



CANADIAN
PARTNERSHIP
AGAINST CANCER



Lung Cancer Screening in Canada

ENVIRONMENTAL SCAN

Version 1.1

Last updated January 13, 2021

2019 - 2020

Background

The Canadian Partnership Against Cancer collects information on national, provincial and territorial lung 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 2019. All provinces and territories responded to the environmental scan. Many provinces and territories provided updated data in early 2020. Due to the COVID-19 pandemic, some of the included data was not vetted by provincial and territorial screening programs prior to publication.

Acknowledgements

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Table of Contents

BACKGROUND.....	2	2. LUNG SCREENING STRATEGIES IN CANADA	12
ACKNOWLEDGEMENTS	2	2.1 STANDARDIZED LUNG SCREENING BUSINESS CASE.....	15
TABLE OF CONTENTS	1	2.2 LUNG SCREENING PILOTS AND STUDIES.....	16
KEY HIGHLIGHTS – 2019-2020.....	2	3. OPPORTUNISTIC LUNG SCREENING.....	24
CANADIAN STRATEGY FOR CANCER CONTROL, 2019-2029	3	4. RAPID DIAGNOSIS INITIATIVES FOR LUNG CANCER	26
EXECUTIVE SUMMARY	6	5. POPULATION OUTREACH	28
1. LUNG SCREENING PROGRAMS AND GUIDELINES.....	8	5.1 FRAMEWORK FOR INTERVENTIONS TO IMPROVE CANCER SCREENING	28
1.1 LUNG SCREENING PATHWAY	8	5.2 FIRST NATIONS, INUIT AND MÉTIS.....	29
1.2 CANADIAN TASK FORCE ON PREVENTIVE HEALTH CARE GUIDELINES. 9		5.3 UNDERSCREENED POPULATIONS	33
1.3 LUNG SCREENING PROGRAMS IN CANADA.....	11	6. REFERENCES	38

Key Highlights – 2019-2020

- ◆ There are currently no organized lung screening programs in Canada.
- ◆ Eleven jurisdictions have been involved in the development of a standardized lung screening business case.
- ◆ Four individual lung screening pilots and studies are ongoing, and one Pan-Canadian lung screening study has been completed.
- ◆ Eight provinces have rapid diagnosis initiatives for lung cancer.
- ◆ Activities are being implemented in Ontario to promote lung screening participation among First Nations, Inuit and Métis, as well as other underscreened populations, as part of the Ontario Lung Cancer Screening Pilot for People at High Risk.

Canadian Strategy for Cancer Control, 2019-2029

Since its launch in 2006, the Canadian Strategy for Cancer Control (the Strategy) has helped reduce the burden of cancer on Canadians—serving as a powerful tool for change and improvement. However, the cancer landscape has changed significantly since the Strategy was first developed, presenting new opportunities as well as new challenges. In 2019, the Canadian Partnership Against Cancer (the Partnership) released the refreshed [Canadian Strategy for Cancer Control](#) – a 10-year roadmap to improve equity in the cancer system and to deliver world-class cancer care to all Canadians, while focusing on a sustainable healthcare system for the future.

As the steward of the Strategy, the Partnership has led the modernization and renewal process. The Partnership engaged with Canadians across all provinces and territories, to learn about how cancer affects their lives and what they want from their national cancer strategy. While the Strategy’s vision remains as relevant today as it was a decade ago, the priorities and actions have been modernized and refreshed to ensure they can continue to guide our collective efforts in the years ahead.

The refreshed Strategy is a visionary and ambitious plan for the cancer and broader health system. Building on its already robust foundation, the refreshed Strategy provides a focused set of priorities and actions that will address the current and persistent challenges in delivering quality care.

Figure 1. Canadian Strategy for Cancer Control Priority 2



PRIORITY 2

Diagnose cancer faster, accurately and at an earlier stage



Action 2: Strengthen existing screening efforts and implement lung cancer screening programs across Canada

Figure 2. Canadian Strategy for Cancer Control Priority 4



PRIORITY 4

Eliminate barriers to people getting the care they need



Action 1: Provide better services and care adapted to the specific needs of underserved groups



Action 2: Ensure rural and remote communities have the resources required to better serve their people

The Strategy calls for the cancer community to continue focusing on the effectiveness of existing screening programs. This includes continuing measures to ensure the right people are getting screened at the right time using the recommended methods, and eliminating barriers to participation in screening, particularly in underscreened communities. Patients in rural and remote communities often need to travel to urban centres to access screening services. While not all services and treatments can be located in all communities, the Strategy calls for the adoption of innovations and enablers that allow cancer care to be provided closer to home.




In addition to strengthening existing screening programs, the Strategy calls for lung screening programs to be implemented across the country. The evidence of the benefit of low-dose CT-based screening for high-risk individuals is clear: screening is associated with a 20-24 per cent reduction in deaths.^{1,2}

A particular focus should be placed on ensuring lung screening programs are implemented for the most at-risk communities.

First Nations, Inuit and Métis continue to experience poorer cancer outcomes than other people in Canada, and face inequities and barriers in accessing care (especially culturally appropriate care).^{3,4,5,6,7} Some of the challenges are similar to the burden experienced by other underscreened, remote, rural and isolated communities in Canada; however, there are historical and contemporary realities that amplify those challenges experienced by First Nations, Inuit and Métis.

Priorities identified and the actions required are Peoples-specific and represent what the Partnership heard through engagement processes. These are an important element of the refreshed Strategy.

Figure 3. Canadian Strategy for Cancer Control First Nations, Inuit, and Métis Priorities

	FIRST NATIONS	INUIT	MÉTIS
<p>PRIORITY 6 Culturally appropriate care closer to home</p> 	<ol style="list-style-type: none"> 1 Recognize and reflect the First Nations wholistic approach to health and wellness. 2 Recognize and eliminate the impacts of racism within the system. 3 Provide equitable access to basic health supports and cancer services. 4 Provide more services closer to home and improve the journey for those who must travel to access care. 5 Improve understanding of cancer and the cancer journey. 	<ol style="list-style-type: none"> 1 Provide equitable access to cancer services closer to home. 2 Improve travel policies. 3 Incorporate Inuit wholistic approaches to health and wellness in cancer care. 4 Recognize and eliminate racism within the system. 5 Improve access to basic health supports. 6 Improve understanding of cancer and the cancer journey. 	<ol style="list-style-type: none"> 1 Provide equitable access to resources, programs and care across the cancer continuum. 2 Create a wholistic system that is responsive to Métis culture. 3 Recognize and eliminate racism within the system. 4 Improve access to basic health supports. 5 Improve understanding of cancer and the cancer journey.
<p>PRIORITY 7 Peoples-specific, self-determined cancer care</p> 	<ol style="list-style-type: none"> 1 Design and deliver First Nations-determined programs and services. 2 Reduce jurisdictional barriers. 3 Improve communication, navigation and coordination across the system. 	<ol style="list-style-type: none"> 1 Design and deliver Inuit-driven programs and services. 2 Improve coordination and navigation of care. 	<ol style="list-style-type: none"> 1 Design and deliver Métis-determined programs and services. 2 Reduce jurisdictional barriers and improve communication, navigation, and coordination.
<p>PRIORITY 8 First Nations-, Inuit-, or Métis-governed research and data systems</p> 	<ol style="list-style-type: none"> 1 Collect First Nations-specific data and set First Nations-specific indicators and targets. 2 Invest in First Nations research capacity. 3 Implement First Nations governance of the collection and use of data and research. 	<ol style="list-style-type: none"> 1 Collect and report on Inuit-specific data. 2 Determine impact of environmental contamination on Inuit health, specifically cancer risk. 	<ol style="list-style-type: none"> 1 Collect Métis-specific data and develop Métis-determined indicators and outcomes. 2 Invest in Métis research capacity.

