

E-CIGARETTES AND VAPING: WHAT YOU NEED TO KNOW

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OVERVIEW

- Setting the Context: Tobacco Use in PEI
- What are E-Cigarettes and E-Liquids?
- E-Cigarette Use: PEI and Canadian Youth
- E-Cigarettes: Harms, Health Impacts, and Relative Risk
- E-Cigarette Regulation in Canada
- E-Cigarettes and Smoking Cessation

SURVEY ON YOUTH AND E-
CIGARETTES FOR HEALTHCARE
PROFESSIONALS (MARCH 2018)

In total, **102** PEI healthcare professionals took part in this survey.

The following results represent the aggregate responses of **24** participants, including:

19 Dental Hygienists

3 Dental Assistants

2 Dentists

SURVEY ON YOUTH AND E-CIGARETTES FOR HEALTHCARE PROFESSIONALS

*HOW MUCH DO YOU CURRENTLY
KNOW ABOUT VAPING AND E-
CIGARETTES?*

The majority of dental participants (64%) indicated they know **'a little'** about vaping and e-cigarettes while the remainder (36%) indicated they know **'a moderate amount.'**

SURVEY ON YOUTH AND E-CIGARETTES FOR HEALTHCARE PROFESSIONALS

*HAVE YOU RECEIVED ANY EDUCATION
OR TRAINING ON HOW TO APPROACH
VAPING AND E-CIGARETTES IN YOUR
PROFESSIONAL PRACTICE?*

The majority of nurse participants (**91%**) **had not** received any education/training.

The majority of pharmacist participants (**81%**) **had not** received any education/training.

BUT... more than half (**55%**) of dental participants **had** received education/training!

SURVEY ON YOUTH AND E-CIGARETTES FOR HEALTHCARE PROFESSIONALS

*ARE YOU COMFORTABLE TALKING
TO PATIENTS ABOUT VAPING AND
E-CIGARETTES?*

More than half of dental participants (**55%**) are **comfortable** talking to patients about vaping and e-cigarettes; **10%** are **'totally comfortable'** and **45%** are **'somewhat comfortable.'**

The majority of nurse and pharmacist participants described themselves as 'uncomfortable' talking to patients about vaping and e-cigarettes.

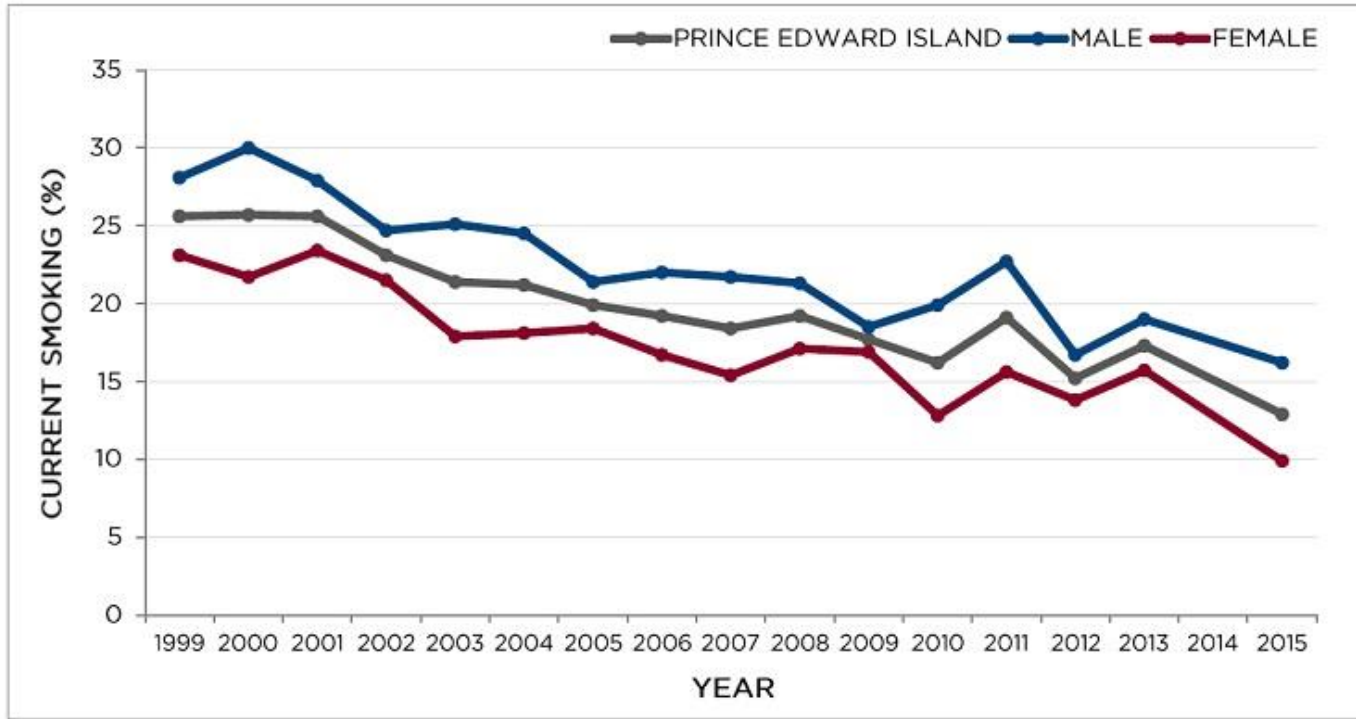
SURVEY ON YOUTH AND E-CIGARETTES FOR HEALTHCARE PROFESSIONALS

