

Manitoba Cancer Screening Guidelines

BreastCheck

Most women age 50-74 should have a screening mammogram every 2 years. Transgender, non-binary and gender diverse people may also need regular mammograms.

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

Visit our website for BreastCheck clinic locations.

CervixCheck

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

Contact us for your patients' screening histories.

ColonCheck

Most people age 50-74 should complete a fecal immunochemical test (FIT) every 2 years.

To request a FIT for your patient complete the Fecal Immunochemical Test (FIT) Requisition Form from the ColonCheck 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 screening can reduce mortality from breast cancer by up to 20-30%. Observational data have shown up to an 80% decrease in cervical cancer mortality following the introduction of organized screening with the Pap test. A large prospective cohort study looking at the long-term effectiveness of using FIT biennially in a population-based screening program showed a reduction in colorectal cancer related mortality of 40%.

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.

Earlier cancer detection

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 visit 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:

- Move more
- Eat healthy
- Reduce exposure to radon
- Maintain a healthy weight
- Live smoke free
- Avoid alcohol
- Be sun safe
- Get vaccinated

To learn more about how to prevent cancer and to access the Decision Aid visit [PracticePrevention.ca](https://www.practiceprevention.ca).

BreastCheck Screening Guidelines

Most women age 50 to 74 should have a screening mammogram every 2 years. Transgender, non-binary, and gender diverse people may also need regular screening mammograms.

	Patient Characteristics	Management
AVERAGE RISK	49 years of age and under	Routine screening mammograms are not recommended.
	50 to 74 years of age	Routine screening mammograms are recommended every 2 years at BreastCheck.
	75 years of age and over	Routine screening mammograms are not recommended. Patients can choose to continue attending BreastCheck if they decide the benefits of screening outweigh the risks.
	50 to 74 years of age with breast implants	Routine screening is recommended, but must be completed at a diagnostic imaging centre.
	Trans women, non-binary, and gender diverse people age 50 to 69 <ul style="list-style-type: none"> Who have taken gender-affirming hormones for 5 years or more 	Routine screening mammograms may be considered at BreastCheck or a diagnostic imaging centre.
	<ul style="list-style-type: none"> Who have taken gender-affirming hormones for 5 years or more and have breast implants 	Routine screening mammograms may be considered, but must be completed at a diagnostic imaging centre.
	<ul style="list-style-type: none"> Who have not taken gender-affirming hormones or have taken gender-affirming hormones less than 5 years 	Routine screening mammograms are not recommended.
	Trans men, non-binary, and gender diverse people age 50 to 69 <ul style="list-style-type: none"> 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.
	<ul style="list-style-type: none"> Who no longer have breast tissue (have had top surgery) 	Individualized assessment is required by the patient's primary physician.
	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) age 50 to 69 would likely apply.
INCREASED RISK	<ul style="list-style-type: none"> BRCA1 and/or BRCA2 gene mutations Previous diagnosis of breast cancer 	<p>Where there is confirmation of the BRCA gene mutation, consultation with the Breast Health Centre is recommended. Surveillance depends on the patient's age and personal history of breast cancer.</p> <p>CancerCare Manitoba's surveillance recommendations for follow-up care can be found at cancercares.mb.ca/followupcare.</p>

