

Smoking is one of the main contributors to the 10-20 year life expectancy gap between people with mental health problems and the wider general population. 123

Because those with mental health problems have much higher smoking rates (approximately 40%) than the wider population (approximately 14.4%) – they disproportionately experience the adverse effects of smoking.⁴⁵ Around one third of all cigarettes in England are smoked by people with a mental health problem.⁶

Evidence to date shows that electronic cigarettes (also called 'e-cigarettes' 'vaping products' or 'vapes') are substantially less harmful than cigarettes.789 Their use continues to grow, with the latest survey from ASH indicating that an estimated 7.1% of the adult population in Britain (around 3.6 million people) are currently vaping.10 Since 2013 they have been the most popular tool for quitting smoking in England.11 The most common reasons given for using an e-cigarette are to quit smoking (by ex-smokers) or cut down (by current smokers).10 The latest ASH survey also indicates that over a half (54.1%) of current vapers are exsmokers, with this proportion growing year on year, while the proportion of current vapers who also smoke (known as dual users) has declined to only 39.8% in 2019, with use among neversmokers remaining rare.10 12

The evidence shows that e-cigarettes are effective in helping people guit smoking, with one study estimating that e-cigarette use contributed to an additional 50,000 guits in 2017. 13 14 15 A randomised control trial published in 2019 found that e-cigarette users were more likely to have guit and remained guit for a year than those using nicotine replacement therapy (NRT), when both aids were used with behavioural support offered by stop smoking services. 16 Studies have also found that e-cigarettes can help some people with mental health problems quit or cut down with minimal side effects. however further research is needed on their effectiveness as a guitting aid for this group. 17 18 19 20 21

This resource has been produced by the Mental Health and Smoking Partnership²² and is intended to provide mental health professionals with a summary of the evidence on e-cigarettes as well as suggested responses to questions service users may ask. It is primarily aimed at professionals working in England but can be used by anyone across the UK.

Further information about smoking and mental health can be found in the <u>Smoking and Mental Health fact sheet</u>²³ produced by Action on Smoking and Health (ASH). The National Centre for Smoking Cessation and Training (NCSCT) also provides a guide to <u>Good practice for smokefree mental health services</u>.²⁴

Summary

- » E-cigarettes are substantially less harmful to health than cigarettes.
- » They do not contain or burn tobacco, meaning they do not produce carbon monoxide, tar or many of the other harmful chemicals found in tobacco smoke and to date, there have been no identified health risks to bystanders.
- » Although it is not yet possible to precisely quantify the long-term health risks associated with e-cigarettes, based on the available evidence it is likely that e-cigarettes are substantially less harmful than cigarettes. E-cigarettes should not be used by people who have never smoked.
- » Licensed NRT products and other stop smoking medications, such as varenicline (Champix), are effective for helping people to quit smoking and are recommended if a person with a mental health problem wants to stop smoking. If people wish to quit smoking using an e-cigarette, they should be given evidence-based information about their relative safety and should be offered specialist support to switch.

- » For anyone who smokes, switching completely to vaping (i.e. stopping smoking completely) will ensure the greatest reduction in harm and deliver most benefit to health. Anyone who is using both cigarettes and e-cigarettes should be strongly encouraged to stop smoking as soon as they can. Support to quit from a trained stop smoking practitioner significantly improves the chances of quitting successfully.
- » For data recording purposes, a person who has stopped smoking completely and switched to vaping is classified as a non-smoker, although their vaping should be recorded as well separately.
- » Tobacco smoke interacts with some medications used for treating mental health and physical health problems, particularly clozapine. Anyone who is on any such medications and decides to stop smoking (either using NRT or other licenced medications, an e-cigarette, or without pharmacological support) should talk to their doctor as they may need to have their dosage reduced.
- » Switching from smoking to vaping could save people around £700 a year.

Frequently asked questions

& suggested responses

General Information

1. What are e-cigarettes?

E-cigarettes are devices that deliver nicotine through an aerosol (commonly referred to as a vapour) rather than smoke. They work by heating and vaporising a solution that typically contains nicotine, propylene glycol and/or vegetable glycerine, and flavourings. They generally consist of a heating element, a liquid, and a battery.

