

《2019年吸煙（公眾衛生）（修訂）條例草案》委員會

就委員會於2019年3月18日會議席上 所提出的關注事項的跟進工作

政府就委員提出的關注事項的回應載於下列各段。

建議禁止另類吸煙產品的理據

2. 食物及衛生局（“食衛局”）於2015年5月的立法會衛生事務委員會（“衛生事務委員會”）會議上，首次提出全面禁止電子煙的建議。不過，由於當時證明另類吸煙產品對健康的害處及其門戶效應的實質性科學證據不多，而世界衛生組織（“世衛”）並未建議禁止新興的加熱非燃燒煙草產品，以及考慮到全禁的立法過程可能耗時甚久，為確保可儘早訂立規管制度以減低這些新產品帶來的危害，食衛局於2018年6月19日的衛生事務委員會會議上建議立法規管另類吸煙產品，類似現行控煙政策的規管。我們亦強調會考慮持份者的意見和新的科學證據，不排除日後提出更嚴格的規管措施。我們知道這並非最理想的安排，但會是我們規管這些有害產品的第一步。
3. 規管的建議受到醫學界、教育界、家長及不少市民強烈批評。他們擔心在受規限的情況下容許售賣另類吸煙產品，不足以保障公眾健康，還會帶來十分負面的影響，尤以對兒童及青少年的影響為甚。衛生事務委員會在會議上亦通過一項無約束力的議案，促請政府全面禁止這些產品。
4. 同時，愈來愈多證據顯示，另類吸煙產品有損健康，並會引致門戶效應。委員可參考立法會參考資料摘要附件B以更詳細了解有關另類吸煙產品的健康風險、門戶及重整效應、普及程度和世衛的建議等。我們在制訂另類吸煙產品的管制時參考的科學研究載於附件A。政府化驗所就電子煙及加熱非燃燒煙草產品的測試結果載於附件B。
5. 事實上，根據海外經驗，另類吸煙產品的使用率可能急速改變，並形成不能逆轉的趨勢。當中，在已設有售賣吸煙產品年齡限制的地方，未成年人的另類吸煙產品使用率及增長尤其令人擔憂。美國在2018年有逾360萬名初中和高中學生為電子煙的現時使用者，使用人數在一年內激增逾150萬。¹日本一項縱向研究顯示，15至19歲人士就某品牌的加熱非燃燒煙草產品的現時使用率，由2015年的0.6%增長超過三倍至2017年的2.0%。²

¹ <https://www.fda.gov/TobaccoProducts/PublicHealthEducation/ProtectingKidsfromTobacco/ucm625887.htm>

² Tabuchi T, et al. Heat-not-burn tobacco product use in Japan: its prevalence, predictors and perceived symptoms from exposure to secondhand heat-not-burn tobacco aerosol. Tobacco Control. 2017;10.1136/tobaccocontrol-2017-053947

6. 當一個新產品還未在市場立足前，實施全面禁止是最有效的管制形式，尤其是預知產品將以非常積極的手法被推銷。鑑於愈來愈多證據證明另類吸煙產品的不良影響，加上世衛的建議和海外經驗，我們認為任何未能達至全禁的規管將會影響我們一直以來的控煙工作，並須額外投放資源以設立一套全新且繁複的執法系統，而我們認為投放有關的額外資源的理據並不充份。我們須考慮一個基本的問題：我們為何要投放大量公共資源“協助”引進已知有害的新產品。

7. 我們必須強調這些另類吸煙產品雖然面世時間尚短，但我們有必要避免重蹈規管傳統煙草產品的覆轍。一方面，如政府僅實施規管，或會被視為正式接納這些另類吸煙產品。另一方面，加熱非燃燒煙草產品含有真煙草，因而保留尼古丁的致癮作用。這些新產品特意吸引年輕人，我們可能因而面臨新一代依賴尼古丁的問題。香港的吸煙率不但在 2017 年達到 10% 的歷史新低，年輕人的吸煙率亦相當低，當中，15-19 歲及 20-29 歲的吸煙率分別為 1% 和 6.7%。正式將這些產品引入本地市場可能會扭轉這個趨勢。因此，我們必須在這些產品大行其道前採取行動，確保政府多年來控煙工作的成果不致毀於一旦，對新的吸煙產品所帶來的害處防範於未然。

