worcestershire county council

E-cigarettes Briefing

FAO: Health Overview and Scrutiny Committee

July 2016

Contents

E-cigarettes Briefing

Key messages

- Smoking is the leading cause of death, disability and health inequality.
- E-cigarettes are now the most popular form of quit support.
- The long-term health effects of e-cigarettes are unknown. They are likely to be 95% less harmful than tobacco but are not risk free.
- Many people wrongly believe that nicotine causes cancer. Nicotine use is different to tobacco use.
- National policy advises smokers who have tried other methods of quitting without success can be encouraged to try e-cigarettes to stop smoking.[1] This is a principle called tobacco 'harm reduction'.
- The challenge is to make the most of the potential to improve smokers' health, while reducing potential use in young people and non-smokers. The new EU Tobacco Products Directive has an important role to play in restricting advertising and improving quality and safety.

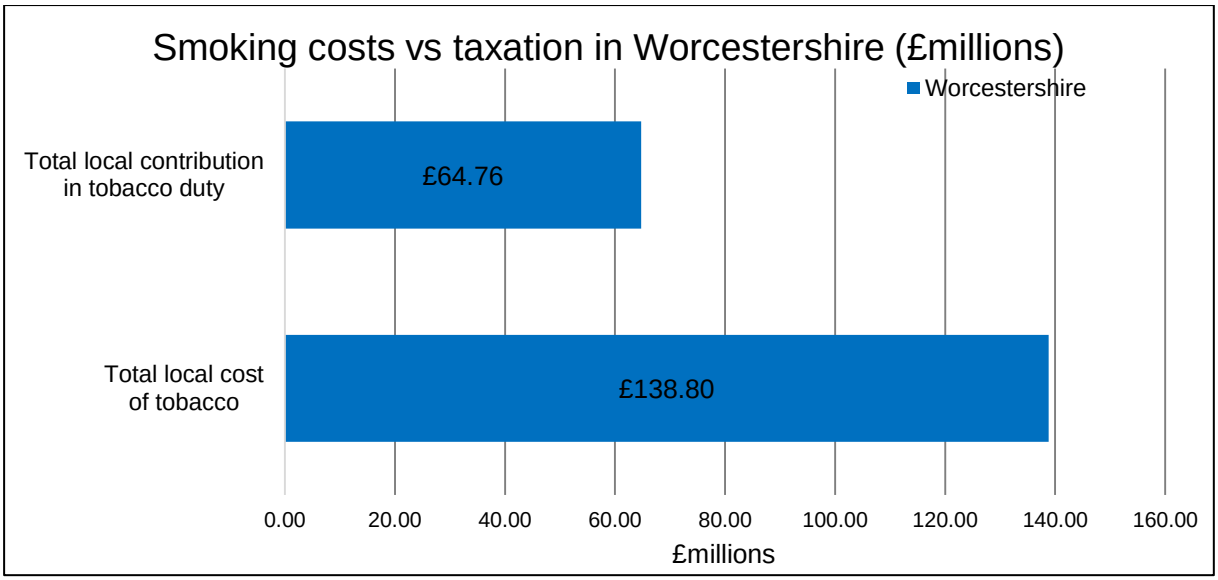
Context

In the UK, 18% of adults smoke, and 17.1% in Worcestershire.[2] But smoking is now strongly concentrated in certain groups, such as people in the most deprived areas, prisoners, people with mental illness, and the homeless. In the UK, 28% of routine and manual workers smoke, and 31.3% in Worcestershire.[3] Smoking is still the largest avoidable cause of premature death, disability and social inequalities in health. In Worcestershire, 860 people aged over 35 die from smoking-related causes every year, around 1 in 6 of all deaths.[4] In Worcestershire, almost 79,000 people still smoke, half of these people will die from smoking if they do not quit.[5][6]

When the wider costs to society are taken into account, smoking costs Worcestershire an estimated £138.8 million per year, from lost productivity, NHS treatment, social care, sickness absence, smoking-related fires, litter picking and passive smoking.

---

[1] PHE (2015) *E-cigarettes: an evidence update. A report commissioned by Public Health England*. London, Public Health England.
[2] Public Health Outcomes Framework.
[3] Public Health Outcomes Framework.
[4] PHE (2016) Local Tobacco Control Profiles for England.
[5] ASH (2016) Ready Reckoner.
[6] ASH (2016) *Health inequalities and smoking*. London: Action on Smoking and Health.



