Vaping among adolescents

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Adolescents aged 15 to 17 years who consumed alcohol, cannabis or other tobacco products were more likely to report having vaped in the previous 30 days than teens who did not use these substances. Being male, employed, having lower grades, or peers that engaged in negative behaviours like skipping school also increased the chances of vaping. For younger teens aged 12 to 14 years, alcohol use, peer behaviours and employment also increased this risk.

These findings are from a new study released today in *Health Reports* titled "Correlates of vaping among adolescents in Canada." The study uses three complementary data sources to present a more complete picture of vaping in adolescents in Canada.

Vaping is the act of inhaling and exhaling vapour which can contain nicotine and flavourings produced by devices such as electronic cigarettes (e-cigarettes) and vape pens or mods. While vaping may be less harmful than inhaling smoke from tobacco, it is not without health risks: nicotine dependence, exposure to potentially damaging chemicals, other substance use, as well as respiratory and cardiovascular disease.

More than one-fifth of adolescents aged 15 to 17 years reported vaping in the previous 30 days

In 2019, 21% (about 240,000) of adolescents aged 15 to 17 years reported vaping in the previous 30 days, which was almost four times higher than 12- to 14-year-olds (5%; about 60,000). Age also affected some of the risk and protective factors for vaping. For example, among 12- to 14-year-olds, Attention Deficit Disorder was a risk factor for vaping in the previous 30 days, whereas having parents who usually knew who they were with and higher relatedness scores (indicating a greater sense of closeness and belonging with others) were protective factors.

The majority who vaped consumed e-liquids containing nicotine, regardless of age

Nicotine is a highly addictive substance affecting attention, cognition and mood. About 9 in 10 (89%) of adolescents aged 15 to 19 years who reported vaping in the previous 30 days used e-liquids containing nicotine, which was comparable to its use by older Canadians (81%). On the other hand, some vaping products appealed particularly to youth, which is why the Canadian federal government has since introduced regulatory measures along with other measures to limit and/or ban their sale. For example, fruit, candy, and dessert-flavoured vape products were more commonly used by 15- to 19-year-olds (62%) than adults aged 25 years or older (43%).

Two-thirds of adolescents who reported using both electronic and tobacco cigarettes tried vaping first

Among 12- to 17-year-olds who reported having used both electronic and tobacco cigarettes, two-thirds (66%) reported trying an e-cigarette before smoking a regular tobacco one. Comparatively, this was the case for one-third of 18- to 24-year-olds. For some of these adolescents and young adults, these numbers simply reflect experimentation, although other research has shown that some e-cigarette users progress to tobacco smoking.





Note to readers

This study uses data from three representative Canadian surveys with coverage in the 10 provinces. Data from the 2019 Canadian Health Survey of Children and Youth were used to examine sociodemographic, youth, parenting and peer characteristics associated with vaping in the previous 30 days among 12- to 17-year-olds. Data from the 2020 Canadian Community Health Survey were used to examine the initiation of vaping before tobacco smoking among those aged 12 years or older, while data from the 2019 Canadian Tobacco and Nicotine Survey were used to examine the use of nicotine and flavoured e-liquids by those aged 15 or older.

While both the Canadian Tobacco Nicotine Survey and Canadian Community Health Survey specifically instructed respondents to exclude the vaping of cannabis when answering the vaping questions a similar qualifying statement was not included in Canadian Health Survey of Children and Youth. It is not known whether respondents of any of the surveys used in this study included the vaping of cannabis in their responses as the data were self-reported. This could result in an overestimate of the prevalence of vaping, although the impact is expected to be minimal because cannabis use is comparatively low in those under the age of 18.

For other information on vaping, see:

- The Daily Canadian Tobacco and Nicotine Survey, 2021
- The Daily, Canadian Tobacco and Nicotine Survey, 2020
- Canadian Tobacco and Nicotine Survey.

The articles "Risk of non-medical drug overdose following prescription of opioids post-injury: A retrospective cohort study," "Prevalence trends and factors associated with vaping in Ontario (2015 to 2018) and Quebec (2017 to 2019), Canada" and "Correlates of vaping among adolescents in Canada" are now available in the July 2022 online issue of *Health Reports*, Vol. 33, No. 7 (82-003-X).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).