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Mathew Cook
Manager, Regulations Division
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RE: Authorized statements regarding e-cigarettes

Dear Mr. Cook,

It has come to my attention that you are seeking comments on the List of Statements for Use in the Promotion of Vaping Products. I am pleased to offer some comments on these statements.

The scientific evidence on the health and behavioral effects of e-cigarettes is an area that is rapidly developing, particularly with growing evidence that e-cigarettes are much more dangerous than previously thought. As a result, the proposed List of Statements for Use in the Promotion of Vaping Products are badly out of date and will put the Government in Canada in the likely position of authorizing statements that mislead and harm the citizens of Canada.

The most current and complete authoritative summary of the evidence on the effects of e-cigarettes was released by the European Public Health Association (attached to this comment and available at https://eupha.org/repository/advocacy/EUPHA_facts_and_fiction_on_e-cigs.pdf).¹

The Ministry should carefully review this summary and the research it summarizes and revise these statements accordingly.

Below I summarize some of the problems with these statements based on the evidence summarized in the EUPHA evidence summary.

1. If you are a smoker, switching completely to vaping is a much less harmful option

There are two problems with this statement. First, growing evidence shows that use of e-cigarettes is associated with adverse cardiovascular^{2 3} and pulmonary effects^{4 5 6 7} similar to cigarettes to the point that epidemiological studies have shown risks of myocardial infarction and COPD and respiratory disease similar to that of smoking cigarettes, even after controlling for the effects of concurrent or former smoking.^{2 4} While some of the epidemiology studies are cross-sectional, which precludes drawing formal causal

conclusions based on the epidemiology alone, the results are precisely what one would predict based on the biological and short-term clinical studies. At the very least, they argue against making such a sweeping statement.

Second, the statement presumes complete switching from cigarettes to e-cigarettes when the great majority of smokers who use e-cigarettes remain dual users.^{8 9}

2. While vaping products emit toxic substances, the amount is significantly lower than in tobacco smoke

This statement is based on assessment of a very limited number of substances, all of which are based on toxins identified in tobacco smoke. E-cigarettes are different products with different chemistry and physics. There needs to be a much broader investigation of the possible toxicants in e-cigarette aerosol before such a sweeping statement can be made by the Government.¹⁰

3. By switching completely to vaping products, smokers are exposed to a small fraction of the 7,000 chemicals found in tobacco smoke

This statement suffers from the same problem as statement 2. In addition, it ignores the fact that e-cigarette aerosol consists of ultrafine particles at levels comparable to or higher than cigarettes. These particles cause cardiovascular and pulmonary disease. In addition, the particle size in e-cigarettes are often smaller than those generated by cigarettes, which are likely more dangerous.¹¹

4. Switching completely from combustible tobacco cigarettes to e-cigarettes significantly reduces users' exposure to numerous toxic and cancer-causing substances

This statement suffers from all the problems described above. While the current consensus is that e-cigarettes expose users to lower levels of the carcinogens that have been studied, this statement ignores the fact that two-thirds of smoking-induced deaths are caused by cardiovascular and pulmonary disease where the risks of e-cigarettes may approach cigarette smoking.¹²

5. Completely replacing your cigarette with a vaping product will significantly reduce your exposure to numerous toxic and cancer causing substances

This statement suffers from the same problems as statement 4.

6. Switching completely from smoking to e-cigarettes will reduce harms to your health

This statement suffers from the same problems as the earlier statements. It also ignores the fact that switching to e-cigarettes could still increase risks because the risk of current e-cigarette use is compounded with the risk of past smoking.

7. Completely replacing your cigarette with an e-cigarette will reduce harms to your health

This statement suffers from the same problems as statement 6.

There is also a concern that these statements could be misread by consumers and potential consumers as indicating that e-cigarettes are *safe*. Has the Ministry done message testing to ensure that these messages will be understood (and not misunderstood) by users?

Importantly, all the proposed statements ignore the reality that most people who use e-cigarettes continue to smoke cigarettes^{8,9} as well as the evidence that for most (but not all) smokers, use of e-cigarettes depresses the likelihood of smoking cessation.¹³ These realities need to be reflected in the required statements. E-cigarette promotion should include these warnings:

- Most people who use e-cigarettes continue to smoke; doing so will increase your overall chance of getting sick.^{2,4}
- You must stop smoking cigarettes when you use this product or your risk of disease will increase.^{2,4}
- E-cigarettes make it harder to stop smoking cigarettes for most people.^{8,9}
- People who start with e-cigarettes are likely to go on to smoke cigarettes.¹⁴

As you know there are many contentious issues surrounding e-cigarettes, so it is important that the Ministry obtain advice from a wide range of experts; a cursory review of the members of the SAB suggests that it is dominated by people who believe in e-cigarettes. There is also a dearth of people with expertise in cardiovascular and pulmonary disease etiology.

Thank you for your consideration.

Sincerely yours,



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