



SPOTLIGHT ON

SUBSTANCE USE

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Evidence-informed health policies need to be put in place to prevent harm related to substance use among youth. These policies focus on the broader contextual factors that create or exacerbate substance-related issues.¹

WHY WE NEED TO FOCUS OUR ATTENTION ON SUBSTANCE USE

Young people try substances for a variety of reasons: to relieve social anxiety or physical pain, to give in to peer pressure, to feel good, to have fun, to try new things.¹ This timeframe in a youth's life typically occurs within a family, school, community, and societal settings. These intersect with the broader social determinants of health and established norms that can give rise to risk factors for substance use.¹

SUBSTANCE USE AMONG NOVA SCOTIAN CHILDREN AND YOUTH

The *Canadian Student Tobacco, Alcohol and Drugs Survey* examines reported tobacco, alcohol, cannabis, and other drug use among samples of students in grades 7 to 12.² The most recent survey shows substance use among Nova Scotian youth is rising and, in some cases, are concerningly higher than national levels.²

The popularity of vaping has led to increases in nicotine use in Nova Scotia. This is particularly



concerning as there had previously been tremendous gains in tobacco control and declining use of conventional cigarettes.³

Alcohol and cannabis use are higher in Nova Scotia than those of peers across Canada, and the misuse of over-the-counter and prescription drugs is also increasing.² These data are limited to the sample of youth in a school setting and, therefore, are not representative of the entire youth population (i.e., youth who are not in school). These data also do not provide any demographic indicators to understand who is more vulnerable to harms from substance use.

A closer look at increases in vaping among Nova Scotia youth

While rates of cigarette smoking have remained relatively low among youth (4.5 percent of students in grades 7 to 12 reported being cigarette smokers in 2019), there has been a surge in vaping over the past five years.²

Vaping has generally been perceived as less harmful than cigarette smoking, but still comes with considerable risks, in part due to the presence of nicotine found in most vaping fluids. Nicotine is highly addictive and exposure to the developing adolescent brain has shown to cause long-term cognitive and behavioural impairments.⁴⁻⁷

Nicotine is one of the main addictive substances in combustible cigarettes, and its regular use is associated with dependence and lung damage.⁸ Nicotine is also found in most vaping products. Highly concentrated nicotine vaping fluid produces a buzz or a rush that is described as enjoyable by youth explaining their reasons for vaping.⁹

- In 2014-15, 13.0 percent of Nova Scotian students in grades 10 to 12 and 4.6 percent in grades 7 to 9 reported vaping in the past 30 days.¹⁰ By 2018-19, this figure had almost tripled in both age groups, to 37.1 percent and 12.4 percent, respectively.
- Notably, in Nova Scotia, the rate of females who vaped in the last 30 days increased markedly between 2016-17 and 2018-19, from 17.5 percent to 25.3 percent, effectively closing the gap between males and females in the province.¹⁰ This is also much higher than national averages.
- The *Canadian Student Tobacco, Alcohol and Drugs Survey* also asks Canadian youth about their perceptions of harm from different substances, including vaping products.¹⁰
- In 2016-17, 38 percent of grade 7 to 9 students in Nova Scotia perceived no or only slight risk of harm from e-cigarette use

on a regular basis; 54.3 percent reported a moderate or great risk of harm from regular use (a significant increase from 2014-15), and 7.7 percent said they did not know (a significant decrease from 2014-15).

- As expected, youth perceive higher harms associated with regular use than with occasional use. The percentage of youth who report perceiving great risk of harm from regular use of e-cigarettes increased significantly between 2016-17 and 2018-19, from 25.5 percent to 41.8 percent, corresponding to a reduction in the percentages of both those who perceive no risk or slight risk. Though the percentage has decreased over time, approximately eight percent of youth report that they do not know the harms associated with regular or occasional use of e-cigarettes.

It is worth noting that 15 percent of Nova Scotian students have only tried vaping and never tried a cigarette, compared to only 8.2 percent of Canadian students.¹⁰ The widespread uptake and reported easy access of vaping also presents significant cause for re-evaluation of legislation regarding vape product marketing and availability.

Alcohol and cannabis: Higher than the Canadian average

Heavy drinking or binge drinking is defined in the *Canadian Student Tobacco, Alcohol and Drugs Survey* as consuming five or more standard drinks on one occasion.¹⁰ High-risk drinking in Nova Scotia was notably higher than the national rate in 2014-2015 and 2016-2017. In 2018-2019, 24.8 percent of students in Nova Scotia reported engaging in high-risk drinking in the previous year (23.4 percent nationally). In 2018-2019, the average age of initiation (age of first drink) among grade 7 to 12 students in Nova Scotia was 13.4 years, unchanged from the 2016-2017 survey.