	Patient Characteristics	Management
INCREASED RISK	<p>Childhood and young adult cancer survivors diagnosed with cancer between 0-30 years of age who were treated with more than or equal to 10 Gy of:</p> <ul style="list-style-type: none"> • Chest or total body radiation. • Upper abdominal radiation exposing breast tissue to radiation (as determined by the treating paediatric and radiation oncologists in very young children) 	<p>Annual mammograms and breast MRI beginning at age 30, or 8 years after completion of radiation, whichever occurs last. Continue annual (mammogram and breast MRI) screening until age 69, then mammogram every 2 years until 74 years of age. Patients should be referred to:</p> <ul style="list-style-type: none"> • A diagnostic imaging centre using the Manitoba Provincial Breast Imaging Consultation Request Form, found at sharedhealthmb.ca/files/breast-imaging-referral-form.pdf • A BreastCheck mobile site using the Appointment Request Form found at cancercare.mb.ca/screening/hcp
	<p>40 to 49 years of age</p> <ul style="list-style-type: none"> • Significant family history* • Pathological diagnosis of lobular carcinoma in-situ (LCIS), atypical ductal hyperplasia (ADH), or atypical lobular hyperplasia (ALH) 	<p>Benefits and harms of screening should be discussed to support informed decision-making. Patients can be referred to:</p> <ul style="list-style-type: none"> • A diagnostic imaging centre using the Manitoba Provincial Breast Imaging Consultation Request Form, found at sharedhealthmb.ca/files/breast-imaging-referral-form.pdf • A BreastCheck mobile site using the Appointment Request Form found at cancercare.mb.ca/screening/hcp
	<p>50 to 74 years of age</p> <ul style="list-style-type: none"> • Significant family history* • Pathological diagnosis of LCIS, ADH, or ALH 	<p>Routine screening mammograms are recommended every year at BreastCheck.</p>
SYMPTOMATIC	<p>Symptomatic at any age, including</p> <ul style="list-style-type: none"> • Changes in the size, shape or colour of the breast • Palpable lump • Thickened hard skin or puckering of the skin • Nipple changes or discharge 	<p>Perform a clinical breast exam to aid with assessment.</p> <p>Refer to a diagnostic imaging centre (even if recent mammogram was negative) using the Manitoba Provincial Breast Imaging Consultation Request Form found at sharedhealthmb.ca/files/breast-imaging-referral-form.pdf.</p>

*A greater than or equal to 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 MAMMOGRAPHY RESULTS

Result	Management
Normal (negative)	<p>BreastCheck will:</p> <ul style="list-style-type: none"> • 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. • 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)	<p>BreastCheck will:</p> <ul style="list-style-type: none"> • Directly refer and coordinate further test(s) as recommended by the radiologist. Follow-up tests may include: <ul style="list-style-type: none"> • 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 patient 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.

CervixCheck Screening Guidelines

Most people with a cervix age 21-69 who have ever had sexual contact should have a Pap test every 3 years. Transgender, non-binary, and gender diverse people may also need regular Pap tests.

	Patient Characteristics	Recommendations
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 (wanted or unwanted): <ul style="list-style-type: none"> intercourse oral and digital contact involving the genital and/or anal area sex with shared sex toys 	Routine screening with a Pap test every 3 years. Patients may choose to delay screening until 25 years of age as evidence suggests the harms of screening patients 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 or one negative high-risk human papillomavirus (hrHPV) test result in the last 5 years. Unscreened and underscreened patients should have 3 Pap tests, each 1 year apart. If the Pap test results are negative or there is 1 negative hrHPV test result, screening may be discontinued.
	Never had sexual contact	Do not screen. Delay screening until initiation of sexual contact.
	HPV vaccinated	Routine screening with Pap test every 3 years.
	Women who have sex with women, transgender, and non-binary people	Routine screening with Pap test every 3 years for individuals with a cervix or neo-cervix.
	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.
INCREASED RISK	Hysterectomy	Do not screen if hysterectomy was: <ul style="list-style-type: none"> total (cervix removed), performed for a benign disease, the pathology is 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 2 negative vaginal vault tests are obtained.
	Immunocompromised or HIV positive	Screen with Pap test every year. All immunocompromised or HIV positive people with any abnormal result (including LSIL and ASCUS) should be referred for colposcopy.
	Previous high-grade cervical pathology (equal to or more severe than HSIL/CIN2/moderate dysplasia)	Screen with Pap test every year after discharge from colposcopy.
SYMPTOMATIC	Previous cervical cancer	In the absence of life-limiting comorbidities, screen every year after discharge from cancer treatment. CancerCare Manitoba's surveillance recommendations for follow-up care can be found at cancercare.mb.ca/followupcare .
	Symptomatic, including: <ul style="list-style-type: none"> visual abnormalities abnormal bleeding abnormal discharge 	Refer for colposcopy.

