

Retail availability and marketing of electronic cigarettes in Canada

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ABSTRACT

OBJECTIVES: Canada is among an increasing number of countries with restrictions on the sale of electronic cigarettes (e-cigarettes). In Canada, e-cigarettes containing nicotine have not been approved for sale; however, e-cigarettes that do not contain nicotine and do not make health claims can be sold. To date, there is little empirical evidence assessing the retail availability and marketing of e-cigarettes in countries such as Canada.

METHODS: Audits were conducted at 59 brick-and-mortar retail outlets (grocery stores, convenience stores, tobacconist shops and vape shops) in four cities (Vancouver, Toronto, Montreal and Halifax) in August–October 2014. In addition, a total of 21 e-cigarette manufacturer/retailer websites were audited, and inquiries were made as to whether the companies sold nicotine-containing products.

RESULTS: Overall, 76% of the retail outlets sold e-cigarette products. Of convenience stores, grocery stores and tobacconist shops with e-cigarettes for sale, the vast majority (94%) sold nicotine-free products only; in contrast, all the vape shops sold at least one nicotine-containing e-cigarette product. Front counter displays were the most common form of in-store promotions and were present in virtually all convenience stores, tobacconist shops and vape shops. Nicotine-containing e-cigarettes were available for purchase at approximately half (52%) of the online e-cigarette retailers surveyed.

CONCLUSION: E-cigarettes with and without nicotine are widely available and marketed at a variety of retail outlets in Canada. “Illegal” sales of nicotine-containing e-cigarettes were predominantly found at vape shops and online outlets, suggesting limited compliance with existing regulations.

KEY WORDS: E-cigarettes; marketing; tobacco control; policy

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The electronic cigarette (e-cigarette) market has grown dramatically in the past five years, prompting the development of different regulatory strategies for these novel products in response. In Canada, e-cigarette products containing nicotine are regulated under the *Food and Drugs Act*, and to date no such product has received market approval under the Act.¹ Therefore, the marketing and sale of e-cigarette products containing nicotine, including e-liquid, is illegal. E-cigarettes that do not contain nicotine and do not make health claims are legally available without authorization by Health Canada and are sold widely in mainstream retail outlets. However, Health Canada has issued a public advisory against using e-cigarettes, as these products “may pose health risks and have not been fully evaluated for safety, quality, and efficacy”.²

Despite restrictions on nicotine-containing e-cigarettes, evidence suggests widespread availability and use of e-cigarettes among Canadians. Recent data indicate that approximately 2.5 million Canadians have used an e-cigarette, including approximately 20% of youth.³ To date, there has been limited systematic effort to assess the availability of e-cigarettes and compliance with the restriction on nicotine-containing products in the Canadian market. The purpose of the current study was to conduct a preliminary audit of e-cigarette marketing and availability in Canada, with a focus on brick-and-mortar and online retail environments.

METHODS

Brick-and-mortar retail audit

A standardized protocol was used to examine brick-and-mortar retail outlets for e-cigarette product availability and marketing in August–October 2014. Retail outlets were examined in four urban centres across Canada: Vancouver, Toronto, Montreal and Halifax. Audits were conducted at 16 retail outlets in each city: grocery stores/supercentres (4), convenience stores (4), tobacconist shops (4) and vape shops/e-cigarette specialty stores (4). The exception was Halifax, where 11 audits were conducted, as only 2 tobacconist shops and 1 vape shop could be identified.

Because licensed tobacco retailer lists are not publicly available in Canada, an Internet-based approach was used to construct a sampling frame for the audit. Potential retail outlets were identified in each city using Google (one of the largest, most

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up-to-date publicly available databases in the world) searches for four pre-specified grocery store/superstore locations and two large pre-specified chain convenience stores (search terms: “[store name] [city name]”); two additional independent or chain convenience store locations, excluding gas station booths (search terms: “convenience store [city]” or “dépanneur Montreal”); four tobacconist shop locations, excluding cigar specialty shops (search terms: “tobacconists [city]” or “tobacco [city]”); and four vape shop locations (search terms: “vape shop [city]”, “vape [city]” and “electronic cigarettes [city]”). For each type of retail outlet, a sampling frame was constructed using all locations listed on the first page of Google map search results, from which retail outlets were selected at random. If the search on Google maps did not yield enough locations, the results were supplemented by stores identified in the location directory Yelp.ca.

