

Tobacco Harm Reduction and Vaping Cessation - New Opportunities for Pharmacist Skills

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To vape or not to vape? That ISN'T the question. The question is: *Will pharmacists step up to help patients no matter where they are in their stage of change towards a healthier life?*

The Stages of Change Model




With an ever-expanding scope of practice, pharmacists are often the first point of contact for any patient seeking help for their health concerns. Almost 70% of smokers say they want to quit.^[2] With the legalization of e-cigarettes, and evolving areas regarding tobacco harm reduction, it can be challenging to navigate the gray when assisting patients.

On May 31st, 2023, the World Health Organization (WHO) and public health champions around the world will come together to celebrate World No Tobacco Day (WNTD).

To mark the event, [Pharmacists for a Smoke Free Canada](#) (PSFC) have released a new tool called the [PSFC e-cig Nicotine Estimator Tool](#).

It was developed for healthcare practitioners to estimate the daily amount of nicotine vaped (mg/day) from an ENDS (Electronic Nicotine Delivery System) which is also called an e-cig, electronic cigarette or vape.

This tool will help pharmacists navigate these new emerging areas of tobacco harm reduction and vaping cessation.



Pharmacists for a Smoke-Free Canada
Pharmaciens pour un Canada Sans Fumée

e-cig Nicotine Estimator

(ENDS, Electronic Nicotine Delivery System, e-cig, e-cigarette, vape)

Name: _____ Date: _____

Step 1: Determine e-cig Type

- ☐ Tank (refillable)
- ☐ Pod - closed (pre-filled) or open (refillable)
- ☐ Disposable - closed (pre-filled)

Step 2: Determine Nicotine Concentration (mg/mL)

(If nicotine concentration is a percentage % - multiply x 10 to convert to mg/mL)

- ☐ Tank e-liquid refill bottle - nicotine concentration _____ (mg/mL)
- ☐ Pod - nicotine concentration _____ (mg/mL)
- ☐ Disposable- nicotine concentration _____ (mg/mL)

Step 3: Determine Daily e-liquid Volume Vaped (mL/24hours)

Volume	Frequency
<input type="checkbox"/> Volume e-liquid _____ (mL)	<input type="checkbox"/> _____ Days
<input type="checkbox"/> # of Pods x Pod size ____ x ____ = _____ (mL)	(1 day = 24 hours)
<input type="checkbox"/> Disposable size _____ (mL)	

Daily Volume = e-liquid volume (mL) ÷ # days _____ (mL/day)

Step 4: Determine Total Daily Nicotine (mg/day)

Multiply concentration (mg/mL) x daily volume (mL/24hrs)

_____ mg/mL x _____ mL/24hrs = _____ (mg/day)
(Step 2) (Step 3) **Total Daily Nicotine**

Note This estimator only estimates daily nicotine vaped not daily nicotine absorbed (which is affected by many variables)

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- 1) [PSFC e-cig Nicotine Estimator Form](#)
- 2) [PSFC e-cig Nicotine Estimator \(mg\) Downloadable Excel Tool](#)
- 3) [PSFC e-cig Nicotine Estimator \(%\) Downloadable Excel Tool](#)

Jane Ling, President of PSFC, along with Dr. Leslie Phillips, PSFC VP (N.L.) have authored the tool and provided an accompanying [short video webinar](#) to explain how to use the PSFC e-cig Nicotine Estimator.

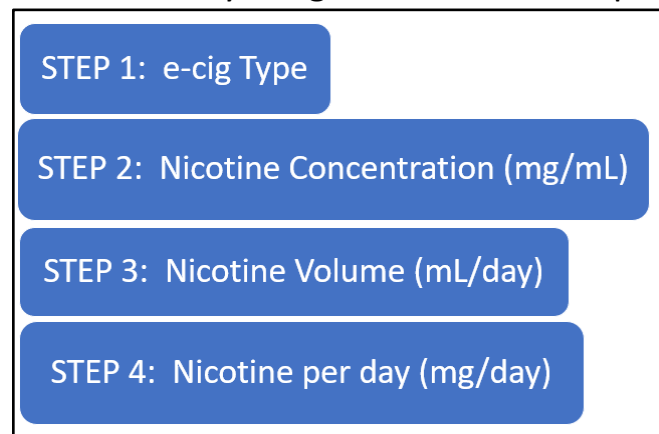
Learning Objectives include:

