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COMMUNITY ADVISED SMOKING CESSATION PROJECT REPORT

LUNGNSPEI

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Acknowledgement

LungNSPEI wishes to acknowledge that its offices in Nova Scotia and Prince Edward Island, Canada are located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People.

Background

Smoking is the leading cause of preventable death in Canada, accounting for 17% of all deaths (Huynh et al., 2022). One of the main causes of smoking-related deaths are various types of cancer (e.g., lung cancer), as well as cardiovascular diseases, diabetes, and respiratory diseases (Jha et al., 2013). Furthermore, people who smoke and are highly dependent are at higher risk for lung illness, among other chronic illnesses (Heatherton et al., 1991; Zhu et al., 2019). As such, there is a need for continued focus on smoking cessation in Canada.

Smoking does not impact all groups equally, making it is necessary to determine which groups are at greatest need for intervention. According to McDonald (2003), a group should be considered a priority population for resource allocation if the following criteria are met: (I) the group accounts for a reasonably large share of the tobacco use burden in Canada, and (II) the group accounts for a disproportionate amount of the tobacco-related healthcare burden in Canada. Using these criteria, we identified three social groups in Canada that are at greatest need for smoking cessation resources: First Nations, low-income, and 2SLGBTQIA+. The factors contributing to smoking onset and prolonged use in these groups will be discussed in turn.

First Nations

First Nations communities have smoking rates up to two times higher than many other Canadian communities (Public Health Agency of Canada, 2018). Smoking rates on reserve are even higher, with approximately half of all First Nations adults living on reserve being smokers (Barker et al., 2021). Of greatest note, First Nations youth are as much as 8 times more likely to start smoking than non-First Nations youth (First Nations Information Governance Centre, 2021). Settler introduction of tobacco has contributed significantly to the elevated smoking rates seen among Canada's Indigenous Peoples, as have long historical intergenerational traumas including colonization, residential schools, and disposition of land (Alberta Health Services, 2022; Khan et al., 2021). Given the unique circumstances that have contributed to high rates of commercial tobacco use among First Nations People in Canada, there is a need to understand what is needed to promote cessation from commercial tobacco in this population.

Lower-income

Smoking rates among low-income individuals are disproportionally high at 23.4% for those in the lowest-income quintile, as compared to 12% among Canadians in the highest-income quintile (Huynh et al., 2022). These trends are also visible in Nova Scotia in Prince Edward Island where the smoking rate among low-income individuals is almost twice that of higher income individuals (Statistics Canada, 2019). Social, psychological, and physical factors, such as higher nicotine dependence, can all contribute to the higher tobacco use among lower income populations (Greenhalgh & Scollo, 2022). Furthermore, smoking can exacerbate financial stress and poverty and contribute to other concerns such as food insecurity (Greenhalgh & Scollo, 2022). Past research has shown that smoking among low-income individuals is often comorbid with other concerns such as mental health disorders and other substance use (Huynh et al., 2022). With a low-income rate of over 15% in both Nova Scotia and Prince Edward Island (Statista, 2023), it is important to determine what resources are necessary to promote smoking cessation in this population.

2SLGBTQIA+

Gay, lesbian and bisexual individuals are 1.3-1.6 times more likely to smoke compared to their straight counterparts (Erban & Dworkind, 2019). According to the 2014 Canadian Community Health Survey, the smoking rate for young adults (18-24 years) in the 2SLGBTQIA+ community was 35% as compared to 23% in straight cisgender individuals from the same age group (Baskerville et al., 2018). In 2017, the smoking rate among all members of the 2SLGBTQIA+ community in Canada was estimated at between 25% to 55% (Baskerville et al., 2018). Members of the 2SLGBTQIA+ community in Canada face several unique challenges that contribute to these elevated smoking rates. These challenges include stigma, discrimination, oppression, community social norms, targeted marketing from the tobacco industry, and a lack of access and adequacy of health services for the community (Canadian Mental Health Association, 2023). Smoking has become normalized within the 2SLGBTQIA+ and is often comorbid with other health concerns such as low socioeconomic status, depression, and other substance use (Baskerville et al., 2018). Past research has suggested smoking cessation within the 2SLGBTQIA+ community should be accessible, culturally-sensitive, and provide alternative coping mechanisms for stress (Baskerville et al., 2018); however, there is a need to understand which elements are necessary to promote smoking cessation specifically among members of the 2SLGBTQIA+ community in Canada.

Project Purpose

Our research aim was to provide insights into the barriers, challenges, and success factors that should be considered when designing smoking cessation interventions with three priority populations who experience higher rates of tobacco use and health inequality in Nova Scotia and Prince Edward Island. These three priority populations included: individuals aged 16 and older from First Nations, low-income and the 2SLGBTQIA+ communities within NS and PEI. Current tobacco cessation programs may not consider the unique challenges faced by priority populations that deal with health inequality and the social determinants of health. Therefore, this project sought to gather recommendations from the selected priority populations who smoke on what improvements are needed in these two provinces to support system-level change to enhance evidence- and needs-based smoking cessation programming.

Additionally, the project sought to utilize a community-advised methodology to ensure the voices of the priority population were at the forefront of the research. As such, an advisory committee of community-based partners from the three identified priority populations was created to guide and inform the project work in collaboration in LungNSPEI. This committee assisted both in the development and rollout of the project, as well as in the design of proposed smoking cessation interventions based on the findings from the project.

Method

Funding for this project came from the Public Health Agency of Canada, the Healthy Canadians and Communities Fund: Design Phase. Ethics approval was sought from and provided by Health Canada and the Public Health Agency of Canada (PHAC) Research Ethics Board, as well as Mi'kmaw Ethics Watch, NS and L'nuey and Mi'kmaq Confederacy of PEI Research Ethics Board.

This project began with a sweeping literature review of smoking among the three priority populations (see Appendix A). The purpose of this literature review was to better understand the current state of smoking within the priority populations, existing best practice/wise-based smoking cessation practices used in these communities, and barriers, challenges, success factors, and/or other important factors that should be

considered when co-designing smoking cessation interventions for these priority populations. Additionally, the literature review helped guide the design of the research project. In total, over 100 documents were retrieved and reviewed from December 2022 to February 2023.

After the completion of the literature review, the two primary components of the research project were carried out. The first of these was an online survey hosted on Qualtrics (see Appendix B). This survey sought to understand the smoking behaviour of our priority populations and gather an understanding of what considerations should be taken when attempting to design new cessation interventions or improve on existing interventions. Those interested in completing the survey were invited to answer questions on their demographics (e.g., age), their smoking behaviour (e.g., cigarettes smoked per day), past cessation attempts, barriers to quitting, relapse triggers, awareness, use, and support of quit resources, and other substance use. Although the survey was distributed online, LungNSPEI team members visited 31 different community-based organizations or locations across NS and PEI from May to October 2023 to gather in-person survey responses. Around ¾ of the survey responses collected came from these in-person outreach activities. A total of 403 individuals from our three priority populations completed the survey between May and October of 2023.

The second primary component of the project was a series of focus groups and sharing circles (see Appendix C). These focus groups were designed to gather input from members of the priority populations on their smoking behaviours, the needs of their communities to help promote smoking cessation, challenges their communities face with quitting, and what they would like to see changed with existing cessation programming to help people quit or reduce their use of tobacco. Fous group/sharing circles were guided by a semi-structured questionnaire and were co-facilitated by a LungNSPEI team member and a community/peer leader. All sessions were held within community-based partner facilities. All sharing circles included an Elder or Knowledge keeper to open the session with cultural protocols (e.g., smudging, drumming) and to facilitate the discussion. Additional LungNSPEI team members participated in the groups/circles and took summary notes. In total, 16 focus groups/sharing circles were held between April and August, 2023, with a total of 80 members of the priority populations participating.

Results and Recommendations

Demographics

See Table 1 for a breakdown of all demographics for the survey sample. Most of the sample came from Nova Scotia (63.8%). Participants were from a variety of different age categories, with the largest being 25-34 (23.2%). Regarding sex and gender identity, just over half the sample was made up of males (52.9%) and those who identify as men (54.1%). Most of the sample (54%) did not work at a paid job in the week preceding their participation. Just under half the sample (41.9%) reported living with a disability. In terms of the priority populations, there was substantial overlap between priority populations, with 82% of the sample being low-income, 20% being First Nations, and 24% being members of the 2SLGBTQIA+ community.

Recommendations

Using project findings, the following 4 evidence-based recommendations were created to help enhance cessation opportunities (both within and outside the health system) and build support among community stakeholders for system level change in both Nova Scotia and Prince Edward Island for evidence-based cessation programming. Our aim is to advocate for our project's recommendations to be used to inform policy to reduce barriers and improve cessation success among individuals from the three identified priority populations.

1. Easily accessible free nicotine replacement therapy (NRT)

Survey	**All priority populations indicated that they would like to see free NRTs available:** • Low-Income – 50.6% • 2SLGBTQIA+ - 53.1% • First Nations – 44.8% **Priority populations also indicated "cravings" as a challenge to quitting:** • Low-Income – 60.1% • 2SLGBTQIA+ - 75.5% • First Nations – 60.0% **Medium – high levels of dependence were observed across all 3 populations based on Fagerstrom test scores:**

	• **Low-Income:** o 15.3 % medium dependence o 34.7% high dependence o 11.9% very high dependence • **2SLGBTQIA+ :** o 18.1% medium dependence o 25.8% high dependence o 16.7% very high dependence • **First Nations** o 23.7% medium dependence o 27.1% high dependence o 11.9% very high dependence **Medium – high addiction levels observed across all 3 populations based on Heaviness of Smoking Index scores:** • Low-Income: o 54.3% medium addiction o 16.1% high addiction • 2SLGBTQIA+: o 52.4% medium addiction o 13.4% high addiction • First Nations: o 56.1% medium addiction o 12.1% high addiction
Focus Group	**Low-Income & 2SLGBTQIA+:**

	• Free access to NRT in a non-judgmental environment repeatedly cited as a needed cessation support. • Participants cited withdrawal symptoms resulting from not smoking. • The cost of NRTs reported as a barrier to accessing NRTs. • Transportation to specific locations like a NSHA MHA building was cited as a possible barrier so having access to NRTs at space LI population frequents would be imperative. • An expanded selection of NRTs made available through a free or subsidized program would also be appreciated. Inhalers, for example, typically are not subsidized; however, they are preferred for those with an oral fixation. **First Nations:** • Economic constraints were brought up as an overarching barrier to quitting smoking.
Literature Review	• Financial barriers were identified as a potential challenge to smoking cessation among all 3 target populations. (Patterson et al., 2022; OTRU, 2020; Kennedy et al., 2022) • Access to free NRTs increased smoking abstinence rates among "disadvantaged" women in Ireland (Hayes et al., 2022). • Complete coverage of evidence based NRT and cessation pharmacotherapies is recommended for those of lower socioeconomic status and members of the 2SLGBTQIA+ community by the USA's CDC (2022). • Referrals and participation in smoking cessation programming in Indigenous Australian communities was increased with the addition of free NRTs (Khan et al., 2022).

2. Accessible and flexible cessation counselling delivered in partnership with community partners who work with low-income clients.

Survey	**All 3 populations showed a desire for in-person and virtual forms of individual and group counselling as indicated in the different forms of cessation supports people believe are needed:** • **Low-Income:** o Virtual counselling: 29.8%

	o Virtual support group: 26.11% o In-person counselling: 33.0% o In-person support group: 31.7% • **2SLGBTQIA+:** o Virtual counselling: 41.8% o Virtual support group: 37.8% o In-person counselling: 33.7% o In-person support group: 37.8% • **First Nations:** o Virtual counselling: 22.4% o Virtual support group: 14.2% o In-person counselling: 32.8% o In-person support group: 22.4% **Stress was listed as a challenge in quitting and a relapse trigger across all groups, indicating a need to incorporate different coping mechanisms into group and individual counselling sessions.** • **Low-income:** o Challenge in Quitting: 75.2% o Relapse Trigger: 50.5% • **2SLGBTQIA+:** o Challenge in Quitting: 75.5% o Relapse Trigger: 90.8% • **First Nations** o Challenges in Quitting: 72.5% o Relapse Trigger: 65.0%

Focus Group	**Counselling in a non-judgmental, familiar space was important to those in the low-income focus groups. Features of inclusive and equitable counselling were:** • "Understanding" and non-judgemental. • On-site counselling in familiar places (ie. Resource centres). • Group meetings. • Telephone counselling option. • Creative or non-traditional types of counselling or support like music, art, or recreation therapy. **Sharing Circles also highlighted the need for community-based programming and consistent touch points of support (i.e., weekly meetings).** **Members of the 2SLGBTQIA+ community indicated that flexible counselling options were important for those who experience judgment due to their sexual orientation or gender expression and had hesitancy seeking in-person care.**
Literature Review	**Low-Income Specific** • Stress is a driver for smoking among those with low SES (socioeconomic status) and a smoke break can be considered a "time-out" or self-care activity (Patterson et al., 2022), reinforcing the importance of developing alternative coping strategies while entering a quit journey. • Successful cessation programs address the underlying SDOH including sources of stress with goals like finding solutions that replace the use of cigarettes as stress management; addressing physiological nicotine dependence; enhancing self-efficacy; and, referrals to social services (Greenhalgh & Scollo, 2022; Patterson et al., 2022; Rogers et al., 2022; Vinci et al., 2022). • Accessing transport is an expected challenge for those experiencing low SES (Huynh et al., 2022), therefore it is important to meet people where they are at and spaces they already frequent. **2SLGBTQIA+** • 5 of the 8 key intervention elements that are essential to 2SLGBTQIA+ programing suggested by Baskerville et al. (2018) are being LGBQT

	specific, being accessible (easy to access locations), being inclusive/relatable, incorporating LGBTQ+ peer support and counselling services, Integrating/combining other activities, and providing concrete coping mechanisms. • Due to a distrust of the healthcare system among 2SLGBTQIA+ people, members of the community are less likely to seek services in a traditional clinical environment. (OTRU, 2020; CMHA, 2023) • Many transgender individuals lack social support from family and friends (Cartujuano-Barrera et al., 2021), therefore it is important they receive support on their cessation journey from an external source. • Cultural adaptions are necessary in 2SLGBTQIA+ programs with features (Baskerville et al., 2018; Berger & Mooney-Somers, 2017; CDC, 2022; Matthews et al., 2019; Matthews et al, 2019b; Patterson et al., 2021; Wheldon and Wiseman, 2020) like creating a safe space for cessation programs to occur, using 2SLGBTQIA+ facilitators, discussing community-specific triggers/issues. **First Nations** • Indigenous Australians reported that family & social group support plays a large role in supporting/motivating quit attempts (Peiris et al., 2019), emphasizing the importance of having community-based programing that reflects the needs of the population. • Minicheiello and colleagues found that cessation programs need to be flexible, need to feature Indigenous leadership, and should be integrated into existing community programs to achieve higher smoking cessation rates (2016). o The least effective programming for Indigenous Canadians was found to be programs that did not "reflect and build on locally specific experiences and community-generated knowledge" (Smylie et al., 2009) further emphasizing that counselling needs to be flexible and adaptable down not only to the population but specific community level.