8. 總體而言，保障公眾健康應該是政府的首要考慮。為此，行政長官在 2018 年《施政報告》公布，政府將修訂法例，禁止進口、製造、售賣、分發和宣傳另類吸煙產品。

煙草產品的焦油量和尼古丁量

9. 《世衛煙草控制框架公約》第 11 條³規定，締約方需實行有效措施，以確保煙草製品包裝和標籤不得以任何虛假、誤導、欺騙或可能對其特性、健康影響、危害或釋放物產生錯誤印象的手段推銷一種煙草製品，包括直接或間接產生某一煙草製品比其它煙草製品危害小的虛假印象的任何詞語、描述、商標、圖形或任何其它標誌。其可包括“低焦油”、“淡味”、“超淡味”或“柔和”等詞語。

10. 根據《世衛煙草控制框架公約》關於煙草製品的包裝和標籤的第 11 條的實施準則，“締約方不應要求在煙草製品包裝和標籤上作出關於煙草成分和釋放物的定量或定性說明，暗示一種品牌比其他品牌更少危害，例如焦油、尼古丁和一氧化碳數字，或聲明“這些香煙含有較低水平的亞硝胺””（粗體為本文所加，以示強調）。⁴

³ https://www.who.int/tobacco/industry/product_regulation/art_11_fctc/en/

⁴ https://www.who.int/fctc/guidelines/Guidelines_art_11_CH.pdf?ua=1

11. 事實上，低焦油及／或尼古丁的產品不應被視為危害較少。世衛國際癌症研究機構表示，經分析人們吸煙的方式，發現尼古丁、致癌物質和毒素的實際攝取量取決於吸食的強度和方法，與聲稱的焦油量幾乎沒有關係。目前以國際標準化組織／聯邦貿易委員會方法所測量的焦油和尼古丁量具有誤導性，對評估人體接觸致癌物質幾乎沒有價值。⁵吸煙者渴求尼古丁，他們可能會吸得更深、每口煙吸得更大或更快，或吸得更頻密，又或者每天吸額外的捲煙以獲得足夠的尼古丁來滿足他們的煙癮。因此，從普通捲煙轉用低焦油捲煙的人很可能吸入了相同份量的有毒化學物，低焦油和尼古丁含量的捲煙無助降低吸煙者的風險。⁶有大型前瞻性研究顯示，與吸食一般焦油含量品牌捲煙的人相比，吸食焦油含量極低或低的品牌的男性患上肺癌風險沒有差異。⁷相反，認為淡煙更安全的誤解削弱了戒煙的決心。研究發現，轉用聲稱為“輕怡”捲煙的吸煙者成功戒煙的可能性較低。⁸事實上，由煙草業界推廣“輕怡”捲煙更安全的錯誤觀念一旦形成後便難以消除。^{9,10,11}

12. 接觸煙草煙霧並沒有安全的水平，亦沒有安全的煙草產品。即使另類吸煙產品比傳統煙草產品釋出較少的有毒物質，在未有充分證據之前，我們不能視之為危害較低。現時沒有證據顯示減少接觸煙霧的有毒物質等於減低人類患病和死亡的風險。與其使用這些聲稱危害較少的產品，我們建議市民使用已證實有效及安全的戒煙方法戒煙，如尼古丁替補療法。衛生署設有綜合戒煙熱線（戒煙熱線號碼：1833 183），提供有關戒煙的專業輔導服務和資訊，並安排轉介吸煙者接受各類戒煙服務。此外，本地的非政府機構提供以社區為本的免費戒煙服務，包括輔導及藥物治療、中醫針灸、企業外展戒煙計劃，以及幫助青少年戒煙的服務。

13. 事實上，加熱非燃燒煙草產品的氣霧含較少有害物質的聲稱仍有待商榷（見附件 A 研究文獻或報告第 13 至 27 項）。有見及此，政府不同意委員的建議，設立加熱非燃燒煙草產品尼古丁和焦油的法定限值並容許售賣有關產品。

⁵ <https://monographs.iarc.fr/wp-content/uploads/2018/06/mono83.pdf>

⁶ National Cancer Institute. Risks Associated with Smoking Cigarettes with Low Machine-Measured Yields of Tar and Nicotine. Smoking and Tobacco Control Monograph 13External. Bethesda: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute, 2001

⁷ Harris Jeffrey E, Thun Michael J, Mondul Alison M, Calle Eugenia E. Cigarette tar yields in relation to mortality from lung cancer in the cancer prevention study II prospective cohort, 1982-8 BMJ 2004; 328 :72