Executive Summary

The Canadian Task Force on Preventive Health Care⁸ recommends that screening for lung cancer with low-dose CT should only be considered in settings that can deliver comprehensive care similar to or better than that offered in the National Lung Screening Trial (e.g., centres with qualified radiologists and radiologic technologists, with examinations and diagnostic follow-up guidelines aligned with the study protocol and with expertise in the early diagnosis and management of lung cancer). Incorporation of nodule risk calculators may also decrease risk of overdiagnosis and rates of false-positive results. Implementation of these recommendations in settings without relevant expertise may decrease the benefit to harm ratio, potentially increasing the harms. The Canadian Task Force on Preventive Health Care recognizes that low-dose CT scans and related expertise are not currently accessible in certain regions in Canada (e.g., rural and remote areas), and this is a consideration that policymakers will need to address.

There are currently no organized lung screening programs in Canada. However, some provinces and territories have initiated lung screening activities such as preparing business cases, convening advisory committees, and planning or implementing pilots and studies ([Table 2](#)). Eleven jurisdictions have been involved in the development of a standardized lung screening business case.

Five individual lung screening pilots and studies have been implemented. These initiatives include two provincial studies (BC, AB), one provincial pilot (ON), a hospital pilot (QC) 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). Among other things, 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. Eight provinces have rapid diagnosis initiatives for lung cancer ([Table 7](#)).

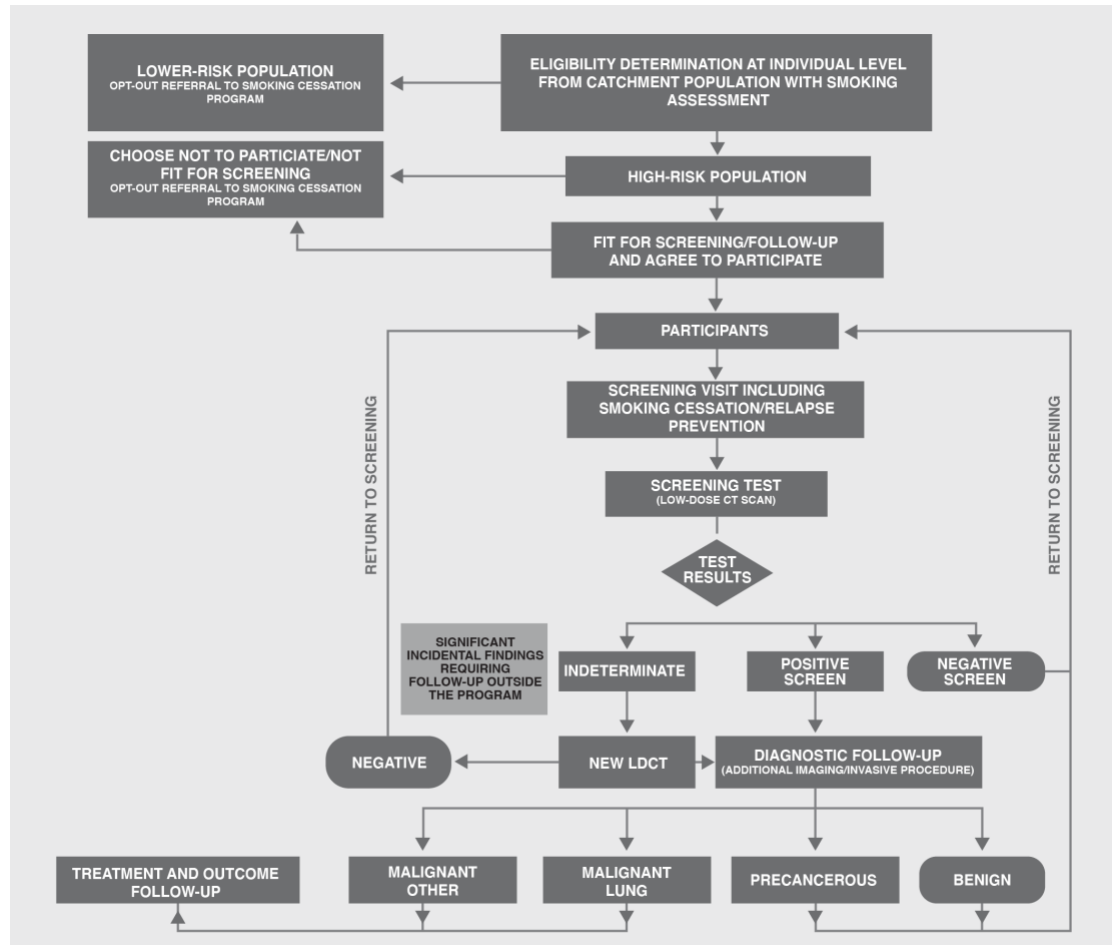
Ontario has implemented strategies to encourage participation by First Nations, Inuit and Métis in their pilot. Strategies include engaging with First Nations, Inuit and

Métis in decision-making and informing approaches to culturally appropriate screening, program resources specific to First Nations, Inuit and Métis, and engaging with healthcare providers working directly with First Nations, Inuit and Métis communities (see [Population Outreach - First Nations, Inuit and Métis](#) section). Strategies to encourage participation by underscreened groups are also part of the Ontario pilot (see [Population Outreach - Underscreened Populations](#) section). Other jurisdictions may consider implementing similar strategies as they set up organized lung screening programs.

1. Lung Screening Programs and Guidelines

1.1 Lung Screening Pathway

Figure 4. Lung Screening Pathway^{9*}



Although none currently exist in Canada, organized lung screening programs would offer screening to high-risk populations following these general steps.