3. Increased awareness and targeted promotion of existing local cessation programs and services.

Survey	**Across all groups, a lack of awareness of existing cessation programs was observed. This indicates a need for increased or improved targeted marketing of these programs to those who need it most.** • **Between 46.5 – 63.2 % of people across all 3 populations in Nova Scotia and PEI were unaware of any of the provincial smoking cessation supports available.** • Low-Income:

	○ NS: 46.5% had not heard of any of the quit resources available to them. ○ PEI: 55.4% had not heard of any of the quit resources available to them. • 2SLGBTQIA+: ○ NS: 59.4% had not heard of any of the quit resources available to them. ○ PEI: 73.7% had not heard of any of the quit resources available to them. • First Nations: ○ NS: 56% had not heard of any of the quit resources available to them. ○ PEI: 63.2% had not heard of any of the quit resources available to them. **Most participants reported never accessing the different forms of counseling for smoking cessation that are available in their province.** • Low-income: 74.8% had never accessed counselling resources for smoking cessation. • 2SLGBTQIA+: 90.2% had never accessed counselling resources for smoking cessation. • First Nations: 80.0% had never accessed counselling resources for smoking cessation. **The lack of awareness combined with the lack of uptake of the quit resources available in the provinces may indicate that promotion of smoking cessation resources needs to be increased.** **Consider using survey results of target populations most desired program features (i.e. in-person counselling) to narrow promotional activities and aim promotional activities in mediums and locations accessible to specific target population.**
Focus Group	**Conversations in low-income and 2SLGBTQIA+ focus groups all reiterated the groups' desire for increased promotion of existing and available cessation resources.** • 2SLGTBTQIA+ focus groups specifically indicated a need for promotion of smoking cessation that was community-representative. **Both low-income and 2SLGBTQIA+ focus groups advised that promotion that focuses more on the health and overall benefits of quitting vs negative messaging about the harms of quitting would be beneficial.** **Design promotions around the specific self-determined needs of the community that can be met by cessation programs.**
Literature Review	**Low-Income** • Smoking is extremely visible and normalized in lower SES environments (Woo, 2022), therefore promotions should be appropriately scaled and mindful of the social acceptance of smoking in the community.

	• To address the higher rates of literacy barriers in lower SES communities' educational content can be in other forms than just written, for example Hitsman and colleagues suggest graphics and alternative formatting (2022). • The U.S.'s CDC suggest using messages that feature low SES people and their shared experiences (2022). • Geo-targeting locations where there are higher numbers of low SES smokers is suggested (Greenhalgh & Scollo, 2022). **2SLGBTQIA+** • When creating promotions for 2SLGTBQIA+ community one must be mindful of a lack of awareness and potentially inappropriate, condescending messaging (Matthews et al., 2019, Williams et al., 2020). • Gay, bisexual, and transgender men report knowing less about existing cessation programs than their heterosexual, cisgender counterparts. (CDC, 2022). • Increasing awareness in the 2SLGBTQIA+ community about the cessation resources that exist and ensuring that messaging is culturally-tailored is imperative (Berger & Mooney-Somers, 2017; CDC, 2022; Matthews et al., 2022). **First Nations** • Increasing the knowledge of the safety and efficacy of NRTs to increase awareness of and acceptance of their use both at the healthcare professional and community/individual level is recommended (Kennedy et al., 2022). • To increase buy-in for programs it is suggested that there is Indigenous co-facilitation and community leadership (i.e. Elders) (Barker et al., 2021).

4. Holistic care and support that acknowledges the role the social determinants of health can play in creating barriers to quitting.

Survey	**Survey demographic data shows high levels of potentially negative social determinants of health that must be considered.**
	• Low-income:
	  ○ Low-income = 100%
	  ○ Rates of unemployment = 70.8%
	  ○ Disability = 40.8%
	• 2SLGBTQIA+
	  ○ Low-income = 52%
	  ○ Unemployed = 51%
	  ○ Disability = 70.5%
	• First Nations:
	  ○ Low-Income = 55%
	  ○ Unemployed = 62.5%
	  ○ Disability = 36.3%

	Reported challenges to quitting and relapse triggers were not only related to physical withdrawals effects and cravings. • **Stress was consistently rated as a top challenge to quitting and as a relapse trigger by all 3 target populations.** ▪ **Factors that influence stress among these populations must be considered when addressing smoking cessation and relapse.**
Focus Group	**A number of social determinants of health/social factors were discussed in focus groups/sharing circles that are unique to their respective population.** • Factors for low-income people: o Concerns over housing insecurity can be a higher priority for people over quitting smoking. o Lack of transportation/access to services to help them quit. o Social isolation and being bored lead them to smoke and make it harder to quit. • Factors for 2SLGBTQIA+ people: o Discrimination based on their sexuality and/or gender expression are struggle that many face in this community. o Lack of access to health services for other concerns, such as gender-affirming care, is a concern. o Discrimination within the healthcare system. • Factors for First Nations people: o Economic barriers. o Require a culturally sensitive-approach that appreciates the cultural significance of tobacco to Indigenous people.
Literature Review	**Low-Income** • Smoking among lower-income people has also been correlated to lower educational attainment and occupational skill (PHAC, 2018). • A meta-analysis of cessation programming found that **multicomponent interventions achieved higher quit rates than control.** These interventions **address different aspects of the recovery process**, **can be individualized/apply a patient-centered approach** and **can enhance overall treatment adherence and retention** (Huynh et al., 2022). • Addressing the underlying psychsoocioeconomic structural factors that contribute to higher smoking rates among low SES people, in a community-based fashion, is recommended when designing cessation interventions (Huynh et al., 2022). 2SLGBTQIA+ • Members of the 2SLGBTQIA+ community are at an increased risk of being negatively affected by the SDOH, including a lack of social inclusion, discrimination and violence, and decreased access to economic resources (CMHA, 2023) • Aleshire et al., (2019) suggest that **holistic tobacco treatment interventions** are needed and that such interventions should consider the **barriers to successful cessation**, such as **high levels of stress** and the **pro-tobacco social norms** in the LGBT community.

	First Nations • Along with the SDOH that must consider when designing cessation programming Health Services Alberta quote regarding intergenerational trauma resulting from colonization and racism/discrimination --> how in depth do I go on this ○ However, it is important to use a strength-based approach when addressing SDOH and holistic care for First Nations people as to not further stereotype, discriminate against, reinforce internalized racism, and widen the gap of equitable health outcomes (Alberta Health Services, 2022). • Smoking cessation programs for First Nations people should be approached with Two-Eyed Seeing, emphasizing traditional ways of knowing and incorporating western knowledge, as cessation programs that include ceremonial practices or culturally based activities report improved quit rates and overall improvements in health compared with Western approaches alone." (Minichiello et al., 2016). • Role models and community leadership should be involved in delivery programming as it may be preferred and increase buy-in (Rahmen et al., 2022; Barker et al., 2021). • It is essential to recognize the sacredness of ceremonial tobacco and not confuse the use of it with use and addiction of commercial tobacco and nicotine. This should be discussed during early sharing circles in the program (CAMH, 2019).

Conclusion

Our research provided insights and a better understanding into the experience of those who smoke from our three identified priority populations. Based on this evidence, our project identified four key recommendations on what improvements are needed in NS and PEI to support system-level change to enhance evidence- and needs-based smoking cessation programming. Our project evidence, and supporting evidence from the literature, identifies the need to take a comprehensive health-equity approach to address the multiple barriers and challenges that priority populations face when trying to access cessation services.

This project provided an opportunity to begin to build a network of stakeholders who have a vested interest in improving success rates in smoking cessation among our priority population communities. Through the next step of our project, we plan to continue to engage community partners and government agencies, to co-design evidence-based smoking cessation programming in our provinces and enhance existing cessation services. By working together to improve health equity in smoking cessation, LungNSPEI aims to ensure that those who want to quit/reduce smoking have access to the supports they needs, to ensure a healthier, smoke-free future for all.

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Table 1

Demographic Information for the Survey Sample

Variable	*N* (%)
Province	
Nova Scotia	257 (63.8)
Prince Edward Island	146 (36.2)
Age	
16-24	51 (14.3)
25-34	83 (23.2)
35-44	72 (20.2)
45-54	70 (19.6)
55-64	60 (16.8)
65+	21 (5.9)
Sex	
Male	189 (52.9)
Female	163 (45.7)
Prefer not to say	5 (1.4)
Gender	
Man	193 (54.1)
Woman	145 (40.6)
Another gender	13 (3.6)
Prefer not to say	6 (1.7)
Employment status	
Unemployed	204 (50.6)
Employed	146 (36.2)
Permanently unable to work	21 (5.2)
Retired	20 (5.0)
Prefer not to say	12 (3.0)
Disability	
Yes	169 (41.9)
No	226 (56.1)
Prefer not to say	8 (2.0)
Priority populations	
General population	29 (7.2)
Low-income	218 (54.1)
First Nations	14 (3.5)
2SLGBTQIA+	25 (6.2)
Low-income + First Nations	44 (10.9)
Low-income + 2SLGBTQIA+	51 (12.7)
First Nations + 2SLGBTQIA+	3 (0.7)
Low-income + First Nations + 2SLGBTQIA+	19 (4.7)

Note. *N* = number of participants. General population refers to those who did not meet the criteria for any of the priority populations.

Lung Nova Scotia Prince Edward Island (LungNSPEI)

Community Advised Smoking Cessation Project

Literature Review

Prepared for:

LungNSPEI

February 28, 2023

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Acknowledgement

Strive Health wishes to acknowledge that its office in Nova Scotia, Canada is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People. This territory is covered by the "Treaties of Peace and Friendship" which the Mi'kmaq and Wolastoqiyik people first signed with the British Crown in 1725. We must further acknowledge that people of African descent have shared these lands for over 400 years in Nova Scotia and over 50 strong and resourceful African Nova Scotian communities exist today.

Executive Summary

Lung Nova Scotia Prince Edward Island (LungNSPEI), in collaboration **with community partners**, aims to **better help individuals who smoke to quit**. **Three priority populations** that **face health inequalities** are the focus of the '**Community Advised Smoking Cessation**' project. Specifically, this includes two-spirit, lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, and additional sexual orientations and gender identities **(2SLGBTQIA+), First Nations and Lower Income** individuals aged 16 and older residing in NS or PEI. These three communities have **higher smoking rates** and often **reduced access** to smoking cessation services.

To better understand best practices in smoking cessation for the three priority populations, a **rapid review of the literature** was undertaken. The aim was to understand known **barriers, challenges, success factors** and/or other **important factors** that should be considered when co-designing smoking cessation interventions with priority populations. Over **100 documents** were retrieved and reviewed from December 2022 to February 2023. Findings indicate:

Social, psychological and economic factors, coupled with the determinants of health, have been attributed to the **initiation and sustained use** of commercial tobacco in the three priority populations. **Smoking is a normalized behaviour**. There is also a strong social gradient: those of lower income and education carry the heaviest smoking burden.

For many, the concern for their **health** or that of household members was a **motivator to quit**.

A **holistic, client-centred approach** is necessary to reduce health inequities and the use of commercial tobacco in priority populations. Studies have demonstrated the superior **efficacy of interventions that** take into **consideration** the **unique needs** of the **individual** and **their communities**, including their culture, values and known barriers, with **multicomponent features**.

Mainstream interventions such as **cognitive-based counselling** combined **with (free) cessation medication require cultural adaptations based on the intended audience.** Increasing the **awareness** of the existence **of culturally relevant cessation services** and support was an identified challenge in many jurisdictions. Programming should be specific to each

community (e.g., promotional materials featuring members of the community) and even to sub-populations within communities (e.g., for trans persons within the 2SLGBTQIA+ community).

Interventions should be **delivered by culturally competent and trained** professionals or peers, taking a stigma-free and **strengths-based approach**. Many priority community members **distrust the health system** and avoid help-seeking based on past discrimination and negative experiences. Cessation services **integrated into existing health services and programming within communities** were more successful. For example, services delivered in easily accessible, 'safe spaces', facilitated by a member of the community.

For **First Nations** People, the long history of colonialism, dispossession of land and residential schooling has created significant **intergenerational trauma** that needs to be considered when **co-designing** cessation programming **with** First Nation community partners.

For **First Nations, wise-based practices** (i.e., **Two-Eyed Seeing**) must be considered alongside or even before evidence-informed ways of knowing. Other key themes included **Indigenous leadership**, **community-based** programming with the support of **Elders/knowledge keepers** (i.e., important role models), **offered by Indigenous workers** with choice or **flexibility** to adapt content to each First Nation community; and importantly, incorporating the **dual role of tobacco** and taking a **harm reduction approach**.

Findings from the literature review were **limited** to the search terms utilized, references retrieved and information gathered during a condensed project timeline.

Some common and unique needs/challenges within the three priority populations of focus for the Community Advised Smoking Cessation Project were identified. In general, **holistic, person-centred approaches** that **consider the root causes/factors that have contributed to smoking initiation and sustained behaviour within the priority populations are** important. Interventions were successful when they were: **flexible, multicomponent**; had **cultural tailoring**; were **community-led/reflective**; included **peer facilitation/support**; were provided by **competent healthcare professionals**/built local **community capacity**; and included the availability of free **cessation medications including NRT**. For **First Nations**, the **dual role of tobacco**, the importance of **wise-based approaches**, **role models** and using **Two-Eyed Seeing** were also top considerations.

The findings in this report provide a **foundation of knowledge** to inform the co-design of smoking cessation interventions with community partners. Going forward, LungNSPEI is expected to

continue to engage key partners and **community members** to gather additional insights into local challenges, opportunities and best practices for Nova Scotians and Islanders who smoke, have recently quit or are interested in making a quit attempt.

Introduction

The overall smoking rate in Canada is decreasing. In 2021, 10% of Canadians over the age of 15 were smokers, down from 16% in 2012 and 25% in 1999 (Canadian Tobacco and Nicotine Survey, 2021; Canadian Tobacco Use Monitoring Survey (CTUMS), 2012). **Despite this, smoking is the leading cause of preventable death**, accounting for 17% of all mortalities with an estimated 45,460 deaths attributed to nicotine dependence annually in the country (Huynh et al., 2022). The main causes of smoking-related deaths are **many types of cancer**, including lung cancer, as well as **cardiovascular disease, diabetes, and respiratory diseases**. According to the **Canadian Tobacco and Nicotine Survey (2020)**, **13.7% of Nova Scotians and 11.6% of Islanders aged 15 and older were current smokers**, with a **national prevalence of 10%.**

Lung Nova Scotia Prince Edward Island (LungNSPEI), in collaboration **with community partners**, aims to **better help individuals who smoke to quit**. **Three priority populations** that **face health inequalities** are the focus of the '**Community Advised Smoking Cessation**' (CASC) project. Specifically, this includes two-spirit, lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, and additional sexual orientations and gender identities **(2SLGBTQIA+), First Nations and Lower Income** individuals aged 16 and older residing in Nova Scotia (NS) or Prince Edward Island (PEI). These three communities have **higher smoking rates** and often **reduced access to smoking cessation services or supports**.

The CASC project will gather input from priority community members via an online survey and through focus group/sharing circle discussions, in addition to guidance from an advisory committee of priority community representatives and other key partners. A literature review was also proposed to better understand best practices in smoking cessation for the three priority populations. Based on all of the information that will be gathered, interventions for priority populations will be collaboratively co-designed.

This report summarizes findings gathered from a **rapid review of the literature** which was undertaken to identify any known barriers, challenges, success factors and/or other important factors that should be considered when co-designing smoking cessation interventions for the three priority populations.

Methods

In December 2022, a draft approach for the literature review was vetted with LungNSPEI. The literature search included a review of both **peer-reviewed and grey literature**, beginning with **PubMed** and supplemented with **Google Scholar**. Article lists were initially scanned for relevance.

Based upon the anticipated time commitment for the project, we aimed to identify and **review 30-35 of the most relevant articles for each priority population**. In total, 696 articles were identified, with 61 peer-reviewed publications and 47 grey literature documents and or websites/materials retrieved and reviewed. Pertinent findings were recorded in the document analysis framework, i.e., an Excel file. See **Appendix A** for search terms utilized for each priority population and the companion Excel file for a complete list of identified articles.

Please note: Any reference to tobacco, smoking or vaping refers to the use of commercial tobacco and not sacred or traditional tobacco.

Findings

As noted previously, the three priority populations of interest have smoking rates that are higher than the general population, which will be described in the respective sections below.

The literature appraisal identified a limited number of systematic reviews, numerous randomized controlled trials, research protocols, qualitative studies, provider and participant workshop materials and various organizational reports regarding smoking cessation interventions. Much of the peer-reviewed literature was not Canadian-based. The companion Excel file "*LungNSPEI Lit Review CASC 2023FEB.xlsx*" contains details for each reference identified and reviewed.

