

Examples of e-cigarette regulation in other jurisdictions

Finland

Finland's tobacco endgame includes lowering e-cigarette use.

Over the past decade, Finland has embedded a tobacco end-game in its national public health strategies and its national legislation.

- In 2010, its Tobacco Act was revised to identify a legislative aim as being “to end the use of tobacco products containing compounds that are toxic to humans and create addiction.”¹
- In 2014, its tobacco control strategy was revised towards the vision of “Ending the consumption of tobacco products” so that “In 2040 no more than 2% of Finns aged 15 to 64 will use tobacco products.”²
- In 2016, the law was amended to clarify that this goal included ending the use of e-cigarettes.³ It is now interpreted at achieving 5% tobacco or nicotine use by 2030.

Finland bans flavours, and requires information leaflets and industry reporting.

Under Finland's 2016 Tobacco Act,⁴ manufacturers of e-cigarettes must:

- Notify the government six months before putting an e-cigarette on the market, and provide comprehensive information on the ingredients and their toxicological profile, and a description of other manufacturing processes. (s. 26) A modest (150 euro) fee is required for each notification.⁵
 - By February 2019, the Finnish agency responsible for overseeing e-cigarettes had received 19,688 advance marketing notifications for e-cigarettes.⁶
- Not use any flavourings in e-cigarette liquids other than tobacco flavour. (s. 24)
- Comply with other aspects of EU Directive (i.e. maximum nicotine concentration of 20 mg/ml) (s. 52)
- Restrict the size of nicotine liquid containers to 10 ml. (s.24)
- Provide annual reports on sales volume, by brand name and type of product, on preferences of various consumer groups, on market surveys (s. 27)
- Maintain a record of any suspected adverse effects on human health, and provide this to government. (s. 28)
- Provide health-related information on and in packages. In addition to the health warning required by the European Union directive, manufacturers must include a leaflet with “instructions for use and storage (including statement that product is not recommended for use by young people and non-smokers), information on illnesses and other health-related circumstances preventing the use of the product, warnings for specific risk groups, information on the product's possible adverse effects, information on the addictiveness and toxicity of the product.”⁷

In Finland, tobacco and e-cigarette retailers pay high licensing fees.

Retailers of tobacco and/or nicotine-containing liquids are regulated by Valvira, the National Supervisory Authority for Welfare and Health. Retailers must: ^{8 9}

- Have a retail licence issued by the local authority (previous holders of a tobacco licence must provide notification that they are also selling nicotine liquids).
- Submit an annual payment at a rate set by local authorities: the maximum is EUR 500 per point of sale (i.e. for each cash register). The maximum for retailers who sell both tobacco products and nicotine-containing liquids is EUR 1,000.
- Refrain from displaying tobacco or nicotine products in their stores. Tobacco specialty stores may do so, but not if the displays are visible from outside. Retailers are permitted to show purchasers a catalogue of available products and price list, if they have been asked. Standards for this material is set by regulation.
- Have one employee designated as a monitor of the store's compliance with regulations.

A public register of retail licences and wholesale notices for tobacco and nicotine products is maintained by Valvira.¹⁰

- There are about 7,250 tobacco and nicotine retail licences in Finland (because each point of sale or cashier must be licensed, this means there will be fewer than 7,250 retail outlets). Of these, about 340 sell nicotine liquids. About 2,750 annual visits are made by municipal inspectors to licensed tobacco/e-cigarette retailers. ¹¹

Finnish health authorities do not promote the use of E-cigarettes as part of a harm-reduction strategy

The Finnish Institute for Health and Welfare (a government agency) does not promote using e-cigarettes or identify harm reduction as a goal of e-cigarette regulation. ¹² The full text of its statement on harms is found in Appendix 1. ¹³

Finland has annual monitoring of youth and adult tobacco use.

Finland's public health monitoring includes annual surveys of school health behaviours^{14 15} and adult smoking behaviours.¹⁶

Finland imposes a tax on e-cigarettes (at about one-tenth of that on cigarettes).

Finland imposes a tax of EUR 0.30 on each ml of e-cigarette liquid, even if the liquid does not contain nicotine.^{17 18} This is the equivalent of \$0.43 Canadian. Finland imposes both ad valorem and excise taxes on tobacco products, but the minimum tax on cigarettes is EUR 54.60 per 200 cigarettes (equivalent to CAD \$80). The tax on 2 ml of nicotine fluid (a typical pod which provides 200 puffs) is thus about EUR 0.60 or CAD \$0.80, or the same as the Finnish tax on 2 cigarettes (EUR 0.27 or CAD 0.40 per cigarette).