⁸ Tindle, H. A., Shiffman, S., Hartman, A. M., & Bost, J. E. (2009). Switching to "lighter" cigarettes and quitting smoking. Tobacco control, 18(6), 485–490. doi:10.1136/tc.2008.029314

⁹ Borland R, Fong GT, Yong HH, et al. What happened to smokers' beliefs about light cigarettes when "light/mild" brand descriptors were banned in the UK? Findings from the International Tobacco Control (ITC) Four Country Survey Tob Control. 2008;17:256–62. [PMC free article] [PubMed] [Google Scholar]

¹⁰ Haddock CK, Lando H, Klesges RC, et al. Modified tobacco use and lifestyle change in risk-reducing beliefs about smoking. Am J Prevent Med. 2004;27:35–41. [PubMed] [Google Scholar]

¹¹ Smith SY, Curbow B, Stillman FA. Harm perception of nicotine products in college freshmen. Nicotine Tob Res. 2007;9:977–82. [PubMed] [Google Scholar]

《2019 年吸煙（公眾衛生）（修訂）條例草案》（“《條例草案》”）詳題的擬議修正

14. 委員提出問題，涉及對刪除《條例草案》詳題中“另類吸煙產品”的“另類”二字能否根據立法會《議事規則》提出擬議全體委員會審議階段修正案（“修正案”）。《議事規則》第 58(9)條規定，“如因對法案作出修正而須將法案的名稱加以修正，則須在完成上述程序時作出；但將該名稱（或該經修正的名稱）納入該法案的待決議題不得提出，任何就法例制定程式的待決議題亦不得提出。”而《議事規則》第 58(9)條的應用是“**在全體委員會審議階段並不能就法案的詳題作出修正**，除非就法案條文作出的某項修正導致有需要就詳題作出修正，或基於某些技術原因而有需要這樣做，例如須作出文字上的改善或澄清某項屬法案範圍內的問題”（粗體為本文所加，以示強調）。¹²

15. 我們認為現時沒有資料顯示擬議刪除詳題中“另類吸煙產品”的“另類”二字 —

- (a) 是因應《條例草案》運作條文的修正案所需；或
- (b) 會改善或澄清詳題中所用的文字。

因此，我們認為擬議的修正案違反《議事規則》第 58(9)條，並不應獲准動議。

食物及衛生局
衛生署
律政司
2019 年 4 月

¹² 立法會主席於 2011 年 6 月 27 日就吳靄儀議員擬對《通訊事務管理局條例草案》提出的全體委員會審議階段修正案的裁決，第 9 段。

另類吸煙產品的科學證據

現時有愈來愈多證據顯示另類吸煙產品均有損健康，並會引致門戶效應。就現時的科學證據，我們可以得出以下結論：

- (a) **電子煙**：電子煙的氣霧含有有害物質及致癌物。雖然電子煙的釋放物與傳統捲煙不同，但已有確實的證據證明使用電子煙對健康有害。電子煙可能作為有效戒煙工具的證據有限，反而有研究顯示使用者同時使用電子煙及傳統捲煙的情況普遍。現時亦有確實證據顯示使用電子煙會增加青少年及年輕人日後使用傳統捲煙的機會（門戶效應）。
- (b) **加熱非燃燒煙草產品**：加熱非燃燒煙草產品與傳統捲煙一樣會釋出大量有害物質及致癌物，其中尼古丁及焦油量與傳統捲煙相若。煙草產品釋出的有害物質及致癌物並沒有安全水平。此外，獨立研究發現，加熱非燃燒煙草產品製造商所測試標示潛在健康危害的生物標誌物當中，大多數在加熱非燃燒煙草產品和傳統捲煙之間實際上沒有統計學上可檢測的差異。加熱非燃燒煙草產品釋放物的改變，未必代表其毒性和健康風險較少。現時沒有證據證明使用加熱非燃燒煙草產品比傳統捲煙危害較少。更有研究發現同時使用加熱非燃燒煙草產品及傳統捲煙的情況普遍。加熱非燃燒煙草產品也令旁人吸入支流煙和二手煙。煙草商誤導的聲稱有可能誤導市民低估加熱非燃燒煙草產品的危害。青少年及年輕人亦容易被加熱非燃燒煙草產品時尚的設計和推廣手法吸引。
- (c) **草本煙**：雖然草本煙不含煙草或尼古丁，但仍可產生有毒物質包括致癌物。吸用草本煙至少與吸用捲煙同樣有害。