The following sections present findings by priority population.

1. 2SLGBTQIA+

BACKGROUND CONTEXT

Smoking among the 2SLGBTQIA+ community remains high, ranging from 25% to 45% (Erban & Dworkind, 2019). Results of the 2014 Canadian Community Health Survey (CCHS) found that the prevalence of cigarette smoking for 2SLGBTQIA+ young adults aged 18 to 24 was 35%, compared to 23% for same-aged cisgender heterosexual individuals. A study in British Columbia found that, compared to the general population, smoking rates among gay and bisexual men are three times higher; **highest among bisexual men** - 73.5% of whom are smokers (Haley et al., 2014).

The 2SLGBTQIA+ community faces very **specific challenges** that contribute to the **initiation and sustained use of tobacco**. According to the Canadian Mental Health

Association (CMHA) (2023), LGBTQ individuals may **lack social inclusion, freedom from discrimination and violence**, and **access to economic resources**. The CMHA website also noted that **bisexual and trans people are overrepresented among low-income Canadians**, referencing an Ontario study with 433 trans individuals where **50% of respondents had a personal annual income of less than $15,000 a year** (2010).

Concerning **social inclusion**, one focus group participant from youth research in Toronto stated that smoking can be a 'common' factor amongst teens, helping 2SLGBTQIA+ individuals 'fit in,' "*I felt strange making friends, I felt strange about my sexuality. It was, smoking was something that it's like okay, well* ***I had this one common factor with these other people****, and we can kind of jive on that*" (Ontario Tobacco Research Unit [OTRU], 2021). Smoking for some may also be a way of "*rebelling against traditional gender roles*" (Centers for Disease Control [CDC], 2022).

Experiences of **stigma and discrimination** can also **increase stress levels** and contribute to smoking behaviour. The 2019 Standing Committee on Health's report, *The Health of LGBTQIA2 Communities in Canada*, heard that **two-spirited individuals can experience discrimination within Indigenous communities** and **face different levels of discrimination** because of their sexual orientation or gender identity, Indigenous origins and at times due to their status of being HIV-positive or having hepatitis C.

Del Pino et al., (2021) explored how the experiences of discrimination and stigma influenced **HIV-positive Black gay men's** perceptions of their smoking. In focus groups conducted in Los Angeles, California, USA with 53 men, two key themes emerged: participants reported **smoking to deal with the stress of being Black and/or gay**; and, to deal with the **additional stress of being HIV-positive**. "...*having concurrent stigmatized identities motivated them to turn to or to maintain smoking as a coping strategy*", Del Pino et al., 2021.

Baskerville et al., (2018) also report higher smoking rates within this community as possibly being related to **other substance use including alcohol, increased rates of depression/mental health** and **low socioeconomic status** (SES) exacerbated by increased homelessness (in addition to factors noted above [e.g., victimization, discrimination, stress]). O'Cleirigh et al., (2018) reported in their study of urban community health center clients in Massachusetts, USA (of which 1,543 identified as gay, lesbian or bisexual), that there were significantly **higher odds of current tobacco use** in those who had **less education or used alcohol**, as well as those of a younger age.

As with some other priority populations, there is a **normalization of smoking** within 2SLGBTQIA+ communities (Aleshire et al., 2019; Wheldon and Wiseman, 2020). Using survey data from the 2013-2014 Population Assessment of Tobacco and Health Study in the USA, Wheldon and Wiseman (2020) assessed **normative smoking behaviours** and barriers to cessation. In their sample of 13,856 adults who were current tobacco users, there were 7,694 heterosexual men, 5,223 heterosexual women, 152 gay men, 176 gay/lesbian women, 115 bisexual men and 496 bisexual women. They found:

- Individuals who identify as **homosexual or bisexual** were **more likely to** have most people they **spend time with be tobacco users** than those who identify as heterosexual.
- **Bisexual women** were **more likely** than heterosexual and homosexual women **to be exposed to tobacco at home**.
- Both **homosexual and bisexual men** were **more likely to be exposed to tobacco at home** than heterosexual men.
- **Homosexual and bisexual men and women** were **more likely to be exposed to tobacco at work** than their heterosexual counterparts.
- **More homosexual and bisexual women socialized with individuals** that had **positive opinions on tobacco** than heterosexual women.

A contributing factor to the normalization of smoking in this community may be the past **targeted advertising** of the tobacco industry in the towards 2SLGBTQIA+ communities including representative marketing, coupons and rebates (Acosta-Deprez et al., 2021; Rainbow Health Ontario, 2022).

SMOKING CESSATION INTERVENTIONS

Berger & Mooney-Somers (2017) completed a content-based **systematic review** of **smoking cessation programs for lesbian, gay, bisexual** and **transgender** people (3,663 participants, 19 studies [15 USA, 1 Canada, 3 other countries], but none with a control group). The mean age of participants across the studies was 42 years. Interventions, primarily **administered by community-based organizations**, used **cultural modifications** (e.g., meeting in LGBT-friendly spaces, discussing social justice and discussing LGBT-specific triggers or issues [hormone replacement therapy]), and **behaviour change techniques**, (e.g., providing normative information, boosting motivation/self-efficacy, relapse prevention, social support, action planning and discussing consequences). The **overall quit rate** was **61%** at the **end** of the **interventions** which **stabilized** around **40% by 3-6 months**.

A **qualitative study** by Baskerville et al. (2018) provides significant insight into the **perceptions of LGBTQ+ youth and young adults in Ontario** regarding smoking cessation and prevention initiatives for their community. The research team conducted **24 focus groups with 204 participants** of diverse ethnic and cultural heritage from Toronto and Ottawa. **Feedback on the likes, dislikes, feelings and concerns** about **culturally modified interventions tailored** for LGBTQ+ youth and young adults was gathered.

Eight overarching themes were identified for smoking cessation and prevention initiatives for this population, based upon three intervention scenarios of **group cessation counselling**, **social marketing campaigns** and **a mobile app with a peer support network and social media campaign**:

- Being **LGBTQ+ specific** (e.g., group counselling with those of the same gender identity/sexual orientation, held in 'safe spaces' and facilitated by a community member; or, media campaigns featuring a member of their community);
- Being **accessible** (easy-to-access locations where sessions are held [including having some available online]; session times that are convenient for individuals; having a manageable travel time-commitment to participate if attending an in-person session; having supports available when they are needed (e.g., having an online chat that operates extended hours versus only being able to talk to someone once a week during a group session; and, cost [needs to be free]);
- Being **inclusive, relatable** (i.e., including community members in the intervention development process so real-life experiences are portrayed in social media campaigns/ads), and **highlighting diversity** (e.g., including all gender identities and people of colour, such as a Black trans person);
- Incorporating **LGBTQ+ peer support** and **counselling services**;
- **Integrating/combining other activities** beyond smoking (e.g., physical activities);
- Being **positive, motivational, uplifting, and empowering** (e.g., "*…I think showing what the benefits are of you not smoking and how you would feel if you weren't a smoker would be more positive than having people with holes in their neck on your cigarette packs*." Focus Group Participant);
- Providing **concrete coping mechanisms** (e.g., providing nicotine replacement therapy [NRT]; or, suggesting alternatives to smoking and highlighting ways to cope); and,
- Integrating **rewards and incentives** (e.g., having food at group sessions, offering public transit tokens, having a contest with prizes or showing how much extra money someone may have if they quit (e.g., a calculate your savings calculator).

Baskerville and colleagues (2018) suggested that **these themes serve as key intervention elements** and should be **considered essential** to smoking cessation program development. Indeed, the peer-reviewed and grey literature aligns with these concepts.

*"'[When people say] quit drinking, or quit smoking, they don't say how it **leaves a hole in your routine**. It's like…when you were asking about the group [counselling], and people were saying it would be good if there were outings or…like, physical activity. There **needs to be some kind of routine thing that can replace [smoking]**.' [Bisexual group participant]"* Baskerville et al., 2018.

*"Having some type of **reward for quitting after a month** or something, it **doesn't have to be monetary**, but rewards might help with that mindset of 'I quit and I'm being rewarded for it,' like a [one]-month incentive, two-month, whatever interval of time. [Trans group participant]"* Baskerville et al., 2018.

Building upon this work, with funding support from the Public Health Agency of Canada, in 2021 the Ontario Tobacco Research Unit in collaboration Canadian Cancer Society launched "The Expand Project: a research initiative and social marketing campaign to address smoking and vaping among queer and trans young adults". The research team completed a **baseline survey with over 1500 respondents** and consulted with **10 key informants** from Canada, the USA and Australia, in addition to conducting the over **20 focus groups** (per Baskerville et al., 2018). The project had **extensive input from the queer and trans youth community**, guidance from an **advisory committee** and **collaborative working groups** in each of the three pilot cities of Toronto, Thunder Bay and Montreal.

A key project activity is **education**, i.e., increasing awareness about smoking rates within the queer and trans youth community and reasons why individuals may have started smoking. Educational content/videos are posted on the program website and social media channels (e.g., **Instagram, TikTok and Facebook**). The Expand program website also promotes **'experiential events'** such as PRIDE parades, film festivals and concerts. For those interested in quitting, support includes **two weeks of free NRT (in Ontario)**, a **Quit to Win challenge** (chance to win up to $500), and via their program website, a Smoker's **Helpline and Quitmap** (to find local services), and an online chat feature with a **Quit Coach** that is **queer and trans-culturally-competent**.

- The Expand project team acknowledged that **more needs to be done to better understand the unique needs of two-spirit individuals** and **strengthen partnerships** with organizations so that those with insight can guide the design of appropriate content and materials. They invite program website users to visit the "Hope for Wellness Helpline"(which is a 24/7 helpline with an online chat feature for Indigenous Canadians) or 'Talk Tobacco: Indigenous Quit Smoking and Vaping Support'.

- Section 3.0 addresses the First Nations literature, and acknowledges the lack of information regarding 'two-spirited' individuals who use commercial tobacco.

1.1 Challenges

Wheldon & Wiseman (2020) also explored **barriers and facilitators of tobacco cessation** using survey data from the 2013-2014 Population Assessment of Tobacco and Health Study in the USA. Their analysis suggested that sexual minorities face **psychological barriers** to smoking cessation, including:

- **Internalizing behaviour, e.g., anxiety, depression and traumatic stress** are more common in gay men and bisexual individuals;
- **Externalizing behaviour, e.g., attention deficit, hyperactivity/impulsivity and conduct disorder** are more common in bisexual individuals; and,
- **Substance use severity** was **higher for gay men and bisexual women** (relative to their heterosexual counterparts).

The CMHA Ontario website (2023) states:

- There are "*Higher rates of **depression, anxiety, obsessive-compulsive and phobic disorders, suicidality, self-harm, and substance use** among LGBT people*."
- "*Some research suggests that use of **alcohol, tobacco and other substances may be 2 to 4 times higher** among LGBT people than heterosexual people*."

Wheldon and Wiseman (2020) also noted in their research that **gay men** had more **environmental barriers** to cessation (e.g., **living with another tobacco user** and **receiving tobacco promotional materials**) as compared to heterosexual men. In the discussion section of their paper, they state that there is some evidence to suggest that people, on average, may choose a partner that is similar to them regarding smoking status (i.e., a regular tobacco user is **more likely to partner** and **cohabitate with another regular tobacco user**).

2SLGBTQIA+ individuals may rank **tobacco use as a lower health priority than other issues** that affect the community (e.g. HIV/AIDS, hate crimes, suicide) (Centers for Disease Control, 2022). Li et al., (2021) noted that, in a study of 1,808 adults who currently smoked, the **perceived health threat of smoking had a weaker negative relationship,** and the **perceived benefits of smoking had a stronger positive relationship,** with **intentions** to **continue smoking** in LGB versus heterosexual smokers. They concluded that "*compared to perceptions of tobacco-related health consequences*

(perceived health threat), behavioural perceptions (perceived benefits and barriers) may have stronger impacts on tobacco use intentions among LGB people."

- ☛ *"Thus,* ***efforts focusing on reducing tobacco-related disparities among the LGB community should address perceived benefits and barriers of tobacco use****"*, i.e., messaging should **aim to reduce LGB people's perceived benefits** and **increase their perceived barriers of tobacco use**, Li et al., 2021.

Other challenges/barriers:

- **Distrust of the healthcare system** impacts cessation seeking. Many 2SLBGTQIA+ individuals report **negative experiences in receiving appropriate care from health providers** and are unlikely to pursue help for quitting through such channels (OTRU, 2020; CMHA, 2023).
- **Financial barriers** can also limit access to NRT/cessation medication and can limit availability to attend cessation clinics if, for example, an individual works multiple jobs (OTRU, 2020).
- **Transgender** individuals frequently suffer from a **lack of social support from friends or family**, which means an additional lack of a support system for those wanting to quit (Cartujano-Barrera et al., 2021).

- When attempting to design and implement a successful cessation program for 2SLGBTQIA+ individuals, consideration should be given to (Matthews et al., 2019; Williams et al., 2020):
  - The **lack of awareness** of existing cessation supports amongst the community;
  - Potentially **inappropriate or condescending messaging**;
  - A feeling of an **unsafe space** (e.g., trans participants may not feel comfortable sharing in a group of cis people; participants not feeling welcome in a particular space/location); and,
  - The potential for **inadequate planning and recruitment issues**.

For example, in the USA, the CDC (2022) reported that:

- A **lower percentage of gay, bisexual and transgender** men were **aware of tobacco quitlines** than their non-GBT men.
- **Lesbian, gay and bisexual adults aware** of smoking quitlines were **less likely** to report the intention **to call the quitline** than their heterosexual counterparts.
- **1-in-4 transgender** individuals reported **avoiding seeking needed health care in the past year because they feared discrimination or mistreatment** based on their gender identity.

- LGBTQ+ people often **fear or experience discrimination or disrespect** from health professionals.

Williams et al., (2019) shared some **lessons learned** when attempting to **adapt a successful LGBTQ cessation program** in the USA**,** "The Last Drag," **from one geographic area** (San Francisco, California) **to another** (southcentral Texas, a more politically conservative region). **Practical challenges** for modifying the evidence-informed 7-session/6-week group program included:

1) **Inadequate pre-implementation planning:** the team did not have the resources to conduct a local needs assessment, nor did they have time to adequately develop community partnerships/identify key community leaders to endorse the program.
2) Issues with **cultural insensitivities:** e.g., an activity planned for the first session with a bowl of fruit was designed as benign in nature, however, it was interpreted as potentially insensitive, i.e., using the term 'fruit' may be highly insulting to local participants, particularly at the initial session; and similarly, the term 'queer' was also offensive to local LGBTQ persons.
3) **Participant recruitment barriers:** despite significant efforts and outreach, only one participant fully completed the 7-session curriculum. The authors suggest the location of sessions NOT occurring in a community-based organization setting likely was a limiting factor. And, having an LGBTQ program meant participants had to openly identify themselves as being community members, which has been suggested as a major barrier for some, i.e., having to 'come out.'

1.2 Success Factors

Patterson et al., (2021) investigated, by sexual orientation, **quit motivations, attempts and methods** in a longitudinal cohort study of 1,177 adult tobacco users. They noted similar quit rates for both heterosexual and sexual minority (gay, lesbian, bisexual, non-heterosexual orientation) adults with over half of each group attempting to quit, but only a small percentage (12% heterosexual, 17% sexual minority) remaining abstinent over the 4-year study. A **low number of participants used evidence-based cessation methods**, i.e., quitlines (1-4% use) and NRT (26-32% use); rather, the majority attempted to quit unassisted. They found:

- For **sexual minority women**, **physical fitness** was a motivator to quit;
- For both groups (heterosexual, sexual minority adults), the **predominant motivator to quit was health-related: future health**, **current health problems** or having a **concerned family member**;
- The **cost of tobacco** was a leading motivation for all **sexual minority adults**; and,

- **Having a household member who also stopped using tobacco increased the quit success rate**.

