

Talking to Youth About Vaping

To: Chair and Members of the Board of Health

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Prepared By: Louise Brooks, MPH, Health Promotion Specialist
Anna Vanderlaan, MPH, Manager Health Promotion

Approved By: Dr. Kyle Wilson, MSc, PhD
Director of Information Systems & CIO/CPO

Submitted By & Signature: *Original signed document on file.*

Dr. Nicola J. Mercer, MD, MBA, MPH, FRCPC
Medical Officer of Health & CEO

Recommendations

It is recommended that the Board of Health receive this report for information.

Key Points

- Vaping poses risks to youth health such as negative impacts to the developing brain and exposure to chemicals associated with lung disease, asthma, cancer cardiovascular disease and other health issues
- Fifteen percent of Wellington-Dufferin-Guelph (WDG) students in grade 7-12 report vaping in the past year
- WDG Public Health collaborates with community partners locally and across the province to implement a multi-pronged approach to decrease youth vaping rates that includes education, research, prevention programs, enforcement and supporting policy development

- Parents and other adults should be aware of the harms related to vaping and are encouraged to discuss these with youth to help them make informed decisions about their health
- Support and resources for youth and anyone in WDG who wants to quit vaping are available at wdgpublichealth.ca/vaping

Background

Electronic cigarettes (including vapes and other vape products) were originally introduced in the early 2000s as a smoking cessation tool.¹ Recent findings indicate that the majority of youth who vape have never tried a tobacco cigarette, suggesting that youth are not using these devices to reduce or quit smoking.²

High nicotine concentrations, flavours, low cost, easy access, marketing strategies aimed at youth and the lack of regulatory measures to protect youth are all factors contributing to youth vaping. National reports indicate that stress reduction was the most cited reason (33%) for vaping in youth ages 15 to 19.² Among youth, vaping has become more popular than traditional cigarettes, threatening national public health efforts for harm reduction.²

Risks of Youth Vaping

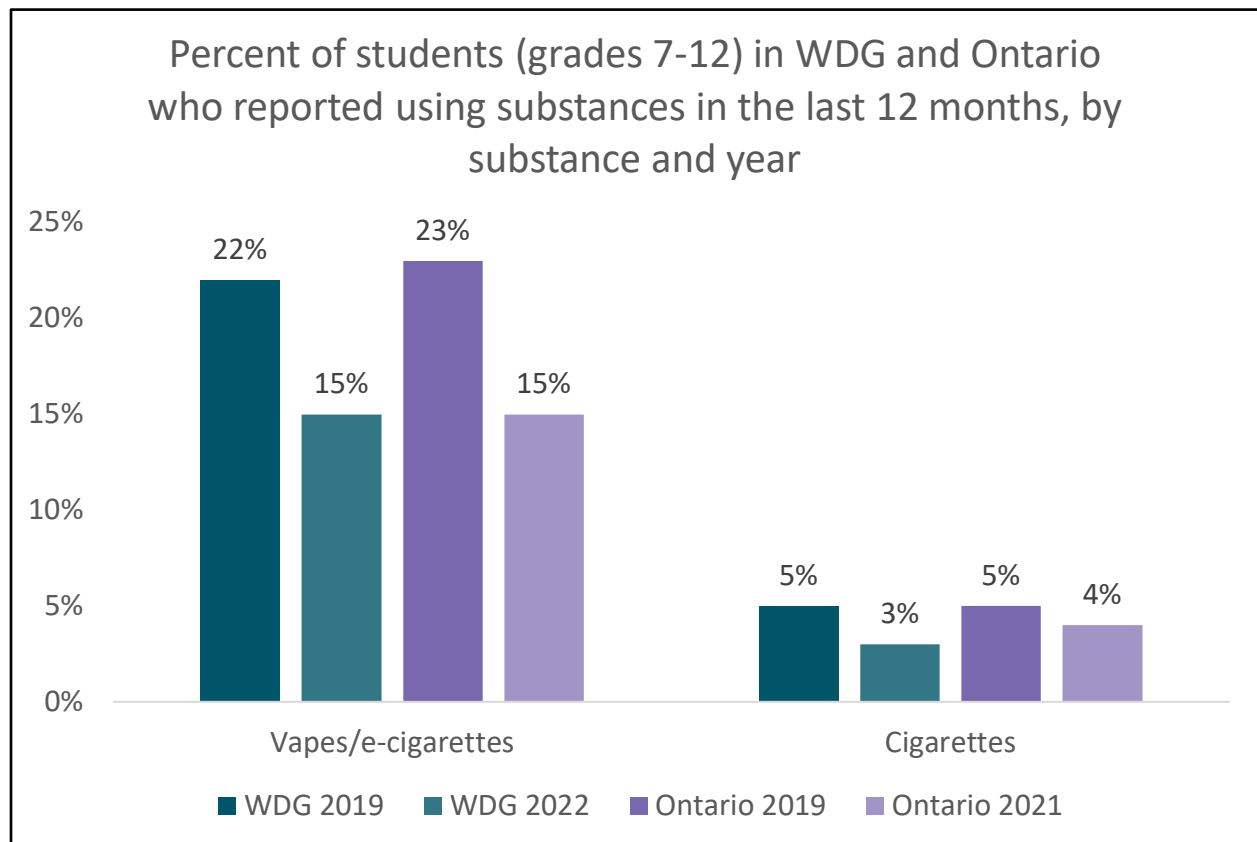
Vaping poses several risks specifically for youth. Recent research suggests vaping:

