

Briefing for the Public Petitions Committee

Petition Number: [PE 1774](#)

Main Petitioner: Craig Edward

Subject: Formally record vaping-related illnesses and deaths

Calls on the Parliament to urge the Scottish Government to collect data on vaping-related illnesses, and vaping during pregnancy, to ensure the best health interventions are provided to all.

Background

The petitioner is concerned about a spate of deaths and hospital admissions linked to vaping that occurred in 2019 in the US. He is also concerned about the exposure of children to online marketing of unregulated vaping products. The petitioner is asking for data on vaping-related illness to be collected, presumably to provide comparable data to that collected on smoking-related harms.

Vaping and regulation

NVPs (Nicotine Vapour Products) is the name given to electronic cigarettes and all related equipment, including liquids, in Scotland. E-cigarettes work by heating a liquid to produce an aerosol that users inhale into their lungs.

Vaping products are regulated in the UK by the [Revised European Union Tobacco Products Directive](#) (EU TPD), translated into UK law through the [Tobacco and Related Products Regulations 2016](#) (TRPR). The regulations make provision for further regulations if health harms are identified with products. Elements of the regulation are in the panel below.

Maximum capacities and nicotine strength allowed:

- tank capacity: 2ml
- e-liquid refill container capacity: 10ml
- nicotine strength of e-liquid: 20mg/ml

Other safety and quality standards:

- child-resistant and tamper evident packaging
- prohibition of certain additives such as colourings
- protection against breakage and leakage, and a mechanism for ensuring re-filling without leakage

The petitioner points out that unregulated products are available over the internet. Regulation in the UK applies to devices containing and delivering nicotine. The illicit drugs market is global and it is possible that similar products to those in the US are available in the UK.

Vaping related illness and deaths in the US: (e-cigarette, or vaping, product use-associated lung injury (EVALI) outbreak)

At the end of October 2019, in response to the deaths in the US, Public Health England published [a blog that outlines what was being observed in the US](#), where regulation of vaping products is different. It sought to provide reassurance and updated advice and guidance.

E-cigarettes containing nicotine are more tightly regulated in the UK than in the US and the UK medicines regulator, the Medicines and Healthcare products Regulatory Agency (MHRA), is responsible for overseeing the tobacco regulations.

The main chemicals under suspicion in the US, such as THC¹ and [Vitamin E acetate oil](#)², are not permitted in e-cigarettes in this country.

The MHRA operates the [Yellow Card Scheme](#), where healthcare workers and members of the public can notify any health problems. Healthcare workers and the public can report a side effect or safety concern for e-cigarettes on the Yellow Card Scheme.

A similar situation pertains across Europe, where there are similar restrictions on e-cigarettes as in the UK – under the [European Tobacco Products Directive](#). No vaping-related cases, such as those in the US, had been reported to the [EMCDDA](#) by its EU Early Warning System Network at the time the blog was published.

The US Centers for Disease Control (CDC) provided [updated information on the outbreak](#) at the end of December 2019. It was confirmed, following further laboratory research, that Vitamin E acetate oil was closely associated with the outbreak. However, the CDC state that:

“While it appears that vitamin E acetate is associated with EVALI, there are many different substances and product sources that are being investigated, and there may be more than one cause”.

¹ The liquid can contain: nicotine, tetrahydrocannabinol (THC) and cannabinoid (CBD) oils, and other substances, flavorings, and additives. THC is the psychoactive mind-altering compound of marijuana that produces the “high.”

² Vitamin E acetate usually does not cause harm when ingested as a vitamin supplement or applied to the skin. However, previous research suggests that when vitamin E acetate is inhaled, it may interfere with normal lung functioning

Data on smoking and recording of harm by smoking and vaping.

The health harms of smoking have been known for many decades, whereas harms relating to vaping in general and to NVPs are not yet fully researched, so the extent of any harm cannot be known or recorded with any confidence.

Because of the known harms of smoking, data tends to track prevalence of smoking and cessation via surveys. Maternal smoking rates are recorded by NHS Information Services Division (ISD) from information collected antenatally. ScotPHO provides sources of data on smoking, as well as smoking-related illnesses and behaviour:

<https://www.scotpho.org.uk/behaviour/tobacco-use/key-points>

ScotPHO also provides information and data on illnesses related to smoking such as cancers and COPD. Not enough is known about vaping to make any direct causal links to particular diseases or conditions.

