CancerCare Manitoba
SCREENING PROGRAMS

Guidelines for Cancer Screening in Manitoba

Most women age 50-74 should have a screening mammogram every 2 years. Transgender men and women may also need regular mammograms.

Encourage your patients to call for an appointment. No referral is required.

Visit our website for locations and availability.

Most women age 21-69 who have ever had sexual contact should have a Pap test every 3 years. Transgender men and women may also need regular Pap tests.

Contact us for your patients' screening histories.

Most men and women age 50-74 should complete a fecal occult blood test (FOBT) every 2 years.

To request a kit for your patient or to inquire about your patients' screening history complete a History & Kit Request Form available on your EMR or on our website.

Supporting Your Patients to Make Informed Decisions About Cancer Screening

As a healthcare provider, your recommendation impacts your patient's decision to participate in cancer screening. The CancerCare Manitoba Screening Guidelines balance the benefits of cancer screening with the potential harms. Healthcare providers are encouraged to have a discussion about cancer screening with their patients to:

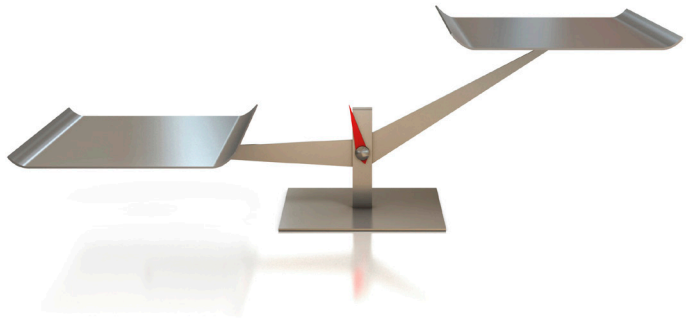
- Foster the patient's understanding of the test, its benefits and potential harms, and
- Support the patient to make an informed decision about cancer screening, one that is consistent with the individual's preferences and values.

BENEFITS OF CANCER SCREENING

Reduced cancer mortality
Randomized controlled trials have demonstrated that early detection through routine screening can reduce mortality from colorectal cancer (FOBT) by up to 25% and from breast cancer (mammograms) by 20-30%. Observational data have shown up to an 80% decrease in cervical cancer mortality following the introduction of organized Pap screening.

Decreased cancer incidence
Diagnostic follow-up of abnormal cervical and colorectal screening test results can prevent those cancers by detecting, treating, or removing pre-cancerous cells.

Enhanced treatment options
Screening can detect cancer at an earlier stage, which may result in simpler treatment, more treatment options, and/or less need for radiation and chemotherapy.



POTENTIAL HARMS OF CANCER SCREENING

False positives
False positive screening tests can result in unnecessary and potentially invasive follow-up.

False negatives
False negative screening tests can result in missed cancers, dysplasia, and potential delays in diagnosis and treatment.

Over diagnosis
Detecting conditions that may not have become clinically significant in a patient's lifetime (over diagnosis) may result in unnecessary intervention and/or treatment.

False reassurance
While cancer screening is effective in reducing mortality, interval cancers do occur. Encourage patients to revisit their healthcare provider if they notice any symptoms, even if their most recent screening test result was negative.

Distress
Although typically less invasive than a diagnostic test, the screening test may cause anxiety and/or discomfort or pain (mammogram and Pap), bleeding (Pap), and radiation exposure (mammogram). A follow-up (diagnostic) test for a patient with a positive screening result may result in unintended complications such as:

- Some cervical treatments (cold knife conisation and large loop excision of the transformation zone) may increase a woman's risk for pre-term delivery, low birth weight, cesarean section, and premature rupturing of membranes.
- Colonoscopy may result in bleeding and perforation of the colon, and very rarely, death.

HELP YOUR PATIENTS REDUCE THEIR RISK OF CANCER

Encourage your patients to:

- Consider vaccination against HPV
- Be physically active
- Keep a healthy weight
- Limit alcohol use
- Be smoke-free
- Eat well including lots of foods high in fibre and a limited amount of red meat and processed meat

BreastCheck Screening Guidelines

Most women age 50 to 74 should have a screening mammogram every 2 years

Discuss the benefits and potential harms of screening to support an informed decision that is consistent with your patient's individual preferences and values.

