



Lung Cancer Screening in Canada:

ENVIRONMENTAL SCAN

Data collected in 2018
Revised March 2019

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Executive Summary

There are currently no organized lung cancer screening programs in Canada. However, some provinces and territories have initiated lung cancer screening strategies such as preparing business cases, convening advisory committees, and planning or implementing pilot studies (Table 2).

Four individual lung cancer screening pilots and studies have been implemented. These initiatives include two provincial studies (BC, AB), one provincial pilot (ON) and a pan-Canadian study (Table 3). The pilots and studies are ongoing, with the exception of the Pan-Canadian study which ended in 2016 (follow-up continues in some sites). These initiatives compare the use of inclusion criteria based on the National Lung Screening Trial (NLST) criteria, the US Preventive Services Task Force (USPSTF), or the Canadian Task Force on Preventive Health Care (CTFPHC) guidelines, with different risk prediction models.

Opportunistic screening for lung cancer with low-dose computed tomography (LDCT) is known to be occurring in six provinces (Table 6). No province or territory has a method of measuring the amount of opportunistic LDCT screening, but some provinces may have the ability to collect this information in the future.

In eight provinces and one territory, synoptic reporting is currently being used for lung cancer pathology (Table 7). Four provinces report that they use the synoptic template from the Canadian Association of Pathologists (CAP) or a modified version of the CAP synoptic template. Furthermore, seven provinces have rapid diagnosis initiatives for lung cancer (Table 8).

The Northwest Territories and Ontario have also implemented strategies to connect with First Nations, Inuit and Métis. Strategies identified addressed engaging with First Nations, Inuit and Métis in decision-making and informing approaches to culturally appropriate screening, reaching First Nations, Inuit and Métis through program resources, and engaging with healthcare providers working directly with First Nations, Inuit and Métis communities (Table 9).

Background

The Canadian Partnership Against Cancer collects information annually on national, provincial and territorial lung cancer screening guidelines, strategies, and activities.

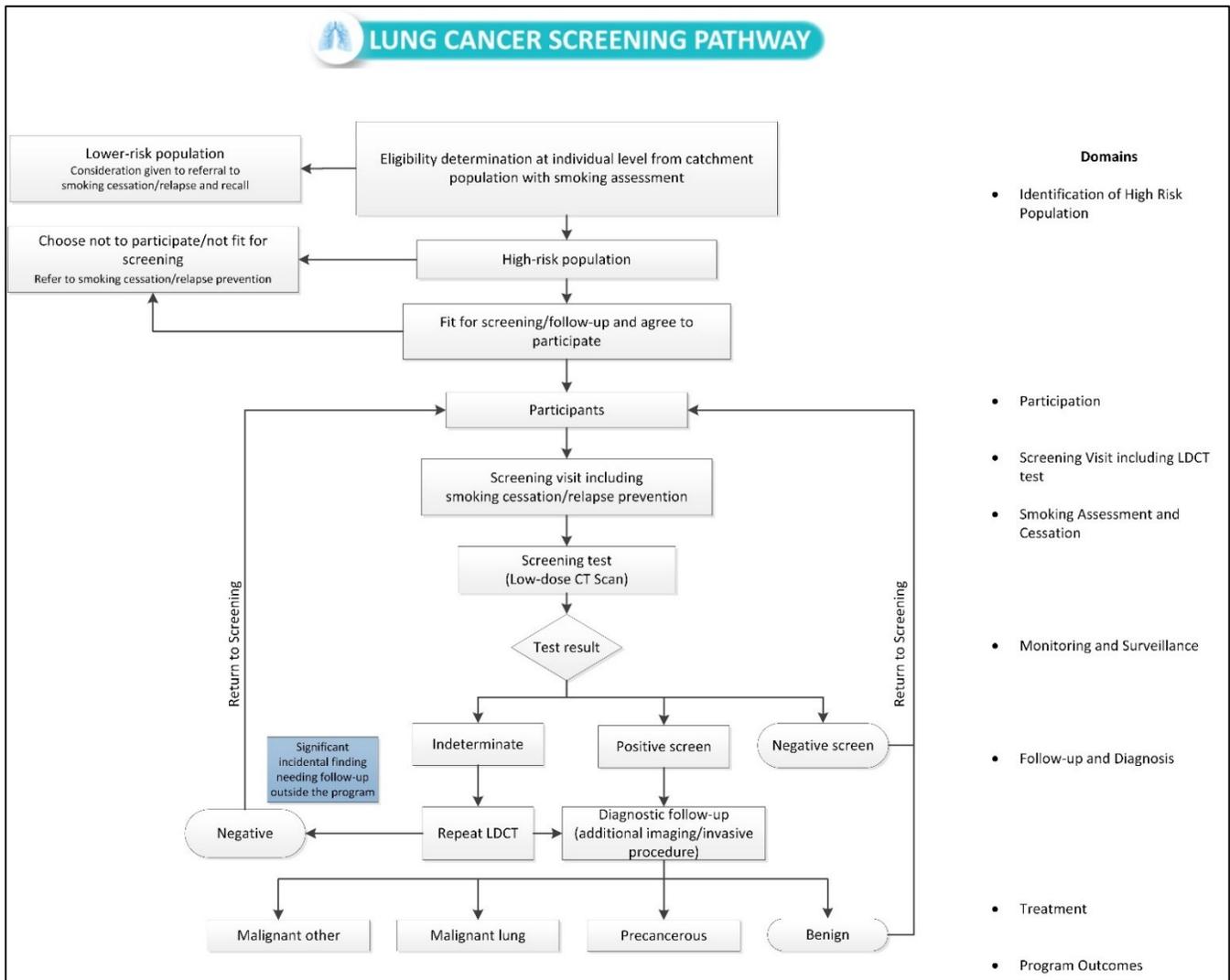
This environmental scan summarizes the data collected from provincial and territorial screening programs and is intended to provide information to inform provincial/territorial decision-making for policy and practice.