ScotPHO produced a [report](#) in 2016 which looked at smoking attributable deaths and trends between 2003-14. Again, because of the lack of robust evidence in the much more recent field of vaping, it is not (yet) possible to attribute deaths or health harms to regulated vaping products.

The National Records Office (NRS) records the causes of death, but does not attribute death to smoking per se, but to the conditions smoking gives rise to. Many of the leading causes of death have known links to tobacco use:

<https://www.nrscotland.gov.uk/statistics-and-data/statistics/scotlands-facts/leading-causes-of-death-in-scotland>

The leading causes of death in 2018 were:

1. Ischaemic heart disease: **6,615 (11.3%)**
2. Dementia and Alzheimer's disease: **6,484 (11.1%)**
3. Lung cancer: **3,980 (6.8%)**
4. Cerebrovascular disease (including stroke): **3,831 (6.5%)**
5. Chronic lower respiratory diseases (e.g. bronchitis and emphysema): **3,469 (5.9%)**

[Public Health England advice](#) on vaping as of October 2019 was as follows:

“For smokers: You should stop smoking completely. Getting expert support combined with using an e-cigarette doubles your chances of quitting successfully. For the best way to quit [read our advice](#)

For people who vape nicotine: if you are still smoking, you should stop and switch completely to vaping, then come off nicotine when you are confident you won't relapse to smoking.

If you have never smoked: Don't vape.

For people who vape CBD: although CBD is less tightly regulated, if you experience symptoms or are concerned you should stop.

For people who vape THC: if you are vaping THC (or an unknown liquid which could contain THC) it can be hazardous. These are the products most implicated in the US outbreak. If you feel unwell or have any difficulty breathing after vaping THC, go to A&E and tell them precisely what the product was you were using.”

Scottish Government Action

As stated above, regulation of vaping products is done at a UK level, being a reserved matter, along with the regulation of most advertising and marketing of nicotine products. Consultation in 2014-15 about measures covered by devolved competence for the sale and use of electronic cigarettes informed [the Health \(Tobacco, Nicotine etc. and Care\) \(Scotland\) Act 2016](#). The new rules for the purchase and supply of vapour products came into force on 1 April 2017. All retailers of vapour products have to apply to be on the [Register of Tobacco and Nicotine Vapour Product Retailers](#).

The Scottish Government webpages on smoking include information on vaping and vaping products.

In 2017, NHS Health Scotland issued a [consensus statement](#) (Health Boards, voluntary sector, Royal Colleges, Universities) on e-cigarettes.

Scottish Parliament Action

A range of questions have been asked in the Scottish Parliament about vaping:

<https://www.parliament.scot/parliamentarybusiness/28877.aspx?SearchType=Simple&Keyword=vaping&ExactPhrase=True&DateChoice=4&SortBy=DateSubmitted&ResultsPerPage=10>

One of these, from Monica Lennon, MSP, asked about the [recording of health harms](#). In his response, the Minister stated that, as yet, there was no international coding for harms relating to vaping: “there is no specific [ICD10 code](#)³ for exposure to an e-cigarette or vapouriser” ICD10 codes provide the standardised basis for gathering data about diseases and conditions that allow for international comparison. The codes are periodically revised and updated. However, in October 2019, [guidance was issued](#) to enable the coding of health harms linked to vaping under existing codes.

As explained above, even for smoking, illness and death that might be linked to smoking is not recorded in that way, but in how the effects are manifested. This can also be observed from the recent coding guidance. That said, as

³ [International Classification of Diseases \(ICD\)](#) is the international standard diagnostic classification for all general epidemiological, health management purposes and clinical use. These include the analysis of the general health situation of population groups and monitoring of the incidence and prevalence of diseases and other health problems in relation to other variables such as the characteristics and circumstances of the individuals affected, reimbursement, resource allocation, quality and guidelines

more research is done, and with interrogation of the ICD10 data in relation to morbidity potentially linked to vaping, the evidence base will continue to be informed and amplified.

Anne Jepson
Senior Researcher

9 January 2020

SPICe research specialists are not able to discuss the content of petition briefings with petitioners or other members of the public. However, if you have any comments on any petition briefing you can email us at spice@parliament.scot

Every effort is made to ensure that the information contained in petition briefings is correct at the time of publication. Readers should be aware however that these briefings are not necessarily updated or otherwise amended to reflect subsequent changes.

Published by the Scottish Parliament Information Centre (SPICe), an office of the Scottish Parliamentary Corporate Body, The Scottish Parliament, Edinburgh, EH99 1SP