Heavy drinking is associated with a range of potential acute harms including increased risk of alcohol poisoning, injury, and unsafe sex.¹¹ Additionally, both cannabis use and heavy drinking have been shown to negatively impact adolescent brain development, with higher frequency and heavier use being associated with increased risk of harm.¹² Alcohol consumption increases among youth who have more access to alcohol.¹ Nova Scotian youth in grades 7 to 12 stated that it was fairly or very easy to access alcohol.¹²



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In 2018-2019, 23.4 percent of grade 7 to 12 students reported cannabis use in the past 12 months, significantly higher than the national percentage.

Alcohol and cannabis use among children and youth not only affect the individual, but significantly impact communities as well.

- Youth aged 16-24 years have the highest age-specific rate of traffic deaths in Canada.¹³ Of particular concern is driving while impaired, which has the potential for serious injury or death for the impaired driver, passengers, and others.
- A significant proportion of young people are at risk for harms related to impaired driving in Nova Scotia: 3.6 percent of students in grades 7 to 9 and 12.9 percent in grades 10 to 12 reported operating a motor vehicle within one hour of consuming alcohol or two hours of cannabis use.²
- Furthermore, one in four students in grades 7 to 9, and almost one in two in grades 10 to 12 have been a passenger in a car where the driver was under the influence of alcohol or cannabis.²

Over-the-counter and prescription drugs: Misuse on the rise in Nova Scotia

On a population level, relatively few children and youth use unregulated or misuse over-the-counter and prescription substances. Substance use in this area has not increased significantly since 2014-15 in Nova Scotia. However, according to the *Canadian Student Tobacco, Alcohol and Drugs Survey*, misuse of over-the-counter and prescription medications is now on the rise.² Among the survey findings:

- In Nova Scotia in 2018-19, 4.8 percent of students in grades 7 to 9 and 14 percent in grades 10 to 12 had used unregulated substances in the past 12 months.
- Synthetic cannabinoids (2.7 percent), solvents (2.1 percent), and hallucinogens (1.2 percent) were the unregulated substances used most by students in grades 7 to 9, while hallucinogens (7.6 percent), synthetic cannabinoids (6.6 percent), and cocaine (4.8 percent) topped the list for those in grades 10 to 12. As well, 10.2 percent of students in grades 7 to 9 and 16.6 percent of students in grades 10 to 12 reported misusing over-the-counter or prescription medication in the past 12 months.



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- Dextromethorphan (a cough suppressant), anti-nausea, and sleeping medicine were the top three medication types most misused for both grades 7 to 9 and 10 to 12.

These data indicate trends, behaviour, and risk perceptions among youth to provide insight and to prioritize which substances require strengthened measures to prevent harm. There is a need to implement and maintain evidence-informed population health policies that address access, advertising, and pricing of these substances. It is also imperative to prioritize the mental health and well-being of youth to achieve population harm-reduction objectives.

RISK AND PROTECTIVE FACTORS THAT INFLUENCE SUBSTANCE USE

While the impact on an individual level may vary from substance to substance, the risks and harms associated with substance use produce similar long-term outcomes:

- The early, frequent, and heavy use of alcohol and cannabis by youth is associated with a complex presentation of acute and chronic harms.¹⁴
- Early substance use is associated with addiction, depression, anxiety, and other mental health diagnoses later in life.

- Adverse childhood experiences (ACEs), sometimes implicated by substance use, can have negative, lasting effects on health, well-being, and opportunities for success. These exposures can disrupt healthy brain development, affect social development, compromise immune systems, and lead to substance use and other unhealthy coping behaviors.¹⁵

For children, youth, and families to thrive, there must be an appropriate, trauma-informed, culturally safe, and robust social safety net in the province. Multiple reports, evidence, and strategies confirm that ensuring families have access to economic resources, are free from discrimination and violence, and are part of a supportive, inclusive community are key strategies to improve the social determinants of mental health and the creation of healthy conditions for families to thrive.^{16,17} Unfortunately, some of Nova Scotia's children and youth, particularly those that have been in the custody of the province, are at a greater risk for harm, in part due to early trauma, being unhoused, or exposed to violence among other ACEs.

To adequately support these children, youth, and families, treatment services addressing substance use must be child and youth centered, trauma informed, and responsive to diverse intersectoral needs.