The information for this environmental scan was collected in June and July 2018. All provinces and territories responded to the environmental scan.

Lung Cancer Screening Programs and Guidelines

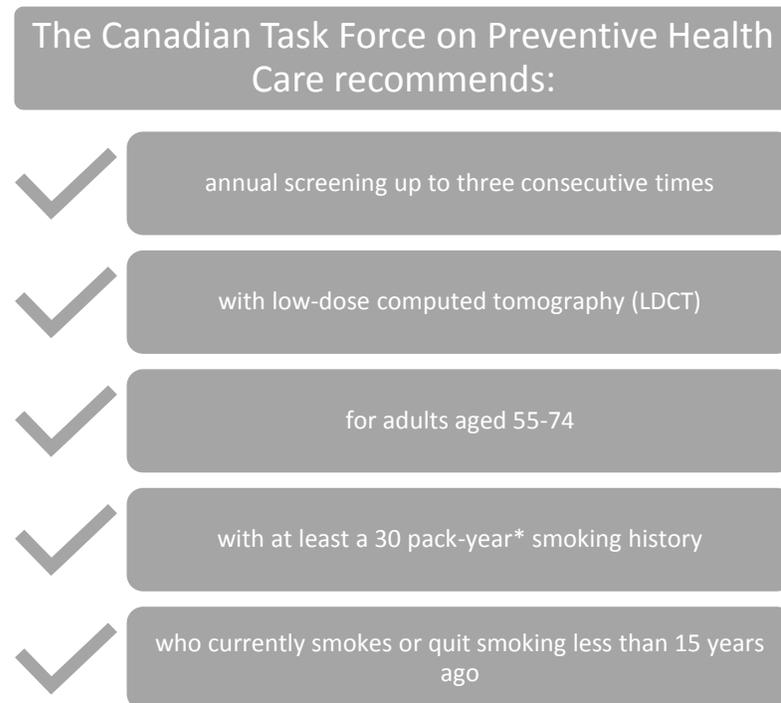
Lung Cancer Screening Pathway

Figure 1: Lung Cancer Screening Pathway¹



Task Force on Preventive Health Care Guidelines (2016)

The Canadian Task Force on Preventive Health Care (CTFPHC) develops clinical practice guidelines that support primary care providers in delivering preventive health care.² In addition to supporting primary care providers, the CTFPHC's guidelines are also relevant to community and public health professionals, physician specialists, other health care and allied health professionals, program developers, policy makers, and the Canadian public.



*Pack-year is defined as the average number of cigarette packages smoked daily multiplied by the number of years smoking.

Additional lung cancer screening recommendations by CTFPHC include:

- LDCT – For all other adults, regardless of age, smoking history or other risk factors, who do not have at least a 30 pack-year* smoking history or who quit more than 15 years ago, routine screening is not recommended
- Chest x-ray – Chest x-ray is not recommended for lung cancer screening, with or without sputum cytology
- Screening should only be carried out in health care settings with access to expertise in early diagnosis and treatment of lung cancer

Lung Cancer Screening Strategies in Canada

There are currently no organized lung cancer screening programs in Canada.

Table 1: Lung Cancer Screening Programs in Canada

	Organized program	Agency responsible for strategy implementation
Yukon (YK)	No	Health and Social Services
Northwest Territories (NWT)	No	Department of Health and Social Services
Nunavut (NU)	No	Department of Health
British Columbia (BC)	No	BC Cancer Agency
Alberta (AB)	No	Alberta Health Services
Saskatchewan (SK)	No	Saskatchewan Cancer Agency
Manitoba (MB)	No	CancerCare Manitoba & Manitoba Health, Seniors, and Active Living
Ontario (ON)	No	Cancer Care Ontario
Québec (QC)	No	Ministère de la santé et des services sociaux (MSSS) [Ministry of Health and Social Services]
New Brunswick (NB)	No	New Brunswick Cancer Network, New Brunswick Department of Health
Nova Scotia (NS)	No	Nova Scotia Cancer Care Program, Nova Scotia Health Authority
Prince Edward Island (PEI)	No	Health PEI
Newfoundland and Labrador (NL)	No	Cancer Care Program, Eastern Health

Some provinces and territories have initiated lung cancer screening strategies such as preparing business cases, convening advisory committees, and planning or implementing pilot studies. Advisory committees typically include representatives of various health professions and health care managers from across the care continuum. Advisory committees are often aimed at informing the development of proposals for organized screening programs and supporting proposals through conducting feasibility reviews. Proposals or business cases for organized lung cancer screening programs outline recommendations and next steps to support operational planning for these programs, and in most case are submitted to a jurisdiction’s Ministry of Health. Screening pilots or studies also help to assess the feasibility of organized screening programs.