	PATIENT CHARACTERISTICS	MANAGEMENT
ASYMPTOMATIC - AVERAGE RISK	**49 years of age and under**	Routine screening mammograms are not recommended.
	50 to 74 years of age	Routing screening mammograms are recommended every 2 years at BreastCheck.
	75 years of age and over	Routine screening mammograms are not recommended. Women can choose to continue attending BreastCheck if they: • Decide the benefits of screening outweigh the risks. • Have no physical or cognitive limitations for mammography that prevent proper positioning or completion of the test.
	Persons with breast implants 50 to 74 years of age	Routine screening is recommended, but must be completed at a diagnostic imaging centre.
	Trans women 50 to 69 years of age • Who have taken gender-affirming hormones for ≥5 years	Routine screening mammograms may be considered at BreastCheck or a diagnostic imaging centre.
	• Who have taken gender-affirming hormones for ≥5 years and have breast implants	Routine screening mammograms may be considered, but must be completed at a diagnostic imaging centre.
	• Who have not taken gender-affirming hormones or have taken gender affirming hormones <5 years	Routine screening mammograms are not recommended.
	Trans men 50 to 69 years of age • Who still have breast tissue (have not had top surgery)	Routine screening mammograms are recommended every 2 years at BreastCheck or a diagnostic imaging centre.
	• Who no longer have breast tissue (have had top surgery)	Individualized assessment is required at a diagnostic imaging centre.
	Transgender persons 70 to 74 years of age	There is no evidence to recommend for or against screening in this population. Guidelines similar to those used for transgender persons (men & women respectively) 50 to 69 years of age would likely apply.
ASYMPTOMATIC - INCREASED RISK	**40 to 49 years of age** • Significant family history* • Pathological diagnosis of lobular carcinoma in-situ (LCIS), atypical ductal hyperplasia (ADH), or atypical lobular hyperplasia (ALH) • BRCA1/BRCA2 gene mutations • Previous diagnosis of breast cancer	Benefits and harms of screening should be discussed to support informed decision-making. Women who choose to be screened should be referred to: • A diagnostic imaging centre using the Manitoba Provincial Breast Imaging Consultation Request Form, or • A BreastCheck mobile site (on a limited basis) using the Appointment Request Form found at www.cancercare.mb.ca/screening/hcp.
	50 to 74 years of age • Significant family history* • Pathological diagnosis of LCIS, ADH, or ALH	Routine screening is recommended every year at BreastCheck.
	• BRCA1 and/or BRCA2 gene mutations • Previous diagnosis of breast cancer	General screening recommendations do not apply; individualized screening discussion with a healthcare provider is required. Where there is confirmation of the BRCA gene mutation, consultation with the Breast Health Centre is recommended. Monitoring depends on the patient's age and personal history of breast cancer.
SYMPTOMATIC	**Symptomatic at any age, including** • Changes in the size, shape or colour of the breast	Perform a clinical breast exam to aid with assessment.
	• Palpable lump • Thickened hard skin or puckering of the skin • Nipple changes or discharge	Refer to a diagnostic imaging centre (even if recent mammogram was negative) using the Manitoba Provincial Breast Imaging Consultation Request Form for further assessment.

** ≥25% lifetime risk of developing breast cancer based on the Claus Model, which takes into consideration the number of first or second degree blood relatives (male and female) diagnosed with breast cancer and/or ovarian cancer, and the age at which they were diagnosed.*

MANAGEMENT OF RESULTS

MAMMOGRAPHY RESULTS	MANAGEMENT
Normal (negative)	BreastCheck will: • Send the healthcare provider and the patient a result letter within 2 weeks of the mammogram. The letter will include the patient's breast density category (either *less than 75%* or *more than 75% dense*). • Send the patient a letter within 2 years of the mammogram to let them know they are due for their next screening mammogram (recall date depends on the radiologist's clinical recommendation).

Abnormal (positive)	BreastCheck will:
	• Directly refer and coordinate further test(s) as recommended by the radiologist. Follow-up test(s) may include:
	  ◦ Diagnostic mammogram
	  ◦ Ultrasound, with or without a core biopsy
	  ◦ Stereotactic core biopsy
	• Contact the patient by phone to let them know they need a follow-up test(s).
	• Send the client and their healthcare provider a result letter and follow-up test information within 2 weeks of the mammogram. The letter will include the patient's breast density category (either *less than 75%* or *more than 75% dense*).

CervixCheck Screening Guidelines

Most women age 21-69 who have ever had sexual contact should have a Pap test every 3 years

Discuss the benefits and potential harms of screening to support an informed decision that is consistent with your patient's individual preferences and values.