Describe the basic components of e-cigarettes, explain how they work, and identify the basic types of e-cigarettes currently available

Apply a systematic process to estimate the amount of nicotine a person is vaping on a daily basis (mg/day), using factors such as device type, e-liquid concentration, and frequency of use

Use a case-based scenario to estimate the daily nicotine amount vaped in various e-cigarettes

This 4-step tool breaks down the formula into an easy-to-use format to estimate daily e-cigarette nicotine vaped in mg/day:



Since 2011, pharmacists in Ontario have had the authority to prescribe smoking cessation medications, varenicline and bupropion. Ontario pharmacists receive \$125 annual remuneration through the [Pharmacy](#)

[Smoking Cessation Program](#) for counselling Ontario Drug Benefits (ODB) and OHIP+ patients on their journey to become smoke-free.

The **Ontario Pharmacists Association (OPA)** provides an online training program called [Implementing Smoking Cessation in the Pharmacy](#) which certifies pharmacists in smoking cessation to allow for billing ODB for smoking cessation services.

The modules include:

Module 1: Pathophysiology

Module 2: How to Help Patients Quit Smoking

Module 3: Prescribing Pharmacotherapy

Module 4: Implementing Smoking Cessation in Your Practice

Module 5: Harm Reduction

Tobacco addiction is a chronic relapsing disease and is a risk factor for many chronic diseases including diabetes, hypertension, COPD, heart disease.^[3] Smoking cessation is one of the most impactful and cost-effective preventative interventions in healthcare.^[3]

On average, it can take several quit attempts, but in each quit attempt patients learn strategies, become more knowledgeable and move towards success. Quitting smoking is challenging for any patient but with pharmacists by their side assisting them on their long and winding road, it can greatly improve their chances of success.

Pharmacists are:

- the most accessible healthcare provider^[4]
- one of the most trusted healthcare professionals
- an expert in medication management and treatment choices

PSFC have developed several tools, algorithms and videos to help pharmacists assist people on their journey to a smoke-free life. By using a

combination of strategies including the **3A's (Ask, Advise, Act)** as well as **motivational interviewing** to gather patient history, pharmacists can work with patients to implement an effective, clinically suitable and sustainable smoking cessation plan.

These PSFC resources can be found online:

[Canadian Pharmacist Smoking Cessation Pharmacotherapy Algorithm](#)

- [1\) PSFC Algorithm Initial Tool](#)
- [2\) PSFC Algorithm Follow Up Tool](#)
- [3\) PSFC Patient Quit Tool](#)

[Algorithme pharmacothérapie pour l'abandon tabagique](#)

- [1\) PCSF Algorithme d'évaluation initiale](#)
- [2\) PCSF Algorithme de suivi](#)
- [3\) PCSF Plan d'abandon pour le patient](#)

In addition, **Tobacco Harm Reduction** and **Vaping Cessation** are two new emerging areas where patients are asking pharmacists for help. PSFC was a part of the development committee of:

1) [Lower Risk Nicotine Use Guidelines \(LRNUG\)](#) - The Health Canada/CAMH

Nicotine is an extremely addictive substance that can be difficult to quit completely. For patients currently using or thinking of using nicotine products, LRNUG outlines modifiable behaviours and recommendations on the use of alternative nicotine products such as e-cigarettes. Pharmacists can share this [Evidence Brief](#) and [Quick Tips page](#) as a way to initiate conversation with patients who are looking to improve their health.

2) [Vaping Cessation Resource Guide](#) - CAMH

These guidelines provide considerations for approaches to vaping cessation. In addition to asking all patients if they are smokers, all patients should be asked if they vape. Some patients use both cigarettes and e-cigarettes, and may be eligible for up to 8 weeks of free Nicotine Replacement Therapy

(NRT) as well as access to an online program designed to help with vaping cessation through the [STOP on the Net Program](#). Take into account patient preference, their personal goals, and smoking history when developing a treatment plan.

With patients paying attention to their lung health now more than ever, pharmacists can help them navigate the changing landscape of smoking, tobacco harm reduction and vaping cessation. With all these new tools, pharmacists are poised to be leaders in assisting patients on their journey to a healthier smoke-free life. No one needs to be left behind.

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