*HAVE YOU EVER DISCUSSED VAPING
OR E-CIGARETTES WITH A YOUTH
PATIENT OR THEIR
PARENT/GUARDIAN?*

The **majority** of dental participants (**75%**) **have not** discussed vaping or e-cigarettes with a youth patient or their parent/guardian.

TOBACCO USE IN PEI (ADULTS 15+)

FIGURE 2.27: CURRENT SMOKING PREVALENCE* BY SEX, PRINCE EDWARD ISLAND, 1999-2015

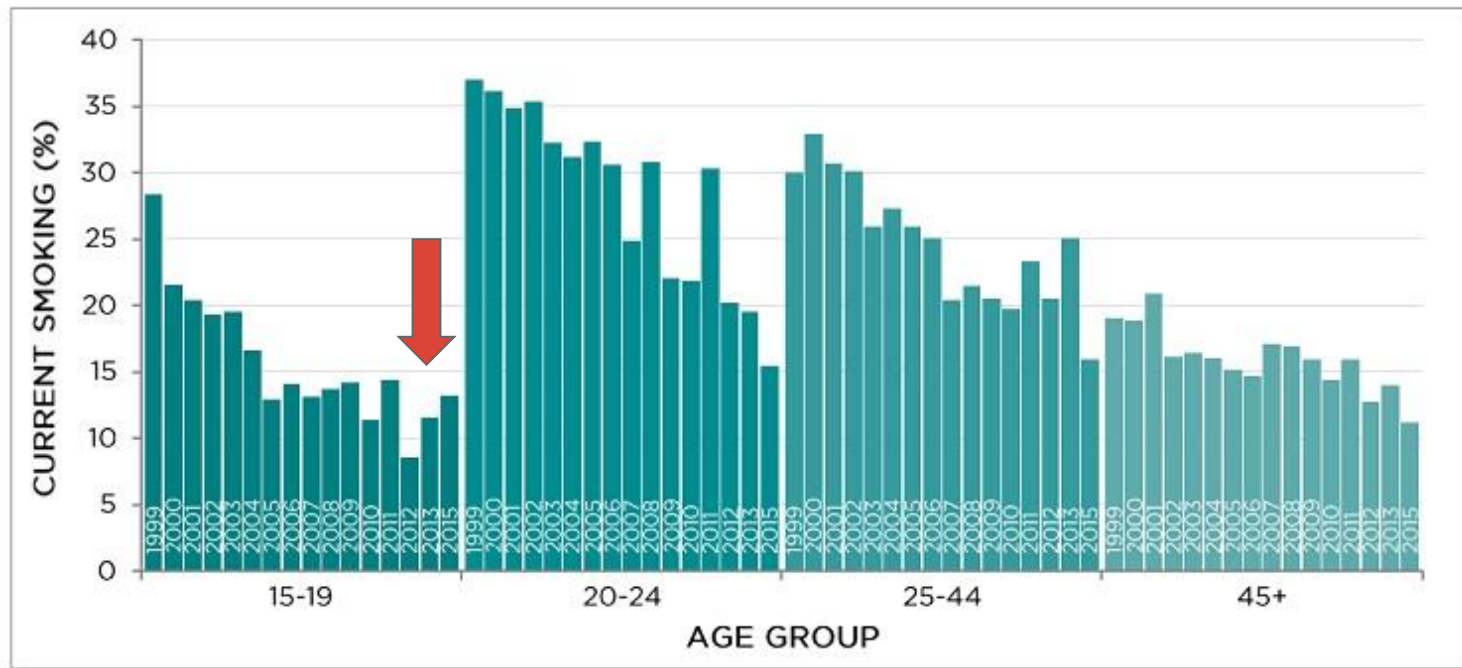


*INCLUDES DAILY AND NON-DAILY SMOKERS

DATA SOURCES: CANADIAN TOBACCO USE MONITORING SURVEY, 1999-2012; CANADIAN TOBACCO, ALCOHOL AND DRUGS SURVEY, 2013, 2015

TOBACCO USE IN PEI (ADULTS 15+)