More info:

There are lots of e-cigarette devices and e-liquids available, all in different shapes, sizes and flavours. Types of device range from:

1) 'Cig-a-like' products: The first generation of e-cigarettes were designed to closely resemble tobacco cigarettes. They include non-rechargeable disposable models and reusable models with rechargeable atomisers and replaceable cartridges. The use of 'cig-a-like' products is now relatively uncommon;



2) **Tank' models or vape pens:** An e-cigarette with a rechargeable atomiser and a tank which needs to be filled with an e-liquid;



3) 'Mods', or advanced personal vaporisers:

A more complex tank model which can be manually customised, for example by adjusting the power on the device



4) **Pod systems:** These are compact rechargeable devices, often shaped like a USB stick or a pebble and operating with refillable pods. They are simple to use and to maintain;



2. Which chemicals are in e-cigarettes?

E-cigarette liquids (e-liquids) typically contain nicotine propylene glycol and/or vegetable glycerine and flavourings which is then heated to produce an aerosol that the user inhales. Unlike cigarettes, they do not contain tobacco, and therefore do not produce tar and carbon monoxide (CO). some of the most harmful chemicals in tobacco smoke. Although e-cigarette vapour has been found to contain some toxins also found in tobacco smoke, these are either at much lower levels or at levels not associated with serious health risk. 8 25 Chemicals linked to vaping-related health concerns, including diacetyl, tetrahydrocannabinol (THC) and vitamin E acetate, are banned ingredients in UK regulated e-liquids.

3. Are e-cigarettes safe to use?

E-cigarettes are not risk-free, and they should not be used by people who have never smoked. However, based on the available evidence it is likely that e-cigarettes are substantially less harmful than cigarettes.^{7 8 9} To date, there have been no identified health risks of passive vaping to bystanders, unlike secondhand cigarette smoke which poses serious risks.⁸ As e-cigarettes are relatively

new products, more evidence is needed about the effects of their longer-term use, but further studies are underway.

4. Should I be worried about reported deaths from vaping?

In the US, there have been 2,807 reported cases of people suffering e-cigarette, or vaping, product use-associated lung injury (EVALI) outbreak with 68 deaths (as of 18 February 2020).²⁶ The US Centers for Disease Control and Prevention (CDC) has linked the lung injuries to vaping products containing THC (Tetrahydrocannabinol) – the component of marijuana that causes a "high" – particularly those obtained from "informal sources like friends, family, or in-person or online dealers".²⁶

The chemical vitamin E acetate, which is believed to be used as a cutting agent in products containing THC, is also associated with the lung injury outbreak and previous research has suggested that inhaling vitamin E acetate may interfere with proper lung functioning.²⁶

The outbreak does not appear to be associated with use of nicotine e-cigarettes. ²⁶ ²⁷

There are 3.6 million vapers in Britain, the majority of whom have been vaping for at least a year.¹⁰ THC and vitamin E acetate are banned for use in vaping products in the UK.27 In the UK, e-cigarettes are regulated under the Tobacco and Related Products Regulations 2016 which transposes the EU Tobacco Products Directive into UK law. The Medicines and Healthcare Products Regulatory Agency (MHRA) which oversees rules on e-cigarettes runs a 'Yellow Card' system to enable healthcare professionals and members of the public to report any suspected adverse effects. A Yellow card report is not by itself proof of a side effect or a causal link between vaping and adverse reactions. The MHRA recently released information from its Yellow Card scheme in relation to e-cigarettes which included four suspected fatal cases since 2011 (two prior to the Tobacco and Related Products

Regulations 2016 coming into force in England).²⁸

More info:

You can check on the MHRA website whether a particular e-cigarette product is legal. Buying unregulated black-market vaping products carries unknown risks. If you suspect a service user is experiencing side effects after using a vaping product, you should report this immediately to the MHRA **Yellow Card** scheme where your complaint will be recorded and investigated. Further guidance from the MHRA about suspected cases of EVALI can be found here.²⁹

5. Is the nicotine in e-cigarettes harmful?

The vast majority of harm from smoking comes from inhaling tobacco smoke which contains over 7000 chemicals, many of which can cause cancer.³⁰ Whilst it is nicotine that makes tobacco so addictive, nicotine use in and of itself, presents relatively little risk to the user.⁹ Provision of the nicotine that smokers are addicted to without the harmful components of tobacco smoke can prevent most of the harm from smoking.⁹

NRT products such as nicotine patches and gum are widely used by smokers to help them quit and their long-term use has not been associated with any health concerns.³¹ They are available on general sale, over the counter or on prescription and are safe to use whilst taking medications for your physical and mental health. NRT products deliver nicotine much slower and at lower doses than smoking.