- **Impacts the developing brain** - Nicotine-containing vapes may predispose youth to an addiction to nicotine which can negatively impact mood, attention and self-control, especially in developing brains.³ Nicotine exposure during adolescence causes long-term structural and functional changes in the brain and can harm cognitive functions like working memory and attention span.³
- **Increases risk of lung injury** - *E-cigarette, or vaping, product use-associated lung injury* (EVALI) are sudden and severe lung problems that have been reported among teens and young adults who vape.⁴
- **Impacts other health issues** - Vaping exposes youth to other harmful chemicals including glycerol, propylene glycol and formaldehyde which have been linked to lung disease, asthma, cancer and other health issues.⁵ For example, a recent study suggests that chronic vaping can significantly impair the body's blood vessels and cause changes to blood, leading to an increased risk for cardiovascular disease.⁶

Trends in Youth Vaping and Cigarette Use

Rates of youth vaping in WDG and Ontario remain high, with 15% of students in grade 7-12 reporting in the 2022 Well-Being and Health of Youth (WHY) Survey that they had used a vape in that past 12 months (Figure 1).⁷ Vaping has become much more popular than cigarette use in this age group, with 15% of students reporting using a vape compared with 3% who report using cigarettes.^{7,8} Recent trends show an encouraging decline in the rates of grade 7-12 students who report vaping in the past year (Figure 1). However, it is possible that this was influenced by pandemic isolation measures and additional parent oversight during this time.⁸ It will be important to review data from the planned 2023-2024 WHY Survey to determine if the decline in youth vaping continues over time.

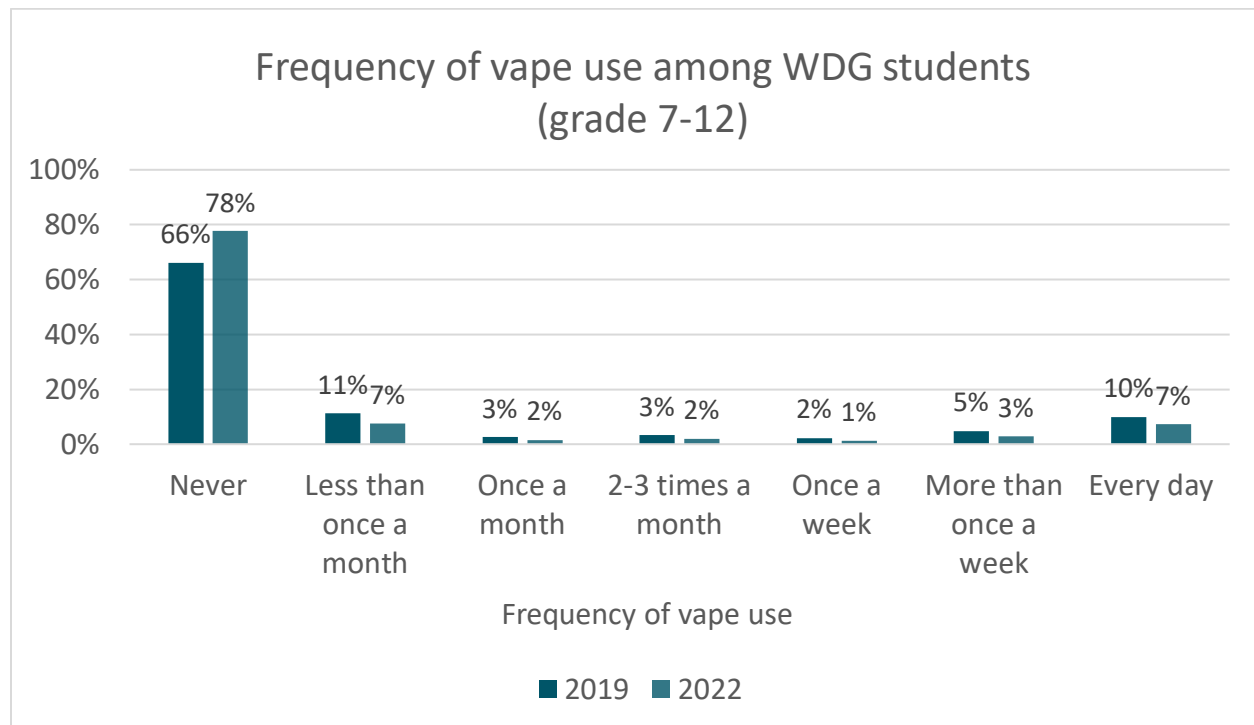
Figure 1. Percent of students (grades 7-12) in WDG and Ontario who reported vaping or using cigarettes in the last 12 months over time