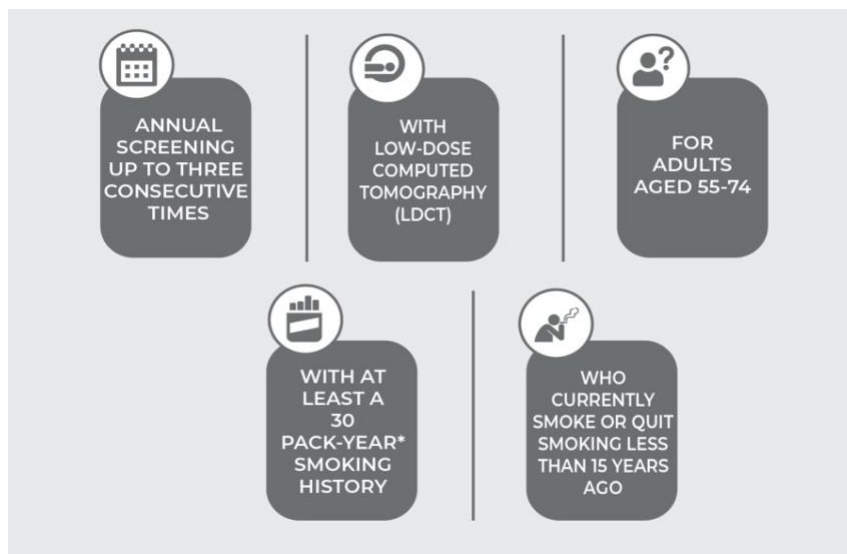
- Eligibility determination
- Fit for screening and agree to participate
- Provision of a screening examination including smoking cessation counselling
- Follow-up of any abnormalities detected at screening
- Recall after a normal or benign screening episode
- Monitoring and evaluation

*Cancer screening pathways are a general representation of the organized screening process, and may not apply to all jurisdictions, especially those which do not have an organized screening program.

1.2 Canadian Task Force on Preventive Health Care Guidelines

The Canadian Task Force on Preventive Health Care (CTFPHC) develops clinical practice guidelines that support primary care providers in delivering preventive health care.⁸ 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.

Figure 5. Canadian Task Force on Preventive Health Care Lung Cancer Screening Recommendations (2016)



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

^Uses a risk calculator to determine the percent risk of developing lung cancer within the next number of years

Additional lung screening recommendations by CTFPHC include:

- Low-dose computed tomography (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
- The use of Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial model risk-based eligibility criteria[^]

The CTFPHC⁸ recommends that screening for lung cancer with low-dose CT should only be considered in settings that can deliver comprehensive care similar to, or better than, that offered in the National Lung Screening Trial (e.g., centres with qualified radiologists and radiologic technologists, with examinations and diagnostic follow-up guidelines aligned with the study protocol and with expertise in the early diagnosis and management of lung cancer). Incorporation of nodule risk calculators may also decrease risk of

overdiagnosis and rates of false-positive results. Implementation of these recommendations in settings without relevant expertise may decrease the benefit to harm ratio, potentially increasing the harms. The Canadian Task Force on Preventive Health Care recognizes that low-dose CT scans and related expertise are not currently accessible in certain regions in Canada (e.g., rural and remote areas), and this is a consideration that policymakers will need to address.

1.3 Lung Screening Programs in Canada

Table 1. Lung Screening Programs in Canada

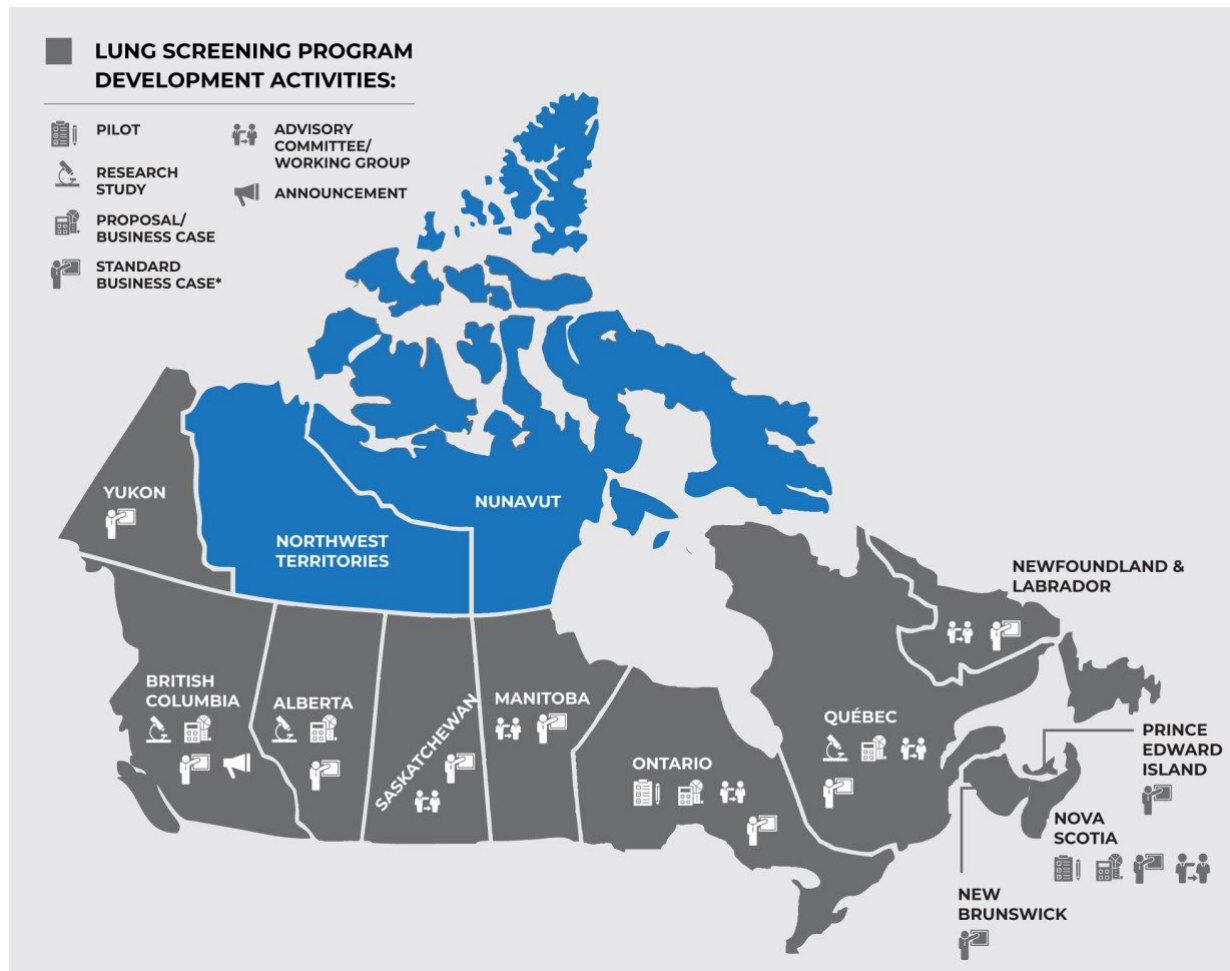
	Organized program		Agency responsible for strategy implementation
	Yes	No	
Yukon (YT)		✓	Health and Social Services
Northwest Territories (NT)		✓	Department of Health and Social Services
Nunavut (NU)		✓	Department of Health
British Columbia (BC)		✓	BC Cancer, Provincial Health Services Authority
Alberta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

There are currently no organized lung screening programs in Canada.