FIGURE 2.28: CURRENT SMOKING PREVALENCE* BY AGE GROUP, PRINCE EDWARD ISLAND, 1999-2015

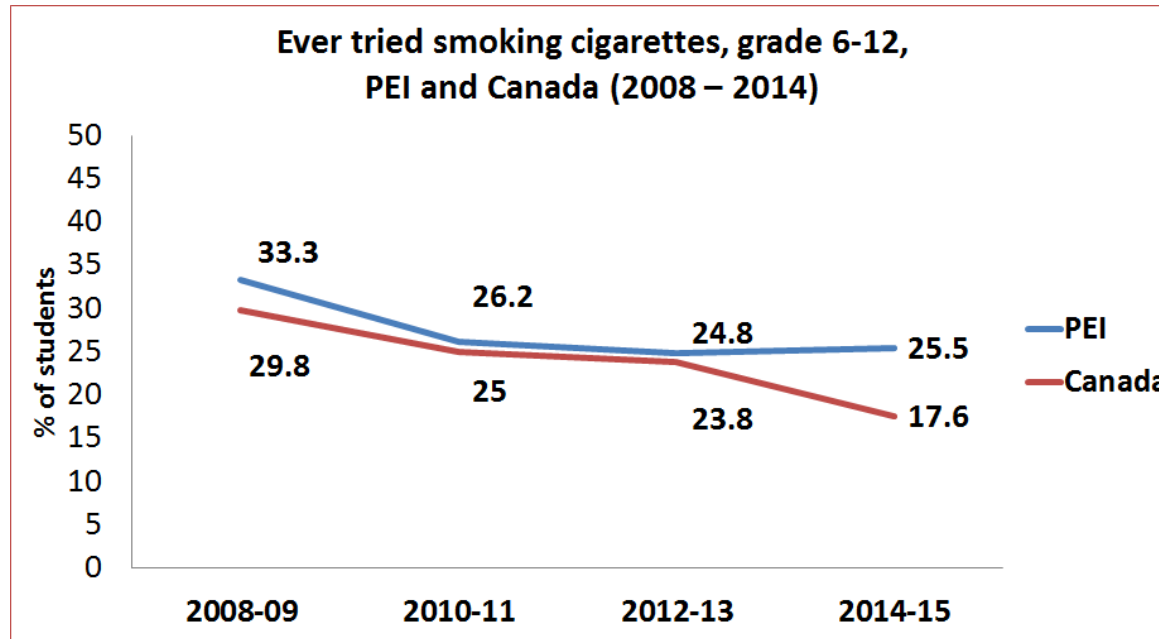


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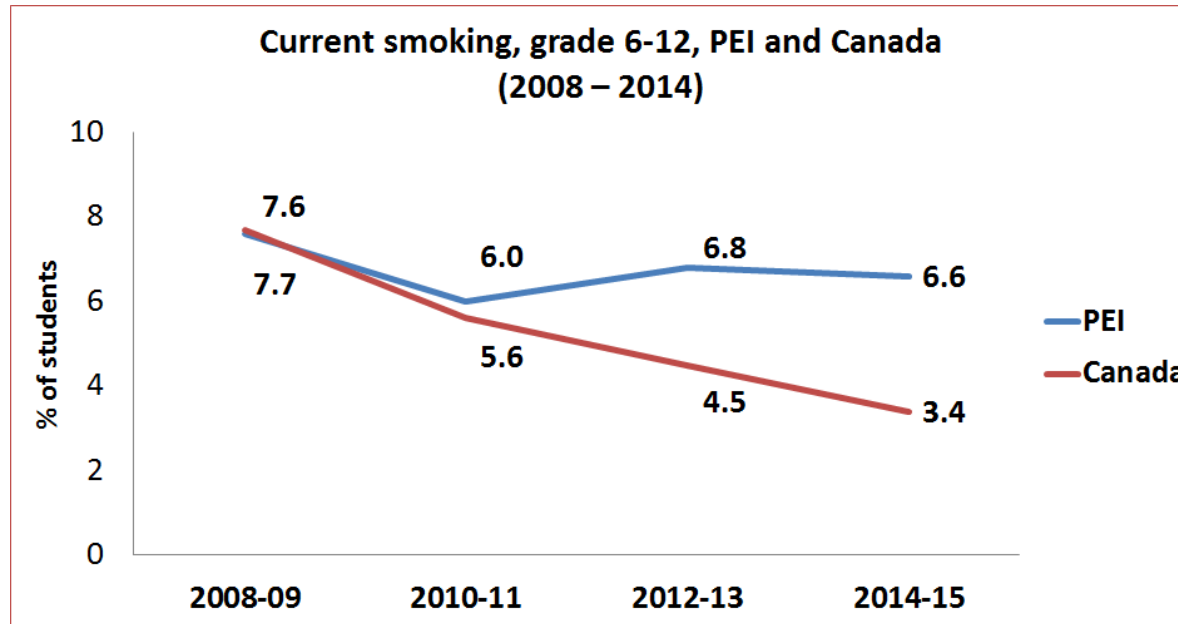
SETTING THE CONTEXT: TOBACCO USE IN PEI (12-18 YRS OLD)