For e-cigarettes, the dose of nicotine and the speed of delivery you get will vary depending on the type of e-cigarette products you use. It is not yet clear how addictive e-cigarettes are compared to tobacco, although there is some evidence to suggest that higher nicotine concentration in e-liquid is associated with increased dependence.³² If you are using an e-cigarette to quit smoking you should use it as much as you feel necessary, in the same way as with NRT.

6. Can an e-cigarette help me stop smoking?

Research shows that e-cigarettes can help people quit smoking, particularly when combined with support from a stop smoking specialist.¹³ ¹⁴ ¹⁵ ¹⁶ Studies specifically on people with mental health problems have also shown that e-cigarettes can help reduce smoking with few side effects, particularly when combined with behavioural support, although more research is needed.¹⁷ ¹⁸ ¹⁹ ²⁰ ²¹ Since 2013 e-cigarettes have been the most popular tool for quitting smoking in England.¹¹ The latest ASH survey also indicates that over half (54.1%) of current vapers are ex-smokers and this proportion has grown year on year.¹⁰

If you smoke, switching completely to vaping (i.e. stopping smoking completely) will ensure the greatest reduction in harm and deliver most benefit to your health, although cutting down can be a good way to get you started on the road to stopping long-term. If you are finding it difficult to quit smoking, you will give yourself the best chance by getting free support from a trained stop smoking practitioner. Most stop smoking services are e-cigarette friendly and can support you to stay smokefree whilst using an e-cigarette.

More info:

People with mental health problems are as motivated and able to quit smoking as those without if they are given the right support.33 34 There is some evidence to suggest that e-cigarettes appeal to those with mental health problems as a viable alternative to smoking and their use does not appear to exacerbate nicotine addiction or psychiatric symptoms, although the impact on smoking status and health problems in the long term is unclear.¹⁷ Several studies have observed reductions in cigarette consumption among people with severe mental illnesses who use e-cigarettes.^{19 20 21} The 2018 PHE evidence review has more detailed information about the effectiveness of e-cigarettes for quitting smoking.8 There is some evidence to suggest that those who use refillable 'tank' e-cigarettes are more likely to make a successful quit attempt

7. Can I get an e-cigarette from my doctor?

There are currently no e-cigarettes with a medical licence on the UK market, so they cannot yet be prescribed by healthcare professionals. If you want to give e-cigarettes a go, speak to a stop-smoking professional who can talk you through your options, or visit a specialist vape shop where they can give you advice on the different products available and how to use them.

If you are admitted into a mental health ward as an inpatient, a majority of services will let you use an e-cigarette within the hospital grounds but rules on how you can access them and where exactly you can use them vary from trust to trust.³⁶

More info:

A survey conducted by ASH of mental health trusts in England found that the vast majority (91%) allow vaping by some or all patients within the trust, with 42% providing them to patients for free.³⁵ E-cigarettes can be purchased on wards in 20% of trusts, from vending machines in 18% of trusts, and hospital shops in 22% of trusts. There was variation in where patients could use e-cigarettes with 44% of trusts permitting vaping in private rooms, 13% permitting vaping in communal areas and three quarters of trusts permitting vaping in ward courtyards (76%) and hospital grounds (73%). Five trusts (11%) had installed 'it's OK to vape' signs. ³⁶

8. Where can I purchase an e-cigarette?

To reduce any potential risks, users should only purchase e-cigarettes from reputable outlets and should handle and use their devices safely and in line with the manufacturer's instructions.³⁷ If you're interested in using an e-cigarette to quit smoking, specialist vape shops can give you advice on the different products available and how to use them.