Recent Highlights

Since 2016, a lung cancer screening pilot has been implemented in Ontario. Furthermore, a new proposal was put forward in Alberta, and one is in the process of being developed in Yukon.

Figure 2: Lung Cancer Screening Strategies in Canada

Status of lung cancer screening programs in Canada (July 2018)

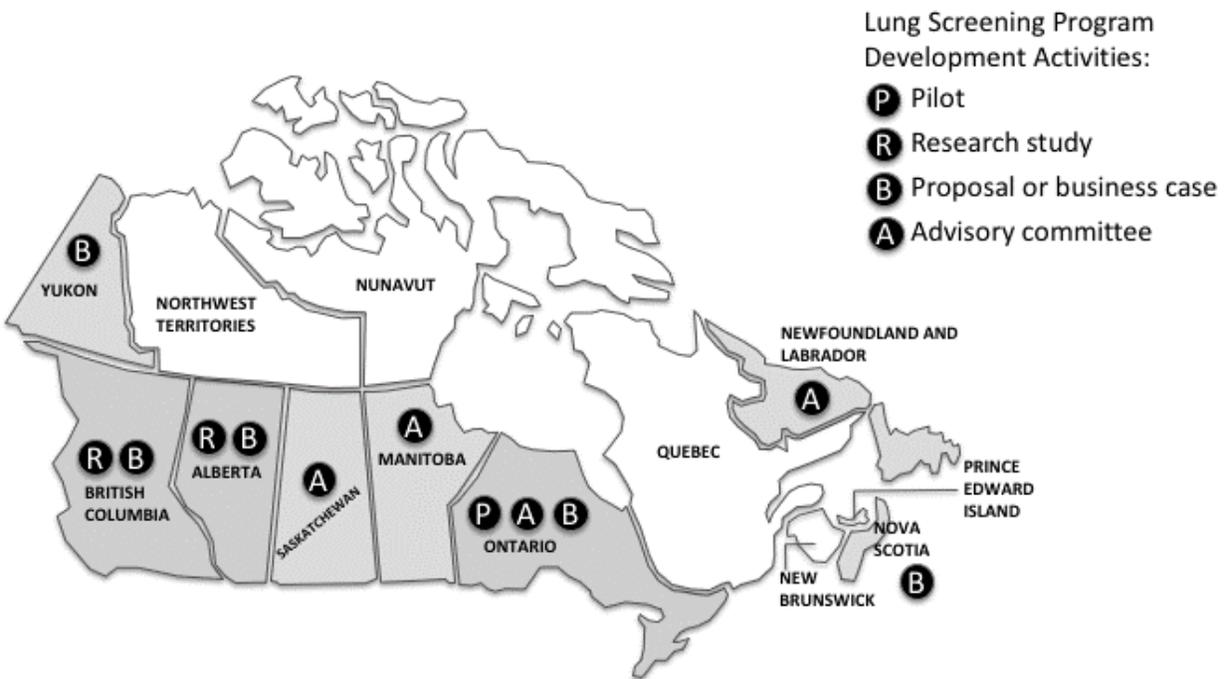


Figure 3: Number of Lung Cancer Screening Strategies in Canada

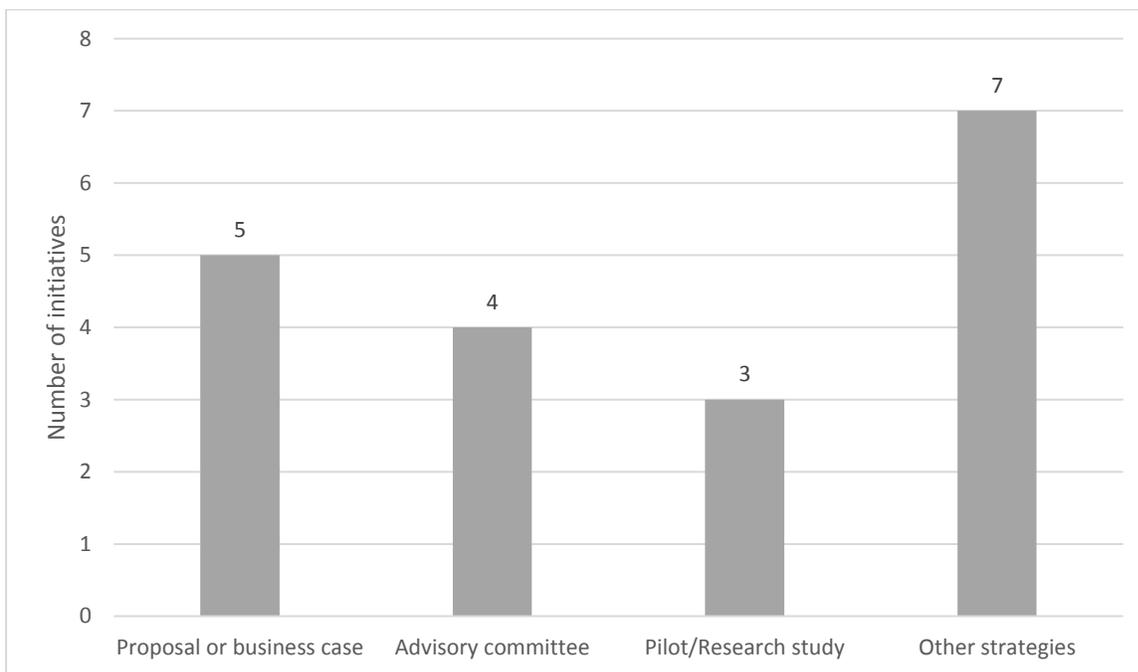


Table 2: Lung Cancer Screening Strategies in Canada

	Proposal or business case	Advisory committee	Pilot/Research study	Other strategies
YK	Currently working with OncoSim data input to assess and develop business case/proposal for lung cancer screening program in Yukon.	No	No	In the process of looking at the feasibility of starting lung cancer screening in Yukon.
NWT	No	No	No	Gathering information and engaged in preliminary discussions with Alberta on the possibility of dovetailing into their pilot project.
NU	No	No	No	Smoking cessation and reducing second-hand smoke are the focus at this time.
BC	Developed in 2016, updated in July 2018.	No	Started in 2016.	No
AB	Proposal was put forth to expand a research study in 2017. This was not for a full screening program. This is not moving forward at this time.	No	Screening activity in Alberta has been a part of a research protocol. This has now reached enrollment and no further subjects are being screened.	No
SK	No	A committee has been formed to monitor national progress.	No	No
MB	No	The Lung Cancer Screening Advisory Group was established in 2016 to determine the feasibility of programmatic lung cancer screening in Manitoba.	No	Communication to primary care providers and specialists regarding lung cancer screening guidelines and not to make referrals in the absence of a program.
ON	A health technology assessment commissioned by Cancer Care Ontario in 2015 used the	Cancer Care Ontario's Lung Cancer Screening Pilot for People at High Risk currently has multiple advisory groups	In June 2017, Cancer Care Ontario introduced a Lung Cancer Screening Pilot for People at	No

	<p>MISCAN-lung microsimulation model to generate expected outcomes of numerous eligibility scenarios. These scenarios varied the ages to start and stop screening, the minimum smoking exposure required, and the maximum time since smoking cessation for former smokers. The preferred scenario identified through this modeling would involve screening people ages 55 to 74 who had smoked at least 40 pack-years, and who were current smokers or former smokers who had quit within the past 10 years. These criteria are similar to those used in the National Lung Screening Trial, but would select a higher risk population for screening. The MISCAN-lung model outputs indicate that applying these eligibility criteria for lung cancer screening in Ontario could be cost-effective.