Source: ASH (2016) Ready Reckoner.

Nicotine, addiction and harm reduction

Many smokers continue smoking not by choice but because they are addicted to nicotine. Around 68% of smokers want to quit. More than a third of smokers attempt to stop each year but only around 2-3% succeed long-term.[7] This is why wider tobacco control measures are key to driving down smoking rates, alongside encouraging more quit attempts in smokers.

Nicotine is not the cause of health harm from smoking, it is the thousands of toxins produced by the tobacco combustion process that kill. This means the health harms from smoking can be avoided by replacing cigarettes with a less toxic form of nicotine.

> ***"People smoke for the nicotine, but die from the tar."***
> (Mike Russell, The BMJ, 1991)

This is why 'safe' sources of nicotine are used to help people quit smoking, alongside behavioural support.[8][9] Licensed nicotine replacement therapy (NRT) such as nicotine chewing gum, patches, lozenges, and nasal sprays are designed to replace the nicotine from cigarettes, ease withdrawal symptoms and make it easier to quit tobacco. In 2013, NICE recommended that licensed nicotine could be used on a long term basis to help reduce the harm from tobacco use.[10] These products are available over the counter or off the shelf.

[7] ASH (2014) *Stopping smoking: the benefits and aids to quitting*. London: Action on Smoking and Health.
[8] An overview of NICE guidance on smoking cessation and prevention is available here.
[9] RCP (2007) *Harm reduction in nicotine addiction*. London: Royal College of Physicians.
[10] NICE (2013) *[PH45] Smoking: Harm Reduction*. London: National Institute for Health and Clinical Excellence.

E-cigarettes Briefing

What are e-cigarettes?

Electronic cigarettes (e-cigarettes), also known as vapourisers, are battery-powered devices that deliver nicotine by heating a solution of nicotine, flavouring, additives and propylene glycol and/or vegetable glycerine (glycerol). The terms 'vaping', 'vapers' and 'vapes' are popular. Unlike cigarettes, there is no combustion involved in the process.

E-cigarette designs are developing rapidly. 71% of vapers use an e-cigarette that is rechargeable and has a **tank** or reservoir to fill with liquids (pictured right below), 23% use an e-cigarette that is **rechargeable** with replaceable pre-filled cartridges, 3% use a **disposable** e-cigarette (ASH, 2016). 'Cig-a-likes', pictured left below, are the least popular type of e-cigarette. 'Third generation' e-cigarettes are popular with users, can be customised and generally deliver nicotine more effectively than first generation devices, making it more likely users will switch from tobacco for good.[11]

Source: NCSCT (2016) Electronic cigarettes: a briefing for stop smoking services.

How is e-cigarette safety regulated?

Previously, e-cigarettes were regulated in the UK as general consumer product, with restrictions on advertising and a minimum age of sale of 18. In May 2016, the EU Tobacco Products Directive came into force. There is a transitional period until May 2017 to allow companies to sell through current products.

[11] RCP (2016) *Nicotine without smoke: Tobacco harm reduction.* London: Royal College of Physicians, 2016.

E-cigarettes Briefing

E-cigarettes containing less than 20mg/ml of nicotine will be classified as tobacco-containing products, meaning:

- They will be subject to advertising restrictions
- They cannot make health claims
- They must display a health warning about the addictive properties of nicotine
- They must meet standards for child resistant packaging
- Tanks must be no larger than 2ml volume.

Products making health claims or containing over 20 mg/ml of nicotine will need medicines authorisation by the Medicines and Healthcare Products Regulatory Agency. Licensed e-cigarettes may therefore become available on prescription through the NHS. In January 2016 E-voke, produced by British American Tobacco, became the first e-cigarette to be medically licensed, but will not come on the market until 2017.

Most vapers currently prefer products that are already below the TPD cut-off limits of 20mg/ml of nicotine and 2ml tanks.[12]

Who uses e-cigarettes?

The number of e-cigarette users in Great Britain has grown rapidly, from 700,000 in 2012 to 2.8 million in 2016.

	2012	2013	2014	2015	2016
Number of electronic cigarette users (vapers) in Great Britain	700,000	1.3 million	2.1 million	2.6 million	2.8 million

Source: ASH (2016) *Use of electronic cigarettes (vapourisers) among adults in Great Britain*.