MANAGEMENT OF RESULTS

Pap test interpretation	Management
Negative for intraepithelial lesion or malignancy (NILM)	Routine screening with a Pap test in 3 years.
Atypical squamous cells of undetermined significance (ASCUS)	<p>21 to 29 years of age</p> <p>Repeat Pap test in 6 months</p> <ul style="list-style-type: none"> Negative → Repeat Pap test in 6 months <ul style="list-style-type: none"> Negative → Routine screening Abnormal → Refer for colposcopy Abnormal → Refer for colposcopy
	<p>30 years of age and older</p> <p>Lab automatically tests the same specimen for hrHPV</p> <ul style="list-style-type: none"> hrHPV negative → Routine screening hrHPV positive → Refer for colposcopy hrHPV invalid → Repeat Pap test in 6 months
hrHPV = high-risk human papillomavirus	
Low-grade squamous intraepithelial lesion (LSIL)	<p>21 to 49 years of age</p> <p>Repeat Pap test in 6 months</p> <ul style="list-style-type: none"> Negative → Repeat Pap test in 6 months <ul style="list-style-type: none"> Negative → Routine screening Abnormal → Refer for colposcopy Abnormal → Refer for colposcopy
	<p>50 years of age and older</p> <p>Lab automatically tests the same specimen for hrHPV</p> <ul style="list-style-type: none"> hrHPV negative → Routine screening hrHPV positive → Refer for colposcopy hrHPV invalid → Repeat Pap test in 6 months
Atypical glandular cells (AGC)	Refer for colposcopy and endocervical curettage. If patient is 35 years of age and older 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	<p>If patient has abnormal bleeding: refer for endometrial biopsy.</p> <p>If patient does not have abnormal bleeding and is</p> <ul style="list-style-type: none"> - less than 45 years of age: continue routine screening - 45 years of age and older: refer for endometrial biopsy
Adenocarcinoma in situ (AIS)	Refer for colposcopy.
Squamous carcinoma, adenocarcinoma, other malignant neoplasms	Refer for colposcopy.
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.
Absence of transformation zone cells	Screen according to cytology result.

NOTE: All cytological abnormal results in immunocompromised or HIV positive individuals should be referred for colposcopy (includes LSIL and ASCUS cytology results).

ColonCheck Screening Guidelines

Most people age 50 to 74 should complete a fecal immunochemical test (FIT) every two years.

	Patient Characteristics	Management
AVERAGE RISK ¹	49 years of age and under	Routine screening with FIT is not recommended.
	50 to 74 years of age	Routine screening with FIT every 2 years.
	75 to 85 years of age	Routine screening with FIT is not recommended. Decision to continue screening until 85 years of age is made on a case-by-case basis with consideration given to life expectancy, family history, past screening history (less benefit if up to date with screening), comorbidities, and the potential benefits and harms of screening.
	86 years of age and over	Do not screen.
INCREASED RISK	Family History of <ul style="list-style-type: none"> One first-degree relative diagnosed with colorectal cancer (CRC) at 60 years of age or older One or more first-degree relatives diagnosed with advanced adenomas² at any age 	Patient Preference Routine screening with FIT every 2 years starting at age 40 or 10 years earlier than the youngest relative's age at diagnosis (whichever occurs first), OR Colonoscopy every 5 to 10 years beginning at age 40 or 10 years earlier than the youngest relative's age at diagnosis (whichever occurs first).
	Family History of <ul style="list-style-type: none"> One first-degree relative diagnosed with colorectal cancer before 60 years of age OR Two or more first-degree relatives diagnosed with colorectal cancer at any age 	Colonoscopy every 5 years beginning at age 40 or 10 years earlier than youngest relative's age at diagnosis (whichever occurs first). Do not screen with FIT.
	Personal History of <ul style="list-style-type: none"> Colorectal cancer or high-risk adenomas requiring surveillance Inflammatory bowel disease (IBD) with associated colitis Confirmed or suspected hereditary colorectal cancer syndromes such as Lynch syndrome or familial adenomatous polyposis (FAP) 	Surveillance and management as directed by the endoscopist. Consider referring individuals with suspected hereditary colorectal cancer syndromes for genetic counselling and testing. Consider referring individuals with confirmed hereditary gastrointestinal cancer syndromes to the hereditary gastrointestinal cancer clinic at CancerCare Manitoba (fax: 204-786-0621). Do not screen with FIT.