</p>	<p>that were implemented in 2015-2016. These groups are engaged to seek recommendations and/or endorsement to support:</p> <ul style="list-style-type: none"> • Completion of pilot design requirements, policies within the screening pathway and pilot evaluation • Development of Radiology Quality Assurance program for LDCT screening • Addressing key clinical, scientific and radiology questions • Execution of recruitment strategy <p>The advisory groups include:</p> <ul style="list-style-type: none"> • Multidisciplinary Expert Panel • Radiologist Quality Assurance Expert Panel • Smoking Cessation Advisory Committee • Physician Leads Working Group • Regional Primary Care Leads and Regional Aboriginal Care Leads Working Group <p>There is also a CCO-Ministry of Health and Long-Term Care Joint Steering Committee to discuss Cancer Screening priorities and provide updates on screening initiatives. Lastly, the Radiology Template Expert Panel, which is not active at present, reviewed the existing reporting and data systems creation and was key in creating LDCT Lung Cancer Screening</p>	<p>High Risk. Specific screening sites were selected to assess/pilot how to best implement organized lung cancer screening for people at high risk in Ontario. The pilot is based out of the following hospitals in Ontario: The Ottawa Hospital in Ottawa, with Renfrew Victoria Hospital as a satellite site (addition of Cornwall Community Hospital planned for late 2018); Health Sciences North in Sudbury; and Lakeridge Health in Oshawa. In early 2019, the pilot will be expanded to include a fourth site. Key components of the pilot’s screening pathway will be evaluated, including recruitment, risk assessment, screening participation, retention, follow-up, diagnosis and treatment. The evaluation will also assess the outcomes of embedding smoking cessation services into the screening pathway. Results of the pilot evaluation will inform the design and implementation of a provincial lung cancer screening program.</p>	
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		Reporting Template. They will convene as needed if changes to the Reporting Template are suggested.		
QC	No	No	No	Request for an INESSS notice is underway.
NB	No	No	No	No
NS	Developed in 2015 and submitted to government. The document put forward an evidence informed proposal for development and implementation of an organized lung screening program for Nova Scotia.	No	No	No
PEI	No	No	No	MRSB conducted a feasibility study. The Lung Cancer Action Group has reviewed the report and develops recommendations for the Steering Committee. Focus is on prevention through smoking cessation initiatives at this time.
NL	No	Established in 2016.	No	Thoracic Triage Panel for quick diagnosis.

Lung Cancer Screening Pilots and Studies

Four individual lung cancer screening pilots and studies have been implemented. These initiatives include two provincial studies, one provincial pilot, and a pan-Canadian study. The pilots and studies are ongoing, except for the Pan-Canadian study which is complete but has continual follow-up in some sites.