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The community where children and youth live, learn, play, and grow has an impact on their behaviour, including substance-use behaviour. International examples with potential for Canadian applications indicate that a whole-of-community approach that focuses on increasing protective factors and reducing risk factors can lead to many benefits for children and youth, including reduced and delayed substance-use behaviour.¹ Protective factors include strong social connectedness to family, school, and community; secure and stable housing; safe and inclusive education; food security; and basic income.¹ Risk factors include a community experiencing poverty, violence, discrimination, or intergenerational trauma.¹ Risk factors also include substances that are highly available, widely marketed, and/or very affordable.^{18,19}

Over the past few decades, substances have become increasingly available and promoted in communities and this impacts child and youth substance-use rates. Lack of regulations and/or existing loopholes on advertising and marketing fail to protect children and youth from exposure to otherwise regulated substances like alcohol, cannabis, and vaping products.

The corporate agenda and media (traditional and social) influence also impact children's perceptions of substance use.²⁰ Young people

are the primary target of many corporate advertisements, which suggest that using substances (alcohol, cigarettes, vaping products) will make you more popular, sexy, and successful.

The physical, social, and online environments where children and youth live, play, and grow influence the way they interact with substances. Further attention to the marketing of substances to youth is needed both federally and provincially. In 2017, substance use cost Nova Scotia more than \$1.4 billion, which amounts to \$1,499 per person.²¹ In addition, the long-term impacts of early, frequent, and heavy substance use are experienced across the lifespan.

Investing in healthy public policy will reduce healthcare costs associated with substance use over time.

IMPROVING OUTCOMES: OPPORTUNITIES IN THE NOVA SCOTIAN CONTEXT

A comprehensive approach connected to the broader social determinants of health is needed to address the issue of substance use. Early intervention, education, and treatment are necessary to reduce harm; however, to effectively reduce the number of children and



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youth using substances, delay the age of first use, and reduce the harmful consumption of substances, population-based policy and regulatory measures are essential. Healthy public policy can improve physical and social environments as well as change societal and cultural norms to reduce the harm caused from the substance use among children and youth.

Using public policy to influence the environment in which children live is crucial to shaping their relationship with substances. Protective policies that ensure affordable, quality housing, nutritious food, and financial security through a living wage are a few ways to reduce or prevent adverse childhood experiences early.²²

Creating stability and access to resources within the household is important; so, too, is ensuring that children and youth live in a neighbourhood that is healthy and thriving. This is another preventative approach to substance use early in life.

More specifically, connecting substance-use prevention to municipal land-use planning and regulation is an effective strategy to reduce availability and limit access and promotion of substances to youth and prevent substance use at a community level.²³

Communities can reduce the negative impact of substance use and improve health outcomes by improving policies, regulations, zoning bylaws, and systems. From a community-programming perspective, more dedicated funds and consistent data collection are crucial to understanding the continued impact on substance use for Nova Scotian children and youth. Equally important: disaggregated data that will allow us to fully understand sub-populations in greatest need of preventative measures. When addressing substance use at the community level, a restorative harm-reduction, health-equity, and anti-stigma approach is needed.

Communities exist within a larger societal context, and healthy public policies that shape that context can have a tremendous ripple-down effect. Addressing the social determinants of health at a population level is imperative and through evidence-informed policy will enhance positive health outcomes for youth. Specifically for substance use, evidence consistently recommends three key elements that will effectively protect public health: (1) restricting access and availability (2) restricting advertising and marketing and (3) implementing pricing models that deter high-risk use.^{19,24}



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Access, advertising, and pricing can also be addressed through federal or provincial legislation to regulate substances. Cannabis, tobacco, and vaping products have federal acts. Alcohol, however, is not regulated in the same fashion. There is no overarching federal legislation, and Nova Scotia has an outdated provincial liquor control act.²⁵ Attention to industry marketing and sponsorship within communities needs to closely be monitored and restricted in spaces where children, live, play, and grow.

A government monopoly on the sale of substances is more protective than a privatized model, which can heavily focus on and be driven by profit. Government-run operations can enhance the balance between financial incentives and public health and safety considerations and, thereby, provide more protection for children and youth.²⁶ Implementing and adhering to a health-impact assessment prior to increasing access will also enhance protection.²⁷

THE BOTTOM LINE

A comprehensive approach that includes prevention, harm reduction, education, and treatment provides the greatest opportunity to protect the health of Nova Scotian youth from the harms associated with substance use.

It is important to look to the evidence to effectively reduce consumption of all substances collectively, as the use of tobacco, alcohol, cannabis, and other substances are strongly related.

The environment and conditions in which children and youth live shape the circumstances, behaviours, and opportunities they have. Investing in evidence-informed healthy public policy will enhance the protective factors, reduce risks, and reshape the supportive conditions needed to delay onset of first substance use and reduce harmful consumption of substances for children and youth in Nova Scotia.

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