¹Average risk includes individuals with one or more second-degree relatives diagnosed with colorectal cancer and individuals with a first-degree relative with non-advanced adenomas or polyps of unknown histology.

²Adenomas greater than or equal to one centimetre in size, or with high-grade dysplasia, or villous and tubulovillous lesions.

ColonCheck Screening Guidelines (continued)

	Patient Characteristics	Management
INCREASED RISK	Childhood cancer survivors diagnosed with cancer between 0-18 years of age who received radiation to the abdomen, pelvis, spine (lumbar, sacral, whole) or total body radiation.	<p>Preferred test: Colonoscopy every 5 years beginning at age 30 or 5 years after completion of radiation therapy (whichever occurs last).</p> <p>Alternative test: Screening with FIT every 1 year beginning at age 30 or 5 years after completion of radiation therapy (whichever occurs last).</p>
	Young adult cancer survivors diagnosed with cancer between 19-35 years of age who received radiation to the abdomen or pelvis or total body radiation.	<p>Preferred test: Colonoscopy every 5 years beginning at age 35 or 10 years after completion of radiation therapy (whichever occurs last).</p> <p>Alternative test: Screening with FIT every 1 year beginning at age 35 or 10 years after completion of radiation therapy (whichever occurs last).</p>
SYMPTOMATIC	<p>Symptomatic, including:</p> <ul style="list-style-type: none"> • Persistent rectal bleeding • Unexplained iron deficiency anemia • Palpable mass 	<p>Refer for endoscopic investigation.</p> <p>Do not screen with FIT.</p>

MANAGEMENT OF COLONOSCOPY RESULTS - POLYP SURVEILLANCE³

Recommendations should consider additional risk factors such as family colorectal cancer history which may shorten the surveillance interval. All recommendations assume a complete examination to the cecum with an adequate bowel preparation.

Patient Characteristics	Management
<p>Normal (negative) colonoscopy result</p> <p>Patient at average risk for colorectal cancer, with no findings at procedure.</p> <p>Normal includes patients with rectosigmoid hyperplastic polyps less than 1 centimetre.</p>	<p>Resume routine screening with FIT in 10 years.</p>
<p>Abnormal (positive) colonoscopy result</p> <p>Conventional adenomas</p> <p>Low risk adenoma(s) (LRA)</p> <ul style="list-style-type: none"> • 1 or 2 tubular adenoma(s) each less than 1 centimetre without high-grade dysplasia 	<p>Patient preference</p> <p>Routine screening with FIT every 2 years starting 5 years post-colonoscopy,</p> <p>OR</p> <p>Repeat colonoscopy in 7 to 10 years.</p>
<ul style="list-style-type: none"> • 3 or 4 tubular adenomas each less than 1 centimetre without high-grade dysplasia 	<p>Colonoscopy in 3 to 5 years.</p>
<p>High-risk adenoma(s) (HRA)</p> <ul style="list-style-type: none"> • Advanced adenomas <ul style="list-style-type: none"> • Any tubular adenoma greater than or equal to 1 centimetre • Any adenoma with high-grade dysplasia or a villous component (villous or tubulovillous) • 5 to 10 tubular adenomas 	<p>Repeat colonoscopy in 3 years, then in 5 years once polyp clearance has been achieved.</p> <p>Further surveillance at endoscopist discretion.</p> <p>Surveillance interval may need to shorten if polyp clearance has not been achieved or high-risk adenomas are present at the second colonoscopy.</p>
<ul style="list-style-type: none"> • Greater than 10 adenomas 	<p>Repeat colonoscopy in 1 year.</p> <p>Further surveillance at endoscopist discretion.</p> <p>Consider referral for genetic testing for familial adenomatous polyposis and MYH polyposis syndromes if 20 or more cumulative adenomas.</p>