Table 3: Lung Cancer Screening Pilots and Studies in Canada

	BC Lung Screen Trial/Pan-Canadian Early Detection of Lung Cancer Extension Project/International Lung Screen Trial [†]	Alberta Lung Cancer Screening Research Study [†]	Ontario Lung Cancer Screening Pilot for People at High Risk [†]	Pan-Canadian Early Detection Study and Extension Study [†]
Start and end date	July 2016-2021 (5 year trial)	April 2015 (start date)	June 2017-2020 (3 year pilot)	September 2008 – 2016 with continual follow-up in some sites
# of individuals recruited	4,800 (2,000 in Vancouver, 2000 in 5 sites in Australia, 800 in Hong Kong) (expected)	800	3000 (expected) Recruitment will take place over the first two years	2537 (an additional 2000 for the extension study)

[†] The information on the lung cancer screening pilots/studies was obtained in January 2018 through phone interview with initiative representatives, and updated in July/August 2018.

All lung cancer screening initiatives used multi-model recruitment methods with physician and self-referral to engage high-risk populations in diverse settings. Recruitment methods ranged from using online and print advertisements to direct physician outreach. Recruitment strategies specific to First Nations, Inuit and Métis are used in two of the initiatives. In addition, smoking cessation referrals were part of all initiatives and were offered to both eligible and ineligible individuals.

Table 4: Referral and Recruitment Strategies for Lung Cancer Screening Pilots and Studies in Canada

	BC Lung Screen Trial/Pan-Canadian Early Detection of Lung Cancer Extension Project/International Lung Screen Trial [†]	Alberta Lung Cancer Screening Research Study [†]	Ontario Lung Cancer Screening Pilot for People at High Risk [†]	Pan Canadian Early Detection Study and Extension Study [†]
Referral process	Self-referral	Self-referral	Self-referral	Self-referral

	Physician referral	Physician referral	Mainly physician referral	Physician referral
Recruitment methods	Social media; family physician recruitment (Fax requisition form or telephone)	Posters; social media/ ads (i.e. Google, FB); press/ media releases; word of mouth; physician recruitment (i.e. fax and post to family physician offices)	Print brochures; family physician recruitment (i.e. Continuing Professional Development course)	Posters; study websites; press/ media releases (i.e. newsprint, television, radio); laboratories; word of mouth; physician recruitment
First Nations, Inuit and Métis Recruitment	Indigenous people health clinic.	No specific recruitment methods for Indigenous populations.	Use <i>Regional Aboriginal cancer</i> leads to provide guidance on community outreach and engagement in Indigenous populations.	No specific recruitment methods for Indigenous populations.
Smoking Cessation Referral	All smokers are referred to local online/phone-based <i>Quit Now</i> program/smoking cessation clinic.	All smokers (n~ 400) are invited to participate in RCT that compares Alberta educational resources and counselling services.	All smokers are referred to smoking cessation services. Those who are ineligible for the pilot project are referred to the Smoker's Help Line at Canadian Cancer Society. Eligible participants are referred for on-site, in hospital counselling service. Specifics vary by site.	All smokers were referred to smoking cessation initiatives in their jurisdictions.

† The information on the lung cancer screening pilots/studies was obtained in January 2018 through phone interview with initiative representatives, and updated in July/August 2018.

These initiatives compared the use of inclusion criteria based on the National Lung Screening Trial (NLST) criteria, the US Preventive Services Task Force (USPSTF), or the Canadian Task Force on Preventive Health Care (CTFPHC) guidelines, with different risk prediction models. The most common risk criteria variables were age, education, ethnicity, family history of lung cancer, BMI, chronic obstructive pulmonary disease status, smoking duration, smoking intensity, smoking quit-time, and personal history of cancer.

Table 5: Inclusion Criteria for Lung Cancer Screening Pilots and Studies in Canada

	BC Lung Screen Trial/Pan-Canadian Early Detection of Lung Cancer Extension Project/International Lung Screen Trial [†]	Alberta Lung Cancer Screening Research Study [†]	Ontario Lung Cancer Screening Pilot for People at High Risk [†]	Pan Canadian Early Detection Study and Extension Study [†]
Study/ Pilot Inclusion Criteria	1) USPSTF guideline or CTFPHC guideline OR 2) >1.5% risk of developing lung cancer over the next 6 years	1) NLST criteria OR 2) >1.5% risk of developing lung cancer over the next 6 years	1) CTFPHC guideline (Note: modification to daily smoking for 20 years) OR 2) ≥ 2% risk of developing lung cancer over the next 6 years	1) USPSTF guideline OR 2) ≥ 2% risk of developing lung cancer over the next 6 years
1) Guideline Inclusion Criteria	Age: 55-80, current or former smokers, > 20 years smoking history	Age: 55-75, ≥30 pack-year, quit ≤ 15 years ago	Age: 55-74, current or former smokers who have smoked cigarettes daily for at least 20 years	Age: 55-75, current or former smokers with a 20 year smoking history
2) Risk Prediction Model Criteria	Age, education, ethnicity, family history of lung cancer, BMI, chronic obstructive pulmonary disease status, smoking duration, smoking intensity, smoking quit-time, and personal history of cancer	Age, education, ethnicity, family history of lung cancer, BMI, chronic obstructive pulmonary disease status, smoking duration, smoking intensity, smoking quit-time, and personal history of cancer	Age, education, family history of lung cancer, personal history of cancer, BMI, chronic obstructive pulmonary disease status, smoking duration, smoking intensity, smoking quit-time	Age, smoking duration, pack-years, family history of lung cancer, education level, body-mass index, chest x-ray in the past 3 years, history of chronic obstructive pulmonary disease

[†] The information on the lung cancer screening pilots/studies was obtained in January 2018 through phone interview with initiative representatives, and updated in July/August 2018.