Since 2012, rates of 'ever tried' cigarette use has remained steady in PEI, while there have been significant reductions reported across Canada.



SETTING THE CONTEXT: TOBACCO USE IN PEI (12-18 YRS OLD)

PEI has the second highest rate of 'current' smokers' in Canada, almost double the national average.



E-CIGARETTES: THE NEXT WAVE IN SMOKING BEHAVIOUR

The past decade has seen a decline in tobacco smoking among Canadian youth. However, over the same period, electronic cigarettes were introduced into the market.

- A rapidly emerging and diversified product class.
- E-cigarette use among youth and young adults has become a public health concern.
- E-cigarettes are now the most commonly used tobacco product among youth.



Long-term trend data on e-cigarette use are limited and not yet available in Canada.

WHAT ARE E-CIGARETTES?

Examples of closed ECIG systems



Examples of open ECIG systems and parts



"CLOSED SYSTEM" E-CIGARETTE



Closed System E-Cigarette



① Rechargeable device

② Tank

"Cig-a-likes"

"OPEN SYSTEM" E-CIGARETTE



Open System E-Cigarette



① Rechargeable device



② Clearomizer



③ Mouthpiece

"Vape Pens"

E-LIQUIDS

E-cigarettes deliver nicotine via aerosol by heating an e-liquid solution (e-juice, vape juice).

E-liquid strengths are measured in percentages and this indicates how much of the liquid is made up of nicotine.

E-liquids typically contain:

- Propylene glycol and/or glycerin
- Nicotine
- Flavourings



E-CIGARETTE USE: PEI AND CANADIAN YOUTH (2014/2015)

In Canada (grade 6-12)

- **18% of students** reported ever using e-cigarettes; **6%** reported use in the past 30 days.
- Past 30-day use was reported by **47%** of current (cigarette) smokers versus only **2%** of students who reported never trying smoking.

In PEI (grade 6-12)...

- **22% of students** reported ever using e-cigarettes; **10%** reported use in the past 30 days.
- **26% of students** in grades 6-12 tried e-cigarettes before trying cigarettes



E-CIGARETTE USE: PEI AND CANADIAN YOUTH (2014/2015)

Indicators associated with 'ever use' and 'past 30 day use' of e-cigarettes:

- ★ Male
- ★ High school student
- ★ Aboriginal
- ★ Living in certain provinces (incl. PEI)
- ★ Attending a school located in rural areas
- ★ Previous user of TB products
- ★ Perceived access ↑ / Perceived risk ↓



ARE E-CIGARETTES HARMFUL?

- ★ E-cigarette aerosol is not harmless. It can contain harmful and potentially harmful constituents, including nicotine.
- ★ Besides nicotine, e-cigarettes can contain:
ultrafine particles that can be inhaled deep into the lungs; flavorants such as diacetyl, a chemical linked to serious lung disease; volatile organic compounds; and heavy metals (e.g., nickel, tin, and lead)
- ★ The use of products containing nicotine in any form poses a danger to youth, pregnant women, and fetuses, in particular.
- ★ Nicotine exposure during adolescence can cause addiction and can harm the developing adolescent brain.



