

Smokefree Surrey Alliance

Briefing on Nicotine Vaporisers (E-cigarettes)

Smoking is the UK's leading cause of early death and disease. Over 80,000 avoidable deaths are caused every year as a result of a smoking-related illness and one in every two long-term users of tobacco will die early. Smoking-related deaths are two to three times higher in low income groups (Marmot, 2010); in Surrey some wards have smoking rates higher than the national average and smoking prevalence for routine and manual workers is almost double the prevalence for non-manual workers.

However, whilst there is still much progress to be made in protecting people from the harms of tobacco, the number of people smoking has declined in recent years with the average smoking rate in the adult population reducing from 28% in 1998 to 20% in 2011. This is largely due to effective multi-strand tobacco control measures including the smoke free legislation introduced in 2007 which prohibits smoking in workplaces and enclosed public places; robust and widespread marketing and stop smoking services. A comprehensive tobacco control programme has successfully changed social norms around smoking which has resulted in changes in smoking behaviour and ultimately a reduction in prevalence.

The introduction of nicotine vaporisers (commonly known as **e-cigarettes**) has prompted much debate in the health community and there are concerns that nicotine vaporisers have the potential to thwart tobacco control efforts to reduce smoking-related harm. This briefing outlines these concerns and provides recommendations for our partners in Surrey.

What are nicotine vaporisers?

Nicotine vaporisers emerged in Europe in 2005. They are electronic inhalers, most of which contain nicotine. They are also known as e-cigarettes (electronic cigarettes), electronic vaping devices, personal vaporisers, or electronic nicotine delivery systems (ENDS). Although some of these devices look and feel like cigarettes, they do not burn tobacco. Brands of nicotine vaporiser vary but generally they contain an electronic heating device that vaporises a liquid solution. The resulting vapour usually contains nicotine and often propylene glycol. Producing nicotine vapour from a

solution rather than by burning tobacco means that the nicotine vapour does not contain most of the toxic chemicals that are present in cigarette smoke. The products vary in appearance; early models generally resembled cigarettes - thin white tubes with a glowing red tip, however newer devices are moving away from this image, they tend to be larger and are being marketed as personal vaporisers. Currently there are an estimated 2.1 million smokers and ex smokers in Great Britain using nicotine vaporisers, with the majority being smokers (ASH, 2014).

What are the concerns around nicotine vaporisers?

Impact on health

A review of the evidence by Public Health England (PHE) states nicotine is not a significant health hazard and that the doses of nicotine delivered by nicotine vaporisers are extremely unlikely to cause significant short or long-term adverse events (ASH, 2014). In addition to nicotine, the vaporisers tend to contain propylene glycol. The impact of repeat inhalation of this substance is, as yet, undetermined. Additionally, there is some evidence to suggest that nicotine vaporisers contain toxic substances; however, the levels are much lower than in conventional cigarettes. Therefore, at present we are not able to confirm whether or not nicotine vaporisers have an adverse impact on health but any impact is likely to be less harmful than tobacco smoking.

Smokefree Surrey Alliance will continue to monitor emerging evidence on the impact of nicotine vaporisers on health.

Safety and efficacy

The various brands and models differ in nicotine content and it is not always clear from the labelling how much nicotine is contained in the products. There have also been some concerns over the safety of the chargers or plugs of these devices, however, this is not backed up by robust evidence. To date there has been little research into the safety and efficacy of nicotine vaporisers and these products are currently unlicensed, although they do have to comply with consumer protection legislation.

As the safety and efficacy of nicotine vaporisers has not been established, the World Health Organisation (2013) advises strongly against the use of these products until such a time that they are deemed to be safe and effective by a national regulatory body. The UK Government is of the opinion that nicotine vaporisers should be regulated and we are thus awaiting to hear the position of the

Medicines & Health Care Products Regulatory Agency (MHRA) which will take account of the revised EU Tobacco Products Directive.

Smokefree Surrey Alliance is supportive of MHRA regulation of nicotine vaporisers and further research into the safety of these devices.