- Some provinces and territories have initiated lung 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 screening programs outline recommendations and next steps to support operational planning for these programs, and in most cases are submitted to a jurisdiction's Ministry of Health.
- Screening pilots or studies also help to assess the feasibility of organized screening programs.

2. Lung Screening Strategies in Canada

Figure 6. Lung Screening Strategies in Canada (July 2019)



RECENT HIGHLIGHTS

British Columbia announced in September 2020 that they will be the first Canadian jurisdiction to implement a full-scale organized lung cancer screening program.

A lung screening pilot was implemented in Ontario in 2017 and will continue until 2021.

A proposal for lung screening was put forward in Alberta in 2018.

Quebec formed an advisory committee in 2019 to evaluate implementing a provincial lung cancer screening pilot.

*Standard Business Case reflects participation in the Lung Cancer Screening Business Case Working Group to inform the development of the standard business case.

Table 2. Lung Screening Strategies in Canada

Jurisdiction	Proposal or Business Case Developed	Advisory Committee/ Working Group	Pilot/ Research Study	Other Strategies
YT				-
NT				Gathering information and engaged in preliminary discussions with Alberta on the possibility of dovetailing into their pilot project.
NU				Smoking cessation and reducing second-hand smoke are the focus at this time.
BC	✓		✓	-
AB	✓		✓	-
SK		✓		-
MB		✓		Communication to primary care providers and specialists regarding lung screening guidelines.
ON	✓	✓	✓	-
QC	✓	✓	✓	-
NB				-
NS	✓	✓		-
PE				With the support of CPAC OncoSim scenario information, work is underway to facilitate a diagnostic assessment pathway prior to introducing a screening program.
NL		✓		Thoracic Triage Panel for quick diagnosis.

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

Proposal or Business Case

BC: Developed in 2016, updated in July 2018. This has been identified as a priority in British Columbia.

AB: Another business case has been put forward and is being reviewed. No decision has been made at this time.

ON: A health technology assessment in 2015 used the MISCAN-lung microsimulation model to generate expected outcomes of eligibility scenarios. The preferred cost-effective scenario involved

screening people ages 55 to 75 who had smoked at least 40 pack-years, and were current or former smokers who had quit within the past 10 years.

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.

QC: A proposal was put forward in April 2019 and is being reviewed. No decision has been made at this time.

Advisory Committee

SK: Committee has been formed to monitor national progress.

MB: The Lung Cancer Screening Advisory Group was established in 2016 to determine the feasibility of programmatic lung screening in Manitoba.

ON: Advisory Committee includes: Multidisciplinary Expert Panel, Radiologist Quality Assurance Expert Panel, Smoking Cessation Advisory Committee, Physician Leads Working Group, Regional Primary Care Leads and Regional Indigenous Cancer Leads Working Group, Cancer Screening-Ministry of Health Quarterly Meeting, Radiology Template Expert Panel. Note: Select committees are only engaged as needed.

NS: Formed working group in April 2019 to identify opportunities to minimize ad hoc screening (in absence of a formal screening program) and for revision of the Nova Scotia business case for a formal lung screening program

NL: Established in 2016. Advisory committee is starting work but are waiting for the national business case.

QC: Established in 2019 to support the Ministry in evaluating the option of implementing a lung cancer screening project.

Pilot/Research Study

BC: Research study started in 2016.

AB: Screening activity in Alberta has been a part of a research protocol. This has now reached enrollment and no further subjects are being screened.

ON: Ontario Health (Cancer Care Ontario) launched the Lung Cancer Screening Pilot for People at High Risk (the pilot) in June 2017 at specific hospitals in Ontario. The main purpose of the pilot is to assess how to best implement organized lung screening for people at high risk in Ontario.

QC: A pilot study began in 2018 at the Centre universitaire de santé McGill and is ongoing. The Ministère de la santé et des services sociaux is evaluating the option of implementing a provincial lung cancer screening pilot.

2.1 Standardized Lung Screening Business Case



11/13

CANADIAN JURISDICTIONS HAVE BEEN INVOLVED IN THE DEVELOPMENT OF A STANDARDIZED LUNG SCREENING BUSINESS CASE

Many jurisdictions intend to add local parameters to the standardized business case and submit for funding consideration.

What is a standardized lung screening business case?

- A standardized lung screening business case was developed to provide comprehensive guidance to jurisdictions on key elements of a lung screening business case, including the clinical and economic evidentiary basis for lung screening programs and program implementation considerations.
- This business case incorporates current evidence from randomized controlled trials and research studies, budget impact analysis and cost effectiveness results from the OncoSim microsimulation model, and guidance on the recommended approach to lung screening implementation.

- The business case is a guidance document for jurisdictional use. Text within the document is modifiable to allow provinces and territories to adapt the business case to their jurisdictional context.

Who was involved in the development of the business case?

- The development of the business case was a collaborative effort between the Partnership and the Lung Screening Business Case Working Group.
- The working group was convened in early 2019 and is comprised of representatives appointed by provincial and territorial cancer programs in 11 jurisdictions (YT, BC, AB, SK, MB, ON, QC, NB, NS, PE and NL).*

* NT & NU were not involved with the business case working group, but are being kept informed of the progress of this work.

How will the business case be used?

- Provincial and territorial cancer programs will use guidance from the standardized lung screening business case to:
 - Develop jurisdiction-specific business cases and submit to government for approval to implement organized lung screening programs
 - Feed into advisory, planning and decision-making functions for lung screening programs
 - Inform the recommended implementation approach (e.g. risk assessment, recruitment, and follow-up) for lung screening pilots and programs

2.2 Lung Screening Pilots and Studies

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

Table 3. Lung Screening Pilots and Studies in Canada

Title	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 of Lung Cancer Study*	Pilot Study by the Centre universitaire de santé McGill (Quebec)^
Purpose of the Study/Pilot	<ul style="list-style-type: none"> • Compare PLCom2012 1.5% 6-year lung cancer risk versus USPSTF age and pack years criteria for inclusion. • Evaluation of air pollution and genetic susceptibility as lung cancer risk factors in addition to PLCom2012 • Prospective evaluation of PanCan Lung Nodule protocol • Randomized trial of manual versus CAD reading of screening LDCT 	<ul style="list-style-type: none"> • To gain expertise in screening as well as develop resources and processes to scale up to a larger program. 	<ul style="list-style-type: none"> • To assess how to best implement organized lung cancer screening for people at high risk in Ontario. 	<ul style="list-style-type: none"> • Prospectively assess the effectiveness of web-based risk prediction model for enrolling individuals into a CT screening study. The risk prediction model used was a prototype¹¹ of the PLCom2012 model. • Cost implication of risk-based lung cancer screening • Determine the role of autofluorescence bronchoscopy to detect lung cancer in the central airways • Determine the incremental value of spirometry and blood biomarkers for lung cancer risk assessment 	<ul style="list-style-type: none"> • To detect lung cancer early in high risk individuals in Quebec