Opportunistic Lung Cancer Screening

Opportunistic screening is defined as spontaneous screening of asymptomatic individuals that occurs outside of organized screening program. It does not include LDCT scans that are ordered for other purposes such as lung cancer investigation in individuals with prior x-ray abnormalities, follow-up, etc.

Given that the Canadian Task Force on Preventive Health Care guidelines (2016) recommend lung cancer screening within organized programs only, it is important to monitor the extent to which opportunistic screening is occurring.

Opportunistic screening for lung cancer with LDCT is known to be occurring in six provinces. No province or territory has a method of measuring the amount of opportunistic LDCT screening, but some provinces may have the ability to collect this information in the future.

Table 6: Opportunistic Screening for Lung Cancer with LDCT in Canada

	Are LDCT scans being ordered?	Who is ordering LDCT scans?	Where is LDCT taking place?	Mechanism to measure amount of opportunistic screening
YK	No	N/A	N/A	No
NWT	Yes	<ul style="list-style-type: none"> Internal medicine in discussion with radiologist 	<ul style="list-style-type: none"> Stanton Territorial Hospital, Yellowknife 	No
NU	No	N/A	N/A	No
BC	Yes	-	-	No
AB	Yes	<ul style="list-style-type: none"> Various practitioners 	<ul style="list-style-type: none"> Private clinics Public clinics 	No
SK	No	N/A	N/A	No
MB	Yes	-	-	No
ON*	Yes	<ul style="list-style-type: none"> Screening Navigator (conducts risk assessment and schedules LDCT screening if eligible) 	<ul style="list-style-type: none"> The Ottawa Hospital, Ottawa, with Renfrew Victoria Hospital as a satellite site (addition of Cornwall Community Hospital planned for late 2018) Health Sciences North, Sudbury Lakeridge Health, Oshawa 	No

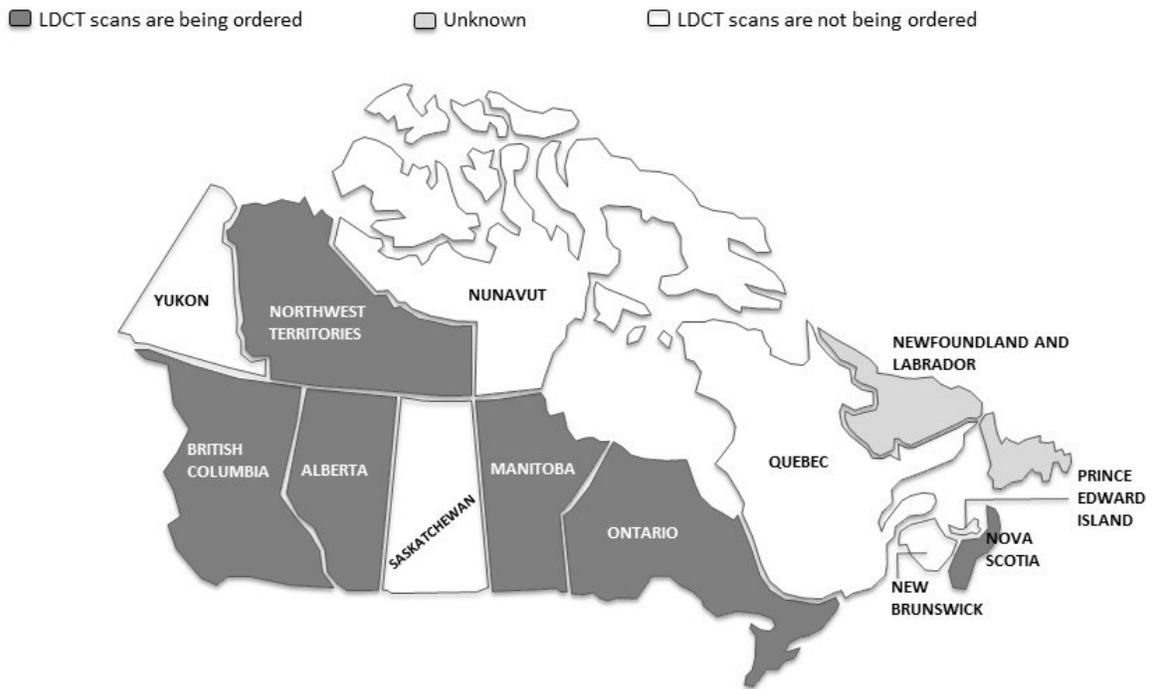
			• Fourth site to be added in early 2019	
QC	No	N/A	N/A	No
NB	No	N/A	N/A	No
NS	Yes	-	-	No
PEI	No	N/A	N/A	No
NL	Unknown	N/A	N/A	No

+ Information relates to Ontario Lung Cancer Screening Pilot for People at High Risk
 - No information was provided at the time the data was collected.