The vast majority of vapers are current or ex-smokers. E-cigarettes are now the most popular form of quit support.[13]

[12] ASH (2016) *Use of electronic cigarettes (vapourisers) among adults in Great Britain*. London: Action for Smoking and Health.
[13] West R, Brown J, Beard E (2016), *Electronic cigarettes in England: latest trends*. Smoking in England, 2016.

E-cigarettes Briefing

Why do people use e-cigarettes?

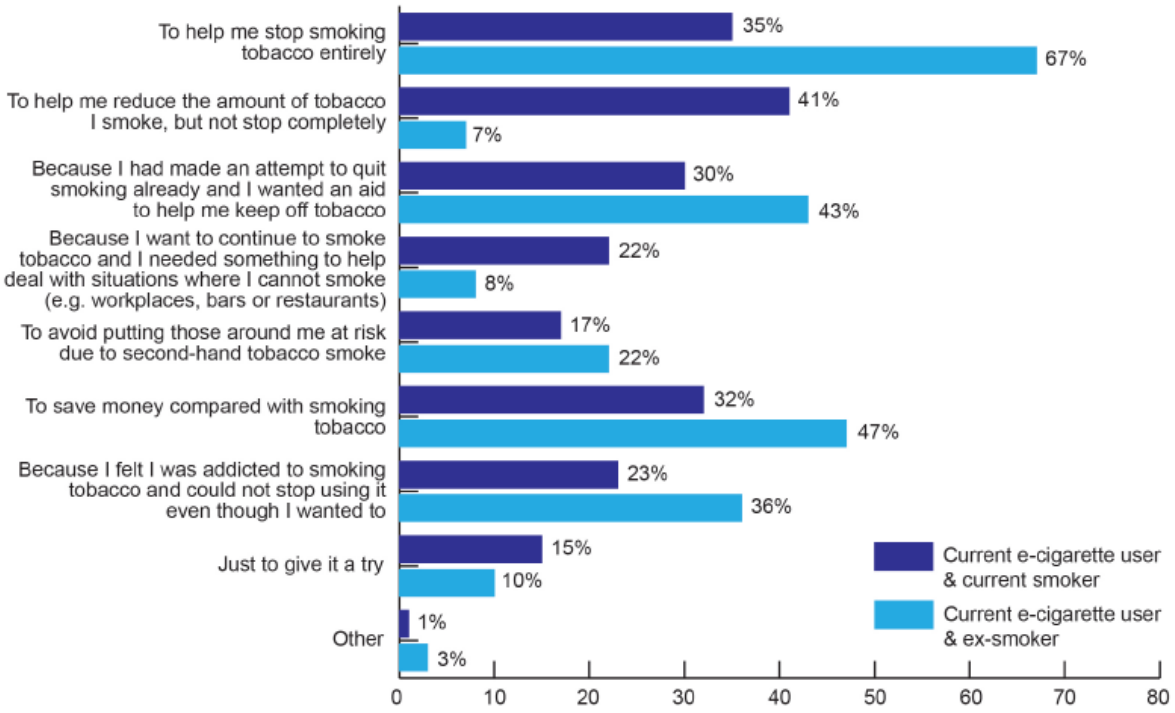
The top three reasons ex-smokers give for currently using e-cigarettes are:

- To help me stop smoking entirely (67%)
- To save money compared with smoking (47%)
- To help keep me off tobacco (43%)

The top three reasons current smokers give for currently using e-cigarettes are:

- To help me reduce the amount of tobacco I smoke, but not stop completely (41%)
- To help me stop smoking entirely (35%)
- To save money compared with smoking (32%)

Reasons for using electronic cigarettes among current users



Unweighted base: GB adult current e-cigarette user and current smoker (n=330), GB adult current e-cigarette user and ex-smoker (n=329, 2016)

Source: ASH (2016) *Use of electronic cigarettes (vapourisers) among adults in Great Britain*.

E-cigarettes Briefing

What is the current national policy position on e-cigarettes?