LUNG CANCER SCREENING IN CANADA – ENVIRONMENTAL SCAN 2019/2020

Title	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 of Lung Cancer Study*	Pilot Study by the Centre universitaire de santé McGill (Quebec)^
Start and end date	July 2016-2021 (5-year trial)	April 2015 (start date) – recruitment ended in 2017	June 2017 - March 2021	September 2008 – 2016 with ongoing follow-up in some sites	September 2018 – September 2020 (2-year pilot)
# of Individuals Recruited	4,800 (expected) (2,000 in Vancouver, 2,000 in 5 sites in Australia, 800 in Hong Kong)	800	<ul style="list-style-type: none"> • 5,999 people recruited~ as of December 2018 • Recruitment will take place over the first two years 	2537	300
Results	2000/2000 recruited in BC completed in August 2019 2% lung cancer so far	Follow up still ongoing. Results are pending.	Final results are expected by 2021.	<ul style="list-style-type: none"> • Web-based risk assessment tool is easy to implement in English or French • Risk prediction tool is highly efficient to identify high risk individuals for LDCT screening • LDCT screening is cost-effective: \$20,724 (in 2015 Canadian dollars) per quality-adjusted life-year gained • Autofluorescence bronchoscopy is not a useful adjunct to LDCT • Spirometry and Pro-surfactant protein B can improve the accuracy of risk prediction model 	-

* The information on the lung screening pilots/studies was obtained in January 2018 through phone interview with initiative representatives, and updated in July/August 2019.

^ This project is independent from the pilot being evaluated for implementation by the Ministère de la santé et des services sociaux

~ 'Recruited' refers to all people who self-presented or were referred to the pilot. Not all recruited people have a risk assessment conducted.

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

All lung screening pilots and studies 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. Pharmacotherapy for smoking cessation was included in two of the initiatives.

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

Title	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 of Lung Cancer Study*	Pilot Study by the Centre universitaire de santé McGill (Quebec)^
Referral Process					
<i>Self-referral</i>	✓	✓	✓	✓	✓
<i>Physician Referral</i>	✓	✓	✓	✓	✓
<i>Facebook</i>	✓	✓			
Recruitment Methods					
<i>Mass Media (e.g. TV, radio, press/media releases)</i>	✓	✓	✓	✓	
<i>Social Media (e.g. Facebook, ...)</i>	✓	✓	✓		
<i>Physician Recruitment</i>	✓	✓	✓	✓	✓
<i>Public Facing Resources (e.g. posters, brochures)</i>	N/A	N/A	✓	✓	✓
<i>Community Events</i>	✓		✓		
<i>Word of Mouth</i>	✓	✓	✓	✓	✓
<i>Laboratories</i>	N/A	N/A	N/A	✓	

Title	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 of Lung Cancer Study*	Pilot Study by the Centre universitaire de santé McGill (Quebec)^
First Nations, Inuit and Métis Recruitment					
<i>Specific Recruitment</i>	<p style="text-align: center;">✓</p> <ul style="list-style-type: none"> Outreach to First Nation downtown health clinic 	N/A	<p style="text-align: center;">✓</p> <ul style="list-style-type: none"> Regional Indigenous Cancer Leads throughout the province engage and recruit participants from rural and urban Indigenous communities. Culturally safe materials (also translated) have been developed to support working with communities and providers. Medical travel benefits under Non-Insured Health Benefits (NIHB) are available for those eligible. 	N/A	N/A

Title	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 of Lung Cancer Study*	Pilot Study by the Centre universitaire de santé McGill (Quebec)^
Recruitment for Underscreened Populations					
Specific Recruitment	<p style="text-align: center;">✓</p> <ul style="list-style-type: none"> Use of Facebook to recruit in addition to direct referral from GPs 	N/A	<p style="text-align: center;">✓</p> <ul style="list-style-type: none"> Underscreened participants are recruited in the same activities mentioned for First Nation, Inuit and Métis populations. 	N/A	<p style="text-align: center;">✓</p> <ul style="list-style-type: none"> All under-screened populations are included in the study. Family physicians and healthcare providers in underscreened areas are recruited and encouraged to refer patients.
Smoking Cessation Referral	<ul style="list-style-type: none"> All smokers are referred to local online/phone based <i>Quit Now</i> program/smoking cessation clinic. 	<ul style="list-style-type: none"> All smokers (n~ 400) are invited to participate in RCT that compares Alberta educational resources and counselling services. 	<ul style="list-style-type: none"> Smoking cessation services are offered to all current smokers. People eligible for screening are offered on-site smoking cessation counselling for at least 10 minutes with a trained counsellor. People ineligible for screening are offered a referral to external smoking cessation services (e.g., telephone quit line). 	<ul style="list-style-type: none"> All smokers were referred to smoking cessation initiatives in their jurisdictions. 	<ul style="list-style-type: none"> All smokers are referred to local online/phone based Ligne J'arrête program/smoking cessation clinic.

Title	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 of Lung Cancer Study*	Pilot Study by the Centre universitaire de santé McGill (Quebec)^
Pharmacotherapy for Smoking Cessation (e.g. at point of care, prescription, etc.)	<ul style="list-style-type: none"> Free nicotine replacement in local pharmacy 	<ul style="list-style-type: none"> Prescribing or funding of nicotine replacement therapies (NRT) or pharmacological aids to quitting are not available through the program, but the counselor will assist the individual in selecting whether they will use an NRT or prescription cessation medication in their quit plan. If they plan to use a prescription medication subjects will need to get this from their physician or a prescribing pharmacist. NRT can be obtained over-the-counter in Alberta and does not require a prescription although some group benefit plans require a prescription for coverage. 	<ul style="list-style-type: none"> For all current smokers that are eligible for screening and participate in smoking cessation counselling, the smoking cessation counsellor will recommend first-line smoking cessation pharmacotherapy if appropriate, and may either provide a prescription or a recommendation on how to get a prescription (e.g., through participant's primary care provider or pharmacist). 	<ul style="list-style-type: none"> Not specified. 	<ul style="list-style-type: none"> Pharmacotherapy prescription is offered during the on-site visit.

Title	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 of Lung Cancer Study*	Pilot Study by the Centre universitaire de santé McGill (Quebec)^
Reference (if the study has been published)	Ann Am Thorac Soc. 2020. 17(4):503-512. DOI: 10.1513/AnnalsATS.201902-102OC .	Tremblay et al. A Randomized Controlled Study of Integrated Smoking Cessation in a Lung Cancer Screening Program. J Thor Onc. 2019. In Press. https://www.jto.org/article/S1556-0864(19)30359-4/fulltext	N/A	<ul style="list-style-type: none"> • J Clin Oncol. 2009;27(17):2787-97. DOI: 10.1200/JCO.2008.19.4233 • Cancer Prev Res. 2011; 4:552-61. DOI: 10.1158/1940-6207.CAPR-10-0183 • N Engl J Med. 2013; 369:910-919. DOI: 10.1056/NEJMoa1214726 • J Thorac Oncol. 2017; 12:1210-1222. https://doi.org/10.1016/j.jtho.2017.04.021 • Lancet Digital Health. 2019; 1:e353-62. https://doi.org/10.1016/S2589-7500(19)30159-1 	N/A

* The information on the lung screening pilots/studies was obtained in January 2018 through phone interview with initiative representatives, and updated in July/August 2019.

