

Protecting youth from the vaping crisis

What needs to be done?

To protect young people from the escalating vaping crisis, Heart & Stroke urges the federal government to step up its efforts to protect youth from the harmful effects of e-cigarettes.

While Heart & Stroke applauds the federal government for implementing key policies to curb vaping, there is more to do. Important policy changes to date have included:

- Restricting the marketing and promotion of vape products (June 2020)
- Limiting nicotine content to a maximum of 20 mg/ml (June 2021)
- Implementing an excise tax on vape products (October 2022)
- Developing a federal-provincial-territorial coordinated framework for the taxation of vaping products (April 2021)¹.

To further protect youth from vaping, Heart & Stroke is advocating for the federal government to implement the following additional measures:

 Restrict vape flavours that are appealing to youth, such as fruit, candy and mint/menthol. The only flavour permitted should be tobacco.

- Implement standardized and plain packaging for all vape products sold in Canada. This would mean vape products would be sold in uniform packaging of the same colour, without graphics, with only company and producer information noted in a standard font.
- Increase the minimum age requirement for the sale of vape products to 21 years across the country.

Why we need to do this?

Canada is facing a youth vaping crisis. Vaping rates among teens and young adults skyrocketed for a decade following the introduction of e-cigarettes in Canada and have remained alarmingly high since. The notion that vaping is safer than smoking, coupled with enticing vape flavours, has contributed to a sharp rise in e-cigarette use.

While e-cigarettes have been marketed as an effective smoking cessation tool, to date there has been no populationlevel evidence that smoking rates have declined following the introduction of e-cigarettes². Moreover, in some cases,



e-cigarette use can lead to continued nicotine dependence and perpetuate the dual use of both cigarettes and e-cigarettes³⁻⁵.

Vapes have been shown to be associated with some of the same negative health consequences as tobacco use, including:

- Heightened risk of infections, weakened immunity, oral health issues, and cardiovascular conditions^{6–8}.
- Respiratory problems⁶ and high blood pressure⁷, with dual users of cigarettes and vapes leading to a higher risk of cardiovascular diseases^{7,9}.
- Damage to the function of blood vessels^{10,11}.

Additionally, vaping has been linked to poor mental health outcomes among youth, including depression and anxiety¹². Given the growing body of research demonstrating health risks associated with vaping, it is imperative that the federal government take additional action now to protect youth.

Why now?

Canada has some of the highest teen vaping rates in the world¹³. In 2021-2022, 25% of Canadian Grade 10 to 12 students reported vaping in the past 30 days¹⁴. In 2021, 48% of young adults (aged 20-24) and 29% of youth (aged 15-19) reported trying e-cigarettes¹⁴. Moreover, the proportion of vapers in Canada who reported vaping daily significantly increased, from 44% in 2019 to 55% in 2021¹⁴. Research shows that the majority of youth vapers in Canada (aged 15-19) used e-cigarettes to cope with stress (33%) due to the disruptions resulting from the COVID-19 pandemic¹⁴. Apart from its use as a coping mechanism, youth in Canada also reported vaping for enjoyment (28%) and out of curiosity (24%)¹⁴. The vaping crisis will not abate without government policy changes.

E-cigarettes are not a smoking cessation aid for youth

Although vaping has been cited as a potential tool to reduce or quit tobacco smoking, 61% of youth (aged 15-19) and 27% of young adults (aged 20 to 24) who are current vapers have never tried a tobacco cigarette¹⁴. This shows that the majority of young people in Canada are not using e-cigarettes for smoking cessation and reemphasizes the growing concern that youth vapers are now part of a new generation of people addicted to nicotine who would have never been smokers. A systematic review of European and North American research studies found an association between vaping among teens and initiation of cigarette smoking, raising concerns about the unintended consequences of promoting vaping as a harm reduction or smoking cessation tool¹⁵.