The audits were conducted with paper and pencil by trained research assistants, who disclosed their task to the store employee(s). Specific product data were collected, including brand names, flavours, product types (disposable, tank system or e-liquid refill), nicotine content and health claims. The presence of e-cigarette promotional materials, including exterior promotions, interior flyers/brochures, interior product displays and any other materials in the retail outlets, was also documented. Where possible, research assistants confirmed with a store employee whether all available e-cigarette products in the outlet had been located and whether any e-cigarette products containing nicotine were available for purchase.

Online retail audit

An audit examining the online availability of e-cigarette products was conducted in August 2014. A total of 23 e-cigarette manufacturer/retailer websites were examined: 13 manufacturers/brands were previously identified by Health Canada, and 10 additional online retailers were identified through Google (search terms: “buy e-cigarettes Canada”). Using contact information available on the company websites, each retailer was contacted and asked three questions: 1) Were their products available online or in retail stores (or both)? 2) Did the company sell products containing nicotine, and were those products available online or in retail stores (or both)? and 3) Could products purchased online be shipped to a Canadian address?

RESULTS

Brick-and-mortar retail audit

Product Availability

Audits were conducted in 59 retail outlets (16 grocery stores, 16 convenience stores, 14 tobacconist shops and 13 vape shops). Overall, 76% (45) of these retail outlets sold e-cigarette products (5 grocery stores, 15 convenience stores, 12 tobacconist shops and all 13 vape shops). Of these, all sold disposable e-cigarettes, and 62% (28) sold other products, including tank systems and e-liquid refills. The e-liquid refills were available in 10 mL, 15 mL and 30 mL bottle sizes, 30 mL being the most common.

Disposable e-cigarettes and e-liquid refills were available in a wide variety of flavours. Five main flavour categories were identified: candy (e.g., caramel), drinks (e.g., root beer), fruit

(e.g., blueberry), tobacco (e.g., US and Canadian blends, menthol) and desserts (e.g., vanilla bean ice cream). The most common e-cigarette brands (disposable and non-disposable types) included VAPUR, KangerTech, SmokeNV, Innokin, EVO, Aspire, Ezee and Joyetech. A few stores, primarily vape shops, sold their own brand of products. Among convenience stores, grocery stores and tobacconist shops with e-cigarettes for sale ($n = 32$), the vast majority (94%) sold nicotine-free products only; in contrast, all of the 13 vape shops audited sold at least one e-cigarette product containing nicotine, with nicotine levels ranging from 0% to 2.5% (25 mg/mL).

Although the vast majority of e-cigarette products did not carry health claims, many products included general information, such as a list of ingredients, a measure of equivalence to conventional cigarettes (e.g., number of puffs, cigarettes or packs) or a disclaimer that the product is not intended for sale to persons under the legal age. Most of the e-liquid refill bottles included a general disclaimer that the contents were harmful and listed corresponding instructions for first-aid treatment (see Figure 1). One brand of e-cigarettes carried a disclaimer that “Health Canada does not classify [brand name] as a cessation or NRT [nicotine replacement therapy] product.”

Promotional Materials

A summary of e-cigarette promotional materials in retail outlets that sold e-cigarettes ($n = 45$) is provided in Table 1. Very few retail outlets had exterior promotions ($n = 8$), with the exception of vape shops, approximately half of which featured general e-cigarette posters and stickers, as well as brand-specific advertisements, on windows and doors.

Few retail outlets had e-cigarette brochures ($n = 7$). Some of the brochures were from specific e-cigarette manufacturers and included information about the products, instructions for use and a list of product benefits. Vape shops also had their own general brochures with information about how e-cigarettes work, information comparing e-cigarettes with tobacco cigarettes, details about their own brands and product lines, and client testimonials. In contrast to product packaging, product brochures carried health claims for e-cigarettes. For instance, some brochures indicated that e-cigarettes emit a “harmless vapour” and are a “safer way” to satisfy the desire for cigarettes; others emphasized that e-cigarettes are not associated with the negative aspects of using traditional cigarettes, such as bad smell and exposure to secondhand smoke, as well as the fact that these products can be used indoors.

All convenience stores and all vape shops, as well as the majority of tobacconist shops (92%), had e-cigarette displays at the front counter or check-out area. Among grocery stores that sold e-cigarette products ($n = 5$), three had product displays at the front counter, and two displayed products in the smoking cessation section of their pharmacy. In vape shops, product displays were present throughout the interior. Although most of the front counter displays were visible to customers, they were not always accessible to them; thus, in most cases customers had to request products from retail outlet employees. Accessible front counter displays were typically found in convenience stores ($n = 11$) and, to a lesser extent, in vape shops ($n = 5$) and tobacconist shops ($n = 3$). Disposable e-cigarettes were the most



Figure 1. Sample e-liquid bottle with general disclaimer

common products included in accessible front counter displays. Other promotional materials observed in retail outlets included posters and signs advertising specific products. In vape shops, it was common to see e-liquid samples, often in a variety of flavours, allowing customers to try various products before purchasing them.