Source: Well-Being and Health of Youth (WHY) Survey 2019 and 2022⁷ Ontario Student Drug Use and Health Survey (OSDUHS) 2019 and 2021.⁷

Although the majority of grade 7-12 students in WDG have never used a vape (78%), many of those who do use one frequently. In the 2022 WHY survey, 7% of grade 7-12 students reported vaping daily (Figure 2).⁷

Figure 2. Frequency of vape use among WDG students (grades 7-12) over time



Source: Well-Being and Health of Youth (WHY) Survey 2019 and 2022.⁷

Local data also shows that among grade 7-12 students some groups are more likely to report vaping in the past 12 months than others:

- Rural students (19%) were more likely to report vaping compared to urban students (14%)⁷
- Non-binary students (19%) were more likely to report vaping compared to male and female students (15%)⁷
- Students who do not identify as heterosexual (18%) were more likely to report vaping compared to heterosexual identifying students (15%)⁷

Administrative staff at all 16 secondary schools in WDG reported an increase in vape-related concerns to local Public Health enforcement officers during site visits in 2023. The health unit has set up an [online complaint form](#) that members of the public are encouraged to use to submit complaints if they identify locations where vape and tobacco products are being sold to underaged youth. There have been over 30 complaints received and investigated to date this year.

Current Policies to Reduce Vaping Among Youth

Regulatory interventions have been shown to be effective at reducing vaping among youth.⁹ Current vape restrictions in Ontario include flavours (except tobacco flavoured) and adopting a 20 mg/mL nicotine concentration limit. These approaches combined with the restriction of vapour products to adults and the use of vaping products in public places has impacted youth vaping behaviours.⁹

At this time, [Bill 103, Smoke-Free Ontario Amendment Act \(Vaping is not for Kids\), 2023](#) has been through first reading.¹⁰ Its aim is to amend the Smoke-Free Ontario Act to prevent youth from initiating vaping and to prohibit the promotion of vaping products. The Act, if amended, would include provisions such as setting a minimum age of 21 for selling and supplying a tobacco product, vapour product or prescribed product or substance. Online vaping sales would be prohibited and vaping sales would also be restricted to specialty vape stores or designated stores in remote or rural communities – both of which would need approval by the local Board of Health.¹⁰

The Alliance for a Tobacco Free Ontario (ATFO) and the Ontario Public Health Association (OPHA) are advocating for the adoption of a tax on vaping products. A wealth of evidence from tobacco policy indicates that youth are particularly sensitive to price.¹⁰