Transgender and gender-nonconforming individuals who smoke and who wish to receive feminizing estrogen hormone therapy are at an **increased risk for cardiovascular disease/ venous thromboembolism,** and therefore should be strongly encouraged to quit smoking (Alshire et al., 2019). Some limited research at the Boston Medical Centre in 2016 demonstrated that 64% of transgender women who were current smokers when they began hormone treatment quit smoking after initiating treatment. As such, **for some trans people**, **receiving hormone therapy** and/or having **gender-affirming surgery** may be a motivator to quit (Cartuhabi-Barrera et al., 2021).

For the 2SLGBTQIA+ population, having content that is **culturally tailored** is essential, as is increasing awareness that these supports exist (Berger & Mooney-Somers., 2017; CDC, 2022; Matthews et al., 2019; Patterson et al., 2021). As noted previously, **cultural tailoring can include** having members of the community as smoking cessation program facilitators, meetings being held in 'safe' community spaces, community members seeing themselves in campaign materials and messages, and, the offering of peer support. For example, Matthews et al. (2019) gathered feedback from LGBT smokers to inform the redesign of draft materials (letters encouraging individuals to contact a quitline counsellor and outreach text messages), improving perceptions that the revised materials would be acceptable to community members. **Discussion of 2SLGBTQIA+ specific issues** (e.g., specific smoking triggers, the cultural acceptance of smoking within the community, stress, hormone replacement therapy and gender-affirming surgery), **is imperative** within smoking cessation programming for the 2SLGBTQIA+ community. The CDC (2022) also advocates for '**barrier-free, widely promoted coverage of all evidence-based cessation treatments** by all types of health insurance.'

In a 2017 systematic review of smoking cessation programs, Berger & Mooney-Somers found that **behaviour-change techniques (BCTs)** were effective in contributing to increased quit rates within the LGBT community. Potentially effective BCTs **involved participants in their quit attempt** (e.g., clients considering their barriers/facilitators, completing an assessment or making a commitment). "*Providing advice, focusing on smoking behaviors, focusing on ex-smoker identity, and measuring expired CO [carbon monoxide] appear to be ineffective among our sample*." The authors acknowledge more research is needed and suggested that participatory methods (noted above) may be most effective for smoking cessation in LGBT individuals.

In the USA, the National LGBT Cancer Network maintains a list of **best practices for tobacco programming in the 2SLGBTQIA+ community**. Originally assembled by LGBTQ public health professionals in 2007, the list has been updated and undergone expert review several times since. They suggest:

1. Promote LGBTQ professional safety and leadership in public health.

2. Include LGBTQ community members in policy planning steps.

3. Monitor the impact of tobacco/cancer on LGBTQ populations.

4. Establish cultural competency standards for agency and agency-funded programs.

5. Fund community-based programs.

6. Routinely integrate LGBTQ-tailored materials into larger campaigns.

7. Disseminate findings and lessons learned. (National LGBT Cancer Network, 2019).

1.3 Key Themes

The following provides a brief overview of key themes identified from the peer-reviewed and grey literature for the 2SLGBTQIA+ community.

CULTURAL ADAPTATIONS

It was repeatedly identified that **culturally-tailored** smoking cessation programs for 2SLGBTQIA+ individuals are necessary (e.g., Baskerville et al., 2018; Berger & Mooney-Somers, 2017; CDC, 2022; Matthews et al., 2019; Matthews et al, 2019b; Patterson et al., 2021; Wheldon and Wiseman, 2020). Cultural adaptations can include features such as **creating a safe space** for cessation programs to occur, **using 2SLGBTQIA+ facilitators**, discussing **community-specific triggers/issues**, ensuring the use of **appropriate** wording in promotional materials and resources, and, that these same materials/resources include **community representation** (further detailed in the next point).

"*Content should be tailored to the people in the group and the group dynamics.*" Berger & Mooney-Somers, 2017.

Importantly, the **uniqueness and needs of sub-populations** must also be recognized. For example, transgender and intersex people may not identify as LGB and may not respond to gay imagery (Berger & Mooney-Somers, 2017). Adaptations can include the planning of inclusive cessation programming that addresses issues transgender individuals may experience (e.g., hormone replacement therapy), acknowledging the different motivators of individuals and or

conducting group sessions with members of the same sexual orientation so participants feel safe and comfortable sharing.

"***Community-based tobacco cessation programs should be responsive to differences in gay and bisexual men and women***" (Wheldon and Wiseman, 2020); cessation programs must **consider the uniqueness** (gender, sexual identity) **within the 2SLGBTQIA+ communities**.

COMMUNITY-REFLECTIVE/LED

Smoking cessation programs that **developed partnerships with 2SLGBTQIA+ community-based organizations or leaders**, had sessions that were **co-facilitated by members of the community** and or that **offered peer support** were perceived as effective and often demonstrated improvements in quit rates (Aleshire et al., 2019; Baskerville et al., 2018; Berger & Mooney-Somers, 2017).

HEALTHCARE PROFESSIONALS

Many trans people report "*high levels of violence, harassment, and discrimination when seeking stable housing, employment, health or social services*" (CMHA, 2023). Aleshire et al., (2019) stated that "*LGBT individuals report **avoiding the healthcare system due to past negative experiences or fear of homophobic or transphobic reactions.***" In their qualitative study of 13 **'LGBT-friendly' healthcare providers** in Kentucky, USA, Aleshire and colleagues found that **tailored tobacco treatment services were not universally provided even by those who identified as LGBT-friendly**. The literature suggests that healthcare professionals should be encouraged to increase their awareness of the social determinants of health and the context in which LGBTQ+ clients live (i.e., facing many years of societal and healthcare discrimination) and be appropriately trained to provide patient-centred care – which means tailoring the delivery of healthcare to the individual patient's values, preferences and needs.

CONTRIBUTING FACTORS

As noted earlier, the 2SLGBTQIA+ community faces unique issues that contribute to increased levels of smoking among the population (CDC 2022; CMHA 2023; Ontario Tobacco Research Unit, 2021). Acknowledging the **social, psychological and economic issues** that

contribute to smoking behaviours is an important factor in the development of a successful program. Aleshire et al., (2019) suggest that **holistic tobacco treatment interventions** are needed and that such interventions should consider the **barriers to successful cessation**, such as **high levels of stress** and the **pro-tobacco social norms** in the LGBT community.

For the 2SLGBTQIA+ community, the reviewed literature suggests smoking cessation interventions need to be **inclusive, community-reflective and culturally tailored**. They should be **offered by trained healthcare professionals with peer support, using strengths-based messaging**, and **address the root causes** or contributing factors **to smoking initiation** and its **continued use**.

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2. Lower Income

BACKGROUND CONTEXT

The smoking rate among low-income populations is disproportionally high at **23.4% for** those in **the lowest-income quintile,** as compared to **12% among Canadians** in the **highest-income quintile** (Huynh et al., 2022). According to data from the Canadian Community Health Survey (CCHS), in 2019 in **Nova Scotia**, as noted by the Canadian Partnership Against Cancer, **22%** of **females** and **39%** of **males aged ≥ 18 years** in the **lowest household income quintile** were **daily or occasional smokers**. Interestingly though, in Prince Edward Island, the 2019 CCHS trends in smoking were different from those in Nova Scotia. In the lowest income quintile, the **male smoking rate** was 22% versus 12% for those in the highest income quintile. However, among females, approximately **10%** in the **lowest-income quintile** were **daily or occasional smokers** versus **22%** in the upper-income **quintile**. [READER NOTE: Additional PEI data should be examined to validate this observation.]

Smoking can exacerbate financial stress and poverty. In Australia, "*disadvantaged smokers have reported frequent* ***experiences of deprivation and financial stress caused by their smoking****, such as* ***going without meals****,* ***substituting food choices*** *and* ***paying bills late*** *in order to purchase cigarettes"* (Greenhalgh & Scollo, 2022). Although smokers of low socioeconomic status (SES) are **as likely to make a quit attempt** as those of higher SES, they are typically **less successful**.

*"**Social** (e.g., low social support for quitting), **psychological** (e.g., low self-efficacy) and **physical factors** (e.g., greater nicotine dependence) all contribute to the higher tobacco use among socially disadvantaged populations."* Greenhalgh & Scollo, 2022.

Smoking and exposure to **second-hand smoke in the home** have been **correlated to lower levels of income,** as well as **educational attainment and occupational skill** (PHAC, 2018). The prevalence of smoking among adults with **less than a high school education** was almost four times that of university graduates, while twice as many unskilled workers versus professionals smoked. Provincial data from the 2019 CCHS shows the smoking rates at 22-29% for females and 36-38% for males in PEI and NS for those with less than secondary school versus 11-12% for females and 14-17% for males with post-secondary education.

Pisinger et al., (2022) also noted the '**strong social gradient' in smoking**:

> "*The **poorer and/or less educated a person** is **and** the **more mental health or abuse problems a person has**, the **higher the prevalence of smoking**. Studies have suggested that the high smoking prevalence **may be a result of low tobacco health risk awareness, widespread smoking among family and friends, low social support for quitting, stronger addiction to tobacco, lower likelihood of using pharmacotherapy or completing smoking cessation courses, psychological differences** such as lack of self-efficacy, and tobacco industry marketing."*

- *"As a result of this, **poor, low-educated persons carry the heaviest burden of smoking**."*

Another relevant factor for those of lower income is housing insecurity. A study in Ottawa found that **96% of unhoused individuals or at risk for being so reported smoking in the past year**, with similarly high trends in the USA (70-80%) (Huynh et al., 2022).

SMOKING CESSATION INTERVENTIONS

Pisinger et al., 2022 state: "*Evidence of interventions that work among lower socioeconomic groups is sparse*." According to a systematic review of research over the past decade into cessation among low SES and other disadvantaged groups, the Cancer Council in Australia (Greenhalgh & Scollo, 2022) suggests that '*the current research output is not ideal or optimal to decrease smoking rates*.'

Huynh and colleagues (2022) completed a **systematic review and meta-analysis of 33 tobacco dependence management studies** (most USA-based) in **low SES populations**. There were over 17,000 participants. Demographic characteristics included: an average age of 37 years; one-third identified as male and two-thirds as female; 39% were Black and 2% were of

Indigenous descent. Many studies (>40%) included participants with **histories of mental health disorders** (anxiety/depression) and 1-in-4 included those with **past substance use** disorders. Over **70% of studies** reported **participants' education as being less than high school**. Trialed interventions included **counselling** (varied formats, duration and techniques), **pharmacotherapy** (typically NRT), **social support**, **incentives** for participation and or socioeconomic support including non-formal **education**, with a range of one to six intervention components per study. Quit rates varied from 1% to 36%. Findings indicated that **multicomponent interventions achieved higher quit rates than control.** These interventions **address different aspects of the recovery process**, **can be individualized/apply a patient-centred approach** and **can enhance overall treatment adherence and retention** (Huynh et al., 2022).

- The authors recommended that tobacco dependence interventions for those of low SES employ a **community-based participatory-action approach** to **address the underlying psychosocioeconomic-structural factors** at play for this population. The inclusion of proven combination pharmacotherapies was also recommended.

Kock et al. (2019) examined **individual-level behavioural smoking cessation interventions, tailored or not, for those experiencing socioeconomic disadvantages**. Studies assessed socioeconomic position via income, eligibility for government financial assistance, occupation and housing. Forty-two studies with over 26,000 participants were included, with the majority (71%) being USA-based (none were Canadian). Trialed interventions with **socioeconomic-position-tailoring** included **in-person or telephone-delivered behavioural interventions**, **digital interventions**, **financial incentives**, or **brief interventions**. **Individuals who participated in an intervention, irrespective of tailoring, were significantly more likely to quit smoking than were control participants**. **Socioeconomic-position-tailored interventions did not yield better outcomes** compared with non-tailored interventions for disadvantaged groups.

- The authors concluded that "*...**individual-level interventions can assist disadvantaged smokers with quitting**, but there were no large moderating effects of tailoring for disadvantaged smokers. **Improvements in tailored intervention development might be necessary to achieve equity-positive smoking cessation outcomes***."

2.1 Challenges

Cessation programming for low SES communities can be **challenging**. For example, although a **2019 Cochrane review** concluded with a high certainty of evidence that successful quitting in the long term can be improved by **financial incentives** (note: the majority of the studies were USA-based with mixed populations), a community-oriented study with six municipalities in Denmark found that **financial incentives offered** when attending a municipal

smoking cessation program **did not benefit smokers with low SES** (as compared to an educational campaign encouraging people to sign up for a standard smoking cessation program) (Pisinger et al., 2022). [Low SES was defined as educational attainment of up to high school or completion of short work-related courses; or, being unemployed and receiving welfare benefits.] The highest proportion of successful quitters were those of high SES who were offered financial incentives.

- ☛ Pisinger et al., (2022) suggest **reasons for the lack of successful quit attempts/rates** include "***strong tobacco addiction, less use of smoking cessation pharmacotherapy, quitting of treatment, early drop-out from smoking cessation programs, reduced social support for quitting and low self-efficacy***." Of note, in this study, significantly more persons of low SES were lost to follow-up.

Barriers to smoking cessation among low SES communities often relate to the **underlying causes of smoking**. Feelings of guilt, shame and stigma can impede help-seeking among low-SES smokers (Greenhalgh and Scollo, 2022). Stress is pervasive in low SES communities and many individuals turn to smoking as a means of **stress management** or as a "time out." A study of homeless youth found that smoking was used to cope with **poverty, unstable employment and housing, limited transportation access, and food insecurity** (Patterson et al., 2022). Access to transportation, nutritious food, stable housing and other social determinants of health are **challenges experienced by vulnerable populations** such as those of low SES (Huynh et al., 2022).

The pervasiveness of smoking in socially disadvantaged areas means that smoking is extremely **visible and normalized** in these communities (Woo, 2022). Additionally, it means that there is **low social support** for those trying to quit, along with low self-efficacy (Huynh et al., 2022; Pisinger et al., 2022). Along with the increased prevalence of smoking in the lower income community, there is a **higher daily consumption** among individual smokers themselves. This leads to **high levels of nicotine dependency**, decreasing the likelihood of a quit attempt being successful (Greenhalgh & Scollo, 2022; Huynh et al., 2022).

An **additional barrier** to accessing telephone-based or online cessation support (e.g., quitlines), is that some low-income individuals **may lack access to a phone** or cannot afford the **costs associated** with **making a call(s) or using data from a mobile phone**.

While a great deal of focus is often put on health equity for this group, there is evidence to show that **targeted interventions can contribute to further social inequalities** in health due to a

propensity to ignore the structural determinants that lead to elevated health risks in such populations (Lapalme, 2021). When cessation programming is delivered as part of research or a trial, for example, challenges can present due to time constraints. The single-timepoint objective measurements (e.g., carbon monoxide monitoring or abstinence) that are standard in clinical research are unable to capture the complexity of smoking cessation patterns over time as they oscillate based on **socioeconomic factors including food security, healthcare and social support** (Huynh et al., 2022). Limited-timepoint data not only fails to provide the whole picture; it also does not provide a regular monitoring system to assess the long-term efficacy of cessation programs (Su et al., 2022). A **harm-reduction approach** could be applied in future research programs.

Literacy levels can also impact cessation programs and or those with a research focus as many studies require participants to complete forms and surveys while most cessation programming provides some educational content, typically via reading materials (Hayes et al., 2022).

The setting and format of cessation programs can impact their success. While **group programming** is often more cost-effective, Hayes et al., (2022) revealed several issues that impede their success. **Low attendance** is a well-known issue for group interventions. Provided that participants can be recruited and they attend, the issue then shifts to the comfort of actively participating in the group which can be impacted by the willingness to quit as well as **feelings of shame or guilt** within individual participants.