Online retail audit

A total of 21 online retailers were audited (2 retailers did not respond). Among retailers, e-cigarette products were available for sale in retail outlets only ($n = 2$), online only ($n = 5$) or both in retail outlets and online ($n = 14$). Approximately half (52%) of the retailers sold nicotine-containing products in retail outlets only ($n = 1$), online only ($n = 4$) or both in retail outlets and online ($n = 6$). All retailers selling nicotine-containing products indicated willingness to ship products to Canada.

DISCUSSION

E-cigarettes are widely available in Canada, including both nicotine- and non-nicotine-containing e-cigarettes. Overall, approximately three quarters of the Canadian retail outlets audited sold e-cigarette products. Consistent with other markets, e-cigarettes in Canadian brick-and-mortar and online retail outlets are available in a variety of types, flavours and nicotine concentrations.⁴ In the current audit, e-cigarettes were available for purchase in 76% of retail outlets. In an audit of stores selling alcohol and tobacco in London, UK, Hsu and colleagues reported that e-cigarettes were available in 57% of retail outlets.⁵ In addition, two audits of e-cigarettes have been conducted in the US: Wagoner and colleagues⁶ found that product availability in a variety of retail outlets in North Carolina and Virginia increased significantly from 25% in 2012 to 60% in 2013, and Rose and colleagues⁷ reported that e-cigarettes were available in 34% and in 31% of two national samples of tobacco retailers in 2012. Although the reported availability of e-cigarettes in the current audit is much greater than that in the literature, it is not clear whether this is a reflection of increased market growth and popularity or a result of differences in types of audited retail outlets, sampling frames and policy contexts in these jurisdictions.

The Canadian e-cigarette market appears distinct in its relative availability of nicotine-free products and its dominant e-cigarette brands. The most common brands identified in this audit did not include any of the leading brands found in the US, such as blu, Mystic or NJOY,⁶ which may be a consequence of Canadian restrictions on nicotine-containing e-cigarettes. Furthermore, the audit revealed the dominance of vape shops in the e-cigarette retail environment, which have become more common in recent years⁸ but have not been included in previous audits of e-cigarettes.⁵⁻⁷ The concentration of promotional materials at the front counter of retail outlets is consistent with findings from retail audits of e-cigarettes in London, UK, and in North Carolina and Virginia in the United States.^{5,6} Promotion of e-cigarettes in retail outlets commonly accessed by young people, including grocery stores and convenience stores, warrants further attention, given the evidence linking exposure to tobacco point-of-sale promotions and smoking initiation among youth,⁹ as well as concerns that e-cigarettes may “renormalize” tobacco use.^{10,11}

With the exception of vape shops, most retail outlets appeared to comply with the prohibition on the sale of nicotine-containing e-cigarettes in Canada. It should be noted that products labelled and marketed as nicotine-free were not tested for nicotine content to establish compliance as part of the

Table 1. E-cigarette promotions across retail outlets selling e-cigarettes in Vancouver, Toronto, Montreal and Halifax, Canada

Type of promotion	Frequency of promotions across retail outlets				
	Grocery stores ($n = 5$)	Convenience stores ($n = 15$)	Tobacco shops ($n = 12$)	Vape shops ($n = 13$)	Total ($N = 45$)
Exterior promotions	0	1	1	6	8
Flyers/brochures	0	2	0	5	7
Front counter displays	3	15	11	13	42
Other	2	1	2	10	15

current study. However, testing conducted on behalf of Health Canada between April and June of 2014 indicated that of the 91 tested products labelled as nicotine-free, almost half were found to contain nicotine.¹² Therefore, the sale of “illegal” nicotine-containing e-cigarettes may be more prevalent among traditional retail outlets than product labelling would suggest. The current audit also indicates that nicotine-containing e-cigarettes are widely accessible to Canadians through the Internet, which is a key sales channel for these products.⁴ Although it was not possible to confirm the geographic origin of the Internet retailers, a number of online outlets appeared to be Canadian-based, rather than simply cross-border sources from the US. The extent to which Canadian authorities are actively enforcing the ban on nicotine-containing e-cigarettes is unclear. In testimony to the Canadian House of Commons, Health Canada representatives described the current enforcement strategy as “complaint- and risk-based”.¹² Judging by the proliferation of outlets selling nicotine-containing e-cigarettes and the open manner in which they operate, enforcement activities appear to be minimal.

