

## **1. Introduction**

- 1.1 This document represents the submission from the National Fire Chiefs Council (NFCC) to the House of Commons Public Bill Committee's call for evidence on the Tobacco and Vapes Bill. NFCC is sharing our experience of the impact that smoking and vaping has on the activities of UK Fire and Rescue Services (FRS).

## **2. Background**

- 2.1 NFCC is an independent membership association comprised of a council of Chief Fire Officers and is the professional voice of UK FRS. Our overarching aim is to lead, support and coordinate prevention, protection, resilience, and emergency response activities across FRS so that they can meet changing demands and keep communities safe. NFCC has a unique role in representing FRS at a national level and leads on driving improvement and development throughout FRS, while supporting strong leadership – including for the devolved administrations.
- 2.2 The NFCC Chair acts as the first point of contact for the Home Office, fire professionals, and partners such as the Local Government Association or NHS England. NFCC represents fire and rescue in a range of Government and sector forums and the NFCC Chair is the first line of advice to ministers in England during major incidents.
- 2.3 NFCC does not enter into activity with, or affiliated with, tobacco companies, a position which is underpinned by the requirements of Article 5.3 of the World Health Organisation's Framework Convention on Tobacco Control (FCTC).
- 2.4 Our submission to the Committee focuses on the impact the Tobacco and Vapes Bill will have on fire safety, particularly in regard to the fire risk surrounding smoking in the home and the fire risk related to the lithium-ion batteries found in vapes.

## **3. Executive Summary**

- 3.1 As public sector organisations, FRSs are part of multi-agency tobacco control approaches to reduce smoking prevalence in order to limit the fire risks associated with smoking and to promote the safety, health, and well-being of their communities. NFCC therefore supports the Government's attempts to limit smoking prevalence and youth vaping through the Tobacco and Vapes Bill.
- 3.2 Despite the overall number of cigarette smokers falling, smoking remains one of the top causes of primary fires in England. Smoking also has a disproportionate impact in terms of deaths from fire. This legislation will reduce smoking prevalence and, therefore, the fire risk surrounding smoking.

- 3.3 In people's homes, the fire risk from vaping is lower than from smoking. However, vapes still pose a fire risk as they contain lithium-ion batteries. The Government must consider the fire risks around the purchase, charging, use, and disposal of vapes and all products containing lithium-ion batteries.
- 3.4 Single use vapes have a significant environmental impact and pose a fire risk in the waste disposal industry. Prohibiting the sale and supply of single use vapes will reduce the number of potential ignition sources that enter the waste industry, leading to fewer waste fires.
- 3.5 Encouraging people to use rechargeable vapes instead of single use vapes is positive from a fire risk and environmental perspective. Robust product safety standards for the rechargeable vape industry are required.

#### **4. Fire Risks of Smoking**

- 4.1 Reducing smoking prevalence is the FRS's main strategic tool for reducing the fire risk around smoking. The Tobacco and Vapes Bill will impact smoking prevalence and reduce the number of smoking-related fires, fatalities, and injuries in people's homes.
- 4.2 Despite the overall number of cigarette smokers falling, smoking remains one of the top causes of primary fires in England. Smokers' materials were the source of ignition for 3,522 primary fires in England in 2022/23, including 1,979 accidental dwelling fires (house fires).<sup>1</sup>
- 4.3 Smoking has a disproportionate impact in terms of deaths from fire due to the nature of smoking-related fires in people's homes, which occur in confined spaces where people sleep and may have health or mobility issues. Smokers' materials result in more fire fatalities than fires caused by any other single ignition source.
- 4.4 In the year ending March 2023, smokers' materials were the source of ignition in 8.2% of accidental dwelling fires, but accounted for the largest proportion of fire-related fatalities in accidental dwelling fires at 35%.<sup>2</sup> Accidental dwelling fires caused by smokers' materials led to 65 fatalities and 431 casualties in 2022/23.<sup>3</sup>
- 4.5 The already significant fire risk from smoking in the home is exacerbated for vulnerable people and when combined with other factors, notably oxygen therapy, emollient products, air flow pressure relieving mattresses, substance misuse, impaired mobility or dexterity, memory impairment, and hoarding. As a

---

<sup>1</sup> Home Office, [Fire Incidents Data Tables FIRE0602a](#).

<sup>2</sup> Home Office, [Detailed Analysis of Fires Attended by FRS, England, April 2022 to March 2023](#).