2.2 Success Factors

The literature suggests that a successful smoking cessation intervention will **address the underlying causes of smoking**, including sources of stress and the socioeconomic burdens that many living in low-SES communities face such as **food security, shelter and income** (Patterson, 2022; Rogers et al., 2022). Successful programs included: **finding solutions that replace the use of cigarettes as stress management**; **addressing physiological nicotine dependence**; **enhancing self-efficacy**; and, **referrals to social services** (Greenhalgh & Scollo, 2022; Patterson et al., 2022; Rogers et al., 2022; Vinci et al., 2022). As Greenhalgh and Scollo (2022) noted, several studies have shown that smoking cessation rates can be increased by **addressing the income/wage challenges** of socioeconomically disadvantaged smokers, illustrating the importance of **addressing the determinants of health and using a holistic approach**.

Addressing the challenges of **group interventions** mentioned in the previous section, in their 2019 systematic review, Kock et al. found **that individualized smoking cessation**

interventions are effective in socioeconomically disadvantaged groups. To address literacy barriers, educational content can be produced in formats other than written materials (e.g., videos).

With respect to NRT, a study among Black disadvantaged adult smokers in the USA showed a large preference for **lozenges over patches,** perhaps due to the immediate craving response the lozenge provides (Liu et al., 2022). It has also been shown that **having free access to NRTs results in higher abstinence rates** among women living in disadvantaged communities in Ireland (Hayes et al., 2022). The authors did note that low literacy was a barrier for those of social disadvantage, suggesting the future implementation of the intervention would need to address this issue. To combat **literacy barriers** when sending letters and text messages to study participants, Hitsman et al., (2022) used words, **graphics and formatting**.

A small systematic review looking at **proactive referrals by healthcare professionals to behavioural cessation programming** showed higher enrollment rates with the referral, especially among low-income smokers (van Westen-Langerweij, et al., 2022).

Similar to suggestions for smoking in the 2SLGBTQIA+ community, the USA's CDC (2022) also advocates for **barrier-free, widely promoted coverage for all evidence-based cessation treatments** by all types of health insurance for those of low SES; sharing of **health messages that feature people with low SES** and their experiences; and, integrating clinic **screening and treatment for commercial tobacco** use in all healthcare settings and with all types of patients. Australia further suggests that organizations could **'geotarget' interventions** in those geographic areas where there are a high number of low SES smokers which may help compensate for low SES smokers' relatively low quit rate, potentially reducing health disparities (Greenhalgh & Scollo, 2022).

2.3 Key Themes

The challenges created and exacerbated by having fewer financial resources than necessary are well known: stress, low education and literacy levels, poverty, food insecurity and inadequate housing. It is these same challenges that contribute to high levels of smoking behaviour in individuals from low-income communities. In day-to-day life, for some, smoking provides an escape and a way to relieve stress. If the underlying causes of smoking are not addressed, smoking cannot be reduced.

MULTICOMPONENT INTERVENTIONS, HOLISTIC APPROACH

Although Kock et al., (2019) did not find a benefit of *individual-level socioeconomic-position-tailored interventions*, Huynh and colleagues (2022) showed that **multicomponent interventions** can be more effective in achieving higher smoking quit rates than control. They suggest interventions can be tailored to address the daily challenges/determinants of health low-income individuals may face, including a **lack of social support**, **financial stress**, **co-addictions** such as substance use, **low self-efficacy** and life opportunities.

Given that low SES smokers are less successful in their quit attempts, **interventions that promote adherence** may be helpful. These include providing **greater choice and sampling of NRT**, and, offering interventions that **enhance resiliency, motivation, self-efficacy** and those that **address life stressors** (Greenhalgh & Scollo, 2022).

Aligned with the above is a holistic, person-centred approach. The Cancer Council in Australia (Greenhalgh & Scollo, 2022) further adds that **employing community-based participatory approaches** to develop tailored approaches, **using effective combination pharmacotherapies** (e.g., varenicline and NRT), incentives, and or **peer facilitators** along with **enhanced social support** are needed to better support low socioeconomic populations.

For the lower income community, the reviewed literature suggests smoking cessation interventions need to take a **holistic, person-centred approach**, and similar to the 2SLGBTQIA+ communities, address **the root causes of smoking initiation** and its **continued use**.

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3. First Nations

BACKGROUND CONTEXT

As described by Alberta Health Services (2022) in their *'Tobacco, Vaping and Cannabis Information Series'* for Indigenous People in Canada and Tobacco, "***The long historical intergenerational traumas**, which include **colonization**, **dispossession** and **residential school systems** have been **linked to disconnection from family and community networks**, **extensive loss of language, cultural genocide**, and **institutionalized racism**. The **legacy of colonialism** in conjunction with the **disparities in the socioeconomic determinants of health** which include employment, education, housing, income, food, stable eco-system, access to healthcare, sustainable resources, social justice and health equity has **negatively impacted** their [**Indigenous Peoples'**] **physical** and*

psychological health outcomes *and* ***increased*** *their* ***vulnerability to indulgence in harmful health behaviours*** *such as* ***smoking*** *tobacco and* ***alcohol abuse****."* (Alberta Health Services, 2022)

They further add, *"...it is essential to* ***recognize*** *that the* ***disempowerments*** *and* ***deficits that Indigenous peoples face as a result of socioeconomic*** *and* ***political inequity****, in the* ***context*** *of* ***colonization, do not represent or define Indigenous people****. The* ***constant narrative*** *of* ***negativity, failure and disadvantages of Indigenous people impacts their health and well-being in multiple ways****. It also* ***contributes to stereotyping*** *of Indigenous peoples and* ***leads to*** *different forms of* ***external and internal racism****, and* ***race-based bias*** *and it* ***shades out solutions that recognize their strengths****. Therefore,* ***positive reframing of the deficit narrative*** *and* ***shifting focus to the strength-based unique assets, capabilities, knowledge and complex healing and wellness traditions that they own are critical components to meaningful healing***."

Considering the above, the remainder of the **First Nations section** will use a **strengths-based approach**.

As noted earlier, **88.4% of Islanders** and **86.3% of Nova Scotians** aged **15 and older** were **non-smokers** according to the Canadian Tobacco Survey in 2020. The **national non-smoking rate** was **90%.** Indigenous Peoples (First Nations in NS and PEI) have non-smoking rates that are 1.4-2 times lower than non-Indigenous Canadians. The **non-smoking** rate among **First Nations adults living on reserve** was **49.8%.** Settler introduction of tobacco has contributed to these high prevalence rates (Barker et al., 2021). In fact, *"...many factors including social, cultural, physiological and psychological stress"* have played a role in the lower non-smoking rates of Aboriginal people (Khan et al., 2021).

First Nations youth, 15-17 years old are eight times more likely to smoke than other Canadians their age. Stress is a common risk factor for smoking among First Nations youth. Those with unstable home lives characterized by neglect, parental drug use, grief and distress were more likely to smoke according to a First Nations Information Governance Centre (FNIGC) report (FNIGC, 2021). Per the 2008/10 First Nations Regional Health Survey, **7-in-10 youth aged 12-17 years did not smoke**. Of those that did, half were daily smokers while the other half were occasional smokers. **Three-quarters of males were non-smokers**, while **66% of females were non-smokers**. Youth who **stayed in school had higher non-smoking rates** (79%) than those who dropped out of school (59% non-smokers) (FNIGC, 2021).

According to the First Nations Regional Health Survey, Phase 3 from 2008/10, the **non-smoking rate during pregnancy** for First Nations women in Canada was **53.1%**. As well known: "*Commercial tobacco use during pregnancy poses risks to the fetus such as low birth weight and an increased likelihood of sudden infant death syndrome (SIDS). Secondhand commercial tobacco smoke exposure also causes acute lower respiratory infections in infants and young children*." (Registered Nurses' Association of Ontario [RNAO], 2022). In Australia, Daly et al. (2021) noted the **non-smoking rate of Aboriginal women as 55%** (similar to the Canadian data) versus **88% for non-Aboriginal women**. "*The impact of colonization, racism, socio-economic disadvantage, marginalization and the resulting stressful life circumstances are all likely contributors to the disparity of higher smoking rates amongst Aboriginal women vs non-Aboriginal women*" (Daly et al., 2021).

READER NOTE: Two-Eyed Seeing is a guiding principle that refers to learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, from the other eye with the strengths of Western knowledges and ways of knowing, and, learning to use both eyes together for the benefit of all. Mi'Kmaw Elder Albert Marshall, 2004 (Institute for Integrative Science and Health, 2023).

SMOKING CESSATION INTERVENTIONS

Based on the literature search, much of the published work regarding **smoking cessation** interventions in **Indigenous communities** has taken place in **Australia**, with some works from **Canada** and the **USA**. [Note: There were no cessation interventions readily identified for First Nations people that identify as Two Spirit]. Although a little older than desired, a **systematic review** by Minichiello et al., (2016) was included in the literature appraisal given 19% of the 87 articles identified were Canadian-based initiatives. Trialed **interventions** across all literature **aimed to reduce, cease or protect Indigenous peoples from the harms of commercial tobacco use**. Three levels of activities were the target of various initiatives in the literature overall:

- **Individual-level activities**: pharmacotherapy (including free NRT shipped to individuals), behavioural support, mobile app support, training health professionals and incentives;
- **Community-level activities**: enhanced education (including education and toolkits for healthcare providers and Indigenous People), media campaigns, quitlines (including some staffed by Indigenous health workers) and the use of ceremonial practices or cultural protocols; and,
- **Legislative-level activities**: policies, laws and taxes.

Articles reviewed for this report address one or more of the above targeted-level activities. Several published studies aimed to support a **broader audience** (e.g., the general population) of which a sub-set of participants were Indigenous, while other works had a narrower focus, for example, **pregnant Indigenous women** or **Indigenous Fathers** in Canada.

An example of a large **multi-site, multicomponent intervention** study is the **Mayi Kuwayu Study**, a **National Study of Aboriginal and Torres Strait Islander Wellbeing** – "*the largest existing prospective cohort study of Aboriginal and Torres Strait Islander peoples in Australia*" (Cohen et al., 2021). Across the country, the Tackling Indigenous Smoking (TIS) program incorporated a mix of the following activities over time.

- ✓ Smoke-free spaces.
- ✓ Brief interventions: screening, assessment and brief advice regarding tobacco use.
- ✓ Community engagement, education and training.
- ✓ Media campaigns and social media campaigns.
- ✓ One-on-one or group smoking cessation support.
- ✓ Promotional resources: posters and pamphlets.
- ✓ Provision of medicines to help people stop smoking (NRT, varenicline and bupropion).
- ✓ Anti-e-cigarette/anti-vaping activities.

The Mayi Kuwayu Study dataset included survey responses (**smoking-related attitudes and behaviours**) **from 8549 Aboriginal and Torres Strait Islander people aged 16 years and older** during **2018-2020**. Participants were classified as residing in either a TIS-funded area (42%) or a non-TIS-funded area (58%) based on their postal code. Participants were well matched (26% current smokers, 33% past smokers; 42% aged $\geq$ 55 years; 62% women; and, 42% had a grade 10 or below education). A smaller percentage of TIS participants resided in a major city (33% versus 48%).

When asked, '**Do you agree that your community disapproves of smoking**?' **36% responded a fair bit or a lot**. Of current smokers, **76% reported they wanted to quit**, while 35% felt that smoking had made them sick in the past and 56% agreed a fair bit or a lot that smoking will make them sick in the future. "***Personal health, cost and health of family*** *were the most commonly reported* ***reasons for*** *current smokers* ***wanting to quit*** *and for past smokers quitting*."

Among **current smokers in TIS-funded communities,** there was a significant **18% lower prevalence of smoking inside the home** (22% TIS versus 28% in non-TIS areas), a **21% lower prevalence of smoking >21 cigarettes/day** (10% versus 13%) and a **13% lower prevalence of smoking the first cigarette within 5 minutes of waking** (25% versus 29%). The authors note that

previous research on smoke-free homes and workplaces has shown a link between smoke-free places and other anti-smoking attitudes and behaviours, including wanting to quit, having made a quit attempt in the past year and having ever stayed quit for a month or more. They further add, "*...**what might be perceived as small effects at the individual level can be substantial at the population level**, especially in the context of a population health intervention with relatively broad population reach, such as TIS*" (Cohen et al., 2021).

While a variety of qualitative studies and smoking cessation interventions (e.g., culturally adapted supports including NRT; provider training) have been conducted within the Australian population of

pregnant Indigenous women who smoke, including women having Indigenous children, there was **limited research published for interventions trialed with Canadian Indigenous women** (Gould Judean et al., 2022; Kennedy et al., 2022; Rahman et al., 2022; Daly et al., 2021). However, **RNAO** recently released a comprehensive **best practice guideline for Canadian providers** entitled, ***Promoting Smoking Reduction and Cessation with Indigenous Peoples of Reproductive Age and Their Communities*** (2022). The 150+ page document aims to provide Canadian nurses and circle of care providers with **evidence-based recommendations** on **culturally safe and meaningful ways to support smoking reduction and cessation with Indigenous Peoples of reproductive age**, their **support networks** and **communities** to improve health and wellness.

In preparing the comprehensive document, RNAO completed an **environmental scan** of existing guidelines, undertook a **literature review**, led **20 key informant interviews**, had an on-site **visit** with both an **urban Indigenous health team** and an **Indigenous midwifery practice**, and, consulted with a **diverse advisory panel**. [READER NOTE: The RNAO literature review was very comprehensive, and as such, a detailed review of the studies regarding pregnant Indigenous women who smoke identified for this review is not provided here. See the companion Excel file for details of some of the studies reviewed.]

Based upon all of the work RNAO led, one conditional and eight strong **recommendations for smoking reduction and cessation supports** fall within the domains of practice, education, and system organization and policy.

Practice:

- ✓ Smoking cessation services should **be Indigenous-led/grounded in a wholistic (meaning whole-person) approach** to health/wellness and be **culturally safe** and **tailored**.
- ✓ Smoking reduction and cessation **counselling are** to be offered **during pregnancy** and **post-partum** to the **individual** and their **support network**.

- ✓ Wholistic/culturally specific smoking reduction and cessation services be offered to the support network.
- ✓ **When needed**, **offer NRT in addition to counselling during pregnancy** to the circle of care (*this is the only conditional strength recommendation*).

Education: (aligned with **Truth and Reconciliation Commission**, 2015, Call to Action # 23 and #24)

- ✓ **Integrate Indigenous health and culturally safe content in academic settings/curricula.**
- ✓ Integrate **Indigenous health and culturally safe content** in continuing professional development for **all health providers.**

System, Organization and Policy:

- ✓ **Advocate for equitable access** to smoking reduction and cessation services for Indigenous Peoples of reproductive age and their support network (can include access to circles of support and NRT).
- ✓ **Embed** smoking reduction and cessation **services within existing health and wellness programs**.
- ✓ Promote smoke-free spaces.

The **Dads in Gear (DIG) Indigenous Program,** led by Dr. Joan Bottorff at the University of **British Columbia** is a unique, evidence-/wise-based program for Indigenous dads and granddads who want to be healthy and smoke-free (Bottorff et al., 2019). "*DIG breaks with the well-worn traditions of focusing on women who smoke in pregnancy/ postpartum period by* ***directly messaging men about their health and the connectedness of their smoking practices to the well-being of their family***."

The program focuses on three core integrated topics: **smoking cessation, fathering, and physical activity**. Offered over 10 weeks, each 2.5-hour session supports Indigenous men in their efforts to be **healthy and smoke-free**, with **creative and masculine approaches** that are **activity-based and interactive**. A 2019 qualitative participatory study informed the program design whereby **Indigenous men (First Nations or Métis) and key informants guided cultural adaptations** to the Dads in Gear (DIG) cessation program:

- ✓ The **inclusion** of **information/discussion** on **traditional tobacco**.
- ✓ Integrating **supports** for stopping the **use of chewing tobacco**.
- ✓ Including **physical activity options that reflect Indigenous men's preferences**.
- ✓ **Extending fathering competencies to** include children of all ages and expanding the focus on fathering to include grandfathers to **reflect family life (multigenerational households) in Indigenous communities**.