To our knowledge, this is the first empirical study on e-cigarette availability and promotion in Canada. The audit was limited to four major urban centres in Canada and may not reflect the retail availability of e-cigarettes in small urban centres or rural areas. Furthermore, the current findings are preliminary and may not be generalizable because of limitations of the sampling frame used. Future audits should examine products in greater detail, noting key product components and price, in order to better monitor the rapidly evolving market. In addition, systematic product testing should be conducted to determine whether products sold in Canada comply with the restriction on nicotine.

Overall, the study findings indicate that e-cigarettes are widely available in Canada and that there may be direct implications for provincial policies on e-cigarettes currently under consideration by several provincial governments, involving regulation of the promotion, sale and use of e-cigarettes.¹³⁻¹⁸ Furthermore, the availability of nicotine-containing products suggests that the existing ban on such products in Canada is a ban in name only, with little enforcement. This underscores the need for developing a new federal regulatory framework for e-cigarettes, echoing the conclusion of a recent report by the Standing Committee on Health.¹² Unlike in most markets, a substantial proportion of products for sale in Canada are not labelled as having nicotine. Although an alarming proportion of these products may contain nicotine, non-nicotine-containing e-cigarettes are nevertheless much more common in Canada than in other jurisdictions, such as the US or the UK. The “mixed” market in Canada may have important implications for who uses e-cigarettes in this country and patterns of use, including associations with tobacco use.

REFERENCES

1. Health Canada. *Notice - To All Persons Interested in Importing, Advertising or Selling Electronic Smoking Products in Canada*, 2009. Available at: http://www.hc-sc.gc.ca/dhp-mps/prodpharma/applic-demande/pol/notice_avis_e-cig-eng.php (Accessed January 28, 2015).

2. Health Canada. *Health Canada Advises Canadians Not to Use Electronic Cigarettes*, 2009. Available at: <http://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2009/13373a-eng.php> (Accessed January 28, 2015).

3. Czoli CD, Reid JL, Rynard VL, Hammond D. *E-cigarettes in Canada – Tobacco Use in Canada: Patterns and Trends*, 2015 edition. Available at: http://www.tobaccoreport.ca/2015/TobaccoUseinCanada_2015_EcigaretteSupplement_Accessible.pdf (Accessed June 25, 2015).

4. Zhu SH, Sun JY, Bonnevie E, Cummins SE, Gamst A, Yin L, et al. Four hundred and sixty brands of e-cigarettes and counting: Implications for product regulation. *Tob Control* 2014;23(Suppl 3):iii3-9. PMID: 24935895. doi: 10.1136/tobaccocontrol-2014-051670.

5. Hsu R, Myers AE, Ribisl KM, Marteau TM. An observational study of retail availability and in-store marketing of e-cigarettes in London: Potential to undermine recent tobacco control gains? *BMJ Open* 2013;3:e004085. PMID: 24366581. doi: 10.1136/bmjopen-2013-004085.

6. Wagoner KG, Song EY, Egan KL, Sutfin EL, Reboussin BA, Spangler J, et al. E-cigarette availability and promotion among retail outlets near college campuses in two Southeastern states. *Nicotine Tob Res* 2014;16(8):1150-55. PMID: 24847099. doi: 10.1093/ntr/ntu081.

7. Rose SW, Barker DC, D’Angelo H, Khan T, Huang J, Chaloupka FJ, et al. The availability of electronic cigarettes in US retail outlets, 2012: Results of two national studies. *Tob Control* 2014;23:iii10-16. PMID: 24935892. doi: 10.1136/tobaccocontrol-2013-051461.

8. Lee YO, Kim AE. ‘Vape shops’ and ‘E-Cigarette lounges’ open across the USA to promote ENDS. *Tob Control* 2014;24(4):410-12. PMID: 24727649. doi: 10.1136/tobaccocontrol-2013-051437.

9. Paynter J, Edwards R. The impact of tobacco promotion at the point of sale: A systematic review. *Nicotine Tob Res* 2009;11(1):25-35. PMID: 19246438. doi: 10.1093/ntr/ntn002.

