

Next Generation Products in Canada: An Update on Heated Tobacco

Earlier this year, the tobacco industry launched the first wave of next generation products (NGPs) onto the Canadian market. Unlike the United States, Canada does not require any kind of pre-market authorization prior to the introduction of new tobacco products. Last March Philip Morris International's Canadian subsidiary, Rothmans, Benson & Hedges (RBH),¹ launched iQOS, a heated tobacco product, in Ontario. British American Tobacco's² (BAT) Canadian subsidiary, Imperial Tobacco, followed suit in May in the Greater Vancouver Area with its version of heated tobacco, a product called i-glo.

Both iQOS and i-glo are essentially hybrids between electronic and regular cigarettes: short sticks containing tobacco and other substances are heated in an electronic device to a temperature that releases the flavour and nicotine and produces what PMI calls "tobacco vapour" instead of smoke, claiming the tobacco is not heated to a high enough temperature to reach combustion. RBH is lobbying aggressively to have iQOS regulated federally as a vapour product in order to take advantage of fewer restrictions on flavours, packaging and labelling, and advertising and promotion, including the possibility of being able to make promotional relative risk statements. A key question is whether heated tobacco products offer the same reduction in risk as vapour products and therefore warrant the same less restrictive regulatory controls.



Marketing

Both iQOS and i-glo are marketed as reduced risk alternative tobacco products for adult smokers. While Philip Morris International is getting much publicity worldwide for its dubious claim of aspiring to a "smoke-free future," this future certainly doesn't mean tobacco-free. In fact, with slogans like "Unlock the true taste of real tobacco," and "Hello tobacco pleasure,"³ the message is that people can once again enjoy tobacco and not feel badly about their addiction.



UNLOCK
THE TRUE TASTE
OF REAL TOBACCO

iQOS heats tobacco to temperatures below 350°C. By using pressed tobacco that wraps the heating blade, the true taste of tobacco is released without burning.

Learn more about Heatsticks™ [HERE](#)

- RED LABEL - Balanced & Rich
- YELLOW LABEL - Mellow & Aromatic

¹ In Canada, Philip Morris International is the parent company for Rothmans, Benson & Hedges—100% owned and operated.

² In Canada, British American Tobacco is the parent company of Imperial Tobacco Canada Limited—100% owned and operated.

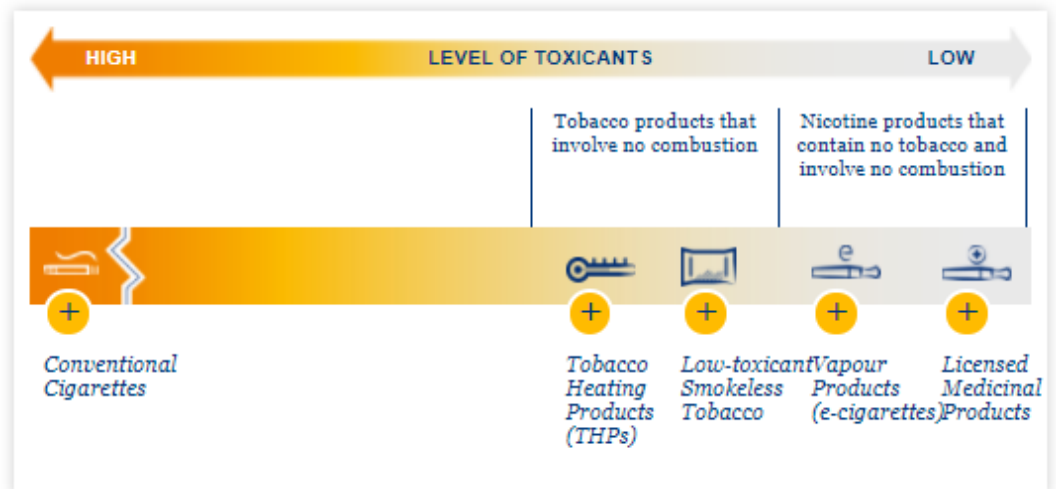
³ Not currently used in Canada.

BAT states that i-glo has the advantage of closely approximating the taste, sensory satisfaction and ritual that smokers are used to with cigarettes. Indeed, in a recent presentation to investors, BAT said it is working to move smokers from questions of “Should I give up or cut back?” to accepting tobacco as being “part of my life.”⁴ The implications for tobacco companies’ revenues generated by widespread acceptance of a lifelong addiction to these new products are obvious; the implications for public health are much less clear in these early days.

Toxicity and health effects

The long-term health effects of regular use of heated tobacco products, as well as the health consequences of second-hand exposure, will unfortunately not be known for decades. To date, almost all of the research on these products has been done by the tobacco companies themselves, which have an egregious history of duplicitous use of scientific research. Independent research on iQOS aerosol indicates the presence of carcinogens and other toxins,⁵ which is no surprise—tobacco itself is not a harmless substance. The researchers also suggest that PMI is playing around with the definition of smoke.