^ This project is independent from the pilot being evaluated for implementation by the Ministère de la santé et des services sociaux.

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 Screening Pilots and Studies in Canada

Title	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 of Lung Cancer Study*	Pilot Study by the Centre universitaire de santé McGill (Quebec)^
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	Ontario Health (Cancer Care Ontario) based screening recommendations on the NLST evidence. Criteria: Current/former smokers ages 55-74 who have smoked cigarettes daily for at least 20 years, with $\geq 2.0\%$ risk of developing lung cancer over the next 6 years as determined by risk assessment.	1) $\geq 2\%$ risk of developing lung cancer over the next 6 years	INESSS guidelines
1) Guideline Inclusion Criteria	<ul style="list-style-type: none"> • Age: 55-80 • Current or former smokers • > 20 years smoking history 	<ul style="list-style-type: none"> • Age: 55-75 • ≥ 30 pack-year • Quit ≤ 15 years ago 	<ul style="list-style-type: none"> • Age: 55-74 • > 20 years smoking history 	<ul style="list-style-type: none"> • Age: 55-75 • Current or former smokers • > 20 years smoking history 	<ul style="list-style-type: none"> • Age: 55-74 • Current or former smoker with PLCO risk score $\geq 2\%$
2) Risk Prediction Model Criteria	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Age, education, family history of lung cancer, body mass index, personal history of cancer and chronic obstructive pulmonary disease, smoking status, smoking duration, smoking intensity, smoking quit-time. 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Age, education, ethnicity, family history of lung cancer, BMI, chronic obstructive pulmonary disease status, smoking duration, smoking intensity, smoking quit-time

* The information on the lung screening pilots/studies was obtained in January 2018 through phone interview with initiative representatives, and updated in July/August 2019.

^ This project is independent from the pilot being evaluated for implementation by the Ministère de la santé et des services sociaux.

3. Opportunistic Lung Screening

Opportunistic screening for lung cancer with LDCT is known to be occurring in six provinces.

- Opportunistic screening is defined as spontaneous screening of asymptomatic individuals that occurs outside of an 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 guidelines⁸ recommend lung screening within high quality settings (typically offered through a programmatic approach), it is important to monitor the extent to which opportunistic screening is occurring.
- 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.

Figure 7. Opportunistic LDCT Screening in Canada (July 2019)



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

Jurisdiction	Are LDCT scans being ordered?		Who is ordering LDCT scans?				Where is LDCT taking place?					Mechanism to measure amount of opportunistic screening
	Yes	No	Pilot Site Staff	Physicians	Primary Care Practitioners	Not Applicable	Private Clinics	Public Clinics	Hospitals	Health Centres	Not Applicable	
YT	Unsure					✓			✓			No
NT		✓			✓	✓					✓	No
NU		✓			✓	✓					✓	No
BC	✓			✓			✓	✓				No
AB	✓				✓		✓	✓				No
SK		✓				✓					✓	No
MB	✓				✓				✓	✓		No
ON †	✓			✓					✓			No
QC		✓				✓					✓	No
NB		✓				✓					✓	No
NS	✓		-	-	-	-	-	-	-	-	-	No
PE		✓				✓					✓	No
NL	✓					✓			✓			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.

4. 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.



8/13

PROVINCES HAVE RAPID DIAGNOSIS INITIATIVES FOR LUNG CANCER

Recent Highlights

In 2019, British Columbia implemented a rapid diagnosis initiative for lung cancer.

Table 7. Rapid Diagnosis Initiatives for Lung Cancer in Canada

Jurisdiction	Initiative Name	Location of Initiative	Point of entry into rapid diagnosis initiative	Point of exit out of rapid diagnosis initiative
YT	No rapid diagnosis initiative			
NT	No rapid diagnosis initiative			
NU	No rapid diagnosis initiative			
BC	BC Cancer Interventional Pulmonology (started 2014) LEAP (started 2019)	<ul style="list-style-type: none"> Cancer Centre Hospital 	<ul style="list-style-type: none"> Date of receipt of referral 	<ul style="list-style-type: none"> Date of diagnosis or rule out of cancer and treatment referral
AB	Alberta Thoracic Oncology Program	<ul style="list-style-type: none"> Cancer centres 	<ul style="list-style-type: none"> Date of receipt of referral 	<ul style="list-style-type: none"> Point of exit would be date of initial treatment decision
SK	No rapid diagnosis initiative			
MB	Cancer Patient Journey Initiative (Lung Cancer Pathway)	<ul style="list-style-type: none"> This process occurs throughout the province 	<ul style="list-style-type: none"> Clinical suspicion (primary care orders CT) 	<ul style="list-style-type: none"> First surgery, chemotherapy or RT
ON	Lung Diagnostic Assessment	<ul style="list-style-type: none"> Level 1 Thoracic Centre 	<ul style="list-style-type: none"> Date of receipt of referral for patients with abnormal imaging 	<ul style="list-style-type: none"> Date of diagnosis or rule out of cancer
QC	Pulmonary Oncology Access Service	<ul style="list-style-type: none"> Hospitals 	<ul style="list-style-type: none"> Date of receipt of referral and first abnormal test result – but can vary across hospitals 	<ul style="list-style-type: none"> Date of first treatment – but can vary across hospitals

Jurisdiction	Initiative Name	Location of Initiative	Point of entry into rapid diagnosis initiative	Point of exit out of rapid diagnosis initiative
NB	No rapid diagnosis initiative			
NS	Thoracic Malignancy Referral Management Pilot	<ul style="list-style-type: none"> Tertiary/quaternary hospital 	<ul style="list-style-type: none"> Date of receipt of referral by Thoracic Surgeon 	<ul style="list-style-type: none"> Date of decision regarding the initial treatment recommendation
PE	In Development			
NL	Thoracic Triage Panel of Eastern Health	<ul style="list-style-type: none"> St. John's 	<ul style="list-style-type: none"> Date of receipt of referral to triage panel for patients with diagnostic imaging report suggesting malignancy 	<ul style="list-style-type: none"> Date of completion of diagnostic investigations

5. Population Outreach

Although there are no organized programs in Canada specific to lung screening, there continue to be opportunities to build on strategies to connect with specific populations about cancer screening.

5.1 Framework for Interventions to Improve Cancer Screening

The Community Preventive Services Task Force (CPSTF), supported by the US Centers for Disease Control and Prevention (CDC), carried out an extensive review of factors related to screening for breast, cervical, colorectal and skin cancer. The review focused on interventions that increase community demand and access and increase provider delivery. The interventions identified aim to increase screening rates across the population but could also support efforts to improve screening equity. The framework outlines evidence-based intervention strategies to support decision making.