Discussion

Quitting Vaping

Given the prevalence of vaping among youth, as well as the health effects described above, there is a need for evidence-based guidance to support youth interested in quitting vaping. Several mobile and web-based applications provide vaping cessation programs to address youth vaping. They include a mixture of resources and methods of support such as telephone counselling, live-chat and texting opportunities. Currently, there is growing evidence in support of mobile- or online-based applications using a combination of support (text messaging, peer mentoring, virtual self-help interventions) as effective vaping cessation interventions.¹¹ At this time there is no guidance specific to pharmacotherapy (i.e., medications) to support quitting vaping, although some existing guidelines suggest it may be reasonable to apply current smoking cessation protocols.¹²

WDG Public Health has a dedicated webpage with information about vaping and current vaping cessation resources from local and provincial organizations. Resources include mobile and desktop applications with texting, live-chat, telephone or interactive website support for youth. Table 1 provides a sample of some of the resources promoted by WDG Public Health. For the full list visit wdgpublichealth.ca/vaping.

Table 1. Available online, app and telephone-based resources for quitting vaping

Program name	Organization	Details
<u>QUASH</u>	The Lung Health Foundation	<ul style="list-style-type: none">• A stop vaping/smoking app for youth.• The program allows users to create a customized quit plan and get help at each stage of the quit process.
<u>Stop Vaping Challenge</u>	The Ontario Tobacco Research Unit (OTRU)	<ul style="list-style-type: none">• An app that provides a venue for youth to reflect on their vaping behaviours and patterns in a fun, social way that encourages quitting with friends.

<u>Smokers Helpline</u>	Canadian Cancer Society	<ul style="list-style-type: none"> • Online resources and a texting program for people looking to quit vaping, smoking or both. • Quit coaches are available.
<u>Not An Experiment (NAE)</u>	Simcoe-Muskoka District Public Health	<ul style="list-style-type: none"> • Online youth vaping cessation support program and a game where youth can create and download a quit plan. • The program supports parents, educators, and youth in understanding the risk and harms associated with vaping. • NAE is currently being evaluated.
<u>Talk Tobacco</u>	Canadian Cancer Society	<ul style="list-style-type: none"> • Free confidential program offering culturally appropriate support, resources, and information via phone about quitting smoking, vaping, and commercial tobacco use to First Nations, Inuit, Métis, and urban Indigenous communities. • Quit coaches are available.
<u>The Expand Project</u>	Ontario Research and Tobacco Unit and Canadian Cancer Society	<ul style="list-style-type: none"> • Informed by and made for queer and trans young adults ages 18-29 working together to provide accurate and timely resources to reflect on smoking and vaping use both personally and in the community.

Public Health Action to Educate Parents, Caregivers and Educators About Vaping

Clearing Up the Cloud Vaping Awareness Campaign

In May of 2023, WDG Public Health launched a month-long vaping awareness campaign entitled *Clearing Up the Cloud* to coincide with Anti-Vaping Awareness Day (May 3, 2023). The goal of the campaign was to increase awareness of the potential health risks of vaping. The campaign targeted parents, educators and the public, and clearly outlined the current health risks of vaping.

Figure 3. Sample social media post from the Clearing Up the Cloud vaping awareness campaign



The campaign used a multi-pronged approach to promote messages. Digitally, campaign messages were disseminated using WDG Public Health social media platforms (Facebook, Instagram, Twitter) (Figure 3). Digital screens located in various venues across Guelph and Wellington County expanded the reach of the campaign and provided a different media stream to reach targeted audiences. A webpage was

developed to house and promote vaping information and cessation resources. Instagram and Facebook campaign posts received paid intermittent boosting throughout the month of May to increase campaign reach. YouTube pre-roll ads were utilized as an additional platform to promote and expand the reach of campaign messages. An estimated 79,000 individual views of the campaign were received.

The campaign also included a [blog post](#) which discussed the vaping campaign messages and encouraged readers and anyone interested in vaping cessation to visit the webpage for more information and cessation resources. *Clearing Up the Cloud* campaign posters were developed in-house, and printed copies were provided to 240 schools in Wellington, Dufferin and Guelph (Figure 4).

Figure 4. Clearing up the Cloud campaign poster disseminated to local schools



Talking to Youth About Vaping

A 2022 situational assessment completed by the Tobacco Control Area Network (TCAN) and Public Health Ontario (PHO) indicated a lack of knowledge about vaping and the potential impacts of vaping.¹³ Information shared from the assessment stated that parents are more likely to allow vaping as opposed to tobacco smoking in their home. Youth and parents may not be aware that vaping products contain nicotine. Adults need to be aware of the risks to provide support to a child or a teen. Being informed is the first step in starting a conversation with youth.

