

TO: Chair and Members of the Board of Health

FROM: Christopher Mackie Medical Officer of Health / CEO

DATE: 2020 April 16

**ASSOCIATION OF LOCAL PUBLIC HEALTH AGENCIES (aIPHa) RESOLUTION:
REGULATORY MEASURES TO ADDRESS THE HARMS, THE AVAILABILITY AND
YOUTH APPEAL OF VAPOUR PRODUCTS**

Recommendations

It is recommended that the Board of Health:

- 1. Receive Report No. 021-20, “Regulatory Measures to Address the Harms, the Availability and Youth Appeal of Electronic Cigarettes and Vapour Products”;*
- 2. Endorse the Statement of Sponsor Commitment and the Association of Local Public Health Agencies Resolution submission, “Reducing the Harms, the Availability and Youth Appeal of Electronic Cigarettes and Vaping Products through Regulation” attached as [Appendix A](#); and,*
- 3. Direct staff to submit the resolution (Appendix A) to the Association of Local Public Health Agencies (aIPHa) for consideration at the Annual General Meeting in June.*

Key Points

- Youth vaping prevalence is increasing at an alarming rate; e-cigarette prevalence rates among Ontario students between the ages of Grade 7 and Grade 12 have doubled over the last two years, with 23% reporting e-cigarette use in the past year (184,200 students) compared to 11% in 2017.
- Vapour products expose users to harmful toxins, including cancer-causing chemicals, diacetyl, volatile organic compounds, heavy metals, and ultrafine particles that can be inhaled deeply into the lungs.
- Nicotine is a highly addictive substance that can have adverse, long-lasting negative effects on the developing brain.
- The Middlesex-London Board of Health has a history of supporting the enactment of strong policy measures to help prevent the initiation of vaping product use and to promote a smoke-free and vapour-free culture.
- Due to growing concerns related to health consequences of vaping and the uptick of youth vaping across Canada, Health Unit staff recommend that the Middlesex-London Board of Health sponsor the attached submission ([Appendix A](#)) for consideration at the Association of Local Public Health Agencies Annual General Meeting in June.

Current Trends in Youth Vaping

Youth vaping prevalence is increasing at an alarming rate. Results from the 2018-19 Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS) show that e-cigarette prevalence rates among Canadian grade 7 to 12 students have doubled from 10% in 2016-17 to 20% in 2018-19, with prevalence rates of past 30-day use being higher among students in grades 10 to 12 (29%) than those in grades 7 to 9 (11%). Of additional concern, the results indicate that students who reported using an e-cigarette (with or without nicotine) in the past 30 days are vaping frequently, with approximately 40% reporting daily or almost daily use. The 2019 Ontario Student Drug Use and Health Survey (OSDUHS) reinforces the need for intensive public health

intervention. Vaping rates have doubled among Ontario students between the ages of Grade 7 and Grade 12 between the last two years, with 23% reporting e-cigarette use in the past year (184, 200 students) compared to 11% in 2017. About 13%, or 1 in 8 report using an e-cigarette weekly or daily, which is up from 2% in 2015.

Health Harms Associated with Vaping

Emerging data suggests that vapour products may be safer than combustible tobacco products; however, this data is not yet conclusive, and there is consensus among the public health community that vapour products and the aerosol that vaping devices produce are not harmless. Vaping devices are still relatively new, and more research is needed to fully understand both the short- and long-term health risks associated with vaping. The use of e-cigarettes appears to be an independent risk factor for the development of respiratory disease, but more longitudinal studies are needed. In the absence of conclusive longitudinal evidence, there is consensus that vapour products expose users to harmful toxins, including cancer-causing chemicals, diacetyl, volatile organic compounds, heavy metals, and ultrafine particles that can be inhaled deeply into the lungs. These substances have been linked to increased cardiovascular and non-cancer lung disease. Additionally, there is substantial evidence that some chemicals present in e-cigarette aerosols are capable of causing DNA damage and mutagenesis, and that long-term exposure to e-cigarette aerosols increase the risk of cancer and adverse reproductive outcomes.

Nicotine is a highly addictive substance that can have adverse effects on the developing brain, including negative, long-lasting effects on attention, memory, concentration, and learning, decreased impulse control, increased risk of experiencing mood disorders (such as depression and anxiety), and increased risk of developing nicotine dependence and addiction. In addition, there is substantial evidence that e-cigarette use increases the risk of ever using combustible tobacco cigarettes among youth and young adults. When attempting to weigh the harms against the potential benefits that e-cigarettes may yield through cessation and harm reduction, the current state of evidence is concerning. Simulation models that have been tested in the United States show e-cigarette use represents more population-level health harms than benefits, with an estimated 80 youth and young adults starting to use an e-cigarette product for every cigarette smoker who quits.

Opportunity for Protective Policy Measures through Federal and Provincial Regulation

The availability of flavours, the ease of accessing vaping products at corner stores and through online sales, the unregulated and targeted advertising to young people, the smoother vaping experience provided by the development of nicotine salts, and the availability of high nicotine concentrations have posed significant challenges in Public Health efforts to halt vapour product uptake. Health Canada and the Ontario Ministry of Health should be commended for their work thus far to address vaping, but additional regulations are required at the federal, provincial and municipal levels. Due to growing concerns related to the health harms associated with vapour product use and the uptick of youth vaping across Ontario and Canada, Health Unit staff, with contributions from the Medical Officer of Health and staff from the Simcoe Muskoka District Health Unit, prepared a resolution, attached as Appendix A, that if sponsored by the Middlesex-London Board of Health, would go forward for consideration by the ALPHA membership at the Annual General Meeting in June. Continued efforts are needed from all levels of government to mitigate youth access and appeal of e-cigarettes and vaping products through policy actions, such as those outlined in the attached resolution. Swift action by Health Canada and the Ontario Ministry of Health is imperative to reverse current trends of youth vaping uptake.

This report was prepared by the Healthy Living Division.



Christopher Mackie, MD, MHSc, CCFP, FRCPC
Medical Officer of Health / CEO