More info:

Further information on how health professionals can work with specialist vape shops is provided by the National Centre for Smoking Cessation and Training.³⁸ A list of reputable vape shops, as reviewed by the Independent British Vape Trade Association – which is independent from the tobacco industry – can be found on: http://www.findavapeshop.com

9. Is vaping cheaper than smoking?

Yes. Evidence suggests that on average, someone who smokes could save an estimated £15.06 per week by switching completely to e-cigarettes.³⁹ This is based on a study of expenditure on smoking, vaping and NRT which found that smokers spend on average £23.40 per week on cigarettes, compared to £7.60 for e-cigarette users and £8.15 for NRT users. The exact amount saved is likely to differ depending to how much you smoke/vape, the type of products you buy, and where you buy them from.

10. Can I continue to smoke whilst using an e-cigarette?

If you smoke, switching completely to vaping (i.e. stopping smoking completely) will ensure the greatest reduction in harm and deliver most benefit to your health. For more dependent smokers, cutting down can be a good way to get you started on the road to stopping long-term, provided that you set a quit date and see it through. The only way to prevent future harm to your health from smoking is to quit completely. You are more likely to quit successfully with support from a trained stop smoking practitioner, alongside medications or e-cigarettes.

11. Is it safe to vape around others?

To date, there have been no identified health risks of passive vaping to bystanders, unlike secondhand cigarette smoke which poses serious risks. 8 If using an e-cigarette indoors helps you or other members of your household

to maintain a smokefree home, it is a far safer option than smoking.

12. Will vaping affect my mental health?

E-cigarette use has not been found to worsen psychiatric symptoms and has been found to be effective for reducing smoking among people with mental health problems. ^{17 18 19 20 21}

A review of the evidence found that stopping smoking is associated with decreased symptoms of poor mental health and may lead to improved positive mood and quality of life compared with continuing to smoke.⁴⁰

Tobacco smoke interacts with some medications used for treating mental health physical health problems, and particularly clozapine. If you are on any such medications and decide to stop smoking, either by using an e-cigarette, licensed NRT, other medication or without such support, make sure you talk to your doctor as you may need to have your dosage reduced.

More info:

Smoking increases the metabolism of various medications. Stopping smoking can reduce metabolism of some medications resulting in higher, sometimes toxic, plasma levels over a few days if the person's medication dose is not adjusted by a prescriber. Patients on psychotropic medications who stop smoking, including those who switch to vaping, therefore require close monitoring and potential reduction in medication dosage.^{41 42}

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- » Hickling LM, et al. <u>A pre-post pilot study of electronic cigarettes to reduce smoking in people with severe mental illness</u>. Psychological Medicine. 2019; 49(6):1033-40
- <u>'Making the Switch'</u> short films for smokers considering a move to vaping developed by the New Nicotine Alliance and the NCSCT
- » NCSCT. Smoking Cessation and Mental Health: A briefing for front-line staff

National guidance:

- » Public Health England and the Care Quality Commission (CQC) support the use of e-cigarettes in mental health in-patient settings as an alternative to smoking. <u>Brief</u> <u>guide: Smokefree policies in mental health inpatient services</u>
- » NICE <u>guideline NG92</u> (2018) recommends that health professionals should: "Offer advice on using nicotine-containing products on general sale, including NRT and nicotine-containing e cigarettes" (1.4.4)⁴³
- » NCSCT Guidance Smoking cessation and smokefree policies: Good practice for mental health services (2018) recommends: "Any conversation with service users about e-cigarettes needs to include an acknowledgement that e-cigarettes are far less harmful than cigarettes, are popular with smokers and that they have a role to play in helping smokers to quit, reducing the harm of continued smoking and managing temporary abstinence"²⁴
- » Mental Health and Smoking Partnership's Statement on Electronic Cigarettes recommends that: "Information on use of NRT, varenicline, bupropion and electronic cigarettes should form part of the care package for people with mental health problems who smoke. Advice should be based on objective evidence of relative harm: it is better for health to use electronic cigarettes rather than smoke tobacco, and this advice should be given to smokers who find other aids to quitting unsatisfactory" 44

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This document has been endorsed by the following members of the Mental Health and Smoking Partnership:



































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