Concerns/questions
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Electronic cigarettes (ECs) are battery-powered devices that allow the inhalation, or “vaping” of an aerosol containing nicotine, that has the option of being flavoured. They became more widely available around 2007, following their invention in China in 2003, and global use has increased year on year. As of 2017, there are now 2.9 million adults in Great Britain using ECs. There are now more ex-smokers (52%) in Great Britain using ECs than dual users of both cigarettes and ECs (45%)3.

This updated guidance seeks to give clinicians the current understanding about where ECs may help with smoking cessation and the current understanding in regards to their safety.

Toxicity
Smoking tobacco exposes the smoker to over 5000 chemicals, many of which are poisonous and more than 70 of which may cause cancer4,5,6. The evidence so far shows that e-cigarettes have significantly reduced levels of key toxicants compared to cigarettes, with average levels of exposure falling well below the thresholds for concern7. While there is a long history of research on the long-term effects of smoking, there is little data available for the long-term effects of ECs. A recent study showed that long-term e-cigarette users (who had been using their product for 17 months on average) had significantly lower levels of key toxicants in their urine than those that still smoked – with levels in e-cigarette users similar to exclusive Nicotine Replacement Therapy (NRT) users. The researchers concluded that the full benefit of using e-cigarettes is from stopping smoking entirely, as opposed to dual use of e-cigarettes and tobacco, who had similar exposure levels to smokers6.

Concerns/questions
1. Entry into smoking: Use among children is rare, and in the small number who do use ECs, most currently smoke or are ex-smokers. In 2016, only 4% of “never smoker” children in Great Britain had tried ECs, and only a tiny proportion (less than 1%) were regular users9. New regulations around age of sale and restrictions on advertising are likely to make this even less of an issue10. Overall youth smoking has fallen in England from 13% in 1996 to 3% in 201411.

2. Safety: As mentioned above, although the long term safety profile of EC use is still to be evaluated, it is accepted that based on the evidence to date, vaping is a far safer alternative to smoking tobacco12. Public Health England and the Royal College of Physicians estimate that ECs are unlikely to exceed 5% of the harm from conventional smoking13,14. Public perceptions do not match the evidence however, with only 44% of adults thinking ECs are safer than smoking15, and this level of misperception has been worsening.

3. Cessation aid: Since late 2013 ECs have become England’s most popular quitting aid16. There is now growing evidence to suggest that ECs are helping users to stop smoking17, with it being estimated that ECs contributed to an additional 18,000 long-term ex-smokers in England in 201518.
4. Regulation: New regulations were implemented in May 2016 through the revised EU Tobacco Products Directive (TPD). The regulations require EC manufacturers to abide by certain product specifications, including health warning labels, nicotine strength restrictions, and restriction of misleading information. The regulations also prohibit many forms of advertisement including a restriction on health claims.

5. Passive vaping: There is no good evidence to suggest that passively breathing vapour from e-cigarettes is likely to be harmful.12, 19, 20

6. More research needed: Ongoing research into the safety of e-cigarettes and their use for smoking cessation is underway. However, the benefits of ECs in assisting cessation should not be ignored while waiting for the publication of this research.

7. The RCGP position is informed by recommendations from PHE13

Recommendations
1. Primary Care Clinicians (PCCs) should provide advice to smoking patients on the relative risks of smoking

2. Patients should be advised that behavioural support and prescription medication from local Stop Smoking Services (SSS) is the most effective quit method. PCCs should provide referral to SSS where these services exist and the patient wishes to access this support

3. Using their clinical judgement on an individual patient basis, PCCs may wish to promote EC use as a means to stopping. Patients choosing to use an e-cigarette in a quit attempt should be advised that seeking behavioural support alongside e-cigarette use increases the chances of quit success further. Most SSS are EC friendly and patients can be advised to bring one to their appointment if they would like to quit using their device

4. PCCs recognise ECs offer a wide reaching, low-cost opportunity to reduce smoking (especially in deprived groups in society and those with poor mental health, both having elevated rates of smoking). In the UK, though start-up costs can be higher, it is likely to be less expensive to use an EC over time than it is to smoke.21

Resources
- CRUK quitting methods infographic
- CRUK e-cigarette evidence infographic
- CRUK policy brief
- NCSCT E-cigarette Guidance22
- PHE Report23
- RCP Report24


2 Kotz, D; Brown, J; West, R; (2014) 'Real-world' effectiveness of smoking cessation treatments: a population study. Addiction, 109 (9) pp. 1531-15303 Use of electronic cigarettes (vapourisers) among adults in Great Britain – ASH 2017

3 ASH. (2017). Use of e-cigarettes (vapourisers) among adults in Great Britain


Medicines and Healthcare products Regulatory Agency Published. E-cigarettes: regulations for consumer products (2016)


Smoking Toolkit Study www.smokinginengland.info