On 6 July 2016 major public health organisations published a consensus statement on e-cigarettes.[14] The key messages are:

- E-cigarettes are significantly less harmful than smoking.
- Millions of smokers wrongly think that e-cigarettes are at least as harmful as tobacco.
- All the evidence suggest the health risks are relatively small by comparison but we must continue to study the long-term effects.
- The current evidence is that in the UK regular cigarette use among youth is almost exclusively confined to young people who previously or currently smoke, and youth smoking prevalence is continuing to fall. This area must be kept under close surveillance.
- There is no circumstance in which it is better for a smoker to continue smoking.

Prevously Public Health England published an estimate that e-cigarette use is around 95% less harmful to health than smoking (but not risk-free), to address some of the misunderstandings around the relative harm from tobacco and e-cigarettes. Sensationalist and misleading media reports may be contributing to public misunderstanding.[15]

What concerns have been raised around e-cigarettes?

- **Children and young people:** concerns have been raised that children and young people may experiment with e-cigarettes, then go on to smoke cigarettes as a result. There is evidence to show young people are experimenting with e-cigarettes, and this increased from 5% to 13% (2013 – 2015). However, 80% of these young people had only tried an e-cigarette once or twice - only 0.5% used them once or more per week. Like adults, most regular users previously or currently used tobacco. A number of surveys have found similar findings.[16]

- **Renormalising smoking:** Early products were designed to look similar to normal cigarettes. This fuelled concerns they would normalise smoking or act as a gateway to tobacco. To date there is no UK evidence to suggest popular tank products (see above) are normalising smoking.

[14] PHE (2016) *E-cigarettes: a developing public health consensus*. London: Public Health England.
[15] PHE (2015b) *E-cigarettes: an evidence update. A report commissioned by Public Health England*. London, Public Health England.
[16] RCP (2016) *Nicotine without smoke: Tobacco harm reduction.* London: Royal College of Physicians, 2016.

- **Safety**: There is a risk of fire from the electrical elements of EC and a risk of poisoning from ingestion of e-liquids. These risks appear to be comparable to similar electrical goods and potentially poisonous household substances. Safety has improved as products have evolved; childproof packaging and instructions on using the correct charger are now industry standard and will now be enforceable under the EU TPD.[17]

- **Dual use:** this refers to concerns that smokers will use e-cigarettes *as well as cigarettes*, not *instead of* them. But current levels are similar to 'dual use' of NRT and cigarettes[18] – quitting smoking is not easy and the majority of both e-cigarette and NRT users also smoke. Quitting often takes several attempts before success.

- **Pregnancy**: although pregnant women are advised not to use nicotine, if they are successfully using e-cigarettes as an alternative to tobacco, this should not be discouraged due to the serious harm of smoking to mother and baby.[19]

- **Tobacco industry involvement:** The tobacco industry have invested heavily in the e-cigarette market, which raises legitimate concerns around their motives and practice. Public Health England is monitoring tobacco industry involvement in the e-cigarette market and being vigilant to ensure organisations can meet obligations under Article 5.3 of the Framework Convention on Tobacco Control to protect public health policy from commercial and other vested interests of the tobacco industry.[20]

- **'Passive vaping':** Public Health England have published new guidance published to support organisations in developing policies around e-cigarette use, based on five principles (below).[21] There is no justification to ban e-cigarettes under smokefree law, though there may be other legitimate reasons for organisations to ban them on their premises, for example for commercial reasons or professional etiquette.

---

[17] PHE (2015b) *E-cigarettes: an evidence update. A report commissioned by Public Health England*. London, Public Health England.
[18] West R, Brown J, Beard E (2016), *Electronic cigarettes in England: latest trends*. Smoking in England, 2016.
[19] NCSCT (2016) *Electronic cigarettes: a briefing for stop smoking services*. London: National Centre for Smoking Cessation and Training.
[20] PHE (2015a) *E-cigarettes: a new foundation for evidence based policy and practice*. London, Public Health England.
[21] PHE (2016) *E-cigarettes in public places and workplaces: a 5-point guide to policy making*. London, Public Health England.

E-cigarettes Briefing

E-cigarettes in public places and workplaces: a 5-point guide to policy making

Public Health England

1. Make a clear distinction between vaping and smoking

E-cigarettes do not meet the legal or clinical definitions of smoking, carry a fraction of the risk and have the potential to improve public health. So policies need to be clear on the differences between vaping and smoking.

2. Ensure policies are based on evidence of harm to bystanders

UK smokefree laws were introduced after clear evidence of harm to bystanders. Evidence shows the risk to bystanders from e-cigarettes is negligible and fears of 'passive vaping' are not well-founded.