<sup>3</sup> Home Office, [Fire incidents Data Tables FIRE0602b and FIRE0602c](#).

result, any proposals to reduce smoking prevalence will have a significant benefit on public safety, including for vulnerable people in communities.

## **5. Youth Vaping and Smoking Prevalence**

- 5.1 Vaping is a way to support smokers to reduce or quit smoking – thereby reducing the fire risk in homes and improving health outcomes – and should not be marketed in any way, including as a recreational activity or in a way that encourages new users (both adults and children), due to the risks associated with vaping.
- 5.2 Research has found that restricting point of sale displays of cigarettes has reduced smoking susceptibility among young people.<sup>4</sup> Treating vapes in a similar manner to tobacco products – keeping them behind counters and not on display – will likely deter young people from purchasing them, thereby reducing future smoking prevalence and associated fire risks.
- 5.3 NFCC recognises the importance of vapes as a tool to help current smokers, especially vulnerable smokers, reduce or quit smoking, but this does not mean the Government should not act to reduce the proliferation of vapes, especially single use vapes.
- 5.4 NFCC recognises that vaping can be a way to support smokers to reduce or quit smoking – thereby reducing the fire risk in homes. However, in regard to single use vapes, for the same reasons that restrictions have been placed on the sale of individual cigarettes, we hold concerns that, at present, single use vapes are being marketed and sold in a way that is designed to attract children and new users to become addicted to nicotine when they are not already. NFCC would support interventions to limit the attractiveness of vaping to children and young people that do not restrict efforts to support and encourage existing smokers to use vapes as a smoking cessation tool.

## **6. Fire Risks of Lithium-ion Batteries**

- 6.1 Vaping is safer than smoking from a fire risk and health perspective. Nonetheless, both single use and rechargeable vapes present a fire risk as they contain lithium-ion batteries.
- 6.2 Lithium-ion battery fires are a growing operational burden on FRS. Flawed battery design, low-quality components, damage to the battery, improper charging or discharging, or misuse can create faults with the lithium-ion battery cell that may cause batteries to fail. Lithium-ion battery fires develop rapidly and are prolonged as the battery materials fuel the fire. These fires pose challenges in terms of firefighting activities, as they are difficult to suppress and extinguish

---

<sup>4</sup> A. Ford, A.M. MacKintosh, C. Moodie, et al., 'Impact of a ban on the open display of tobacco products in retail outlets on never smoking youth in the UK: findings from a repeat cross-sectional survey before, during and after implementation', *Tobacco Control*, 29, 3 (2020), pp. 282–288.

and can release toxic chemicals. There is also potential for reignition due to residual heat.

- 6.3 FRSs do not currently collect specific data relating to fires caused by refillable or single use vapes. Fire incident statistics (FIRE0605) capture “smokers’ materials” as a cause of fires, but this is not aggregated further, and it is therefore difficult to know how many domestic fires are caused by vapes.
- 6.4 Both single use and rechargeable vapes can cause potentially serious fires and significant injuries, given that they are often in close proximity to people (e.g., in pockets or homes) and can explode. Some prominent examples include a [fire caused by a vape in a family home](#) in Maldon, Essex in 2022 and a [vape that exploded in someone’s pocket](#) in London, causing significant injuries. A [hospital fire in Hampstead](#) attended by firefighters from London Fire Brigade (LFB) on 30 April 2024 was likely caused by the failure of a lithium battery in a rechargeable vape.
- 6.5 In addition to the vape fires reported to FRS, there are concerns around the number of “near misses” that are not reported.
- 6.6 Research undertaken by the insurer [Zurich Municipal](#) revealed that house fires caused by vapes increased 108% in 2021–2023. This study also revealed widespread consumer confusion over the correct way to dispose of spent vapes, with three out of four vape users (72%) unaware of how to safely dispose of the devices, while a similar number have no idea vapes contain lithium batteries. As a result, 107 million single use vapes a year are ending up in the general waste stream, where they are causing a rise in fires.

