CDHA POSITION STATEMENT ON E-CIGARETTES
BACKGROUND

Electronic cigarettes (e-cigarettes) are battery-powered devices that mimic the use of conventional cigarettes. E-cigarettes are usually comprised of a battery, a cartridge containing water, flavouring and sometimes nicotine in a base of propylene glycol and glycerin, and an atomizer that heats this liquid to produce vapour.\textsuperscript{1,2} Puffing on the device triggers the atomizer to heat the solution, producing vapour that is inhaled by the user, an action that is often referred to as "vaping."\textsuperscript{2} A key difference between e-cigarettes and tobacco cigarettes is that e-cigarettes do not contain tobacco and no combustion takes place.\textsuperscript{2,3}

PREVALENCE

Since the introduction of e-cigarettes to North American markets in 2007, the use of e-cigarettes has increased, especially among youth and young adults. Approximately 2.5 million Canadians ages 15 and older (8.5% of the total population) have tried using an e-cigarette.\textsuperscript{2,4} The majority of e-cigarette users are current tobacco smokers, suggesting that dual use of cigarettes and e-cigarettes is high.\textsuperscript{4} Among tobacco users, it is estimated between one-third to one-half have tried e-cigarettes.\textsuperscript{5-9} E-cigarettes are also being used by non-smokers, including youth.\textsuperscript{4,7} Reasons for e-cigarette use include curiosity, a perception that they are a less harmful alternative to tobacco, a desire to reduce and/or quit smoking, and convenience, as e-cigarettes are often permitted in locations where tobacco smoking is prohibited.\textsuperscript{4,6,10}
THE ISSUE

Although e-cigarettes are perceived to be less harmful than tobacco cigarettes due to their absence of combustion-related toxins, there are growing concerns about their potential for nicotine addiction, possible adverse health effects, their potential to renormalize tobacco use, the increased uptake among youth, and other unforeseen consequences of unregulated production, sale, and use of these diverse products.\textsuperscript{11,12} In addition, the e-cigarette industry promotes the use of e-cigarettes as a harm-reduction strategy for tobacco users and smoking cessation aids. However, while research is emerging, these claims have not been supported by sufficient and conclusive high-quality evidence.\textsuperscript{11,13-15} E-cigarettes have not been approved as a smoking cessation aid by Health Canada. Furthermore, e-cigarettes may represent a “gateway” drug, particularly to youth, if they increase the likelihood that non-smokers or former smokers will use combustible tobacco products, or if they discourage smokers from quitting.\textsuperscript{16}

In addition to nicotine, a highly addictive substance, other ingredients that have been found in e-cigarettes include formaldehyde, carcinogenic compounds such as nitrosamines, carbonyl compounds, volatile organic compounds (some levels similar to cigarettes), and vapour containing heavy metals.\textsuperscript{12,17-20} There has also been an increase in accidental poisonings and short-term eye and respiratory irritation.\textsuperscript{21,22} The potential harm associated with the long-term exposure to the second-hand vapour produced from e-cigarettes remains unknown.
CURRENT REGULATION

E-cigarettes without nicotine may be legally sold in Canada. In contrast, e-cigarettes containing nicotine and those that make health claims have not been approved for sale and are currently regulated as drugs under The Food and Drug Act. This law requires Health Canada’s approval to import, advertise or sell these products. To date, no e-cigarettes with nicotine have been granted authorization by Health Canada under this Act. Despite this legislation, the use of e-cigarettes both with and without nicotine has increased rapidly in a short period of time.\(^2\)

However, the rules for e-cigarette use continue to evolve. In the absence of federal leadership, provinces and cities have moved to regulate e-cigarettes. Nova Scotia became the first province to regulate the use of e-cigarettes; several other provinces are in the process of passing similar legislation. A growing number of municipalities have also taken steps to limit the use of e-cigarettes in public spaces and municipal offices. However, there are significant inconsistencies in the policy approaches across jurisdictions.

RECOMMENDATIONS

In the absence of sufficient high-quality evidence demonstrating the safety of e-cigarettes and their role in reducing dependence on tobacco, and given emerging concerns about health risks, federal, provincial/territorial, and municipal governments must take steps to minimize the potential negative public health consequences of these products, particularly for youth.\(^16\) CDHA recommends that e-cigarettes with and without nicotine be subject to the following regulatory controls\(^{18,23-27}\):

- A continuing ban on e-cigarettes containing nicotine
- A ban on e-cigarettes sales to minors
- A ban on flavourings in cartridges and e-liquids, especially those that are directly marketed to youth (e.g., bubble gum flavour)
- A ban on e-cigarette use in public places and workplaces

Since e-cigarettes are not approved as a smoking cessation aid in Canada, health care providers should continue to assist individuals interested in quitting by using evidence-based cessation treatments and behavioural support. Further high-quality research on safety, youth uptake, potential role of smoking cessation, and the long-term health and societal effects of e-cigarettes is needed. CDHA will continue to monitor the research findings and revise this position statement as appropriate.
REFERENCES


Endorsed by CDHA’s Board of Directors on July 15, 2015.