

## Exploring Youth Vaping/Smoking Cessation and Prevention on PEI: Key Findings and Recommendations

### **Background**

E-cigarette use (“vaping”) among youth and young adults is an epidemic. Vaping has gained significant popularity among young Islanders with 39.3% of Island students (grades 7 to 12) having used these products in the last 30 days. Smoking among Island youth is also on the rise with the rate of smoking among high school students increasing 4% over the last 2 years (from 11.8% in 2015 to 15.8% in 2017) to now double the national average of 7.9% (Health Canada, 2019). In addition to physical health, research shows several connections between nicotine and mental health (Office of the U.S. Surgeon General, 2016).

Existing nicotine cessation programming on Prince Edward Island (PEI), such as the *PEI Smoking Cessation Program* currently do not provide specific support to address youth nicotine cessation. Although smoking cessation counselling services are available through primary care, the program does not support those who are solely vaping and does not offer programming to address the unique needs of Island youth (under 19 years of age).

### **Aim**

The Exploring Youth Vaping/Smoking Cessation and Prevention on PEI Project was conducted by LungNSPEI in 2022 and made possible through funding by the PEI Alliance for Mental Well-Being. Our project aimed to increase knowledge of the gaps and opportunities in PEI nicotine prevention and cessation programs/services for youth (aged 11-21) and increase awareness of the factors that help youth in PEI live a nicotine-free lifestyle and mitigate the toxic stress caused by nicotine addiction.

The purpose of this project was to create evidence-informed recommendations for youth focused cessation opportunities (both within and outside the health system) and build support among community and government stakeholders for system level change on Prince Edward Island (PEI) for youth nicotine cessation/prevention programming.

### **Methods**

Our project implemented the following four methods:

- Conducted and analyzed 25 interviews with Island youth (aged 17-24) who had either quit or were in the process of quitting vaping / smoking about their experience quitting, services used, products tried, barriers, etc.
- Surveyed 85 Island youth, aged 16-21 who were either currently using nicotine products or who had made at least one attempt to quit vaping and/or smoking.

- Conducted a Community Asset Map using a resiliency lens to identify gaps and opportunities in existing Island programs and services that could potentially help youth improve their physical and mental health and reduce risk for addiction to nicotine products.
- Conducted a literature review to explore the current state of knowledge of youth vaping cessation interventions and highlight best or promising practices that could be implemented in PEI at the individual or school level.

### **Results & Recommendations**

Our results showed that Island Youth are interested in quitting vaping/smoking with many of the survey/interview youth participants stating they were actively trying to quit. Participating youth indicated that the main challenges to quitting vaping/smoking were ‘peer/social pressure’, ‘stress and anxiety’ and ‘managing cravings’ and that they were interested in receiving both in-person and virtual counselling, text-message support as well as access to Nicotine Replacement Therapy.

Using project findings, the following 4 evidence-based recommendations were created to help enhance Island cessation opportunities (both within and outside the health system) and build support among community and government stakeholders for system level change on PEI for youth nicotine cessation/prevention programming.

#### ***Recommendation #1) Expansion of the PEI Smoking Cessation Program criteria to include vaping and counselling support targeted specifically for youth***

##### *Supporting evidence from the literature:*

- The PEI Smoking Cessation Program Evaluation (2022) outlined the need to “expand the program to include cessation support for vaping product users” as a recommendation to increase reach in response to increasing rates of vaping use in PEI and evaluation data.
- Behaviour counselling has been found to almost double the rates of long-term abstinence as opposed to usual or no treatment (Fiore et al., 2008).
- Social cognitive approaches such as cognitive behavioural therapy, motivation-enhancement interventions, and social influence and support have high efficacy as tobacco use cessation tools in youth smoking (Gabble et al., 2015; Sussman et al., 1999; Sussman, 2003; McDonald et al., 2003)
- The Ottawa Model for Smoking Cessation recommends regular follow up over a 6-month period as it helps prevent relapse, boosts motivation to quit and increases chances of a successful quit attempt (University of Ottawa Heart Institute, 2013).

**Recommendation #2) Utilising existing mental health programs and services targeted to support youth to manage stress and anxiety using healthy lifestyle behaviours**

*Supporting evidence from the literature:*

- Youth who smoke or use vaping products are at higher risk of developing mood disorders, and permanent lowering of impulse control (U.S Department of Health and Human Services, 2022)
- Programs that support youth to manage their mental well-being could assist youth in developing healthy coping mechanisms, instead of using vaping to manage stress and anxiety.
- E-cigarette use has been found to be associated with greater rates of anxiety (Grant et al. 2019).
- Nicotine has been found to worsen anxiety symptoms (Kutlu & Gould, 2015)

**Recommendation #3) Screening youth for smoking/vaping starting at age 12 using evidence-based screening tools.**

*Supporting evidence from the literature:*

- A brief 3–5-minute interaction with a physician is proven to have a significant impact on increasing smoking cessation rates (Cochrane Database Sys Rev, 2013).
- The Canadian Paediatric Society recommends confidentially screening all youth for use of vaping products starting at the age of 12 (or earlier when appropriate), using evidence-based screening tools such as S2B1 or CRAFFT.
- There is evidence that children as young as 12 are using e-cigarettes, with the average age of initiation on PEI being age 15.7 (Youth & Young Adult Vaping Survey, 2020).
- Evidence of nicotine dependence is evident with 39.3% of High School students having used vaping products in the last 30 days, (CSTADS, 2018-19).

**Recommendation #4) Continue to advance nicotine reduction policy measures focused on youth protection**

*Supporting evidence from the literature:*

- Evidence-based policy measures have been effectively implemented in the US and Canada to prevent and reduce tobacco use among youth and young adults. These same strategies can be applied to e-cigarettes (U.S. Department of Health and Human Services, 2016; Government of Canada, 2022).
- Young people are more sensitive to price increases on tobacco products (and thus less likely to purchase these products) than adults (Liang, Chaloupka, Nichter et al., 2003, van Hasselt, Kruger, Han, et al. 2019).
- Tax increases lead to higher reductions in youth tobacco use prevalence in comparison to adults (Ding, 2003)



## **Conclusion**

Our project provided insights and a better understanding into the experience of PEI youth and young adults who are addicted to vaping products and their experience trying to quit.

Our project evidence and supporting evidence from the literature identified the need for our province to take a comprehensive approach to address the myriad of factors that influence youth tobacco/nicotine use and cessation in PEI and create effective programming there must be interprofessional, cross-organizational collaboration.

Our next project 'Engaging Youth Vaping Stakeholders in Harm Reduction' will take the evidence from our 'Exploring Youth Vaping/Smoking Prevention/Cessation in PEI' project and begin to build a network of stakeholders who have a vested interest in youth mental health and addiction. By engaging a diverse range of sectors on the topic of youth mental health and addiction, together we will help to strengthen existing advocacy efforts for improved policy change that will build coordinated partnerships to mitigate sources of toxic stress caused by nicotine addiction.

Creating a better understanding of the lived experience of Island young adults who vape will help to strengthen cessation support services that are provided to PEI youth to help support their quit attempt and prevent nicotine addiction.

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