According to the program evaluation, at completion, **28% of men reported they were abstinent** and **43% had reduced their smoking** (Bottorff et al., 2019).

3.1 Challenges

The literature identified some challenges regarding the **implementation of research-based interventions with Indigenous People**: participant recruitment, funding delays and intervention fidelity. Some studies suffered from a lack of participant or community interest, concerns about stigma, onerous consent processes and or travel constraints. Delayed or absent dedicated funding undermined the success of some interventions by delaying activities or presenting human resource capacity challenges.

The following information relates to some **challenges with the implementation of smoking cessation services/supports from a First Nations/Indigenous perspective**.

The use of NRT among First Nations communities in Canada was not identified. In Australia, the **use is low among Aboriginal and Torres Strait Islander** adults compared to other Australians (**23%** vs. 42%), with **barriers such as knowledge, access and cost of NRT** potentially impacting its use (Kennedy et al., 2022). Among those Aboriginal persons who reported using NRT, having a higher nicotine dependence was linked to the belief that NRT helped them to quit.

Kennedy and colleagues (2022) found in another study of **Aboriginal healthcare professionals' knowledge and attitudes** that only a **small percentage of providers (23%) always recommended NRT in combination with counselling**. A similar percentage (22%) never recommend the combination. Some providers expressed negative attitudes and beliefs towards NRT, e.g., "*I prefer not to use medications*." Thus, the lower rates of NRT use among the Aboriginal population may also be influenced by the **lack of recommendations for combined treatment by Aboriginal health professionals**.

Another widely available and tested commercial tobacco cessation intervention was the **quitline service**. In Australia, their 'Aboriginal Quitline', in operation since 2013, provides customized and culturally safe assistance to Aboriginal people trying to quit smoking, employing female and male Aboriginal counsellors and an Aboriginal Community Engagement Coordinator. In an evaluation of this service, **key barriers** for Aboriginal people who smoke to use the quitline were the **preference for face-to-face service**, the **perceived cost** of the service, **not having a (working) phone** and **feelings of shame** (Cancer Institute New South Wales, 2022).

In a qualitative study of Aboriginal women who smoked or quit smoking and had been pregnant in the last five years, some of the reasons cited for smoking and or not quitting include **nicotine withdrawal, daily routine** (having a cigarette when drinking coffee), **the social norms** of the community, **others smoking in the home**, the **lack** of **health care professionals asking** or **advising** about not smoking during pregnancy or at follow up, having an **unpleasant experience with NRT** and the **easy availability/access to tobacco products** (Rahman et al., 2022). In the discussion section of their paper, the authors note "*Key barriers to the maintenance of abstinence **in the general population** included: the women's perception of smoking as a means for stress management, lack of social and partner support, extrinsic motivation (i.e. pregnancy) for quitting, and the perception that smoking was part of their identity prior to pregnancy*." (Rahman et al., 2022). They further add that relapse is more common among women with lower SES/educational attainment, as well as those that lack social support or experience postpartum depression.

Daly and colleagues (2021) reported in their survey of 100 Aboriginal women receiving antenatal care in Australia that the three **most common reasons women declined the offer of smoking cessation support** were: a **lack of interest in quitting smoking** (47%), the **belief** that the **support would not be helpful** (22%) and **wanting to quit without assistance** (16%).

For commercial tobacco use in youth, Bougie and Kohen (2018) identified through the Aboriginal Peoples Survey that for **off-reserve First Nations high school students** aged 12-21 years, **peers were influential**: "*A consistent risk factor for smoking among all Indigenous students was having **close friends who engaged in risk behaviours***."

A small pilot trial in Australia aimed to support Aboriginal Australians with a **smoking cessation app** for those interested in making a quit attempt in the following month (Peiris et al., 2019). The app, available in Android and iOS, comprised a **personalized profile and quit plan**, **text and in-app motivational messages** and a **challenge feature** where users could compete with others. The comparator was usual cessation support services. Recruitment challenges led to a much **lower participation rate** (n=49) than the planned 200. The average participant age was **42 years, 55%** had **moderate nicotine dependence,** and ~**30% tried NRT/medication in the past year**. At baseline, **almost half (47%)** of participants **had tried to quit in recent weeks** and **at the 6-month follow-up, only 1 participant in the intervention arm was abstinent**. A process evaluation showed **low to moderate app use** despite high mobile phone use including text and social media. Participants logged 3 sessions each per month for 6 minutes per session. Other key themes from interviews with app users (n=15) included: "*the **powerful influence of prevailing social norms around acceptability of smoking***;" the **role of family and social group support** in

supporting/motivating quit attempts; and **low awareness and utilization of smoking cessation support services** (e.g., quitlines).

The important challenge of **building capacity** within Indigenous communities to support smoking cessation ongoingly was a key theme in the evaluation of the 'IT'S TIME Toolkit', (Barker et al., 2021). [READER NOTE: The Canadian-developed toolkit for First Nations is described in detail in the Key Themes Section.] Evaluation participants indicated the **need to support helpers** (i.e., training the facilitators) to deliver content, build their skills and increase their awareness of the harms associated with tobacco use (Barker et al., 2021). **If helpers are not trained adequately to deliver the toolkit content, then they may not use the developed materials to support clients in furthering their tobacco reduction or cessation journeys**. Capacity building amongst Aboriginal Health Workers in Australia was also highlighted as a challenge by Kennedy and colleagues (2022).

3.2 Success Factors

Several **facilitators** to successful smoking cessation were noted in the literature. Minichiello et al., (2016) concluded in their systematic review that long-term **community investments** coupled with the key themes of **Aboriginal leadership, Two-Eyed Seeing** (described below) **and flexible implementation** were necessary to produce desired changes in smoking rates. **Interventions that were integrated into existing health, social and emotional well-being programs were seen as strong features** (Tane et al., 2022).

In Australia, a survey of remote Aboriginal and Torres Strait Islanders noted **differences between the factors associated with initiating** and **sustaining quit attempts**, drawing attention to the different behavioural processes involved (Thomas and Panaretto, 2022). While Aboriginal and Torres Strait Islanders are more likely to make a quit attempt than their non-Aboriginal counterparts, they are **less likely to sustain a quit attempt** (Kennedy et al., 2022), similar to the literature for lower income individuals.

Making a quit attempt:

- Sociodemographic (i.e., younger age; not able to buy essentials);
- Attitude (i.e., want to quit, worried about their health, want to set a good example for children, see a health benefit if they quit); and,
- Policy exposure (e.g., have an effective smoke-free home, health professional encouraged them to quit, family/friends support/encouraged them to quit).

Sustaining quit attempt of 1 month or more:

- Sociodemographic (i.e., higher level of education, employed);
- Lower nicotine dependence;
- Chewed pituri (native tobacco that has nicotine) in the past year; and,
- Having an effective smoke-free home.

Kennedy et al., (2022) suggested that '**increasing the awareness and knowledge** about the **effectiveness and safety of NRT** may be **important to address acceptance and adherence**, which can potentially influence cessation rates.' Based on the findings of both papers published by Kennedy and colleagues (2022), there may be **opportunities to enhance knowledge** and **awareness** of the **benefits of NRT combined with counselling both** at the **healthcare professional** and **client/community levels**.

"*Receiving smoking cessation training and believing that providing SCC [smoking cessation care] is part of their professional role were both significantly associated with the provision of all the smoking cessation care components*." Kennedy et al., (2022)

The Australian Aboriginal Quitline evaluation report (Cancer Institute New South Wales, 2022) made a series of 14 **recommendations for the delivery of a culturally safe service**. Some program enhancement recommendations include additional targeted promotional activities to create awareness of the service, consider the feasibility of adding free NRT, ensure all counsellors have completed cultural training/use appropriate language, refine procedures to ensure Aboriginal callers are offered an Aboriginal counsellor and consider the feasibility to have a dedicated toll-free number for the Aboriginal Quitline.

For **First Nations youth**, there were **decreased odds of smoking** in those **students who had high scores on the peer educational aspirations scale** and for those who **perceived a positive school environment** (Bougie and Kohen, 2018). The FNIGC First Nations Youth Smoking report (2021) identified **six significant factors** to be **protective against smoking** among First Nations youth:

- ✓ Having **good to excellent** self-rated **mental health.**
- ✓ **Not binge drinking** in the past year (37.6% non-smoking with binge drinking, 84.4% non-smoking with no binge drinking in the past year).
- ✓ **Not using drugs** in the past year (44.2% non-smoking if marijuana use versus 88.7% non-smoking with no marijuana use; 30.2% non-smoking if prescription drug misuse versus 73.2%

non-smoking with no prescription drug misuse; 17.2% non-smoking if illicit drug use versus 73.6% non-smoking with no illicit drug use).

- ✓ Having a **father who works full time** (compared to having a father who does not work for pay).
- ✓ **Not doing volunteer work** in the community (63% non-smokers with volunteer work versus 75.4% non-smokers with no volunteer work [the authors attribute this to the high acceptability rates of smoking in First Nation communities]).
- ✓ **Having friends who do not smoke**. This had the strongest effect: compared to youth whose friends smoke, those whose friends **do not smoke have odds 18 times as high of not smoking themselves**.

3.3 Key Themes

The following section provides an **overview of common themes** that produced **positive changes in initiation, consumption and quit rates** amongst Indigenous People. Positive **improvements** in the number of **smoke-free environments**, a greater **understanding of the harms** of commercial tobacco use and or **increased community interest** in addressing the high consumption rates of commercial tobacco were also observed when the following approaches/considerations were utilized in smoking reduction and cessation initiatives.

Two-Eyed Seeing

"*There is a need to **account for Indigenous and Western ways of knowing**, with priority given to the former, as it is inherently strengths-based, in contrast to the typical deficit-based Western Eurocentric model.*" (FNIGC, 2021.) As noted by Minichiello et al. (2016), "***tobacco cessation programs that include ceremonial practices or culturally based activities report improved quit rates and overall improvements in health compared with Western approaches alone***."

In Canada, the Centre for Addiction and Mental Health (CAMH) collaborated with an Engagement Circle of First Nations community workers, healthcare providers and Elders to design the "**First Nations IT'S TIME Toolkit**" (CAMH, 2019). A toolkit also exists for Inuit People. Both versions of the resource were designed for helpers (i.e., healthcare providers and/or allied health professionals) interested in **supporting First Nations and Inuit in quitting or reducing commercial tobacco use**. The toolkit development was guided by the principle of **Two-Eyed Seeing** "*whereby the strengths of both evidence-based practice (Western knowledge) and wise-based practice (Indigenous Ways of Knowing* [*traditional activities and teachings to support wholistic health and healing*]) *have been combined to support commercial tobacco reduction or cessation through a strengths-based and wholistic approach*."

All of the materials (Helper's Guide, Condensed Guide, Resources and Participant Booklet) can be freely copied, shared and adapted in accordance with the principles of Ownership, Control, Access and Possession (OCAP). [OCAP asserts that First Nations have control over data collection processes and that they own and control how this information can be used.] The **commercial tobacco intervention with First Nations** is organized into **six sharing circles**, each focusing on specific **learning outcomes** (**preparing to quit or reduce use; developing a plan; learning ways to prevent resuming smoking**). Applying the Two-Eyed Seeing approach, sharing circles include both evidence-informed (e.g., psychoeducation, cognitive behavioural skills learning) and wise-based practices (e.g., inviting an Elder or knowledge keeper to open the session, honouring traditional tobacco, smudging, engaging in other traditional activities). For brevity in this report, additional details regarding the intervention can be accessed in the comprehensive document, Helper's Guide.

While the First Nations toolkit was not formally evaluated and published in a peer-reviewed journal, the Inuit version was qualitatively evaluated, with several positive indicators of success (Barker, 2021). A pilot session and a focus group with Inuit living in Ottawa who use tobacco (n=13) and an online survey with a group of helpers who work with Inuit (n=11) were used to evaluate the Toolkit. Participants reported that **session attendance changed their thinking regarding tobacco use**, for example, they **saw** that **quitting was possible** and how their **family could be a motivator** to quitting. They also **learned new strategies** they said they would **consider trying**. Participants said they **heard 'relatable stories'** so they deemed the session of value. Focus group participants indicated they would **take small steps to start the quitting process as a result of attending the session**. They also mentioned specific **tools** in the participant booklet **they would use post-session to track their smoking and behaviours** (e.g., bringing fewer cigarettes versus a full pack, using a tracking sheet).

Within **Australia**, the **'10,000 Lives' initiative** (Khan et al., 2022; Khan et al., 2021) aimed to reduce smoking prevalence in Central Queensland, which includes a population of Aboriginal and Torres Strait Islander people. **Quitlines** offered counselling by Aboriginal and Torres Strait Islander counsellors to **provide culturally safe smoking cessation assistance**, and also offered up to **12 weeks of free NRT mailed to clients,** thereby using a Two-Eyed seeing approach. A key strategy, according to Khan et al., (2022) was **identifying** and **encouraging champions** from clinical and community services **to refer smoking clients** or colleagues **to the quitline**. **Adding free NRT** to the quitline's offerings **increased referrals** as well as **participation** in, and i**nteraction** with, the quitline. There was a **3-fold increase** in the number of Aboriginal and Torres Strait Islander peoples who were **referred to**, **participated in the initial counselling session** for assessment and plan for quit support counselling sessions, and **completed the counselling sessions**. Initiatives such as **tailoring quitline services**, **incentivizing people who smoke** (i.e., free NRT) and **increasing provider referrals to quitline services** can help to effectively address disparities in quitline use by Indigenous persons (Khan et al., 2022).

Several other Australian-based interventions incorporated a decolonized perspective, supported individuals locally to quit, and **balanced evidence- and wise-based approaches** in the **intervention co-design, delivery and assessment** with a percentage of participants successfully quitting smoking (Khan et al., 2021). **Interventions led by Indigenous community members**, **implemented in partnership with non-Indigenous health workers** and **offered as mainstream health services** led to positive change (Minichiello et al., 2016).

Community, Flexible, Capacity-building

Minichiello et al., (2016) found a **change in knowledge** was demonstrated when **access to culturally based health services** were **provided** and **information was grounded "*in the particular local Indigenous context reflecting each community's specific history, protocol and ceremonial framework*.**" They also noted other work by Smylie et al., (2009) in Canada where "*interventions were found to be the least effective when they **did not reflect and build on locally specific experiences and community-generated knowledge***."

The 'IT'S TIME Toolkit' evaluation noted the resource was **culturally relevant and safe**, aligned with Inuit values and incorporated Inuit principles in addition to the Two-Eyed Seeing approach (Barker et al., 2021). The importance of having a **choice** in the activities and resources was also highlighted. Choice allows helpers to **choose which components** of the intervention (Toolkit) they wish **to implement** and **to tailor the approach for specific clients** and or their **communities**.

- In the Helper's Guide they "*acknowledge the diversity among First Nations in Canada in regards to geography, language, protocols, traditional activities, and teachings… there may be instances where we have chosen a word, teaching, or activity that may not be culturally relevant or appropriate for a community…Helpers can customize the language, teachings, or activities to meet the needs of their community – the resources are meant to be flexible and adaptable*."

The **flexibility of the materials** (e.g., provided in Word format to permit editing) **allows choice** in ways to **adapt the content** to **reflect local practices** and **community traditions**, adding in materials or modifying activities/content to implement the session in a group or individual format, in an urban or rural setting, or different First Nations communities. The materials also **support the facilitator's needs** by including checklists, prompts and learning objectives, for example, for those that need that level of support while at the same time having a condensed guide for those with

more experience or more comfortable with facilitation. This supports local capacity building of 'helpers' in the field of smoking cessation.