## **7. Fire Risks in the Waste Industry**

- 7.1 Prohibiting the sale and supply of single use vapes will encourage greater use of rechargeable vapes, which is positive from a fire risk and environmental perspective as it will reduce the number of potential ignition sources that enter the waste industry, leading to fewer waste fires.
- 7.2 Fires at waste processing centres require a large mobilisation of FRS resources over a protracted period of time and can potentially cause significant environmental damage, impacting air and water quality in particular. These fires also cause significant problems in communities through backlogs to waste disposal if a waste centre is not operational due to fire. NFCC’s national operational guidance on fires in waste sites states that UK FRSs attend around 300 significant fires in waste sites each year.<sup>5</sup>
- 7.3 Research undertaken by Eunomia on behalf of the Environmental Services Association (ESA) in 2021 estimated that around 48% of waste fires can be

---

<sup>5</sup> NFCC, [Fires in Waste Sites Guidance Framework](#).

attributed to lithium-ion batteries. Eunomia estimated that the total annual cost to the UK of waste fires caused by lithium-ion batteries is £158 million.<sup>6</sup>

- 7.4 [Research by Zurich Municipal](#) has found that fires in waste disposal vehicles have increased by 62% in 2021–23.
- 7.5 Research undertaken by [Material Focus revealed](#) that across the UK in 2022 there were more than 700 fires in waste disposal vehicles and recycling centres caused by electrical batteries including the lithium-ion batteries commonly used in single vapes. Local authorities are reporting battery fires as an increasing problem which comes at a cost to taxpayers. Several councils have passed motions calling for a ban on single use vapes.
- 7.6 In response to increased reports of fires caused by batteries and electricals containing batteries in waste, NFCC worked with Material Focus to develop a new [Stop Battery Fires](#) campaign to raise awareness of how householders can safely recycle their batteries and electricals. However, in our view, stronger regulatory measures will be necessary alongside public awareness campaigns to mitigate the fire safety risks of lithium-ion battery disposal. Electrical Safety First's [the Safety of Electric-Powered Micromobility Vehicles and Lithium Batteries Bill](#) makes provisions regarding the safety of electric-powered micro-mobility vehicles and lithium-ion battery disposal.
- 7.7 In April this year, NFCC responded to the Department for Environment, Food & Rural Affairs (DEFRA) [consultation seeking views on reforms to the Waste Electrical and Electronic Equipment \(WEEE\) Regulations 2013](#). This included a proposal to create a new category for vapes in the WEEE Regulations 2013. However, further work is required to understand how vapes will be safely collected and recycled. For example, there will be high fire risks related to multiple vapes being stored in a storage container awaiting collection. There will also be fire risks associated with the transport of large quantities of end-of-life vapes, which will need to be considered.
- 7.8 Vapes are only one of many household products which contain lithium-ion batteries. Therefore, consideration may need to be given to creating a separate category (and developing of a separate WEEE disposal regime) for all products containing lithium-ion batteries.

## **8. Product Safety Regulation for Rechargeable Vapes**

- 8.1 NFCC supports greater restrictions on single use vapes as a means of encouraging people to use rechargeable vapes and recommends that the restrictions are accompanied by a considered approach to fire safety.

---

<sup>6</sup> Eunomia, [Cutting Lithium-Ion Battery Fires in the Waste Industry](#) (2021).

- 8.2 Restrictions on single use vapes could drive people to source alternative cheaper rechargeable vapes with a higher energy output. This could result in a greater number of house fires caused by potentially unsafe rechargeable vapes being charged at home – both illicit products that do not meet safety standards and more people using legal rechargeable vaping products unsafely.
- 8.3 It is crucial that restrictions on single use vapes are accompanied by the introduction of robust product safety standards for the rechargeable vape industry to ensure that any supply void is not filled by cheap unregulated products from the global marketplace.
- 8.4 We also recommend that the Government publishes its response to the [Product Safety Review Consultation](#), which NFCC responded to in October 2023, to address issues around unsafe or non-compliant products.

## **9. NFCC Responses to Consultations on Tobacco and Vaping**

- 9.1 Please find below links to NFCC's responses to relevant public consultations.
- 9.2 [Smarter Regulation: UK Product Safety Review](#) (October 2023). A consultation on the Government's long-term approach to product safety and the regulatory framework.
- 9.3 [Consultation on Creating a Smokefree Generation and Tackling Youth Vaping](#) (December 2023). A consultation on the proposed actions the UK Government and devolved administrations will take to tackle smoking and youth vaping.
- 9.4 [Draft Environmental Protection \(Single-use Vapes\) \(Scotland\) Regulations 2024: Consultation](#) (March 2024). Views sought on proposals to ban single use vapes in Scotland.
- 9.5 [The Environmental Protection \(Single-use Vapes\) \(England\) Regulations 2024 Draft SI](#) (March 2024). Draft version of the statutory instrument to ban the sale and supply of single use vapes in England.
- 9.6 [Consultation on Reforms to the Waste Electrical and Electronic Equipment \(WEEE\) Regulations 2013](#) (March 2024). Views sought on reforms to the WEEE Regulations 2013. This included a proposal to create a new category for vapes.