Guidance note

E-cigarette use in smokefree NHS settings

The NFCC is committed to making people safer using the skills, knowledge and experience of the Fire & Rescue Service (FRS), along with quality partnership working. This guidance builds on the NFCC Smoking, Vaping & Tobacco Position Statement and partnership work between the NFCC and Public Health England (PHE). The Position Statement can be found at; ‘Smoking, Vaping and Tobacco Position Statement’ (January 2018).

Background
The NHS has made a commitment for all mental health inpatient services sites to be smokefree by 2017/18, expanding to all acute trusts in 2018/19 and all NHS estates becoming smokefree by 2019/20, this is also supported in the Government’s Tobacco Control Plan for England 2017. This is because smoking is still the biggest cause of preventable premature death, a high proportion of people in the healthcare system smoke and the National Institute for Health and Care Excellence (NICE) recommends that tobacco dependence is treated routinely as part of clinical care.

NHS Trusts are developing smokefree policies to give comprehensive support for people who want to quit or temporarily abstain from smoking while in NHS settings. NICE guidance emphasises the importance of having a full range of treatment options available for smokers, who may need to try different methods of managing their tobacco dependence. These options include, Nicotine Replacement Therapy, Bupropion and Varenicline. The Care Quality Commission and Public Health England have also encouraged trusts to make e-cigarettes an option in inpatient facilities. Health partners believe that the range of options available is likely to play a significant role in the success of a smokefree policy.

E-cigarettes are the most popular stop smoking aid in England. Based on current evidence, they have been estimated to be at least 95% less harmful to health than smoking.

In 2014, the Department of Health and Social Care issued an alert via the Central Alerting System which acknowledged that e-cigarettes support smokefree strategies and clarified its position on charging of e-cigarettes. However, the NFCC is aware that there is still variation in the application of smokefree policies regarding how and when people can use or charge their e-cigarettes, and which devices are allowed.

While we appreciate there may be some concern among Health Fire Officers and Health and Safety officers on use of e-cigarettes in inpatient settings, this should be considered in relation to the risks associated with compliance with a smokefree policy, particularly regarding the potential for secret smoking of tobacco and the resulting fire risk.

As NHS Trusts continue to negotiate the use of e-cigarettes in their respective inpatient settings, the NFCC believes that Trusts should support these strategies by maximising the opportunities while managing the lower, potential risks.
The range of e-cigarettes available
E-cigarettes comprise of a battery-powered heating element that is designed to vaporise a solution made of propylene glycol and/or glycerine, water and frequently contain flavourings and nicotine. **There are many different types of e-cigarettes** available and they can be classified into three basic types: (1) one-time, disposable products (often referred to as cigalikes); (2) reusable, rechargeable kits that are designed to be refilled with liquid by the user (often referred to as tanks) and (3) reusable, rechargeable kits that allow users to customise their product e.g. by regulating the power delivery from the batteries to the heating element. Devices with tanks that can be refilled with liquid are the most popular type among current vapers.

Battery care and charging
Although very rare compared to fires caused by smokers’ materials, the root cause of e-cigarette related fires is likely to be through a **malfunctioning lithium-ion battery**. This can be triggered by mechanical damage, exposure to extreme heat, unsafe charging, short-circuiting or by design and manufacturing faults within the battery. When this occurs, the pressure and temperature of the battery increases and can cause the device in which it is stored (whether it’s an e-cigarette or mobile phone) to be propelled at high velocity. The immediate and dramatic nature of such events means that they are often given a high media profile, whilst the larger number of tobacco smoking related fires, injuries and deaths receive little media attention. With safe battery care, the potential for such events can be minimised.

The risks associated with charging e-cigarettes should be considered alongside the charging of any other battery-operated device such as a mobile phone.

**Key messages for safe use of rechargeable electronic cigarettes:**

- Buy e-cigarette devices from reputable retailers.
- Facilitate opportunities for supervised charging of devices by staff in designated areas.
- Advise staff and patients of the approved safe use of e-cigarettes and regularly audit/enforce, agreed protocols.
- Ensure systems for review of any incidents related to recharging e-cigarettes (should they occur) are in place to promote learning.
- When the charge is complete, disconnect battery and remove charger from USB port/socket – this is usually indicated by a light on the device.
- Only use chargers designed for use with the specific device. Some chargers may overcharge the product, leading to an increased risk of fire.
- Never leave an electronic cigarette charging unattended, and never leave them charging overnight.
- Store batteries and chargers in a cool dry place at normal room temperature. Do not leave them in hot places such as direct sunlight.
- Do not immerse batteries or chargers in water or otherwise get them wet.
- Never use damaged equipment or batteries.
- Never carry batteries, keys or coins in the same pocket or bag.
- Never use a vaping device close to medical oxygen, flammable emollient creams or airflow mattresses.
- Do not use counterfeit goods - batteries and/or chargers are unlikely to have overcurrent protection and could lead to batteries exploding.
- Never modify or adapt e-cigarettes and their associated kit.
- Never use damaged equipment or batteries.

**Indoor and outdoor vaping**

Unlike cigarettes, there is no side-stream vapour emitted by an e-cigarette into the atmosphere, just the exhaled aerosol. To date, there have been no identified health risks to bystanders from passive vaping.

E-cigarette use is not covered by smokefree legislation and Public Health England’s advice is that it should not routinely be included in the requirements of an organisation’s smokefree policy.

Given the current evidence, PHE notes that: “People with asthma and other respiratory conditions can be sensitive to a range of environmental irritants, which could include e-cigarette vapour, and PHE advises organisations to take this into account and to make adjustments where appropriate.”

Some trusts permit vaping in single patient rooms. Considering the range of e-cigarettes available, some allow for smaller volumes of exhaled vapour and this can be managed in a courteous way for patients, staff and visitors. If the trust cannot negotiate indoor vaping in a manageable way, then a convenient outdoor space would be the next best solution. There is no need for people to leave trust premises to vape as there is for smoking. Vapers should never share the same outdoor space with smokers as this puts them at risk of relapsing to smoking.

Based on the experiences in trusts where these policies have been implemented, exhaled vapour may trigger some types of smoke detectors – particularly if blown directly into the detector head in large quantities.

If vaping is found to trigger detectors action should be taken to address the issue. Actions can include one or more of the following:

- prevent vaping in specific areas,
- change the detector head position to avoid direct ingress of vapour,
- change the detector head type from ionisation to optical, or to a bi-element detector head

Any actions taken should not reduce the effectiveness of the fire alarm system.