In the literature, Indigenous interventions often embraced the entire community, not just the individual. Tane et al., (2022) noted the **social, emotional and cultural well-being of the entire community** is often considered. For example, some interventions were offered in a group counselling format to allow the sharing of experiences among community members, while other projects included "***regular engagement with Elders and Leaders*** *(men and women), yarning sessions, on-Country Camps, men's groups, women's groups, weaving and artwork sessions, where these* ***activities were integrated within the cultural life of the communities***." (Barker et al., 2021; Tane et al., 2022). An Ontario workshop for youth "*starts with evidence-based core tobacco content and ensures* ***community-level customization****, which is based on ongoing relationships with Indigenous communities*" and strong relationships with community partner organizations (Habash et al., 2021). Other interventions focused on the broader community to **establish smoke-free places** and were effective in creating smoke-free environments (i.e., Tackling Indigenous Smoking Program, Cohen et al., 2021).

Tane et al., (2022) noted in several projects with Australian Aboriginal women that smoked, **existing social networks and partnerships were utilized to provide participants with access to a range of community resources, adding value to existing programs** with these connections (integration into existing primary healthcare and social, emotional wellbeing programs). A survey of Aboriginal and Torres Strait Islander women aged 16–49 years who were smokers or ex-smokers found that the **most preferred strategies** were **group-based support,** chosen more often by those with moderate to high nicotine dependence or of a younger age, and **holistic support,** chosen more often by those that use Aboriginal health services (Kennedy et al., 2022). Older women or those in an urban setting preferred NRT, online or telephone support. **Intervention offerings that were integrated into existing health, social and emotional well-being programs were seen as strong features** (Tane et al., 2022).

Role Models

The **influential role of cultural leaders within First Nations communities** must be recognized. **Interventions led by Indigenous community leaders** led to positive change and had high levels of community ownership of smoking cessation interventions (Minichiello et al., 2016; Tane et al., 2022). Kennedy et al., (2022) noted that Australian Aboriginal women would prefer to receive smoking cessation support from Aboriginal health workers. From the perspective of being a mother, a qualitative study in Australia found that half of the participants (12 Aboriginal women who smoked tobacco currently or in the past, and had been pregnant in the last five years) would like to

set a good example for their children so that they do not think smoking is normal or start smoking in the future (Rahman et al., 2022).

Related to the concept of leadership, a suggestion of having **Indigenous clients as co-facilitators** in the implementation of the 'IT'S TIME' workshop intervention was proposed to increase buy-in from fellow Indigenous People and to support capacity building from a client and community perspective (Barker et al., 2021). **Taken as a whole, the literature regarding First Nations communities suggests that interventions should have strong community governance and leadership, e.g., with Elders, community leaders and mentors.**

Dual role of Tobacco

For many, if not most First Nations communities, there is a **distinction between traditional, sacred tobacco and commercial tobacco**. The First Nations Health Authority in British Columbia states on its Respect Tobacco webpage: "*For thousands of years, natural tobacco has been an integral part of Aboriginal culture in many parts of British Columbia and Canada. Used in ritual, ceremony and prayer, tobacco was considered a sacred plant with immense healing and spiritual benefits. For these reasons, the tobacco plant should be treated with great respect.* ***We should also be very careful not to confuse traditional tobacco and its sacred uses with commercial tobacco and the addiction epidemic we see today***."

While cigarette smoking has been normalized in many First Nations communities, the literature suggests that **interventions should include the option to teach about the distinction between commercial and ceremonial tobacco**. For example, the First Nations IT'S TIME Toolkit suggests that the first of six sharing circles discuss both honouring traditional tobacco and the history and impact of commercial tobacco in First Nations communities (CAMH, 2019).

Harm Reduction

Several Indigenous publications (e.g., Barker et al., 2021; Borrorff et al., 2019; Habash et al., 2021) applied a harm reduction approach. The RNAO guideline "***Promoting Smoking Reduction and Cessation*** *with Indigenous Peoples of Reproductive Age and Their Communities"* clearly articulates this important consideration in its title (RANO, 2022). Although a primary goal of the Community Advised Smoking Cessation project may be abstinence (i.e., quitting), taking a harm reduction approach can help improve client and community engagement and support the goal of reducing the burden of commercial tobacco on those facing health inequities.

In summary, as noted by the Ontario Tobacco Research Unit (2018) for First Nations interventions regarding the use of commercial tobacco, "***cessation interventions should be multifactorial, taking account of the social determinants of smoking including historical antecedents, community norms, cultural strengths, recognition of individual and community needs, and community involvement and leadership from Indigenous people***."

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4. Commonalities

Across all three priority populations, **common themes** included **understanding and addressing the underlying causes of smoking** (social, psychological and economic issues), **applying a person-centred and holistic approach**, and having **trained and culturally competent healthcare professionals reflective of the community delivering smoking cessation services in the community that are evidence-informed, and for First Nations that are also wise-based**.

Additional common themes from the literature:

- There is intersectionality among the priority populations with many First Nations and 2SLGBTQIA+ individuals being of lower income.
- Smoking behaviour is normalized across the priority populations.
- Many individuals lack the social support of friends/family.
- Discrimination, stigma and stress were commonly cited, and often a reason for not help-seeking with health professionals given past negative health system experiences.
- Programming may lack cultural contextualization.
- There was a lack of awareness of and or access to available supports (e.g., quitlines) and cessation medication/NRT.
- Concurrent substance use or mental health issues can be present.
- Priority communities were less likely to succeed in their quit attempts.

Limitations

This literature review is limited by the volume of information gathered based on project constraints. An exhaustive search was not feasible given the condensed timeline and availability of resources. Rather, this review aimed to identify a sufficient number of articles, both peer-reviewed and grey literature, to inform the work of the Community Advised Smoking Cessation project knowing that additional insights would be gathered from the communities themselves. The project is focused on the smoking of commercial tobacco, primarily cigarettes, so the literature specific to vaping was not explored, although it is well-known that the use of e-cigarettes and or vaping is

increasing amongst the younger demographic. Additionally, searches were primarily focused on 'smoking cessation', so the literature on 'harm reduction' was not reviewed although some documents did include such strategies (e.g., Barker et al., 2021; Bottorff et al., 2019; RNAO, 2022).

In total, 696 articles/reports were identified and 108 reviewed (2SLGBTQIA+ n= 40; Lower Income n= 25; First Nations n= 43). The information contained within this report does provide several important considerations and key themes for the Community Advised Smoking Cessation project. These findings, combined with those of the pending participant survey and focus group/sharing circle discussions and the support/guidance of the project Advisory Committee and key partners, are anticipated to sufficiently inform the co-design of evidence-informed and wise-based smoking cessation interventions for the three priority populations.

Conclusion

Both common and some unique needs/challenges within the three priority populations of focus for the Community Advised Smoking Cessation Project were identified in the literature review. For many, **personal health** or **concern for their family** were **motivators** to quit, while a **referral or advice by a health professional** increased enrollment or participation in cessation programming for others. Key themes included **holistic, person-centred approaches** that **consider the root causes/factors that have contributed to smoking initiation and sustained behaviour within the priority populations**. Interventions were successful when they were: **flexible, multicomponent**; had **cultural tailoring**; were **community-led/reflective**; included **peer facilitation/support**; were provided by **competent healthcare professionals**/built local **community capacity** using **strengths-based messaging** (e.g., focusing on the benefits of quitting, including the benefits to household members); and included the availability of free **cessation medications including NRT**. For **First Nations**, the **dual role of tobacco**, the importance of **wise-based approaches (Two-Eyed Seeing)**, **role models** and using **harm reduction approaches** were also top considerations.

The findings in this report provide a foundation of knowledge to inform the co-design of smoking cessation interventions with priority communities. Going forward, LungNSPEI is expected to continue to engage key partners and community members to gather additional insights into local challenges, opportunities and best practices for Nova Scotians and Islanders who smoke, have quit or are interested in making a quit attempt.

Appendix A - Search Strategy

2SLGBTQIA+

73 PubMed articles when narrowed to English, with an abstract and 2018-present.

(bisexual[tiab] OR bisexuality[MeSH Terms] OR bisexuality[tiab] OR bisexuals[tiab] OR gay[tiab] OR gays[tiab] OR "gender identi*" OR "gender divers*" OR GLB[tiab] OR GLBT[tiab] OR homosexual[tiab] OR homosexualities[tiab] OR homosexuality[MeSH Terms] OR homosexuality[tiab] OR homosexuals[tiab] OR intersex[tiab] OR lesbian[tiab] OR lesbianism[tiab] OR lesbians[tiab] OR LGB[tiab] OR LGBT[tiab] OR "men who have sex with men"[tiab] OR msm[tiab] OR queer[tiab] OR "sexual minorities"[tiab] OR "sexual minority"[tiab] OR "sexual orientation"[tiab] OR transgender[tiab] OR transgendered[tiab] OR transgenders[tiab] OR transsexual[tiab] OR transsexualism[MeSH Terms] OR transsexualism[tiab] OR transsexuality[tiab] OR transsexuals[tiab] OR "women loving women"[tiab] OR "women who have sex with women"[tiab] OR WSW[tiab] OR Sexual and Gender Minorities[mesh])

AND

(((smoking OR tobacco[tiab] OR vaping[tiab] OR e-cigarette*[tiab] OR electronic nicotine delivery systems[tiab] OR tobacco*[tiab] OR cigar*[tiab] OR cigarette*[tiab] OR nicotine[tiab]) AND (CESSATION[tiab] OR control[tiab] OR quit[tiab])) OR Tobacco Use Cessation[mesh] OR Smoking Cessation[mesh])

AND

(communit*[tiab] OR program*[tiab] OR cultur*[tiab] OR linguistic* OR language* OR tradition*)

Lower Income

497 PubMed articles when narrowed to English, with an abstract and 2018-present. The term "poor" had too many false hits (i.e., poor responder) so it was removed from the search terms.

("low* resource"[tiab] OR low* income*[tiab] OR "vulnerable*"[tiab] OR poverty[tiab] OR “material* depriv*”[tiab] OR underserved[tiab] OR “under served”[tiab] OR disadvantaged[tiab] OR poverty[mesh])

AND (same as the previous search)

(((smoking OR tobacco[tiab] OR vaping[tiab] OR e-cigarette*[tiab] OR electronic nicotine delivery systems[tiab] OR tobacco*[tiab] OR cigar*[tiab] OR cigarette*[tiab] OR nicotine[tiab]) AND (CESSATION[tiab] OR control[tiab] OR quit[tiab])) OR Tobacco Use Cessation[mesh] OR Smoking Cessation[mesh])

AND (same as the previous search)

(communit*[tiab] OR program*[tiab] OR cultur*[tiab] OR linguistic*[tiab] OR language*[tiab] OR tradition*[tiab])

First Nations

An initial consultation occurred with Megan Barker, Education Specialist, The TEACH Project/ STOP with AHACs (Aboriginal Health Access Centres) Program, Nicotine Dependence Service, CAMH, Toronto, Ontario. Ms. Barker provided a list of references and resources utilized in the design of the 'IT'S TIME' Toolkit and or TEACH Project, which she deemed of relevance for the current initiative. To augment this list, a PubMed query and review of the grey literature were also undertaken.

130 PubMed articles when narrowed to English, with an abstract and 2018-present.

("first nation*" OR INDIGENOUS OR aborigin* OR Mi'kmaq OR micmac) AND ("SMOKING CESSATION" OR "tobacco control") AND (communit* OR program* OR cultur*)

AND (same as the previous search)

(((smoking OR tobacco[tiab] OR vaping[tiab] OR e-cigarette*[tiab] OR electronic nicotine delivery systems[tiab] OR tobacco*[tiab] OR cigar*[tiab] OR cigarette*[tiab] OR nicotine[tiab]) AND (CESSATION[tiab] OR control[tiab] OR quit[tiab])) OR Tobacco Use Cessation[mesh] OR Smoking Cessation[mesh])

AND (same as the previous search)

(communit*[tiab] OR program*[tiab] OR cultur*[tiab] OR linguistic*[tiab] OR language*[tiab] OR tradition*[tiab])

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Note to reader: Not all references are noted below. See the companion Excel file for the complete list.

A virtual library of references retrieved has been provided to LungNSPEI.

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Appendix B – Survey Questions

LungNSPEI (formerly known as the Lung Association of Nova Scotia and Prince Edward Island) invites you to participate in our survey about quitting smoking. Your feedback will help us create equitable and accessible smoking cessation programs for people that want to quit, taking into consideration factors that create health inequalities.

We know that there are higher smoking rates among First Nations, lower-income and 2SLGBTQIA+ communities. We want to learn from individuals in these communities, what needs should be considered when designing smoking cessation programs.

You are eligible to participate in this survey if you are:
Aged 16 or older; and
Currently reside in Nova Scotia or Prince Edward Island; and,
Currently smoke cigarettes, or, have recently quit smoking cigarettes in the past 6-months; and,
Are a member of at least one of the following communities: First Nations or Indigenous or Lower Income (i.e., having a household income of less than $40,000 a year) or are a member of the 2SLGBTQIA+ community.

Up to 1,500 eligible people can complete this survey, which takes place on a website called Qualtrics (Terms of Service and Security Statement). The survey contains multiple choice and open-ended questions about your smoking history and behaviours, your interest/experience with quitting smoking and general details about yourself (e.g., age, gender, income, mental health) as well as which community or communities you identify with (First Nations, lower-income, 2SLGBTQIA+). It should take about 10-15 minutes to complete.

There are no direct benefits to you for participation. Your responses however will provide knowledge to the health and scientific community about the views and behaviours people have about smoking and quitting. This information will also inform the development of community-based smoking cessation programs and resources. There is minimal risk to participating in this study, though some people may experience discomfort when answering questions about themselves. You are not required to answer any question that you are uncomfortable answering.

If you experience discomfort when talking about smoking, we encourage you to contact 8-1-1 to discuss this with a trained counsellor. In Nova Scotia you can also call the Mental Health and Addictions Crisis Line at 1-888-429-8167 or access supports online (click here). In Prince Edward Island, call toll-free 1-833-553-6983 to access the Mental Health and Addictions Phone Line or access support online (click here).

Survey data will be stored for three years at LungNSPEI offices on a password-protected laptop that only researchers from this study will have access to. [Add additional text here if required for First Nations survey data collection, management and information sharing.] After this time survey data will be destroyed. Survey responses will only be shared in summary format (e.g., 40% of participants were residents of PEI) in presentations, publications and reports, including on the LungNSPEI website.

At the end of the survey, you have the option to enter your email address to receive a $10 e-gift card. If you complete this survey in-person with a member of our team, you will be offered a $10 gift card at that time. Your email will be collected separately from survey responses and cannot be linked to you in any way. An email from GiftBit will be sent, inviting you to redeem your e-gift card on their website from a variety of brands (e.g., Walmart, Esso, Ultimate Dining Card). GiftBit's Terms of Service can be found here.

You are free to withdraw from the study at any time without penalty. On each page of the survey, there is a withdrawal option that you can select if you choose to stop participating. If you withdraw, your survey data will be deleted.

Please contact Julia Hartley, Director of PEI Operations, LungNSPEI by email at juliahartley@lungnspei.ca or phone at (902) 892-5957 if you would like to learn more about this study.

For information regarding ethical matters, please contact the Government of Canada Research Ethics Board Secretariat: reb-cer@hc-sc.gc.ca

By clicking "Yes, I am eligible and want to participate" below, you are agreeing to the following statements:
I understand what this survey is about, appreciate the risks and benefits, and that by agreeing to participate, I am not giving up any legal rights in the event that I am harmed during the research.
I understand that my participation is voluntary, that I am not obligated to participate, and that I can end my participation at any time without penalty.
I have reviewed the eligibility criteria and meet these criteria.

If you do not wish to participate in this study, please click "No, I do not want to participate" and this window will be closed.

We recommend you print this page or take a screenshot of this information in case questions arise, as you will not have access to this form after you move to the next page.

Yes, I am eligible for this survey and want to participate.
No, I do not want to participate.

Thank you for agreeing to participate in our survey. Your feedback will help us create equitable and accessible smoking cessation programs for people that want to quit, taking into consideration factors that create health inequalities. We know that there are higher smoking rates amongst First Nations, lower-income and 2SLGBTQIA+ communities. We want to learn from individuals in these communities, what needs should be considered when designing smoking cessation programs.