Table 8. CDC Framework for Interventions to Improve Cancer Screening¹⁰

Increase Community Demand	Increase Community Access	Increase Provider Delivery
<ul style="list-style-type: none"> • Group Education • One-on-one Education • Client Reminders • Client Incentives • Mass Media • Small Media 	<ul style="list-style-type: none"> • Interventions to Reduce Client Out-Of-Pocket Costs • Interventions to Reduce Structural Barriers <ul style="list-style-type: none"> ○ Reducing Administrative Barriers ○ Providing Appointment Scheduling Assistance ○ Using Alternative Screening Sites ○ Using Alternative Screening Hours ○ Providing Transportation ○ Providing Translation ○ Providing Childcare 	<ul style="list-style-type: none"> • Provider Reminders • Provider Incentives • Provider Assessment and Feedback

5.2 First Nations, Inuit and Métis

According to the limited data specific to First Nations, Inuit and Métis, participation rates for cancer screening are much lower among First Nations, Inuit, and Métis than non-Indigenous people in Canada. The data also indicate considerable variation in screening participation across geographic location.¹¹

Strategies to increase participation in screening among First Nations, Inuit and Métis identified in this environmental scan include engaging First Nations, Inuit and Métis in decision-making, co-creating approaches to culturally appropriate screening, and First Nations-, Inuit- or Métis-specific program resources. 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.

No strategies related to client reminders, client incentives, appointment scheduling, alternative sites, alternative hours, childcare, provider reminders or provider incentives were reported.

Northwest Territories and Ontario both collect Peoples-specific data.

- In Northwest Territories, data are embedded in the individual's health care number.
- In Ontario's lung screening pilot, data pertaining to First Nations, Inuit or Métis identifiers are optional.

Table 9. Group Education Strategies to Increase Screening Participation Among First Nations, Inuit and Métis

Jurisdiction	Intended Audience			Description
	First Nations	Inuit	Métis	
ON	✓*	✓*	✓*	Through Indigenous Cancer Care Unit (ICCU), Regional Indigenous Cancer Leads and regional teams, communities have been engaged through workshops and health fairs.

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

One-on-one education activities involve an individual (health care provider or layperson) explaining the benefits of screening and ways to overcome barriers to screening to clients individually either in person or by phone.

Table 10. One-on-One Education Strategies to Increase Screening Participation Among First Nations, Inuit and Métis

Jurisdiction	Intended Audience			Description
	First Nations	Inuit	Métis	
ON	✓*	✓*	✓*	Partner with regional health authorities and community/organizational leadership to coordinate one-on-one education sessions. There are also more targeted sessions through the Indigenous Tobacco Program (ITP) and smoking cessation counselling.

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

Client reminders (e.g., letters, phone calls) are used to remind clients that screening is due and provide follow-up information (e.g., benefits of screening, ways to address barriers, help to schedule appointments).

Table 11. Mass Media Strategies to Increase Screening Participation Among First Nations, Inuit and Métis

Jurisdiction	Intended Audience			Description
	First Nations	Inuit	Métis	
ON	✓*	✓*	✓*	Use social media to increase awareness about the importance of cancer screening to eligible Indigenous population.
BC			✓*	Use social media to increase awareness about the importance of cancer screening to eligible Indigenous population.

*Information relates to Ontario Lung Cancer Screening Pilot for People at High Risk and the BC Lung Screen Trial/Pan-Canadian Early Detection of Lung Cancer Extension Project/International Lung Screen Trial

Small media include videos and printed materials such as letters, brochures, and newsletters. These materials can be used to inform and motivate people to be screened for cancer. They can provide information tailored to specific individuals or geared towards general audiences.

Table 12. Small Media Strategies to Increase Screening Participation Among First Nations, Inuit and Métis

Jurisdiction	Intended Audience			Description
	First Nations	Inuit	Métis	
ON	✓*	✓*	✓*	Participant Information Sheets and recruitment brochures were designed and tailored for each First Nation, Inuit and Métis population. These materials were informed by Indigenous partners and translated into the Ojibway, Inuktitut, French, and Mohawk languages.

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

Table 13. Strategies to Reduce Out-of-Pocket Costs for First Nations, Inuit and Métis

Jurisdiction	Intended Audience			Description
	First Nations	Inuit	Métis	
ON	✓*	✓*		Through the ICCU, First Nations and Inuit Health Branch (FNIHB) approved eligible individuals accessing assessment and screening at one of the identified pilot sites for medical transportation benefits under the NIHB program.

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

Structural barriers are obstacles (other than those related to economics/finances) that make it difficult to access screening, for example, distance to screening locations, hours of service, setting of screening, administrative procedures, etc. Interventions to reduce structural barriers may include providing mobile screening, reducing administrative burden, providing assistance with scheduling, providing translation, expanding hours of service, etc.

Table 14. Transportation Strategies to Increase Screening Participation Among First Nations, Inuit and Métis

Jurisdiction	Intended Audience			Description
	First Nations	Inuit	Métis	
ON	✓*			Mobile Health Unit travels the northern part of the province providing information to First Nation groups about the importance of screening.

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

Table 15. Translation Strategies to Increase Screening Participation Among First Nations, Inuit and Métis

Jurisdiction	Intended Audience			Description
	First Nations	Inuit	Métis	
ON	✓*	✓*	✓*	Participant Information Sheets and recruitment brochures were translated into the Ojibway, Inuktitut, French, and Mohawk languages.

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

Provider assessment and feedback interventions evaluate provider performance and give providers information about their performance in offering screening services.

Table 16. Provider Assessment & Feedback Strategies to Increase Screening Participation Among First Nations, Inuit and Métis

Jurisdiction	Intended Audience			Description
	First Nations	Inuit	Métis	
ON	✓*	✓*	✓*	Primary Care providers are educated through Continuing Medical Education (CME) accredited presentations. Training is provided for healthcare providers working in Indigenous communities to increase access to lung screening services.

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

Table 17. Policies and Guidelines Related to First Nations, Inuit and Métis

Jurisdiction	Intended Audience			Description
	First Nations	Inuit	Métis	
ON	✓*	✓*	✓*	Through the relationships developed and fostered by the ICCU, regional teams have been able to continue working with communities as guided through the Indigenous Cancer Strategy. The ICCU also worked with both CCO and regional Screening teams to provide Ownership, Control, Access and Possession (OCAP®) training and these data governance principles within project policies and processes.

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

5.3 Underscreened Populations

Several populations have been identified as having lower cancer screening participation rates, including non-English speakers, individuals from various cultural groups, and those living in rural or remote locations.

Some jurisdictions are implementing strategies to reach underscreened populations, so individuals have access to translated materials and can get screened closer to home. Other strategies are being implemented among primary care physicians who serve underscreened groups. The Ontario Lung Cancer Screening Pilot is providing a professional development course about lung screening for people at high risk.