Flavours encourage youth vaping

Flavours have been cited as a key contributor to the disproportionate rise in vaping among youth, Flavours are designed to appeal to youth and draw them to e-cigarette use¹⁶. In 2021, fruit was the most popular vape flavour in Canada (65% among 15-19 year olds; 57% among 20-24 year olds), followed by mint/menthol (12% among 15-19 year olds; 22% among 20-24 year olds)14. Research shows that flavours influence user satisfaction, willingness to initiate use, perception of harm, intention to quit, as well as the level of nicotine exposure¹⁶⁻¹⁹. The rise in the popularity of the mint/ menthol e-cigarette flavour is concerning, since research has shown that youth perceive mint/menthol flavour as less likely to be addictive and less likely to lead to cancer when compared with the tobacco flavour²⁰. Additionally, the mint/ menthol flavour has been shown to enhance user experience significantly, with young users reporting greater interest to use, willingness to use again, and urge to vape with mint/menthol compared to the tobacco flavour¹⁹. Currently six Canadian provinces and territories (Nova Scotia, Prince Edward Island, New Brunswick, Nunavut, Northwest Territories, and Quebec) and six countries (Finland, Hungary*, Netherlands, Ukraine, Lithuania, and China) have either adopted or implemented comprehensive vape flavour restrictions, including banning mint/menthol flavour. A comprehensive flavour ban is critical, given that partial restrictions have not been proven effective.

Plain packaging reduces the lure of e-cigarettes

Packaging and design also play a key role in enticing adolescents to vape and in promoting consumption. The vape industry continuously floods the market with new and innovative products offering youth-focused designs and colourful packaging. E-cigarette plain packaging policies are a recent development, with only Israel, Denmark and Finland implementing the measure. Evidence of its effectiveness is in its infancy²¹, but the tobacco plain packaging law can provide an approximation of how such a policy may fare. Tobacco plain packaging policies have been shown to reduce the effectiveness of packaging as a marketing tool in Canada and in several other countries.²²⁻²⁴ Specifically, 45% of Canadian smokers reported disliking the look of cigarette packs after the implementation of plain packaging policies²⁵. Further to this, chief medical officers of health from across Canada have called on the federal government to require plain and standardized packaging for all vape products²⁶.

^{*} Hungary also restricted tobacco flavour.

Raising the minimum purchase age curbs youth vaping

Laws restricting the age of purchase protect youth and young adults from experimenting with e-cigarette use and from developing nicotine addiction. Because these laws increase the age gap between those who can legally buy products and teens, they reduce the ability of high school students to purchase e-cigarettes from their peer groups.^{27,28} At present, the majority of youth report accessing vape products through peer and social sources, such as resale or sharing.²⁹ While there has been limited research on the impact of minimum age laws on e-cigarette use and initiation, the effectiveness of such tobacco laws in protecting youth from tobacco initiation and nicotine addiction have been well documented. Raising the minimum legal age of sale to 21 for cigarettes, in conjunction with e-cigarettes, would have a substantial effect on preventing or delaying initiation of use among youth as compared to a policy allowing 19 year olds to purchase. 30,31 The current age of initiation for vaping in Canada is 15.8 years³², and for tobacco it is 13.3 years¹⁴. By delaying initiation, age restrictive policies protect the developing brain of youth from the harms associated with nicotine use.

Increasing the minimum age for the sale of e-cigarettes and tobacco to 21 years is receiving strong support from people in Canada and is emerging as the new international standard. The U.S., Honduras, Philippines, Singapore, Ethiopia, Uganda, Mongolia, Thailand, Sri Lanka and Japan have set the minimum legal age for sale of tobacco to 21 years²⁷. The U.S., Honduras, Georgia, Kazakhstan, and Kuwait have set 21 as the minimum age for legal sale of e-cigarettes²⁸. In 2020, Prince Edward Island raised the minimum age for purchase of e-cigarettes to 21³³.

Support for the policy recommendations

Heart & Stroke's policy recommendations are in line with measures being implemented internationally to curtail the rising crisis of youth vaping. Recent polling data shows that people in Canada support these measures. A nationally representative polling conducted by Pollara Strategic Insights in January 2023 found that nine out of ten Canadians are supportive of the federal government introducing measures to restrict the sale and use of vape products among youth, with two-thirds expressing strong support³⁴. Specifically:

 84% of Canadians support the federal government implementing restrictions on the sale and use of vape flavours and additives that are attractive to youth such as sweet, candy, fruit, dessert, and mint/menthol flavours;

- 84% of Canadians support the federal government implementing plain packaging mandate for vape products, which will prohibit the use of colourful company logos and design;
- 86% of Canadians support the federal government increasing the minimum age requirement for the sale of vape products to 21 years³⁴.

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