



Smoking or vaporising: what's the difference?

Who this is for. This is safety information for people who have already been prescribed cannabis flower, and their carers. It does not suggest that anyone should seek a prescription, or that any medicine will help any condition. If anything here differs from what your prescriber told you, follow your prescriber.

In short

- UK law says a prescribed cannabis medicine must not be smoked.^{1, 2} For flower, use a medical vaporiser as your prescriber advises.⁶
- Burning makes smoke, with tar, carbon monoxide and many other harmful chemicals. A vaporiser heats the flower without burning it.^{7, 8, 9}
- Vaporising avoids most of the smoke, but it is not proven safe in the long term.^{12, 13}
- Never mix your medicine with tobacco, and never use vapes or cartridges that were not prescribed for you.

Why your prescription says “vaporise, never smoke”

The law. Since 1 November 2018, UK law has said that a person “shall not self-administer” a cannabis-based medicine “by the smoking of the product”. This applies in England, Wales and Scotland, and in Northern Ireland.^{1, 2} The Home Office said that smoking “continues to be prohibited”.³ Breaking these rules can be a criminal offence.⁴

What the law leaves open. The rules do not say what counts as “smoking”, and they do not mention vaporisers. Police guidance for officers says vaping is different from smoking, because smoking involves burning.⁵ So a vaporiser that heats without burning is the accepted way to take prescribed flower, but the law itself does not spell this out. If you are unsure, ask your prescriber.

Good practice. UK prescribing guidance says clinicians should check that you can get a medical-grade vaporiser, and know how to use it safely, when flower is prescribed.⁶

What burning makes

Burning plant material makes smoke that carries tar (sticky particles that stay in the lungs) and carbon monoxide (a gas that cuts the oxygen your blood can carry).⁸ Cannabis smoke contains many of the same harmful chemicals as tobacco smoke, including some known to cause cancer.⁷

In a well-known study, smoking cannabis caused about five times the rise in carbon monoxide in the blood, and about three times as much tar breathed in, as smoking a similar

amount of tobacco. People breathed the smoke in more deeply and held it for longer.⁸

A vaporiser heats the flower until the medicine turns into vapour, below the point where it burns. In a small trial, vaporising gave similar amounts of THC in the blood as smoking, with less carbon monoxide.⁹

What the evidence shows

- Long-term cannabis smoking is linked to more coughing, phlegm, wheezing and bouts of bronchitis. A major US review rated this evidence as substantial.¹⁰ A later review of 22 studies agreed, though most were weak.¹¹
- Stopping smoking cannabis is linked to fewer chest symptoms.¹⁰
- In small studies, people who vaporised, or who switched from smoking, reported fewer chest symptoms than people who smoked.¹²

And what it does not show

- There are no large trials or long-term studies of people who switched from smoking to vaporising.¹²
- Vaporising is not proven safe. Smoking and vaporising both raise heart rate and blood pressure for a while, and the long-term effects on the heart and lungs are not known.¹³
- In an animal study, vapour from a flower vaporiser affected blood vessels about as much as smoke did.¹⁴
- Whether smoking cannabis causes lung cancer is not settled. Studies disagree.^{10, 15}

If you used to smoke cannabis

The same amount can feel stronger when vaporised. In a small trial, vaporised cannabis gave higher THC levels in the blood, and stronger effects, than the same dose smoked.¹⁶ Do not judge your amount by what you used before. Follow your prescriber's instructions.

Smoke also speeds up how the body clears some other medicines, such as clozapine, olanzapine and theophylline.^{6, 17} If you stop smoking, or change how much you smoke, tell your GP or pharmacist so they can check your other medicines.

General information, not medical advice. Your prescriber's instructions come first.

Urgent help: NHS 111 (in Northern Ireland, your GP or GP out of hours service). In an emergency, call 999.

thegreenthistle.co.uk | James Clyne Gunn, Registered Nurse (Adult) | Written October 2026, next review October 2027

Sources on page 3 | Page 1 of 3



Mixing with tobacco

Never mix your medicine with tobacco. That would be smoking it, and it adds tobacco smoke, which contains more than 5,000 irritants, toxins and cancer-causing substances.¹⁸

Mixing is common. In a 2020 survey in Great Britain, 81% of tobacco smokers who used cannabis mixed it with tobacco.¹⁹

Smoke, children and other people

Smoke harms the people around you, especially children, whose lungs are still growing. Children who live with a smoker are more likely to get asthma, chest infections and ear infections. Opening a window or going to another room does not protect them.¹⁸

Cannabis smoke reaches children too. In a US study of children in hospital whose parents smoked tobacco, almost half had a breakdown product of THC in their urine. It was more common when a parent smoked cannabis rather than using it another way, used it daily at home, or smoked in another room rather than outside.²⁰

Less is known about second-hand vapour. In an animal study, even diluted vaporiser vapour, like a person nearby might breathe, affected blood vessels.¹⁴ Until more is known, use your vaporiser away from children and other people, in a well-aired room.

A medical vaporiser is not an e-cigarette

An e-cigarette or vape pen heats a liquid, usually nicotine mixed with propylene glycol, vegetable glycerine and flavourings.²¹ A dry herb vaporiser heats the plant material itself.