3. Identify and manage risks of uptake by children and young people

In developing policies for child and youth settings, guarding against potential youth uptake should be balanced with fostering an environment where it is easier for adults not to smoke.

4. Support smokers to stop smoking and stay smokefree

Policies need to make it easier to vape than to smoke. For example, vapers should not be required to use the same space as smokers, as this could undermine their ability to stay smokefree.

5. Support compliance with smokefree law and policies

Support compliance with smokefree law by emphasising a clear difference between smoking and vaping. Communicate clearly where vaping is permitted or prohibited.

E-cigarettes Briefing

What do we still need to know?

We won't know the **long-term health effects** of e-cigarettes for decades. The policy being made now takes a pragmatic approach, weighing the possible risks of e-cigarettes against the definite significant health harm of tobacco. E-cigarettes will continue to be researched and monitored to assess their long term impact.

It is also important to consider **health inequalities**. Overall, e-cigarettes are cheaper to use than cigarettes, but the relatively high upfront cost (at least £20 for a starter kit) may put off people on low incomes. People in higher social grades are more likely to use e-cigarettes.[22]

What is the role of the local authority?

- Demonstrate leadership by signing up to the Local Government Declaration on Tobacco Control.
- Advocate for strong public health and tobacco control action locally.
- Enforce age-of-sale on cigarettes and e-cigarettes.
- Promote smokefree homes, cars and playparks.
- Support effective national measures such as plain packaging and increased tobacco duty.
- Counteract smuggled and counterfeit tobacco.
- Enforce the tobacco and e-cigarette advertising ban.
- Monitor smoking prevalence and action if there are changes in downward trend.

What can you do?

- Keep informed and up to date on tobacco control and e-cigarette policy through the organisations and websites below.
- Sign up to the Smokefree Action Coalition newsletter for national updates.
- Contact Lucy Chick on lchick@worcestershire.gov.uk (Health and Well-being Strategy Development Officer) to join the Worcestershire Tobacco Control Alliance.
- Be aware that reporting on e-cigarette research can be of variable quality. Contact the Public Health Directorate in the County Council if you would like advice on interpreting specific stories.
- Be open to innovative and flexible approaches to reduce harm from smoking.

Author:
Sarah Bird
Public Health Specialty Registrar

[22] West R, Brown J, Beard E (2016), *Electronic cigarettes in England: latest trends*. Smoking in England, 2016.

E-cigarettes Briefing

References and further reading

Action on Smoking and Health

- ASH (2016) *The impact of the EU Tobacco Products Directive on e-cigarette regulation in the UK.*
- ASH (2016) Ready Reckoner.
- ASH (2016) *Health inequalities and smoking*. London: Action on Smoking and Health.
- ASH (2016) *Use of electronic cigarettes (vapourisers) among adults in Great Britain*. London: Action for Smoking and Health.
- ASH (2014) *Stopping smoking: the benefits and aids to quitting*. London: Action on Smoking and Health.

National Centre for Smoking Cessation and Training

- NCSCT (2016) *Electronic cigarettes: a briefing for stop smoking services*. London: National Centre for Smoking Cessation and Training.

National Institute for Health and Social Care Excellence

- NICE (2013) *[PH45] Smoking: Harm Reduction*. London: National Institute for Health and Social Care Excellence.

Public Health England

- PHE (2016) Local Tobacco Control Profiles for England.
- PHE (2016) *E-cigarettes: a developing public health consensus*. London: Public Health England.
- PHE (2016) *E-cigarettes in public places and workplaces: a 5-point guide to policy making*. London, Public Health England.
- PHE (2015a) *E-cigarettes: a new foundation for evidence based policy and practice*. London, Public Health England.
- PHE (2015) *E-cigarettes: an evidence update. A report commissioned by Public Health England*. London, Public Health England.
- Public Health Outcomes Framework.

Royal College of Physicians

- RCP (2016) *Nicotine without smoke: Tobacco harm reduction*. London: Royal College of Physicians, 2016.
- RCP (2007) *Harm reduction in nicotine addiction*. London: Royal College of Physicians.

Smoking Toolkit Study

- West R, Brown J, Beard E (2016), *Electronic cigarettes in England: latest trends*. Smoking in England, 2016.