast cancer that detects abnormal growths in the breast. A mammogram should be completed as part of an individual's regular healthcare routine every two years from ages 45–74.¹⁰

Mastectomy

The surgical removal of a breast to treat breast cancer or prevent breast cancer in women who are at a high risk.

Pap Smear Test

A routine screening test for cervical cancer that is recommended from age 25–69, and completed every three years. Pap smear test checks the cells of the cervix to make sure there are no abnormal cells.¹¹

Prognosis

The predicted course of a disease related to recovery and survival.



Otipemisiwak Métis Government

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