

FIVE THINGS TO KNOW ABOUT ...

Electronic cigarettes

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See also the editorial by Stanbrook on page 1379 and at www.cmaj.ca/lookup/doi/10.1503/cmaj.131469**Electronic (e-) cigarettes are cigarette-shaped canisters used to simulate the action of cigarette smoking**

Batteries within the canisters heat up fluid-filled cartridges that contain varying concentrations of flavouring agents, propylene glycol, glycerine, water and other chemicals.^{1,2} Not all e-cigarettes contain nicotine. The cartridge content varies widely according to the manufacturer and distributor. The act of smoking an e-cigarette is called “vaping,” because the user inhales vapour, not smoke.



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Electronic cigarettes release vapour, not smoke.**E-cigarettes are not regulated or approved for sale in Canada**

Although not approved for sale in Canada, e-cigarettes are readily available online and through retail outlets. A recent 4-country survey of current and former smokers showed that 40% of the 1581 Canadians surveyed were aware of e-cigarettes and 10% had tried them.³ Although the prevalence of cigarette smoking has decreased over the past few decades,⁴ consumer interest in e-cigarettes is rising.⁵

Although perceived by cigarette smokers as a safer alternative to tobacco smoking, e-cigarettes have not been evaluated for their safety

It is unknown whether inhalation of the mixture of chemicals found in the vapour of e-cigarettes is safe.⁵ Available literature suggests that e-cigarettes contain trace amounts of impurities and carcinogenic tobacco-specific nitrosamines.⁶ Concerns exist regarding the potential to maintain nicotine dependency in current smokers or induce addiction in nonsmokers.³

E-cigarettes have not been fully evaluated for their efficacy as smoking cessation aids

To date, one 6-month randomized controlled trial has investigated the efficacy of nicotine-containing e-cigarettes as a smoking cessation aid; statistical power was insufficient to conclude that e-cigarettes were superior to nicotine patches.⁷

Effective smoking cessation interventions are available for smokers wishing to quit

Several pharmacologic and behavioural interventions have been found to improve smoking cessation rates (see Appendix 1, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.130806/-/DC1). These strategies help patients manage nicotine withdrawal symptoms, learn behavioural self-regulation skills and provide instrumental social support.

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