10. Benowitz NL, Goniewicz ML. The regulatory challenge of electronic cigarettes. *JAMA* 2013;310(7):685-86. PMID: 23856948. doi: 10.1001/jama.2013.109501.

11. Hajek P, Etter J-F, Benowitz N, Eissenberg T, McRobbie H. Electronic cigarettes: Review of use, content, safety, effects on smokers and potential for harm and benefit. *Addiction* 2014;109(11):1801-10. PMID: 25078252. doi: 10.1111/add.12659.

12. Standing Committee on Health. *Vaping: Towards a Regulatory Framework for E-cigarettes. Report of the Standing Committee on Health, 2015: 41st Parliament, 2nd Session*. Available at: <http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=7862816&Language=E&Mode=1&Parl=41&Ses=2> (Accessed March 31, 2015).

13. Bill 60. *An Act to Amend Chapter 12 of the Acts of 2002, the Smoke-free Places Act, and Chapter 14 of the Acts of 1993, the Tobacco Access Act*. Available at: http://nslslegislation.ca/index.php/proceedings/bills/smoke-free_places_act_amended_-_bill_60 (Accessed March 31, 2015).

14. Bill 45. *Making Healthier Choices Act*, 2015. Available at: http://www.ontla.on.ca/web/bills/bills_detail.do?BillID=3080 (Accessed March 31, 2015).

15. Bill 14. *Tobacco Control Amendment Act*, 2015. Available at: <https://www.leg.bc.ca/parliamentary-business/legislation-debates-proceedings/40th-parliament/4th-session/bills/first-reading/gov14-1> (Accessed March 31, 2015).

16. Bill 9. *An Act to Amend the Smoke-free Places Act*, 2015. Available at: http://www.assembly.pe.ca/bills/pdf_first/65/1/bill-9.pdf (Accessed June 23, 2015).

17. Bill 44. *An Act to Amend the Smoke-free Places Act*, 2015. Available at: <http://www.gnb.ca/legis/bill/FILE/58/1/Bill-44-e.htm> (Accessed June 23, 2015).

18. Bill 44. *An Act to Bolster Tobacco Control*, 2015. Available at: <http://www.assnat.qc.ca/en/travaux-parlementaires/projets-loi/projet-loi-44-41-1.html> (Accessed June 23, 2015).

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RÉSUMÉ

OBJECTIFS : Le Canada compte parmi un nombre croissant de pays qui imposent des restrictions à la vente des cigarettes électroniques. Au Canada, les cigarettes électroniques contenant de la nicotine ne sont pas homologuées pour la vente; cependant, celles qui ne contiennent pas de nicotine et qui ne font pas d’allégations santé peuvent être vendues. Jusqu’à maintenant, il existe peu de preuves empiriques sur la disponibilité des cigarettes électroniques chez les détaillants ou sur leur marketing dans les pays comme le Canada.

MÉTHODE : Nous avons mené des audits dans 59 points de vente au détail traditionnels (épicerie, dépanneur, tabagie et boutiques spécialisées dans la vente de cigarettes électroniques) dans quatre villes (Vancouver, Toronto,

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Montréal et Halifax) entre août et octobre 2014. De plus, nous avons audité les sites Web de 21 fabricants ou détaillants de cigarettes électroniques en leur demandant s'ils vendaient des produits contenant de la nicotine.

RÉSULTATS : Globalement, 76 % des points de vente au détail vendaient des cigarettes électroniques. La très grande majorité (94 %) des dépanneurs, épiceries et tabagies vendant des cigarettes électroniques ne proposaient que des produits sans nicotine; par contre, toutes les boutiques spécialisées en cigarettes électroniques vendaient au moins un produit contenant de la nicotine. Les présentoirs à la caisse étaient la forme la plus courante de promotion en magasin; ces présentoirs étaient omniprésents dans les dépanneurs, tabagies et boutiques spécialisées. Des cigarettes

électroniques contenant de la nicotine étaient en vente dans environ la moitié (52 %) des détaillants de cigarettes électroniques en ligne que nous avons sondés.

CONCLUSION : Les cigarettes électroniques avec et sans nicotine sont largement disponibles et commercialisées dans un éventail de points de vente au détail au Canada. Les ventes « illicites » de cigarettes électroniques contenant de la nicotine se font surtout dans les boutiques spécialisées et les points de vente en ligne, ce qui témoigne d'une conformité limitée à la réglementation en vigueur.

MOTS CLÉS : cigarettes électroniques; marketing; lutte antitabac; politique