No strategies related to group education, one-on-one education, client reminders, client incentives, reducing out-of-pocket costs, appointment scheduling, alternative hours, transportation, childcare, provider reminders or provider assessment and feedback strategies were reported.

Table 18. Mass Media Strategies to Increase Screening Participation Among Underscreened Populations in Canada

Jurisdiction	Intended Audience	Description
ON*	<ul style="list-style-type: none"> Underscreened Groups Overall 	<ul style="list-style-type: none"> Pilot sites are responsible for local recruitment and have developed strategies to target appropriate people in local populations, including those that might be hard to reach or are underscreened.

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

Small media include videos and printed materials such as letters, brochures, and newsletters. These materials can be used to inform and motivate people to be screened for cancer. They can provide information tailored to specific individuals or geared towards general audiences.

Table 19. Small Media Strategies to Increase Screening Participation Among Underscreened Populations in Canada

Jurisdiction	Intended Audience	Description
PE	<ul style="list-style-type: none"> Underscreened Groups Overall 	<ul style="list-style-type: none"> Canadian Cancer Society Lung cancer brochures. Other handouts are developed as needed.

Structural barriers are obstacles (other than those related to economics/finances) that make it difficult to access screening, for example, distance to screening locations, hours of service, setting of screening, administrative procedures, etc. Interventions to reduce structural barriers may include providing mobile screening, reducing administrative burden, providing assistance with scheduling, providing translation, expanding hours of service, etc.

Table 20. Alternative Site Strategies to Increase Screening Participation Among Underscreened Populations in Canada

Jurisdiction	Intended Audience	Description
ON*	<ul style="list-style-type: none"> Underscreened Groups Overall 	<ul style="list-style-type: none"> Hub and spoke model for The Ottawa Hospital, where the spoke sites, Renfrew Victoria Hospital and Cornwall Community Hospital, enable participants to be screened closer to home.

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

Table 21. Translation Strategies to Increase Screening Participation Among Underscreened Populations in Canada

Jurisdiction	Intended Audience	Description
ON*	<ul style="list-style-type: none"> Non-English speakers 	<ul style="list-style-type: none"> Public-facing brochures, Participant Information Sheet and select website content are available in French.

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

Table 22. Provider Incentive Strategies to Increase Screening Participation Among Underscreened Populations in Canada

Jurisdiction	Intended Audience	Description
ON*	<ul style="list-style-type: none"> Primary care physicians who serve underscreened groups 	<ul style="list-style-type: none"> An accredited Continuing Professional Development course about lung screening for people at high risk is offered to primary care physicians in the pilot regions. The course is certified for Mainpro+ credits, which are required for primary care physicians to maintain their professional designation.

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

Table 23. Policies / Guidelines Related to Underscreened Populations in Canada

Jurisdiction	Intended Audience	Description
ON*	<ul style="list-style-type: none"> Those with physical disabilities Non-English speakers Specific cultural groups Those living in an urban setting Those living in a rural setting Those living in a remote setting 	<ul style="list-style-type: none"> Pilot sites are responsible for putting processes in place to facilitate attachment to primary care physicians for screening participants within their catchment areas. Pilot sites will facilitate culturally relevant attachments and account for accessibility issues, when possible.

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

Population Outreach Case Study:

Ontario Lung Cancer Screening Pilot for People at High Risk

Improving Screening Program Participants' Experience

Ontario's Lung Cancer Screening Pilot for People at High Risk uses screening navigators. Screening navigators support participants throughout the screening process by providing information about lung screening (including benefits and risks), determining eligibility for screening by conducting a risk assessment, providing screening results and ensuring that follow-up appointments are booked appropriately.

The pilot site is responsible for:

- Determining eligibility for screening by conducting a risk assessment;
- Empowering people to make informed decisions about participating in screening;
- Providing smoking cessation support;
- Conducting a baseline low-dose computed tomography (LDCT) scan and ongoing routine annual screening and/or follow-up of nodules if follow-up is recommended according to Lung-RADS™;
- Providing the participant with navigation support throughout the screening pathway;
- Communicating screening results, incidental findings (i.e., findings other than lung nodules) and next steps to referring and family physicians (if different); and
- Enabling seamless transition for lung diagnostic assessment for assessment of suspicious scans.

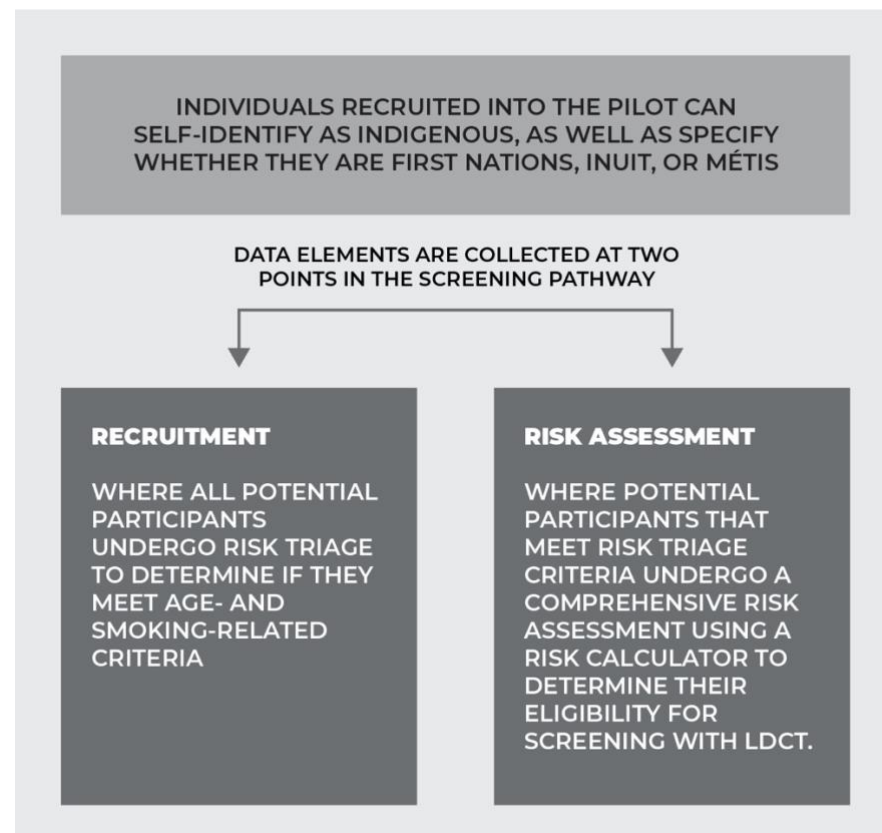
Indigenous Identifiers

In Ontario's lung screening pilot, data pertaining to First Nations, Inuit or Métis identifiers are optional. 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.

Implementation of Multi-component Strategies for Recruitment

Ontario Health (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. Ontario Health (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 strategies to target appropriate people in local populations that might be hard to reach or are underscreened.

Figure 8. Ontario Lung Cancer Screening Pilot – Collection of Peoples-Specific Identifiers



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