MANAGEMENT OF COLONOSCOPY RESULTS - POLYP SURVEILLANCE³ (Continued)

Patient Characteristics	Management
<p>Serrated Polyps</p> <ul style="list-style-type: none"> • 1 or 2 non-dysplastic sessile serrated lesions each less than 1 centimetre in size 	<p>Repeat colonoscopy in 5-10 years. Further surveillance at endoscopist discretion.</p>
<ul style="list-style-type: none"> • 3 - 4 non-dysplastic sessile serrated lesions each less than 1 centimetre in size • Hyperplastic polyp(s) greater than or equal to 1 centimetre 	<p>Repeat colonoscopy in 3-5 years. Further surveillance at endoscopist discretion.</p>
<ul style="list-style-type: none"> • 5 - 10 non-dysplastic sessile serrated lesions each less than 1 centimetre in size • One or more sessile serrated lesions greater than or equal to 1 centimetre in size or with dysplasia • Traditional serrated adenoma(s) of any size 	<p>Repeat colonoscopy in 3 years. If no polyps requiring surveillance then subsequent colonoscopy in 5 years. Further surveillance at endoscopist discretion.</p>
<p>Serrated Polyposis Syndrome:</p> <ul style="list-style-type: none"> • Five or more serrated lesions/polyps proximal to the rectum, all being equal to or greater than at least 5 millimetres in size with two or more that are greater than or equal to 1 centimetre. <p>OR</p> <ul style="list-style-type: none"> • More than 20 serrated lesions or polyps of any size distributed throughout the large colon, with at least five proximal to the rectum. 	<p>Repeat colonoscopy in 1 year and then 1-3 years at endoscopist discretion.</p>
<p>Post-curative resection for colorectal cancer</p>	<p>Colonoscopy 1-year post-surgery (or 1 year after the first completed colonoscopy if done after surgery), and then 4 years after initial surgery, then every 5 years unless polyp surveillance requires shorter intervals</p> <p>Refer to the "CancerCare Manitoba colorectal cancer patient follow-up treatment summary" for more information. This can be found at: https://www.cancercare.mb.ca/For-Health-Professionals/follow-up-care-resources</p>
<p>Colon was not cleared of polyps. Includes incomplete excision of an adenoma, in particular those with high-grade dysplasia or villous components, or piecemeal removal of a large sessile adenoma equal to or greater than 2 centimetres in size.</p>	<p>Repeat colonoscopy in less than 6 months. Subsequent surveillance at endoscopist discretion.</p>

³For additional information on adenoma surveillance, refer to Colorectal Polyps and Surveillance Recommendations: [cancercare.mb.ca/screening/hcp](https://www.cancercare.mb.ca/screening/hcp)

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 at 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.
- Maintain and monitor provincial registries for screening test and follow-up test results, including Pap test, colposcopy, mammogram, FIT, and colonoscopy results. Pertinent personal health information is provided to the screening programs by Manitoba Health, 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 at www.cancercare.mb.ca/screening/hcp:

- for more information about cancer screening
- to view and register for education and training opportunities
- to register your Pap test clinic
- to download request forms
- to order resources for your clinic

If you have questions about cancer screening, contact us at:

screening@cancercare.mb.ca

1-855-95-CHECK

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 less than 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	Symptomatic at any age, including: • Unexplained new symptoms lasting more than 3 weeks (cough, chest or shoulder pain, loss of appetite or 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.