In this survey, any reference to the use of cigarettes, e-cigarettes or vaping refers only to the use of commercial tobacco and does NOT include ceremonial tobacco.

All responses are anonymous and confidential.

1. What are the first 3 digits of the Nova Scotia or PEI postal code where you live (e.g., B1A, C0B). If you do not have a permanent place of residence, please use the following 3-digits: For those in Nova Scotia, please use XXX; for those in Prince Edward Island, please use YYY.

2. Currently, do you smoke cigarettes (not including e-cigarettes)?
I smoke cigarettes daily (i.e., one or more cigarettes every day)
I smoke cigarettes occasionally (i.e., not every day)
I quit smoking cigarettes in the last 6-months
I quit smoking cigarettes more than 6-months ago
I don't smoke cigarettes at all

3. Currently, does anyone in your household (not including yourself) smoke cigarettes?
Yes
No
Not sure

4. At what age did you smoke your first whole cigarette (this does not include e-cigarettes)? _____

5. How soon after you wake up do you smoke your first cigarette?
Within 5 minutes
6 to 30 minutes
31 to 60 minutes
After 60 minutes

6. Do you find it difficult to refrain from smoking in places where it is forbidden (e.g., in community spaces, church, the library, the cinema)?
No
Yes

7. Which cigarette would you hate the most to give up?
The first one in the morning
Any other

8. How many cigarettes per day do you smoke?
10 or less
11 to 20
21 to 30
31 or more

9. Do you smoke more frequently during the first hours after waking than during the rest of the day?
No
Yes
Don't know/prefer not to answer

10. Do you smoke when you are so ill that you are in bed most of the day (meaning do you smoke when you are physically ill)?
No
Yes
Don't know/prefer not to answer

11. Are you planning to quit smoking in the next 30 days?
Yes
No
Don't know/prefer not to answer

12. On a scale of 1 to 10, where 10 means this is the most important thing you have to do and 1 is the least important, how important is it for you to quit smoking?

13. On a scale of 1 to 10, where 10 means you are very confident that you can quit smoking and 1 means you have very little confidence, how confident are you that you can quit smoking?

14. In the past year, how many times did you stop smoking for at least 24 hours because you were trying to quit?
None
1 to 2 times
3 or more times
I did not try to stop smoking in the past year
Don't know/prefer not to answer

15. In your whole life, how many times did you stop smoking for at least 24 hours because you were trying to quit?
None
1 to 2 times
3 or more times
I have not tried to stop smoking in my lifetime
Don't know/prefer not to answer

16. What tobacco treatment medications have you used in the past to stop smoking or stop using commercial tobacco? Please select all that apply.
Nicotine patches
Nicotine gum
Nicotine lozenge
Nicotine inhaler
Nicotine spray
Bupropion (also called Zyban or Wellbutrin)
Varenicline (also called Champix or Chantix)
Combination of any of these medications (e.g., patch and lozenges at the same time)
I have never used treatment medications in the past to stop smoking or stop using tobacco
Other, please specify _____

17a. Which of the following smoking cessation programs in Nova Scotia have you heard of before? Please select all that apply.
Tobacco Free Nova Scotia (e.g., calling 8-1-1)
Nova Scotia Health Stop Smoking Services
QuitNS by the LungNSPEI (formerly names the Lung Association of Nova Scotia and PEI)
I have not heard of these programs
Other: _____

17b. Which of the following smoking cessation programs in PEI have you heard of before? Please select all that apply.
PEI Smoking Cessation Program
Smoke-Free NOW by LungNSPEI (formerly names the Lung Association of Nova Scotia and PEI)
I have not heard of these programs
Other: _____

18. If you have quit smoking before, what triggered you to return to smoking or using tobacco? Please select all that apply.
Stress
Withdrawal symptoms
Urges to smoke
A crisis
Boredom

Being around other smokers
Drinking alcohol
Social situations
Weight problems
Other concerns, please specify _____
Don't know/prefer not to answer
I have not quit smoking before

19. If you have ever attended counselling to help you quit smoking, did you find it helpful?
I attended in-person counselling and found it helpful
I attended in-person counselling but it was NOT helpful
I attended telephone counselling/virtual online counselling and found it helpful
I attended telephone counselling/virtual online counselling but it was NOT helpful
I have never attended counselling to help me to quit smoking
Don't know/prefer not to answer

20. Who would you turn to first for help if you want to try to quit smoking?
A doctor
A nurse practitioner
A pharmacist
A health care provider, please specify: _____
A health charity (e.g., Canadian Cancer Society, The Lung Association)
A friend or role model, community leader/Elder, etc.
Other, please specify _____
No one

21. What are some of the challenges people face while trying to quit smoking? Select all that apply.
Managing cravings
Motivation
Stress and anxiety
Peer/Social pressure
Other (please explain): _____

22. What support services would you like to see made available for people trying to quit smoking? Select all that apply.
Telephone counselling or virtual online counselling
A virtual online support group with people with similar lived experience
In-person counselling
In-person support group with people with similar lived experience
Text-message support from quit counsellors
Nicotine replacement therapy (NRT)
I think the following would be helpful (please explain): _____

23. What role could your community play in helping people to quit smoking?
_____

The next section asks about vaping or the use of e-cigarettes. As a reminder, we are only talking about the use of commercial tobacco and not ceremonial tobacco.

24. Which of these options best describes your e-cigarette use/vaping history?

I currently use an e-cigarette/vape regularly (at least once a week over a 3-month period)
I used to use an e-cigarette/vape regularly (at least once a week over a 3-month period), but don't anymore
I have tried an e-cigarette/vaping a few times before
I have never tried an e-cigarette/vaping

25. Have you used an e-cigarette in the past 30 days?
Yes
No
Don't know/prefer not to answer

26. How often did you use an e-cigarette in the past 30 days?
Less than once a week
Once a week
2 to 3 times a week
Daily or almost daily
Don't know/prefer not to answer

27. Have you used e-cigarettes to quit smoking?
Yes, I am currently using an e-cigarette to quit smoking
Yes, I have used an e-cigarette to quit smoking but not currently
No, I have not used e-cigarettes to quit smoking

28. What support services would you like to see made available for people trying to quit vaping?
Telephone counselling or virtual online counselling
A virtual online support group with people with similar lived experience
In-person counselling
In-person support group with people with similar lived experience
Text-message support from quit counsellors
Nicotine replacement therapy (NRT)
I think the following would be helpful (please explain): _____

29. What role could your community play in helping people to quit vaping? _____

The next section asks about the use of substances other than commercial tobacco. This information will help us understand the use of tobacco and other substances together.

30. During the past 12 months, have you had a drink of beer, wine, liquor, or any other alcoholic beverage? By drink we mean a bottle or can of beer, 1.5oz/45ml of liquor or a glass of wine (5oz/150ml)
Yes
No
Don't know/prefer not to answer

31. How often do you have a drink containing alcohol?
Almost never
Monthly or less
2 to 4 times a month
2 to 3 times a week
4 or more times a week

32. How often do you have five or more drinks on one occasion?
Never
Less than monthly
Monthly
Weekly
Daily or almost daily

33. In the past 30 days, have you smoked marijuana, cannabis, hashish or any other substance? (This refers to substances that are inhaled.)
Yes
No
Don't know/prefer not to answer

This section asks about your health.

34. In general, would you say your mental health is…?
Excellent
Very good
Good
Fair
Poor
Don't know/prefer not to answer

35. In general, how would you rate your ability to handle unexpected and difficult problems, for example, a family or personal crisis? Would you say your ability is:
Excellent
Very good
Good
Fair
Poor
Don't know/prefer not to answer

36. In the past 30 days, have you received treatment or counselling for any problem you were having with your emotions, nerves, or mental health?
Yes
No
Don't know/prefer not to answer

37. In the past 30 days, have you received treatment or counselling for your use of alcohol or any other drug, not including commercial tobacco/commercial cigarettes?
Yes
No
Don't know/prefer not to answer

38. Do you have any final comments or suggestions for us when it comes to helping people to quit smoking?

These final questions help us understand who completed the survey. All responses are completely confidential.

39. What is your current age?

16-24
25-34
35-44
45-54
55-64
65 or older

40. Do you identify as First Nations, Métis, or Inuit? First Nations includes Status Indians and Non-Status Indians.
Yes, First Nations
Yes, Métis
Yes, Inuit
No
Don't know/prefer not to answer

40a. I am a member of the following First Nations community (Please select one answer).
Another First Nations Community

40b. Do you live on or off-reserve?
I live on-reserve
I live off-reserve
Don't know/prefer not to answer.

41. How would you describe your gender? Gender refers to the social roles and expectations, behaviours, expressions, and identities of girls, women, boys, men, and gender-diverse people.
Male (including transgender men)
Female (including transgender women)
Another gender, please specify: _____
Prefer not to answer

42. How would you describe your sex assigned at birth?
Male
Female
Intersex
Prefer not to say

43. What is your sexual orientation?
Heterosexual (Straight)
Gay or Lesbian
Bisexual
Another sexual orientation, please specify: _____
Don't know/prefer not to answer

44. Do you self-identify as a person with a disability? A person with a disability is someone with a physical, mental, sensory, psychiatric or learning impairment and considers themselves to be systematically marginalized by reason of that impairment.
Yes
No
Don't know/prefer not to answer

45. Last week, did you work at a job or a business? Please include part-time jobs, seasonal work, contract work, self-employment, baby-sitting, and any other paid work, regardless of the number of hours worked.
Yes
No
Permanently unable to work
I'm retired
Don't know/prefer not to answer

45. In which of the following groups does your household income fall (include all sources of income, before taxes and deductions)?
Less than $5,000
$5,000 to $9,999
$10,000 to $14,999
$15,000 to $19,999
$20,000 to $29,999
$30,000 to $39,999
$40,000 to $49,999
$50,000 to $59,999
$60,000 to $69,999
$70,000 to $79,999
$80,000 to $99,999
$100,00 to $149,999
$150,000 and over
Don't know/prefer not to answer

Thank you for taking the time to complete our survey.

Once you click submit, you will have the option to enter your email address to receive a $10 e-gift card. Your email will not be linked to your responses in any way.

If you are interested to learn more about smoking cessation, or for additional information and resources for both Nova Scotia and PEI, please visit us at: https://www.lungnspei.ca/smoking-cessation

In addition to this survey, we are **hosting several small group discussions of 8-10 people**. Some sessions will take place in person across Nova Scotia and Prince Edward Island and some may be online, lasting about 60 minutes. You will be offered **a $30 gift card for your participation** in the small group discussion. You have the option to enter your email address in the next window to receive more information about these sessions.

Again, thank you for your time!

SUBMIT

If you wish to withdraw from this survey, select withdraw below.

I want to withdraw
I want to continue

Would you like to **learn more about the small group discussions**?

Please enter your e-mail address and we will send you some information about the small group discussions.

Or, you can register online at https://www.lungnspei.ca/casc or contact us by email at quitsmoking@lungnspei.ca or by phone at 902-892-5957 (PEI), toll-free 1-888-566-5864.

Would you like to **receive a $10 e-gift card** as a thank you for completing our survey? You will receive an email from GiftBit to redeem a gift card for Walmart, Esso or the Ultimate Dining Card.

Enter your e-mail address and we will send you a link to GiftBit. Please allow us up to 2 weeks to send you the gift card link.

If you complete this survey in-person with a member of our team, please show this screen to the LungNSPEI team member to receive your $10 gift card.

We thank you for your time spent taking this survey. Your response has been recorded.

Appendix C – Focus Groups Questions

CASC Focus Group
Facilitator Guide, 2SLGBTQIA+ and or Lower Income Sessions

Purpose: Gather feedback/perceptions of priority populations regarding their experiences with smoking, quit attempts (if applicable) and supports they may need to quit.

Methods: Participants will be identified and invited to focus groups in collaboration with community leaders, community-based organizations and or via existing contacts through LungNSPEI. A diversity of perspectives within priority populations is being sought.

DRAFT Script:

- Good evening and welcome. Thank you for taking the time to join our discussion about quitting smoking. My name is Joanna, and I will serve as the moderator for today's focus group which should last no more than an hour.
- Our co-facilitator tonight is X, so (she/he/they)'ll be helping me out. We also have (note LungNSPEI members) with us tonight as well.

Let's begin by introducing ourselves. Please tell us your first name and [add a personal touch, e.g., if you prefer coffee or tea].

- As you may know, smoking continues to be the leading cause of preventable death in Canada. We know that smoking rates are higher in the 2SLGBTQ1A+/lower-income community for a variety of reasons.
- LungNSPEI and its partners want to understand how they can better help people that smoke commercial tobacco quit or reduce their use. So, tonight we are interested in your perspectives and any unique challenges you think may prevent people from quitting smoking.
- Please note that any reference to smoking cigarettes, e-cigarettes or vaping refers to the use of commercial tobacco and does not include ceremonial tobacco.
- There are no right or wrong answers to the questions we are about to ask.
- We do ask that you please be respectful and appreciate the diverse lived experience of focus group participants, even if you don't share the same experience or opinion.
- Please feel free to share your point of view, even if it differs from what others have said. If you want to follow up on something that someone has said, you want to agree, disagree, or give an example, feel free to do that, but try not to interrupt anyone else. And don't feel like you have to respond all the time.
- We are here to ask a few questions, listen, and make sure everyone has a chance to share if they want. We're interested in hearing from each of you. So, if you're talking a lot, I may ask you to give others a chance, and if you aren't saying much, I may call on you. We just want to make sure we hear from all of you over the one-hour session.
- Feel free to get up and move around if you would like [for in-person sessions: or we have some fidget toys on the table as well].
- X and I will both be taking notes to help us remember what is said. With your permission, we would like to audio record the discussion so that we can ensure accuracy in reporting. The audio recording will be deleted as soon as we complete our notes and no names will be included in the report. Also, any direct quotes will not be attributed to a specific individual.
    - Do I have your consent to record the discussion?
- We do ask that you not share any information that can identify you or anyone else while answering the questions in order to ensure confidentiality. All information will be kept confidential and will not be used for any reasons other than that disclosed in the consent form. In

the same spirit, we ask that anything discussed in today's focus group be kept confidential as we want everyone here to feel comfortable sharing their true thoughts and feelings. So please respect the privacy of all participants.

- Before we begin, all consent forms must be signed and returned to us. Please take a moment to review it and ask any questions before turning it in. Are there any questions before we begin?

If anyone decides to withdraw their participation during the focus group, we will only use your responses up to the point that you withdrew your consent.
So, let's begin.
[Ensure consent and begin audio recording.]

Co-facilitator:
What does a typical day look like regarding your smoking behaviours?
Probes: First thing when you wake up, after work/on breaks.

If you have tried to quit smoking before, can you describe your experience?

What kind of support services would be helpful to quit smoking?
Facilitator probes: NRT access in community-friendly spaces, community-reflective advertising; online, in-person, workplace supports, peer-led groups, where specifically, what times of day, days of the week?

What holds you back now from trying to stop smoking or what held you back in the past if you recently quit?

What challenges do you face in quitting smoking? What would be difficult about quitting for you?

Co-facilitator:
What challenges does your community face in quitting smoking?

What would be the benefits of quitting that affect you personally? What do you think will happen if you don't make a change?

What role could your friends, family or members of your household play in helping you quit?
Joanna:
What role could your community play in helping you quit?

- *Would you be willing to explain further?*
- *Would you be willing to give me an example of what you mean?*
- *Is there anything else you would like to add?*

SHUT OFF RECORDING *Facilitator Note at closing:*

Online survey: If you haven't taken the 10-15-minute survey and are interested to do so, please take a postcard. There is a $10 gift card for completing the survey. If anyone is interested to learn more about smoking cessation supports and services, you can call 811 to access a Quitline support service, or please take one of the pamphlets provided, or visit the LungNSPEI website at https://www.lungnspei.ca/smoking-cessation or https://www.lungnspei.ca/other-smoking-cessation-resources for more information and links to other supports.