Figure 4: Opportunistic LDCT Screening in Canada

Opportunistic LDCT Screening in Canada

JULY 2018



Synoptic Reporting for Lung Cancer Pathology

Synoptic reporting for lung cancer pathology refers to a standardized electronic report meant to improve quality of reporting for lung cancer pathology. Structured pathology reporting is an important component of lung cancer diagnostic procedures and has been shown to support quality improvements in clinical care and population-level health management.³

Eight provinces and one territory currently use synoptic reporting for lung cancer pathology. Four provinces report that they use the synoptic template from the Canadian Association of Pathologists (CAP) or a modified version of the CAP synoptic template.

Recent Highlights

Since 2016, Quebec and Nova Scotia have implemented synoptic reporting for lung cancer.

Table 7: Synoptic Reporting for Lung Cancer Pathology in Canada

Synoptic reporting	
YK	-
NWT	Yes – Alberta Thoracic Oncology Program (ATOP) in Edmonton for lung cancer diagnosis (rapid access clinic), Dynalife in Edmonton for pathology services – understanding that they provide synoptic reporting
NU	No
BC	Yes – BC Cancer Registry expects regional health authorities to adopt synoptic reporting for lung cancer diagnosis
AB	Yes
SK	No
MB	No
ON[†]	Yes - CAP's electronic Cancer Checklist (CAP eCC) and associated paper Cancer Protocols. All pathology labs in Ontario that receive lung cancer resection specimens are required to complete a synoptic report using the CAP eCC Lung Resection template. Use of the CAP eCC Lung Biomarker template for any labs completing lung biomarker tests (ALK, EGFR, PDL1) in Ontario
QC	Yes – A synoptic report is available to clinicians on the MSSS website.
NB	Yes - CAP synoptic reporting template
NS	Yes – CAP synoptic reporting template is received from the lab, if any further information is needed there is a discussion with the lab information services
PEI	Yes – Two templates developed, one for reporting the biopsy and one for molecular testing results. A single template is not used regularly by pathologists for reporting malignancy.
NL	Yes – CAP synoptic reporting template

† Information relates to Ontario Lung Cancer Screening Pilot for People at High Risk

- No information was provided at the time the data was collected.

Figure 5: Synoptic Reporting for Lung Cancer Pathology in Canada

Synoptic Reporting for Lung Cancer Pathology

JULY 2018

Synoptic reporting occurs Synoptic reporting does not occur No data



Rapid Diagnosis Initiatives for Lung Cancer

A rapid diagnosis initiative for lung cancer is defined as any initiative implemented to shorten the average wait time from clinical suspicion of lung cancer to diagnosis. Patients typically enter rapid diagnosis initiatives at the time of referral for diagnostic imaging and exit at the date of diagnosis.

Seven provinces have rapid diagnosis initiatives for lung cancer.

Recent Highlights

Since 2016, Nova Scotia and Prince Edward Island have implemented rapid diagnosis initiatives for lung cancer.

Table 8: Rapid Diagnosis Initiatives for Lung Cancer in Canada

	Name initiative	Location of initiative	Point of entry into rapid diagnosis initiative	Point of exit out of rapid diagnosis initiative
YK	No rapid diagnosis initiative			
NWT	No rapid diagnosis initiative			
NU	No rapid diagnosis initiative			
BC	No rapid diagnosis initiative			
AB	Alberta Thoracic Oncology Program	Calgary Edmonton	Date of receipt of referral	-
SK	No rapid diagnosis initiative			
MB	Cancer Patient Journey Initiative (Lung Cancer Pathway)	Manitoba	Clinical suspicion (primary care orders CT)	First surgery, chemotherapy or RT
ON	Lung Diagnostic Assessment Program	Level 1 Thoracic Centre	Date of receipt of referral for patients with abnormal imaging	Date of diagnosis or rule out of cancer
QC	Quebec Heart and Lung Institute (IUCPQ) – pulmonary oncology access service	Quebec	Date of receipt of referral and first abnormal test result	Date of first treatment
NB	No rapid diagnosis initiative			
NS	Thoracic Malignancy Referral Management Pilot	Nova Scotia (province-wide but based in Halifax)	Date of referral received by Thoracic Surgeon	Date of decision regarding the initial treatment recommendation

PEI	PEI Lung Cancer Diagnosis Pathway	-	-	-
NL	Thoracic Triage Panel of Eastern Health	St. John's	Date of receipt of referral to triage panel for patients with diagnostic imaging report suggesting malignancy	Date of completion of diagnostic investigations

- No information was provided at the time the data was collected.

Population Outreach

First Nations, Inuit and Métis

In general, participation rates for cancer screening are much lower among First Nations, Inuit, and Métis than non-Indigenous people in Canada. There is considerable variation in screening participation across geographic location.⁴

The Northwest Territories and Ontario both collect Indigenous and/or people-specific data (e.g. First Nations, Inuit, and/or Métis identifiers). In the Northwest Territories, data is embedded in the individual's health care number. This data is being used to produce epidemiological reports that present rates by Indigenous vs. non-Indigenous status.