Peer pressure, popularity, stress and anxiety are among the reasons that youth start vaping.¹⁴ Talking to youth about vaping is crucial in helping them make informed and healthy choices. Health Canada offers a discussion guideline: [Talking With Your Teen About Vaping](#). Key points and strategies for parents to consider when discussing vaping with a child or adolescent include:^{14, 15}

- **Open communication:** Create an environment where your child or adolescent feels comfortable discussing sensitive topics. Encourage open dialogue and to come with questions or concerns.
- **Being informed:** An understanding of risks and harms will provide the knowledge required to have an informed discussion.
- **Learning the vaping lingo:** Learning the various words that youth use to describe vaping will provide a better understanding and ease of conversation.
- **Appealing to their intelligence:** Approach the conversation with respect for your child's intelligence and ability to understand complex issues.
- **Conversation, not lecture:** Be patient and ready to listen. Listening provides the goal of having a meaningful discussion. Take the opportunity to learn together (e.g., if you don't know the lingo, ask).

- **Discussing coping strategies:** Talk about healthier ways to cope with stress, anxiety and peer pressure. Encourage hobbies, sports and creative outlets.
- **Providing resources:** Provide youth with credible resources of information such as those from healthcare providers or Public Health. Helpful resources for quitting vaping can be found at: www.wdgpUBLICHEALTH.ca/vaping.

Health Equity Implications

Some groups of youth may be at an increased risk of vaping and therefore an increased risk for future health concerns. Queer and trans young adults, youth with attention deficit hyperactivity disorder and those suffering with mental health and substance use issues are more likely to vape.¹⁶ Tailored cessation services that are culturally competent and developed in cooperation with the intended target group are recommended to reduce inequities in vaping-related health concerns.¹⁶

To inform evidence-based intervention strategies, it is also important to understand underlying risk factors for vaping. For example, a recent study of adolescents and young adults demonstrated the relationship between vaping and adverse childhood experiences.¹⁷ It found that the following risk factors were associated with vaping: parental smoking or vaping, emotional abuse, emotional neglect, exposure to verbal intimate partner violence, household substance use, household mental illness, parental separation/divorce, parental problems with police, foster care or contact with a child protective organization, an unsafe neighbourhood and peer victimization. This supports the conclusion that early intervention to buffer the effects of adverse childhood experiences and build resilience in youth may be important vaping prevention measures.

Conclusion

Vaping poses significant risks to the health of youth, including negative impacts on brain development and exposure to harmful chemicals linked to lung disease, cancer, cardiovascular problems, and other health issues. The prevalence of vaping among Wellington-Dufferin-Guelph (WDG) students is concerning, with 15% of grade 7-12 students reporting vaping within the past year. Although trends appear to be improving, the results of the upcoming 2023-2024 WHY Survey will help clarify if the observed decrease in vaping among youth has continued.

WDG Public Health, in collaboration with community partners, will continue to use a multi-pronged approach to mitigate youth vaping rates through education, research, prevention programs, enforcement, and policy development. In particular, Public Health will continue to work in close partnership with our local school boards to help identify issues related to youth vaping and provide support.

This report underscores the importance of parental engagement in discussing vaping-related risks with youth. Youth who are interested in reducing or quitting vaping should visit wdgpublichealth.ca/vaping to review available supports. Continued efforts of the entire community are essential to ensure sustained improvement in reducing local vaping rates, particularly as the tobacco control community emphasizes the concerning trend of vaping replacing cigarettes as the most prominent nicotine product among youth.

Ontario Public Health Standards

Foundational Standards

- Population Health Assessment
- Health Equity
- Effective Public Health Practice
- Emergency Management

Program Standards

- Chronic Disease Prevention and Well-Being
- Food Safety
- Healthy Environments

- Healthy Growth and Development
- Immunization
- Infectious and Communicable Diseases Prevention and Control
- Safe Water
- School Health
- Substance Use and Injury Prevention

2023 WDGPH Strategic Directions

- People & Culture:** WDGPH has an organizational culture of engagement, inclusion, and agility.
- Partner Relations:** WDGPH collaborates with partners to address priority health issues in the community.
- Health System Change:** WDGPH is positioned to be an agent of change within the broader health sector.

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