Gateway to smoking/normalisation of smoking

There is a concern that nicotine vaporisers may encourage nicotine addiction in non smokers and provide a gateway to smoking for children and young people. The marketing of these products has in some instances been clearly directed at young people. A review of the evidence by Bauld et al (2014), however, did not find any evidence to suggest that non-smoking children who tried nicotine vaporisers were more likely to then try tobacco. 1% of 16-18 year olds reported using nicotine vaporisers more than once a week; use is prevalent in smokers or ex-smokers. However, it is not clear whether it is too early for such trends to develop.

Another concern is that the use of nicotine vaporisers in public places where smoking has been prohibited has the potential to 'normalise' smoking and to undo the good that has come out of the smoke free legislation introduced in 2007. There have also been reports that the use of nicotine vaporisers has led to problems in enforcing smoke free legislation (such as in work vehicles) as it has been difficult to prove whether people are smoking cigarettes or using nicotine vaporisers (particularly when relying on CCTV for evidence).

Smokefree Surrey Alliance remains cautious as to the impact of nicotine vaporisers on smoking amongst young people. The Alliance advocates that any advertising of nicotine vaporisers should be regulated to ensure it denormalises, (rather than renormalises) smoking by positioning the product clearly as a replacement for smoking and not marketing the product to young people.

Smokefree Surrey Alliance will continue to enforce smokefree legislation and implement a comprehensive tobacco control strategy to denormalise smoking and reduce exposure to secondhand smoke.

Deferring quitting / triggering relapse

Concerns have been raised about the possible role of nicotine vaporisers in deferring quit attempts for people who are using these vaporisers in conjunction with smoking tobacco. By continuing to

use nicotine vaporisers after quitting smoking, there is also a danger that the ongoing nicotine dependence will trigger a relapse. At present there is no evidence that this is happening and nicotine use overall has continued to decline (ONS, 2012), despite the increase in use of vaporisers.

Surrey Stop Smoking Service will continue to provide stop smoking support to people who want to quit smoking tobacco, including those people that choose to use nicotine vaporisers as an aid to quitting.

Smoking Cessation support and nicotine vaporisers

Smoking Cessation services offer one-to-one support for people wishing to stop smoking or using any other form of tobacco. This support includes advocating the use of either pharmacotherapy or licensed nicotine replacement therapy as an aid to stopping smoking. We understand that an increasing number of people are using nicotine vaporisers in order to either stop smoking or reduce the amount they smoke. Nicotine vaporisers are generally considered to be safer than smoking tobacco however, are not currently an approved smoking cessation aid.

*Surrey Stop Smoking Service will continue to advocate the use of **licensed** nicotine replacement products as an aid to stopping smoking for anyone seeking support. Smokers will be advised of the effectiveness of approved pharmacotherapy, however should they wish to use nicotine vaporisers to aid their quit attempt, they will still be able to access behavioural support offered by the Service. They will also be able to use licensed nicotine replacement products in conjunction with nicotine vaporisers.*

Summary of recommendations

1. In view of the lack of knowledge and evidence around safety, quality and efficacy of nicotine vaporisers, Surrey Stop Smoking Service will not promote the use of the vaporisers or any other non-licensed nicotine containing product to clients as a stop-smoking aid. For those wishing to stop smoking, we would recommend using one of the many **licensed** nicotine containing products available that have been proven to be safe and effective. However, those choosing to use nicotine vaporisers in their attempt to quit smoking will still be supported through the Service.
2. In line with Public Health England's position on the use of nicotine vaporisers in the workplace, we do not consider it appropriate to use nicotine vaporisers and other non-licensed nicotine delivery systems in the workplace, on account of the fact that manufacturing standards and safety of these products have not been established.

Surrey County Council considers, at this point in time, that nicotine vaporisers and other non-licensed nicotine delivery systems are prohibited in all Surrey County Council buildings.

Anyone who would like to stop smoking is advised to contact Surrey Stop Smoking Service who provide tailored behavioural support together with the use of pharmacotherapy or licensed nicotine replacement products. All details can be found on their website:

<http://www.healthysurrey.org.uk/your-health/smoking/>.

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