Appendix 1

Unofficial translation of Finnish National Institute for Health and Welfare Statements on E-cigarettes¹⁹

(Downloaded October 27, 2019)

Electronic cigarettes contain substances that are harmful to health

- *The nicotine in electronic cigarettes is highly addictive and has its own health effects.*
- *The use of electronic cigarettes impairs the normal functioning of the lungs and reduces the function of the lungs.*
- *Experimental studies have shown that the use of electronic cigarettes can contribute to the development of cardiovascular changes.*
- *Cigarette liquids and vapors contain a number of harmful substances, such as PAH and VOC (volatile organic compounds). Some of the compounds are the same, carcinogenic compounds, as in tobacco smoke, but generally in smaller amounts.*
- *Silica and metal particles and drug residues have been found in some e-cigarette liquids.*
- *Some e-cigarette fluids have caused toxic effects on cells in laboratory tests.*

In the fall of 2019, incidents and deaths of e-cigarettes were reported in the United States. Symptoms of those affected include shortness of breath, chest pain, abdominal pain, cough, coughing up blood, vomiting, diarrhea and fever.

The US health authorities are investigating the causes of the disease. So far no single cause has been established. Some, but not all, sufferers have used a cigarette containing tetrahydrocannabinol (THC, a psychoactive compound of cannabis) and a liquid containing vitamin E acetate. The wide spectrum of e-cigarette liquids and the identification of the ingredients of street-bought products complicate the investigation.

Further information from the US Health Authorities:

[US Food and Drug Administration \(FDA\)](#)

[Centers for Disease Control and Prevention \(CDC\)](#)

If you use an e-cigarette and your health suddenly deteriorates, consult a doctor immediately and tell them that you have used an e-cigarette. Bring the electronic cigarette liquid you use to quickly identify its manufacturer and ingredients. Use only electronic cigarette equipment and liquids that have been marketed under the Finnish Tobacco Act.

The long-term health effects are not known

The health effects of electronic cigarettes are the subject of much research. However, there is still very little information on the dangers of e-cigarettes compared to how much harm is known about tobacco products.

The effects of long-term use are not known until years or decades, when the health of those who have begun use in recent years has been monitored long enough to detect the onset of slowly developing diseases such as cancer.

Electronic cigarettes contain less harmful substances than tobacco and tobacco smoke. It is difficult to reliably estimate the long-term difference in exposure to harmful substances. The disadvantages can also be partially different with the use of electronic cigarettes and smoking.



The screenshot shows the website of the Finnish National Institute for Health and Welfare (THL). The page is titled "ALKOHOLI, TUPAKKA JA RIIPPUVUUDET" (Alcohol, Tobacco and Dependence). The main heading is "Sähkösavuke" (E-cigarette). The text explains that an e-cigarette is an electronic device that heats a liquid to produce vapor. The liquid contains glycerol or propylene glycol, and may also contain nicotine and other substances. It notes that e-cigarettes do not contain tobacco or tar, but they do contain nicotine, which is addictive. The text also mentions that e-cigarettes can cause respiratory irritation and may contribute to cardiovascular changes. A list of harmful substances is provided: "Sähkösavukkeissa on terveydelle haitallisia aineita" (E-cigarettes contain substances harmful to health), including nicotine, which can lead to addiction.

While smoking is one of the major risk factors for cardiovascular disease, nicotine also has an independent effect on the circulatory system. The electronic cigarettes on the market today are able to absorb nicotine as effectively as cigarettes. Experimental studies suggest that electronic cigarettes contribute to the development of cardiovascular changes in the body.

Reported side effects of using electronic cigarettes include chest pain, accelerated heart rate, head, throat and stomach pain, dizziness, fever, throat and mouth irritation or dryness, pneumonia and low blood pressure.

Electronic cigarette and indoor air

When e-cigarettes are used, emissions of various compounds are released into the indoor air. It can also affect bystanders.

However, the effects of e-cigarettes on indoor air and exposure to harmful substances are less than the effects of tobacco smoke.

E-cigarettes are not an effective aid to stop smoking

E-cigarettes are often used to support the reduction or cessation of smoking. Some users also succeed in quitting. However, research evidence on this issue is incomplete and partly contradictory. Thus, electronic cigarettes cannot be considered as an effective aid to quit smoking.

Studies have shown that a large proportion of those who try to quit smoking try to go back to smoking, continue to use both products, or stay away from nicotine addiction.

According to the Medicines Act, suitable products to support smoking cessation must be shown to be safe and effective for their intended purpose.

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Endnotes

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