

Written evidence submitted by the British Heart Foundation (ECG0065)

Key messages:

- Emerging evidence suggests that electronic cigarettes cause significantly less harm than smoking tobacco products, and can be useful as a smoking cessation aid. However, the long term studies needed for absolute clarity are lacking.
- The British Heart Foundation, as a medical research charity, recognises that tobacco products are extremely harmful to users and bystanders. We are therefore supportive of methods which have been shown to help people quit.
- As a medical research charity, the British Heart Foundation actively encourages more research to be undertaken within this field, especially on the long term impact of electronic cigarettes on the cardiovascular system.

The British Heart Foundation (BHF) is the UK's leading heart charity. As an organisation, we recognise the devastating impact of smoking on health and the potential of this emerging technology to help people quit. As the largest independent funder of cardiovascular research in the UK, we also recognise that the approach to e-cigarettes must be based on high quality evidence and evolve as further research becomes available.

The British Heart Foundation is a core funder of Action on Smoking and Health (ASH), ASH Scotland and ASH Wales. We would like to refer those seeking further information on this important topic to these organisations' submissions to this inquiry.

The benefits of e-cigarettes as a 'stop smoking' aid

1. The British Heart Foundation recognises that electronic cigarettes have seen a dramatic increase in use since 2012, with around 2.9 million users in 2017 in the UK¹. They are now a popular means of cessation and are recognised by NHS Stop Smoking Services as a means to help individuals quit tobacco products.²
2. Electronic cigarette users have cited quitting and saving money as their main reasons for use.³
3. Current research shows that e-cigarettes are significantly less harmful than tobacco products; however, there is a lack of evidence to suggest that these products are totally harm free.^{4,5,6} Quitting smoking is the best thing a smoker can do for their heart health. We are therefore supportive of methods that have been shown to help people quit. Regardless of the method used, quit attempts are most likely to succeed when done with the support of NHS Stop Smoking Services.

¹ ASH, 'Use of e-cigarettes (vaporisers) among adults in Great Britain', May 2017

² NHS Smokefree: <https://www.nhs.uk/smokefree/help-and-advice/e-cigarettes>

³ ASH, 'Use of e-cigarettes (vaporisers) among adults in Great Britain', May 2017

⁴ McNeill.A, Brose.L.S, Calder.R, Hitchman.S.C, Hajek.P, McRobbie.H, E Cigarettes: an evidence update- A report commissioned by Public Health England. PHE, August 2015

⁵ Shahab.L, Goniewicz.M.L, Blount.B.C, Brown.J, McNeill.A, Alwis.U, Feng.J, Wang.L, West.R 'Nicotine, carcinogen and toxin exposure in long term e-cigarette and Nicotine replacement Therapy users: A Cross-sectional study, March 2017

⁶ British Medical Association, 'E-cigarettes: Balancing risks and opportunities', 2017

4. Although the health harms from nicotine are significantly lower than from tobacco, nicotine does have physiological effects, such as increasing the heart rate. The BHF therefore recommends that anyone with an existing cardiovascular condition consults their doctor before using any nicotine replacement therapy.
5. Compared with second hand smoke from tobacco products, current evidence suggests that electronic cigarettes also cause significantly less harm to 'bystanders'.^{7, 8, 9}

E-cigarette usage outside of cessation

6. The British Heart Foundation recognises that some of those who are using electronic cigarettes are doing so whilst continuing to smoke tobacco products - this is commonly known as 'dual use'¹⁰. There are around 1.3 million 'dual users' in the UK¹¹. We are not aware of evidence so far of significant health benefit from dual use – smokers should be supported to quit entirely.
7. Although e-cigarettes are safer than conventional cigarettes, the safest option is to use neither, and e-cigarette use by non-smokers should be discouraged. In line with this, we therefore support the current ban on the sale of electronic cigarettes to under 18s.

Public Perceptions

8. A YouGov survey has highlighted that perception of harm caused by e-cigarettes amongst smokers and non-smokers is not consistent with the current body of evidence. Around 26% of those surveyed believed electronic cigarettes were equally or more harmful than conventional tobacco.¹²
9. As a medical research charity, we believe it is important to ensure that the current evidence on the risks and benefits of e-cigarette use is communicated accurately to the public so that those who are considering using an e-cigarette as an aid to quit smoking can make an informed decision.

Further Research

10. E-cigarettes are a relatively new product and, as such, there is not yet conclusive research evidence into their long term effects. Current evidence indicates electronic cigarettes are significantly less harmful than smoking conventional tobacco products¹³ but it is vital that high quality research continues to be conducted into the health impacts of e-cigarettes and that emerging evidence helps to shape future advice on and regulation of these products.

⁷ British Medical Association, 'E-cigarettes: Balancing risks and opportunities', 2017

⁸ McNeill.A, Brose.L.S, Calder.R, Hitchman.S.C, Hajek.P, McRobbie.H, 'E-Cigarettes: an evidence update- A report commissioned by Public Health England', PHE, August 2015

⁹ Hajek.P, Etter.J.F, Benowitz.N, Eissenberg.T and McRobbie.H, 'Electronic cigarettes: review of use, content, safety, effects on smokers and potential for harm and benefit', November 2014

¹⁰ ASH, 'Large national survey finds 2.9 million people now vape in Britain: For the first time over half don't smoke', May 2017

¹¹ ASH, 'Use of e-cigarettes (vaporisers) among adults in Great Britain' May 2017

¹² ASH, 'Large national survey finds 2.9 million people now vape in Britain: for the first time over half don't smoke', 8th May 2017

¹³ British Medical Association, 'E-cigarettes: Balancing risks and opportunities', 2017

11. We are currently funding a number of research projects into the effects of e-cigarettes on the cardiovascular system. This research is in its infancy but we hope that it will help clarify the relationship between e-cigarettes and cardiovascular health. Please see below for information on one of our funded projects:

BHF funded research into electronic cigarettes

The BHF is funding research at the University of Dundee into the effects of electronic cigarettes and tobacco cigarettes on smokers' blood vessel function. This study is funded for two years and nine months at an investment of around £200,000 and will be led by Dr Jacob George. This study will give more clarity on the long term risks or benefits of switching to electronic cigarettes for those looking to cease smoking tobacco.

12. There is a separate category of emerging products, known as heat-not-burn products, which are sometimes portrayed as similar to electronic cigarettes. 'Heat not burn' products heat and vaporise tobacco¹⁴. It is important to note that these products are different to e-cigarettes as they contain tobacco (e-cigarettes do not). There is currently no impartial research into 'heat not burn' products to suggest that they are a 'healthy alternative' to smoking conventional cigarettes. Further research into the safety and long term health implications of these products is vital.

About the British Heart Foundation

The BHF is the UK's leading heart charity. We are working to achieve our vision of a world in which people do not die prematurely or suffer from cardiovascular disease. Thanks to modern treatments built on our research, huge progress has been made in saving lives. Most babies born today with heart defects survive to adulthood and seven out of ten people survive a heart attack. However, heart and circulatory disease still kills one in four people and affects 7 million people in the UK, so there is so much more to do.

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¹⁴ ASH, 'ASH reaction to new Philip Morris IQOS 'heat not burn' products, November 2016