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**RCGP Position Statement on the use of electronic nicotine vapour products (E-Cigarettes)  
UPDATED SEPTEMBER 2017 – APPROVED BY IMRAN RAFI 6.9.17.****Background**

Smoking tobacco is the single largest cause of preventable illness and premature death, being responsible for around 122,000 deaths a year in the UK<sup>1</sup>. Smoking accounts for 27% of all cancer deaths, 40% of all respiratory deaths and 20% of all circulatory disease deaths. It is in this context that smoking cessation is one of the most effective health interventions. Up until recent years, the main tools to support those trying to give up smoking have been behavioural support, nicotine replacement therapy, and oral bupropion or varenicline. Research shows that professional support alongside medication (as offered by local Stop Smoking Services) is the most effective approach, and is around three times more effective than going 'cold turkey'<sup>2</sup>.

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%)<sup>3</sup>.

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 cancer<sup>4,5,6</sup>. 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 concern<sup>7</sup>. 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 smokers<sup>8</sup>.

**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 users<sup>9</sup>. New regulations around age of sale and restrictions on advertising are likely to make this even less of an issue<sup>10</sup>. Overall youth smoking has fallen in England from 13% in 1996 to 3% in 2014<sup>11</sup>.
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 tobacco<sup>12</sup>. Public Health England and the Royal College of Physicians estimate that ECs are unlikely to exceed 5% of the harm from conventional smoking<sup>13,14</sup>. Public perceptions do not match the evidence however, with only 44% of adults thinking ECs are safer than smoking<sup>15</sup>, and this level of misperception has been worsening.
3. **Cessation aid:** Since late 2013 ECs have become England's most popular quitting aid<sup>16</sup>. There is now growing evidence to suggest that ECs are helping users to stop smoking<sup>17</sup>, with it being estimated that ECs contributed to an additional 18,000 long-term ex-smokers in England in 2015<sup>18</sup>.

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<sup>12, 19, 20</sup>
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 PHE<sup>13</sup>

## 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<sup>21</sup>

## Resources

- CRUK quitting methods infographic
- CRUK e-cigarette evidence infographic
- CRUK policy brief
- NCSCT E-cigarette Guidance<sup>22</sup>
- PHE Report<sup>23</sup>
- RCP Report<sup>24</sup>

<sup>1</sup> Peto, Lopez, et al. MORTALITY FROM SMOKING IN DEVELOPED COUNTRIES 1950-2020 (updated September 2015). <http://gas.ctsu.ox.ac.uk/tobacco/>

<sup>2</sup> 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

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

<sup>4</sup> IARC. Personal Habits and Indoor Combustions: Tobacco Smoking. IARC Monogr Eval Carcinog Risks to Humans. 2012;100E(6). <http://monographs.iarc.fr/ENG/Monographs/vol100E/mono100E-6.pdf>.

<sup>5</sup> IARC. Personal Habits and Indoor Combustions: Second-hand Tobacco Smoke. IARC Monogr Eval Carcinog Risks to Humans. 2012;100E(7). <http://monographs.iarc.fr/ENG/Monographs/vol100E/mono100E-7.pdf>.

<sup>6</sup> IARC. Tobacco smoke and involuntary smoking. IARC Monogr Eval Carcinog Risks to Humans. 2004;83. <http://monographs.iarc.fr/ENG/Monographs/vol83/mono83.pdf>.

<sup>7</sup> Burstyn I. Peering through the mist: systematic review of what the chemistry of contaminants in electronic cigarettes tells us about health risks. *BMC Public Health*. 2014;14(1):18.

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- <sup>10</sup> Medicines and Healthcare products Regulatory Agency Published. E-cigarettes: regulations for consumer products (2016)
- <sup>11</sup> Smoking drinking and drug use among young people in England 2014, HSCIC, [www.hscic.gov.uk/pubs/sdd14](http://www.hscic.gov.uk/pubs/sdd14)
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- <sup>14</sup> Tobacco Advisory Group of The Royal College of Physicians. Nicotine without Smoke.; 2016.
- <sup>15</sup> Use of electronic cigarettes (vapourisers) among adults in Great Britain – ASH 2017 [http://www.ash.org.uk/files/documents/ASH\\_891.pdf](http://www.ash.org.uk/files/documents/ASH_891.pdf)
- <sup>16</sup> Smoking Toolkit Study [www.smokinginengland.info](http://www.smokinginengland.info)
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