2. 以下列表概括相關的國際及本地研究文獻和報告，研究結果分類如下：

- A. 釋出有害物質的水平（第 3 至 5 頁）；
- B. 臨床症狀或疾病的風險（第 6 至 9 頁）；
- C. 二手煙（第 10 至 11 頁）；
- D. 潛在門戶效應（第 12 至 14 頁）；
- E. 雙重使用（第 15 頁）；

- F. 戒煙（第 16 至 17 頁）；
- G. 誤導性的聲稱（第 18 頁）；及
- H. 受傷及中毒（第 19 頁）。

A. 釋出有害物質的水平

	研究文獻或報告
電子煙	
1.	National Academies of Sciences Engineering, and Medicine. Public health consequences of e-cigarettes. Washington, DC: The National Academies Press; 2018 .
2.	Chivers E, Janka M, Franklin P, Mullins B, Larcombe A. Nicotine and other potentially harmful compounds in “nicotine-free” e-cigarette liquids in Australia. <i>The Medical Journal of Australia</i> . 2019 ;210(3):1.
3.	Goniewicz ML, Smith DM, Edwards KC, Blount BC, Caldwell KL, Feng J, et al. Comparison of Nicotine and Toxicant Exposure in Users of Electronic Cigarettes and Combustible Cigarettes. <i>JAMA Network Open</i> . 2018 ;1(8):e185937-e.
4.	Rubinstein ML, Delucchi K, Benowitz NL, Ramo DE. Adolescent Exposure to Toxic Volatile Organic Chemicals From E-Cigarettes. <i>Pediatrics</i> . 2018 ;141(4).
5.	Fuller TW, Acharya AP, Meyyappan T, Yu M, Bhaskar G, Little SR, et al. Comparison of Bladder Carcinogens in the Urine of E-cigarette Users Versus Non E-cigarette Using Controls. <i>Scientific Reports</i> . 2018 ;8(1):DOI:10.1038/s41598-017-19030-1.
6.	Hackshaw A, Morris JK, Boniface S, Tang J-L, Milenković D. Low cigarette consumption and risk of coronary heart disease and stroke: meta-analysis of 141 cohort studies in 55 study reports. <i>BMJ</i> . 2018 ;360:j5855 doi: 10.1136/bmj.j5855.
7.	Chung S-S, Zheng J-S, Kwong ACS, Lai VWY. Harmful flame retardant found in electronic cigarette aerosol. <i>Journal of Cleaner Production</i> . 2018 ;171:10-6.
8.	Wei B, Goniewicz M, O'Connor R, Travers M, Hyland A. Urinary Metabolite Levels of Flame Retardants in Electronic Cigarette Users: A Study Using the Data from NHANES 2013–2014. <i>International Journal of Environmental Research and Public Health</i> . 2018 ;15(2):201.
9.	Salamanca JC, Meehan-Atrash J, Vreeke S, Escobedo JO, Peyton DH, Strongin RM. E-cigarettes can emit formaldehyde at high levels under conditions that have been reported to be non-averse to users. <i>Scientific reports</i> . 2018 ;8(1):7559.
10.	Breland A, et al. Electronic cigarettes: what are they and what do they do? <i>Annals of the New York Academy of Sciences</i> . 2016 :1-26.
11.	American Academy of Pediatrics. Electronic Nicotine Delivery Systems. <i>Pediatrics</i> . 2015 ;136(5):1018-1026.
12.	Pisinger C, Døssing M. A systematic review of health effects of electronic cigarettes. <i>Prev Med</i> . 2014 ;69:248-260.