In Ontario's lung cancer screening pilot, data pertaining to First Nations, Inuit, and/or Métis identifiers are optional. Individuals recruited into the pilot can self-identify as Aboriginal, as well as specify whether they are First Nations, Inuit, or Métis. These data elements are collected at two points in the screening pathway: 1) Recruitment, where all potential participants undergo risk triage to determine if they meet age and smoking-related criteria; and 2) Risk Assessment, where all potential participants undergo a comprehensive risk assessment using a risk calculator to determine their eligibility for screening with LDCT. Select indicators, including self-reported First Nations, Inuit, and/or Métis status, are reported in quarterly performance and quality management reports for the pilot. This supports tracking of pilot progress and identification of opportunities for improvement, such as refining outreach strategies to recruit appropriate populations, identifying barriers for full participation and recognizing areas within the screening pathway to improve participant experience. Additionally, interim and final evaluation reports will provide a breakdown of the demographics, where the self-reported First Nations, Inuit, and/or Métis status will be included.

The Northwest Territories and Ontario have also implemented strategies to connect with First Nations, Inuit and Métis. Strategies identified addressed engaging with First Nations, Inuit and Métis in decision-making and informing approaches to culturally appropriate screening, reaching First Nations, Inuit and Métis through program resources, and engaging with healthcare providers working directly with First Nations, Inuit and Métis communities. Specifically, one strategy engaged First Nations, Inuit and Métis partners in the development of a cancer strategy. Other strategies were geared towards program resources, such as the development of culturally appropriate material, and medical transportation coverage to reduce challenges associated with geographic isolation. In addition, some strategies were put in place to help educate health care providers working directly with First Nations, Inuit and Métis communities.

Table 9: Strategies to Connect with First Nations, Inuit and Métis Communities in Canada

Strategies to connect with First Nations, Inuit, and Métis	
NWT	<ul style="list-style-type: none"> • A number of “cancer sharing circles” in partnership with Indigenous governments or groups over the past few years that have informed the development of the NWT Cancer Strategy. • Sponsored cancer terminology workshops to assist in the development of appropriate cancer terminology in a Dene dialect. • Still working with many community-level resources to guide the implementation of the strategy.
ON†	<ul style="list-style-type: none"> • Cancer Care Ontario's Aboriginal Cancer Control Unit enlisted the support of translators from First Nations, Inuit, and Métis communities to develop culturally and linguistically appropriate materials, such as the public-facing brochures and participant experience surveys. The resources are available in 5 languages: English, French, Ojibway, Mohawk and Inuktitut. • Both public/community and primary care provider led strategies to connect with First Nations, Inuit, and Métis communities have been established. An accredited Continuing Professional Development (CPD) course describing the lung cancer screening pilot was created for regional primary care leads to deliver to providers in the pilot regions. Course material includes lung cancer and risk factor statistics specific to First Nations, Inuit, and Métis populations, highlighting that these communities may have a high proportion of people who would benefit from screening. Moreover, multiple engagement strategies such as mail-outs, presentations and meetings with primary care and First Nations, Inuit, and Métis provider groups are in place to facilitate trusting relationships. • A hub and spoke model was implemented for The Ottawa Hospital, which serves as the hub for the region. Currently, Renfrew Victoria hospital serves as a spoke site, enabling participants to get screened closer to home. As of late 2018, Cancer Care Ontario will be onboarding a second spoke site, which will be well-positioned to provide screening closer to home for surrounding Aboriginal communities, including the Akwesasne First Nation. • To reduce challenges associated with geographic isolation, medical transportation coverage through the Non-Insured Health Benefits Program for First Nations and Inuit (approved by Health Canada) is available to those in need.

† Information relates to Ontario Lung Cancer Screening Pilot for People at High Risk

Underserved Populations

Cancer Care Ontario supported the development and implementation of multi-component strategies to recruit potentially eligible screening participants, especially those at highest risk for their Lung Cancer Screening Pilot for People at High Risk. This includes both primary care provider and public/community led strategies at all pilot sites. Cancer Care Ontario also implemented a hub and spoke model for The Ottawa Hospital, where the spoke sites, Renfrew Victoria Hospital and Cornwall Community Hospital (as of late 2018), enable participants to get screened closer to home. Medical transportation coverage through the Non-Insured Health Benefits Program for First Nations and Inuit (approved by Health Canada) is available to those in need, which can potentially reduce the challenges associated with geographic isolation. Primary care provider recruitment strategies have succeeded in recruiting higher risk participants;

however, recruitment outreach is labour intensive and requires flexibility. Each pilot site has developed and implemented region-specific and local outreach activities to reach high-risk individuals in rural communities.

Improving Screening Program Participants' Experience

Ontario's Lung Cancer Screening Pilot for People at High Risk uses Screening Navigators. These navigators help to support participants throughout the screening pathway process to maximize participant retention and help avoid people falling through the cracks as they navigate through a complex health care system. This includes:

- Risk assessments to determine eligibility for screening
- Informed decision-making about participating in lung cancer screening
- Smoking cessation support to all current smokers
- Communication with referring providers and primary care physicians (if different) of screening results and next steps
- Facilitated participant recall and follow-up that is similar to the Ontario Breast Screening Program
- Seamless transition to a Lung Diagnostic Assessment Program for assessment and/or surveillance of scans with suspicious findings

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CANADIAN PARTNERSHIP
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