Never put your medicine in an e-cigarette. Never put anything except your prescribed medicine in your vaporiser, and do not add anything to any vaping product.²² Use the type of device your prescriber advised.⁶

Illegal and unknown vapes

In the UK it is illegal to have cannabis, including THC vapes, unless it was prescribed for you.²³ With vapes and cartridges from any other source, you cannot know what is in them.

- In the USA in 2019 and 2020, an outbreak of serious lung injury called EVALI meant 2,807 people were in hospital or died, including 68 deaths. Most cases were linked to THC vapes from friends, dealers or online sellers, and to vitamin E acetate, an oily substance added to some of them.^{22, 24}
- In 2025 the UK government warned that many vapes sold as THC contain dangerous synthetic cannabinoids, often called spice, instead.²⁵ A study of vapes taken from pupils at 27 English secondary schools found spice in about 1 in 6 samples, and THC in only about 1 in 100.²⁶
- NICE advises prescribers to tell patients to stop any cannabis that is not prescribed, including products bought online or illegally.²⁷

If you have had a bad reaction to any vape, get medical help. You can report it on the MHRA Yellow Card scheme, at yellowcard.mhra.gov.uk.²⁸

Help to stop smoking tobacco

Free NHS stop smoking services offer support, nicotine replacement (such as patches or gum) and stop smoking medicines. Ask your GP or pharmacist, or contact a service yourself.²⁹

England: Smokefree National Helpline, 0300 123 1044²⁹

Scotland: Quit Your Way Scotland, 0800 84 84 84³⁰

Wales: Help Me Quit, 0800 085 2219³¹

Northern Ireland: find a local service at stopsmokingni.info³²



Sources

All sources checked 12 October 2026. The numbers match the small numbers in the text.

1. Misuse of Drugs Regulations 2001, reg 16A(3). legislation.gov.uk/uksi/2001/3998/regulation/16A
2. Misuse of Drugs (Amendment No.2) Regulations (NI) 2018, reg 16A(3). legislation.gov.uk/nisr/2018/173/made
3. Home Office Circular 018/2018. gov.uk/government/publications/circular-0182018-rescheduling-of-cannabis-based-products-for-medicinal-use-in-humans
4. Misuse of Drugs Act 1971, s 18(1). legislation.gov.uk/ukpga/1971/38/section/18
5. Police CDLO guidance, Medicinal cannabis and the police, Feb 2025. library.college.police.uk/docs/NPCC/Medicinal-cannabis-guidance-2025.pdf
6. Medical Cannabis Clinicians Society, Good practice guide v6, July 2026, s 6.1, 10.3.1. ukmccs.org/guidance-publications
7. Moir and others, Chem Res Toxicol 2007. doi.org/10.1021/tx700275p
8. Wu and others, N Engl J Med 1988. doi.org/10.1056/NEJM198802113180603
9. Abrams and others, Clin Pharmacol Ther 2007. doi.org/10.1038/sj.clpt.6100200
10. National Academies, Health effects of cannabis, 2017. nap.nationalacademies.org/catalog/24625
11. Ghasemiesfe and others (systematic review), Ann Intern Med 2018. doi.org/10.7326/M18-0522
12. Chaiton and others, Can J Public Health 2021. doi.org/10.17269/s41997-021-00565-w
13. Chaiton and others (review), Curr Opin Pulm Med 2025. doi.org/10.1097/MCP.0000000000001239
14. Liu and others (animal study), J Am Heart Assoc 2023. doi.org/10.1161/JAHA.123.032969
15. Khoj and others (review), Respir Med 2024. doi.org/10.1016/j.rmed.2023.107494
16. Spindle and others (trial), JAMA Netw Open 2018. doi.org/10.1001/jamanetworkopen.2018.4841
17. MHRA Drug Safety Update, smoking interactions. gov.uk/drug-safety-update/smoking-and-smoking-cessation-clinically-significant-interactions-with-commonly-used-medicines
18. NHS, Passive smoking. nhs.uk/live-well/quit-smoking/passive-smoking-protect-your-family-and-friends
19. Hindocha and others, Addiction 2021. doi.org/10.1111/add.15381
20. Wilson and others, Pediatrics 2018. doi.org/10.1542/peds.2018-0820
21. NHS, Using e-cigarettes to stop smoking. nhs.uk/live-well/quit-smoking/using-e-cigarettes-to-stop-smoking
22. CDC, EVALI outbreak, final update Feb 2020 (archived). archive.cdc.gov/www_cdc_gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html
23. NHS, Medical cannabis. nhs.uk/medicines/medical-cannabis
24. Blount and others, N Engl J Med 2020. doi.org/10.1056/NEJMoa1916433
25. DHSC news, 16 Oct 2025. gov.uk/government/news/young-people-given-stark-warning-on-deadly-risks-of-taking-drugs
26. Cozier and others, Addiction 2025. doi.org/10.1111/add.70110
27. NICE NG144, rec 1.5.7. nice.org.uk/guidance/ng144
28. MHRA Yellow Card. yellowcard.mhra.gov.uk
29. NHS stop smoking services. nhs.uk/live-well/quit-smoking/nhs-stop-smoking-services-help-you-quit
30. Quit Your Way Scotland. nhsinform.scot/care-support-and-rights/nhs-services/helplines/quit-your-way-scotland
31. Help Me Quit. helpmequit.wales
32. Public Health Agency, Stop smoking NI. stopsmokingni.info