Following publication of that independent research, and in keeping with past behaviour, PMI attacked the science, accusing the researchers of faulty methodology.⁶ PMI’s assertions that the level of toxins in iQOS is 90%-95% lower than in cigarettes sound impressive, but keep in mind that this represents an average: some toxins such as mercury, ammonia



and acrylamide are present in concentrations of up to 40% of that found in tobacco smoke.⁷ Also keep in mind that cigarettes are the most lethal consumer product on the market—the bar against which improvements are measured could not get any lower. The continuum of risk diagram above, from BAT, indicates that although heated tobacco products are less toxic than cigarettes, there are less harmful alternatives for smokers, including Swedish-style “Snus” smokeless tobacco and vapour products. And lastly, PMI’s assertions of the high rate of successful smoking cessation among iQOS users also warrants skepticism—smokers who have switched from cigarettes to iQOS after just 7 days are considered to have quit smoking.⁸

⁴ British American Tobacco. Capital Markets Day presentation. Consumers and Marketing. 25 October 2017.

[http://www.bat.com/group/sites/UK_9ZTFMCM.nsf/vwPagesWebLive/DOARDFLL/\\$FILE/Consumers & Marketing.pdf?openement](http://www.bat.com/group/sites/UK_9ZTFMCM.nsf/vwPagesWebLive/DOARDFLL/$FILE/Consumers%20&%20Marketing.pdf?openement)

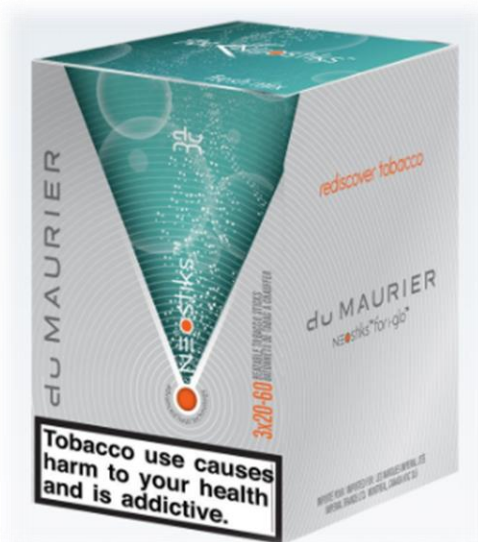
⁵ Auer R, et al. Heat-Not-Burn Tobacco Cigarettes: Smoke by Any Other Name. JAMA Internal Medicine. Online 22 May 2017.

⁶ The Washington Post. Big Tobacco’s new cigarette is sleek, smokeless — but is it any better for you? 11 August 2017.

⁷ PMI Science. Scientific update for smoke-free products. November 2017, Issue 03.

https://www.pmiscience.com/system/files/publications/pmi_scientific_update_november_2017_0.pdf

⁸ Philip Morris International. 2016 Letter to Shareholders. 3 March 2017. http://media.corporate-ir.net/media_files/IROL/14/146476/AR_2017/index.html#letter



Regulation

Health Canada has advised that federally, heated tobacco products are regulated as tobacco products under the current *Tobacco Act*. However, this does not mean that all tobacco regulations automatically apply. For example, the Tobacco Products Labelling Regulations, which require graphic health warnings covering 75% of the package major faces, only apply to cigarettes and little cigars. The warnings printed on packages of heatsticks are voluntary, perhaps in an effort to forestall more stringent mandatory warnings. Not surprisingly, the warning on PMI's Heets (see page 1) has been placed at the top of the flip-top package, so that it disappears when the package is opened. PMI has also chosen to include the words "Health Canada" on the front of the package, implying that it is a government-mandated health warning.

Bill S-5, which amends the *Tobacco Act* to become the *Tobacco and Vaping Products Act*, and which is still slowly crawling through the legislative process more than a year after first reading, pre-dates the introduction of heated tobacco in Canada. Nonetheless, Bill S-5 specifies that the definition of a vapour product excludes tobacco products and their accessories, as well as anything else specified by the regulations. As mentioned earlier, RBH is aggressively lobbying to have iQOS regulated federally as a vapour product. However, note that BAT's du Maurier branded heatsticks preclude it from pursuing recognition as a vaping product: Bill S-5 prohibits tobacco product-related brand elements on vaping products.

Eight Canadian provinces have passed or are in the process of passing vapour product legislation. Although these laws regulate heated tobacco as tobacco products, the definition of an e-cigarette/vapour product in all these provinces also captures heated tobacco—it is not specifically excluded. This means that tobacco companies can legally display their heated tobacco products at point of sale in specialty vape shops where minors are not permitted access. In the case of British Columbia and Manitoba, customers can even test heated tobacco prior to purchase. However, municipal smoke-free/vape-free bylaws can exceed provincial legislation, which is the case in Vancouver where use of electronic cigarettes is prohibited everywhere smoking is prohibited.

Conclusions

There is currently not enough credible independent evidence to verify the reduced risk claims being made by tobacco companies about heated tobacco; it would therefore be premature for governments to regulate them as anything other than tobacco products. Furthermore, the continuum of risk indicates that heated tobacco products are more toxic than vapour products, which further substantiates our belief that they do not merit the same regulatory advantages as vapour products. And while heated tobacco products may prove to be less harmful than cigarettes, significant public health benefits will only be realized under the following conditions:

- If heated tobacco products prove to be dramatically less harmful than cigarettes;
- If smokers completely switch (and not continue to smoke as well—known as dual use);
- If heated tobacco products do not interfere with smokers' motivations to quit tobacco use entirely; and
- If the market does not expand beyond current smokers to new tobacco users.