	PATIENT CHARACTERISTICS	MANAGEMENT
ASYMPTOMATIC - AVERAGE RISK	**20 years of age and under**	Do not screen.
	21 to 69 years of age and have ever had sexual contact. Sexual contact includes past or current: • Intercourse • Oral and digital contact involving the genital and/or rectal area • Sex with sex toys • Sexual abuse	Routine screening with Pap tests every 3 years. Women may choose to delay screening until 25 years of age as evidence suggests the harms of screening women 21-24 may outweigh the benefits.
	70 years of age and over	Discontinue screening if the patient has had 3 negative Pap tests in the past 10 years. Unscreened and/or underscreened patients should have 3 Pap tests, each 1 year apart. If the results are negative, screening may be discontinued. Decision to continue should be based on a discussion of harms and benefits, patient values and preferences, and comorbidities.
	Never had sexual contact	Do not screen. Women who have not had sexual contact by age 21 should delay screening until sexually active.
	HPV vaccinated	Routine screening with Pap tests every 3 years.
	Women who have sex with women	Routine screening with Pap tests every 3 years.
	Transgender	Routine screening is recommended for: Trans men: Female-to-Male (FTM) • With a cervix. • Who have had their cervix removed but have had a previous high-grade cervical pathology result (≥HSIL/CIN2/moderate dysplasia) (vault test). Trans women: Male-to-Female (MTF) • Who have had vaginoplasty (head of the penis used to create a neo-cervix). • Who have had penile inversion vaginoplasty (vault test).
	Pregnant	Do not screen during pre or post-natal care *unless the woman is due for a Pap test* and the benefits of screening outweigh the harms of screening.
	Hysterectomy	Do not screen if: • Hysterectomy was total (cervix removed), • Hysterectomy was performed for a benign disease (pathology negative for high-grade cervical dysplasia) and there is no prior history of high-grade cervical pathology. If Pap test results or hysterectomy pathology are unavailable, screen until two negative vaginal vault tests are obtained.
INCREASED RISK	**Immunocompromised or HIV positive**	Screen with Pap test every year.
	Previous high-grade cervical pathology result (≥HSIL/CIN2/moderate dysplasia)*	After discharge from colposcopy, screen annually with Pap tests until 69 years of age. Screening can be discontinued if results are negative in the previous 10 years.
	Previous cervical cancer	In the absence of life-limiting comorbidities, continue screening annually after discharge from cancer treatment.
SYMPTOMS	**Symptomatic at any age, including** • Visual abnormailities • Abnormal bleeding • Abnormal discharge	Refer to colposcopy.

**For more information, see CervixCheck's Pap Test Learning Module at* www.cancercare.mb.ca/screening/hcp

MANAGEMENT OF RESULTS

CYTOLOGY RESULT	MANAGEMENT
Negative for intraepithelial lesion or malignancy (NILM)	Routine screening with a Pap test every 3 years.
Unsatisfactory	Repeat Pap test in 3 months. If persistent (2 consecutive or 2 within 12 months) unsatisfactory result due to "obscuring blood" or "obscuring inflammation", refer for colposcopy.
Atypical squamous cells of undetermined significance (ASCUS) **Low-grade squamous intraepithelial lesion** (LSIL)	Repeat Pap test in 6 months → **Abnormal** → **Colposcopy** Repeat Pap test in 6 months → **Negative** → **Repeat Pap test in 6 months** → **Abnormal** → **Colposcopy** **Repeat Pap test in 6 months** → **Negative** → **Routine screening**
Atypical glandular cells (AGC)	Refer for colposcopy and endocervical curettage. If woman is ≥35 years of age or has abnormal bleeding, colposcopy should also include an endometrial biopsy.
Atypical squamous cells, cannot rule out high-grade (ASC-H)	Refer for colposcopy.
High-grade squamous intraepithelial lesion (HSIL)	Refer for colposcopy.
Atypical endocervical cells	Refer for colposcopy.
Atypical endometrial cells	Refer for endometrial biopsy.
Benign endometrial cells	If there is abnormal bleeding: Refer for endometrial biopsy. < 45 years of age: In the absence of abnormal bleeding, continue routine screening. ≥ 45 years of age: Refer for endometrial biopsy, regardless of menstrual history.
Adenocarcinoma in situ (AIS)	Refer for colposcopy and endocervical curettage.
Squamous carcinoma, adenocarcinoma, other malignant neoplasms.	Refer for colposcopy and Gynecologic Oncology.
Absence of transformation zone cells	Screen according to cytology result. See the Pap Test Learning Module chapter 10 - Other Results: Absence of Transformation Zone.
Rejected specimen	Repeat Pap test in 3 months. Inform woman that the repeat is not due to abnormal cytology.