	研究文獻或報告
	加熱非燃燒煙草產品
13.	Jeong WT, Cho HK, Lee HR, Song KH, Lim HB. Comparison of the content of tobacco alkaloids and tobacco-specific nitrosamines in 'heat-not-burn' tobacco products before and after aerosol generation. <i>Inhalation toxicology</i> . 2019 :1-7.
14.	Salman R, Talih S, El-Hage R, Haddad C, Karaoghlanian N, El-Hellani A, et al. Free-Base and Total Nicotine, Reactive Oxygen Species, and Carbonyl Emissions From IQOS, a Heated Tobacco Product. <i>Nicotine & Tobacco Research</i> . 2018 :nty235-nty.
15.	Leigh NJ, Palumbo MN, Marino AM, O'Connor RJ, Goniewicz ML. Tobacco-specific nitrosamines (TSNA) in heated tobacco product IQOS. <i>Tobacco Control</i> . 2018 ;Published Online First: 21 September 2018:doi: 10.1136/tobaccocontrol-2018-054318.
16.	Glantz SA. PMI's own in vivo clinical data on biomarkers of potential harm in Americans show that IQOS is not detectably different from conventional cigarettes. <i>Tobacco Control</i> . 2018 ;27(Suppl 1):s9-s12.
17.	St.Helen G, Jacob III P, Nardone N, Benowitz NL. IQOS: examination of Philip Morris International's claim of reduced exposure. <i>Tobacco Control</i> . 2018 ;Published Online First: 29 August 2018:doi: 10.1136/tobaccocontrol-2018-054321.
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F. 戒煙

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H. 受傷及中毒

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電子煙及加熱非燃燒煙草產品的化驗結果

電子煙

政府化驗所曾就從市面購入電子煙進行化驗，以確定當中是否含有某些選定的有害化學物。有關樣本購自格仔鋪、電子煙專門店和互聯網。政府化驗所完成五輪化驗，並曾化驗下列化學物：

- (a) 甲醛¹；
- (b) 煙草特異性亞硝胺²，包括N-亞硝基降煙鹼(NNN)和4-(N-甲基亞硝胺基)-1-(3-吡啶基)-1-丁酮(NNK)；
- (c) 添味劑³，包括丁二酮、2,3-戊二酮和乙酰基甲基原醇；以及
- (d) 重金屬⁴，包括鉛、砷、鎬、銻、鉻和鎳。

2. 所有化驗結果摘錄如下：

日期	樣本來源	所檢測的化學物	化驗樣本數目（結果為陽性的樣本數目）	驗出的化學物含量
2015年9月	電子煙溶液	甲醛	37 (26)	5.6 毫克／公斤至9 600 毫克／公斤
2016年2月	氣霧	甲醛	20 (10)	0.07 至 8.1 微克／100 毫升氣霧
2016年7／8月	氣霧	煙草特異性亞硝胺	20 (0)	未能驗出
2017年2月	氣霧	<ul style="list-style-type: none"> • 丁二酮 • 2,3-戊二酮 • 乙酰基甲基原醇 	<ul style="list-style-type: none"> • 丁二酮：20 (0) • 2,3-戊二酮：20 (0) • 乙酰基甲基原醇：20 (2) 	兩個樣本均為 0.7 微克／100 毫升氣霧
2017年4月	氣霧	<ul style="list-style-type: none"> • 鉛 • 砷 • 鎬 • 銻 • 鉻 • 鎳 	20 (0)	未能驗出

¹ 甲醛屬刺激物，可刺激鼻和咽喉。世衛也把甲醛歸類為第 1 類致癌物，即有充分證據證明甲醛在人體可以致癌。

² 煙草特異性亞硝胺在煙草和煙草煙霧廣泛出現，在尼古丁與其他煙草生物鹼產生化學作用時形成，是已知的致癌物。世衛把 NNN 和 NNK 都歸類為第 1 類致癌物。

³ 添味劑通常以天然和人造物質混合而成，是複雜的混合物。雖然添味劑可供安全食用，但吸入這些化學物可能有害，視乎食物接觸到這些化學物的形式和數量而定。

⁴ 許多重金屬都可致癌（例如世衛把鎬和鎳歸類為第 1 類致癌物），或對人類器官有害（例如鉛可損害腎臟和神經系統）。

加熱非燃燒煙草產品

3. 衛生署在2017年把7個加熱非燃燒煙草產品的樣本送交政府化驗所化驗，以測試其尼古丁量和焦油量。結果顯示所有樣本釋出的氣霧均含有尼古丁和焦油。尼古丁會令人上癮，並使血管收窄；焦油則會致癌和刺激呼吸道。化驗結果表列如下：

樣本	尼古丁（毫克／支）	焦油（毫克／支）
1	0.2	5
2	0.2	4
3	0.2	4
4	0.2	5
5	0.2	4
6	0.2	4
7	0.1	4

4. 按政府化驗所的化驗結果，本港於2017年出售的傳統香煙的尼古丁及焦油含量分別介乎每支0.1至1.3毫克和1至14毫克。結果證實加熱非燃燒煙草產品內的尼古丁量和焦油量與傳統捲煙相若。