LATEST RESEARCH: HEALTH IMPACTS OF E-CIGARETTES

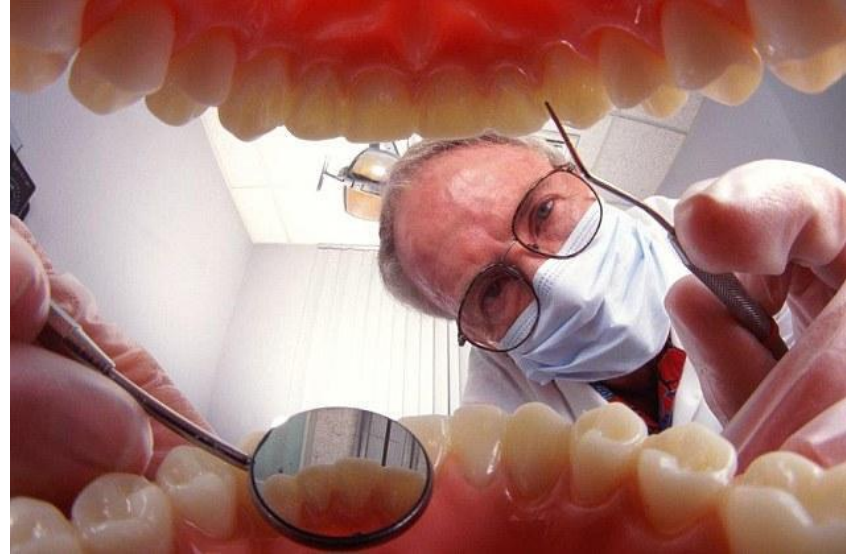
- ★ **Brain risks**
- ★ **Behaviour risks**
- ★ **Addiction**
- ★ **Initiating dual/multiple product use**
- ★ **Safety risks**



E-CIGARETTES AND ORAL HEALTH

The smoking cessation and harm reduction ability of e-cigarettes has significant potential to reduce tobacco smoke-related oral diseases, such as oral cancer and periodontal diseases.

However, the potential negative effects of e-cigarette aerosol on the oral tissues need to be considered alongside the health benefits of reducing combustible tobacco smoke exposure.



[“E-Cigarettes ‘just as harmful as tobacco’ for oral health”](#) (March 2016)

[“E-Cigarettes shown to be detrimental to oral health in new study”](#) (Feb 2017)

E-CIGARETTES VS. CIGARETTES: RELATIVE RISK

E-cigarettes are harmful, but less harmful than tobacco cigarettes.

E-cigarette aerosol contains fewer toxicants than cigarette smoke.

Evidence shows that **e-cigarettes are likely to be far less harmful than combustible tobacco cigarettes**, however, the absolute risks of the products haven't yet been fully determined.

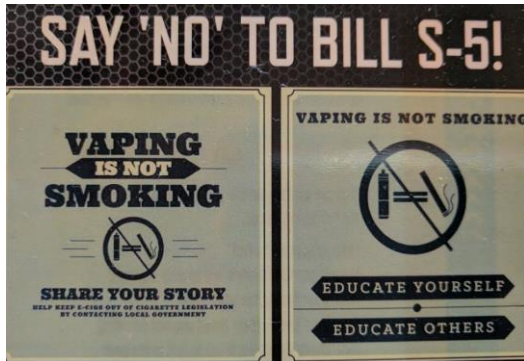


E-CIGARETTE REGULATION IN CANADA

E-cigarettes without nicotine may be legally sold in Canada.

E-cigarettes containing nicotine have not been approved for sale by Health Canada; it is illegal to market e-cigarettes as a cessation aid, or to sell e-cigarettes with nicotine.

Despite this...use of e-cigarettes with and without nicotine has increased rapidly over last several years and they can be easily obtained online or under the table.



**Bill S-5: An Act to amend
the Tobacco Act and the
Non-smokers' Health Act**

E-CIGS AND SMOKING CESSATION

- In Canada, it is illegal to market e-cigarettes as a cessation aid.
- E-cigarettes are portrayed as safe and a viable cessation tools similar to quit medication and nicotine replacement therapies
- Although many patients may report using e-cigarettes as a cessation device, inadequate research exists to support e-cigarette use as a smoking cessation tool.
- Health care providers should continue to assist patients interested in quitting by referring to existing evidence-based cessation treatments and behavioural support.



SUMMARY

- E-cigarette use among youth and young adults has become a public health concern.
- In 2014, 22% of PEI students reported having ever used e-cigarettes.
- Long-term trend data on e-cigarette use are limited and not yet available in Canada.
- Cigarettes are likely to be far less harmful than combustible tobacco cigarettes, however, the absolute risks of the products haven't yet been fully determined.
- Brain risks, behaviour risks, addiction, initiating dual product use, and safety risks.
- Inadequate research exists to support e-cigarette use as a smoking cessation tool.

THANK YOU!

To learn more about e-cigarettes: join the PETRA mailing list!

PEI Tobacco Reduction Alliance (PETRA)

www.peitobaccoreduction.com