NOTE: All cytological abnormal results in immunocompromised and HIV+ women, should be referred to colposcopy (includes LSIL, ASCUS).

Key message for healthcare providers

The greatest reduction in cervical cancer rates will be achieved by screening eligible women who have not previously been screened, not by screening younger women or screening women more frequently than recommended. Request your patient's Pap test history from CervixCheck by phone, email, or online at www.cancercare.mb.ca/screening/cervix.

Cervical cancer is caused by HPV.

HPV Facts:

- HPV is very common: Over 80% of sexually active people will have an HPV infection during their lifetime
- HPV is easily spread: Nearly half of women acquire an HPV infection from their first sex partner
- 90% of HPV infections disappear on their own
- The vast majority of people who have had HPV never develop cancer
- The HPV vaccine is very effective against HPV cancers and genital warts. If appropriate, recommend that your patients be vaccinated.

ColonCheck Screening Guidelines

Most men and women age 50-74 should complete a fecal occult blood test (FOBT) every 2 years

Discuss the benefits and potential harms of screening to support an informed decision that is consistent with your patient's individual preferences and values.

	PATIENT CHARACTERISTICS	MANAGEMENT
ASYMPTOMATIC - AVERAGE RISK	**49 years of age and under**	Routine screening is not recommended.
	50 to 74 years of age	Routine screening with FOBT every 2 years is recommended. Individuals with a family history of one of more 2nd degree relatives (aunt, uncle, grandparent) diagnosed with CRC/polyps/adenomas OR one or more 1st degree relatives diagnosed with non-advanced adenomas should follow the average risk screening recommendation.
	75 years of age and over	Routine screening is not recommended. Decision to continue screening persons ≥75 years of age should be made on an individual basis based on family history, comorbidities, and the risks and benefits of screening.
ASYMPTOMATIC - INCREASED RISK	**Personal History of** • Colorectal cancer or adenomas requiring surveillance • Inflammatory bowel disease (IBD) with associated colitis • Confirmed or suspected hereditary colon cancer syndromes such as Lynch Syndrome (previously known as HNPCC) or familial adenomatous polyposis (FAP)	Endoscopic surveillance and management as per endoscopist.
	Family History • Two or more 1st degree relatives diagnosed with CRC at any age	Colonoscopy every 5 years beginning at age 40 or 10 years earlier than the youngest relative's diagnosis (whichever occurs first). Screening with FOBT is not recommended.
	• One 1st degree relative diagnosed with CRC at any age	**Preferred test:** Colonoscopy every 5 to 10 years beginning at age 40 or 10 years earlier than the youngest relative's diagnosis (whichever comes first). **Alternative test:** Screening with FOBT every 1 to 2 years starting at age 40 or 10 years earlier than the youngest relative's diagnosis (whichever comes first).
	• One or more 1st degree relative diagnosed with advanced adenomas (≥1 cm in size, or with high-grade dysplasia, or villous and tubulovillous lesions) at any age	Colonoscopy every 5 to 10 years or FOBT every 1 to 2 years beginning at age 40 or 10 years earlier than the youngest relative's diagnosis (whichever comes first).
SYMPTOMATIC	**Symptomatic at any age, including** • Persistent rectal bleeding, change in bowel habits, and/or abdominal pain • Iron deficiency anemia • Palpable mass	Refer urgently for endoscopic investigation. Screening with FOBT is not recommended.

MANAGEMENT OF RESULTS

FOBT RESULTS	MANAGEMENT
Normal (negative for blood)	ColonCheck will: • Send the healthcare provider and the patient a result letter. • Send the patient an FOBT in 2 years when they are due for their next colorectal cancer screening test.
Abnormal (positive for blood)	ColonCheck will: • Contact the patient by phone (within 3 days of the program receiving the abnormal test result) to let them know they need a follow-up test. • Coordinate direct referral to colonoscopy or work with the patient's healthcare care provider to ensure colonoscopy referral is made. • Send the healthcare provider and client a result letter and follow-up test information. All FOBT positive results must be investigated, as bleeding from cancers or adenomas may be intermittent. Repeating an FOBT after a positive result in unwarranted, as subsequent negative results do not rule out serious pathology.

