

E-cigarette use by high school students linked to cigarette smoking

October 30 2017



Credit: CC0 Public Domain

Use of e-cigarettes by high school students was strongly associated with later cigarette smoking, according to a large study conducted in 2 Canadian provinces and published in *CMAJ* (*Canadian Medical*

Association Journal).

"While our study provides strong evidence that e-cigarettes are associated with smoking initiation among youth, the association is unclear," says Dr. David Hammond, School of Public Health and Health Systems, University of Waterloo, Waterloo, Ontario. "E-cigarettes may help to re-normalize smoking; however, the association between e-cigarettes and smoking may simply reflect common factors rather than a causal effect: the same individual and social risk factors that increase e-cigarette use may also increase the likelihood of youth smoking."

The study included 44 163 students in Grades 9-12 at 89 schools in Ontario and Alberta, Canada, who participated in the ongoing COMPASS study. In the current study, researchers looked at e-cigarette use at the start of the study in phase 1 (2013/14) and at follow-up (2014/15, with 87 schools). They classified students into 6 categories: current daily smokers, current occasional smokers, former smokers, experimental smokers, puffers and those who had never tried smoking.

Among students in both study phases, youth who used e-cigarettes in the 30 days prior to the start of the study were more likely to start [smoking cigarettes](#) and to continue smoking after 1 year, a finding consistent with other similar study types. At the same time, the prevalence of smoking decreased slightly over time: therefore, if e-cigarettes are promoting [youth smoking](#), the overall impact has been modest to date.

"Youth may be trying e-cigarettes before smoking because they are easier to access: until recently, [youth](#) could legally purchase e-cigarettes without nicotine, whereas regular cigarettes cannot be sold to young people under 18 years of age," says Dr. Hammond.

This is a large longitudinal study, meaning it collects information on the same subjects over time. Similar studies have been conducted in the US,

although tobacco regulation in Canada is different. Unlike the US, Canada has not approved nicotine-containing e-cigarettes for sale in conventional retail outlets such as supermarkets, although they are widely available online and in vape stores. Non-nicotine e-cigarettes do not require prior approval and make up a larger part of the e-cigarette market in Canada compared with many other countries. Canada is expected to announce new federal regulations on e-cigarettes shortly.

As the study was conducted in only 2 provinces, extrapolation of the findings nationally is unwise. As well, the study only looked at smoking initiation related to e-cigarettes and not the possible impact of e-cigarettes on smoking cessation.

The authors note that "the findings from our study provide support for both sides of the debate. It is highly plausible that 'common factors' account for a substantial proportion of increased cigarette-[smoking initiation](#) among [e-cigarette](#) users. At the same time, it would be foolhardy to dismiss the likelihood that early exposure to nicotine via e-cigarettes increases smoking uptake. Attributing the relative importance of these 2 factors will not be straightforward, and represents a critical challenge to the research community."

The authors suggest further research should be conducted on the link between [smoking](#) initiation and nicotine e-cigarettes compared with non-nicotine e-cigarettes.

More information: *Canadian Medical Association Journal* (2017).
www.cmaj.ca/lookup/doi/10.1503/cmaj.161002

Provided by Canadian Medical Association Journal

Citation: E-cigarette use by high school students linked to cigarette smoking (2017, October 30)
retrieved 5 May 2024 from

<https://medicalxpress.com/news/2017-10-e-cigarette-high-school-students-linked.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.