COLONOSCOPY RESULTS	MANAGEMENT
NEGATIVE FINDINGS With no additional CRC risk factors. This includes individuals with left-sided hyperplastic polyps <1cm.	Resume routine screening with FOBT 5 years after colonoscopy. ColonCheck will recall the participant in 5 years.
POSITIVE FINDINGS • **Low risk adenomas (LRA)** 1-2 tubular adenoma <1cm with no high-grade dysplasia	Repeat colonoscopy in 5 to 10 years.
• **Non-dysplastic sessile serrated adenomas/polyps (SSA/Ps) <1cm**	Repeat colonoscopy in 5 years.
• **High risk adenomas (HRA) which includes** ◦ ≥3 adenomas or ◦ Advanced adenomas • **Traditional serrated adenomas or SSA/Ps with dysplasia or ≥1cm**	Repeat colonoscopy in 3 years, then every 5 years once polyp clearance achieved. Surveillance interval may need to shorted if polyp clearance is not achieved.
Post-curative resection for colorectal cancer	Colonoscopy 1 year post-surgery or 1 year after the first completed colonoscopy done after surgery. Next colonoscopy at 5 year intervals, unless polyp surveillance requires shorter intervals.
Colon was not cleared of polyps (incomplete polypectomy or incomplete removal of an advanced adenoma)	Consider repeating colonoscopy in 3 to 6 months.

Lung Cancer Screening Guidelines

CancerCare Manitoba does not currently manage an organized screening program for lung cancer. However, the Canadian Task Force on Preventive Health Care (CTFPHC) recommends lung cancer screening for high-risk individuals. Patients may present to your office inquiring about whether they should undergo a low-dose screening CT. The decision to screen requires an individualized discussion with your patient that weighs the benefits and harms. **Regardless of the screening decision, smoking cessation counselling is recommended.**

	PATIENT CHARACTERISTICS	MANAGEMENT
ASYMPTOMATIC	**54 years of age and under**	Do not screen. There is no evidence that the benefits of screening this age group outweigh the harms.
	55 to 74 years of age who • Are current smokers, or former smokers who quit within the past 15 years AND • Have a 30 pack-year* history, **AND** • Have no signs, symptoms or history of lung cancer	Three annual screens with low-dose computer tomography (LDCT). Submit an imaging requisition for a low-dose CT and include the patient's age, smoking status (current smoker or number of years since quitting), and number of pack-years. Screening with chest x-ray is not recommended.
	55 to 74 years of age with ≤30 pack-year smoking history	Routine screening is not recommended. There is no evidence that the benefits of screening outweigh the harms for those who do not meet the smoking criteria.
	75 years of age and over	Routine screening is not recommended. There is no evidence that the benefits of screening this age group outweigh the harms.
	Family History of lung cancer	Routine screening is not recommended.
	Exposure to radon, asbestos, or other known lung-cancer-causing agents	Routine screening is not recommended.
SYMPTOMATIC	**Including** • Unexplained new symptoms lasting more than 3 weeks (cough, chest and/or shoulder pain, loss of appetite/weight, hoarseness, dyspnea, dysphagia, abnormal chest signs • Unexplained changes in symptoms with chronic lung disease • Unexplained hemoptysis • Finger clubbing • Features suggestive of paraneoplastic syndrome	Refer for diagnostic imaging.

**A pack year is the product of the number of years smoked and the number of packs of cigarettes smoked per day. For example, someone with a 30 pack-year history could have smoked one pack per day for 30 years or two packs per day for 15 years.*

CancerCare Manitoba operates Manitoba's three organized cancer screening programs: BreastCheck, CervixCheck, and ColonCheck.

The goal of the screening programs is to reduce cancer mortality through the prevention and early detection of breast, cervical, and colorectal cancers. Eligible individuals who are average risk and asymptomatic are invited to participate in screening at recommended intervals.

The screening programs:

- Provide and promote cancer screening services across Manitoba.
- Use direct mail to invite and remind Manitobans to be screened and to notify them of their screening results.
- Ensure that individuals with abnormal screening results receive timely follow-up through direct referrals and/or working with healthcare providers.
- Maintain and monitor provincial registries for screening results, including Pap test and colposcopy results, mammograms, and FOBTs and colonoscopies. Pertinent personal health information is provided to the screening programs by Manitoba Health, Seniors, and Active Living; CancerCare Manitoba; healthcare agencies; laboratories; and healthcare facilities.
- Facilitate education and awareness activities for healthcare providers and the public.
- Conduct quality assurance activities and ongoing monitoring and evaluation of program operations.

Visit our website for more information and to order education and health promotion resources.
www.cancercare.mb.ca/screening
screening@cancercare.mb.ca

References for this document are found at **www.cancercare.mb.ca/screening**