Evidence: Young People and Smoking

What is effective in helping young people to stop smoking

Most of the evidence on smoking interventions with young people is from preventative interventions, which will have a greater overall influence on young people and smoking than cessation interventions. Prevention is important, but the reasons why young people start smoking (and continue to smoke) are multiple and complex, and therefore it is still necessary to have evidence-based interventions for supporting stopping smoking in young people for whom prevention interventions have not worked.

Preventing uptake of smoking

Smoking rates in young people have fallen in recent decades largely due to the regulatory measures to prevent uptake of smoking by limiting exposure to marketing and the reduction of the availability of cigarettes through raising the age of sale and increasing prices through taxation and addressing illicit markets.[1] Evidence suggests that prices can deter young people from smoking, and they are three to four times more sensitive to changes in price than adults[2] and price/tax increases minimise impact on disadvantaged young people relative to other interventions[3].

In 2021, the National Institute for Health and Care Excellence (NICE) issued guidance on interventions to prevent the uptake of smoking among young people[4]. Their broad recommendations were further national, regional and local mass-media campaigns, helping retailers to avoid illegal tobacco sales, whole-school and organisation-wide smokefree policies and adult- and peer-led school-based interventions.

Knowledge about smoking is a necessary component of smoking prevention, but knowledge-based campaigns have limited impact, particularly on smoking rates. However, such campaigns may postpone initiation of smoking[5]. This is likely to have a positive effect on whether young people develop into adult dependent smokers, given most adult smokers started at an early age, postponing initiation implies they are less likely to go on to be adult dependent smokers. Education on the harms of smoking should still be included as part of health education for young people but given the

expense of targeted smoking prevention campaigns compared to other prevention interventions (e.g. raising the age of sale), campaigns are best targeted at those communities with the highest smoking rates.

Additionally, knowing that carers, parents and sibling smoking is strongly associated with smoking initiation in young people, prevention and intervention strategies for carers and family members who smoke should in turn prevent uptake of smoking in young people within those households.

Supporting the desire to stop smoking

Within a short time of starting to smoke many young people want to quit and try to quit[6] and quit attempts are common. As many as 50% of teenage smokers, regardless of different social contexts, make a quit attempt within six months of starting smoking, albeit relapse rates are common.[7]

One of the challenges is that young people are wary of how their smoking is viewed by others, especially in asking for support to quit. Therefore, attitudes to quitting also need to be challenged, particularly amongst girls. For example, a review in 2024 highlighted that young females that recognised that they were *addicted* to smoking perceived quitting as so difficult that the benefits of smoking outweighed quitting, and there were also additional concerns about potential weight gain[8]. The same review also suggested considering the use of role models of those who formerly smoked to help facilitate quitting; they could potentially help challenge specific attitudes to quitting[8].

Living in an environment where smoking is considered *normal* not only increases the chances of a young person initiating smoking but is a barrier to smoking cessation[8]. Creating a non-smoking environment is therefore crucial, this can be achieved by smokefree places and policies, but this can also be achieved through the non-smoking behaviour of others, and attitudes towards smoking, which evidence has suggested is heavily influential in smoking cessation[8]. As noted earlier, this may also mean cessation support is needed amongst the young person's more immediate family and social network, and indeed evidence has suggested that young people have indicated that co-quitting with friends and family is appreciated[8].

Interventions to support smoking cessation

The is currently a limited amount of good quality research around what is the most effective intervention to support smoking cessation in young people. The two most recent evidence reviews that have been conducted report studies with mixed results[6,9], and no clear evidence that one approach is better than another at either short term smoking abstinence[9] (6–12 weeks) or longer-term abstinence (6 months)[6]. This limited

consistent evidence highlights how difficult it is to support young people to quit smoking. However, evidence does point to promise with some interventions, especially those that combine approaches and behavioural support is an important component of a quit attempt and may have a more important role in young people when quitting and should be reinforced as part of any intervention. Additionally, evidence showing that group counselling, but not individual counselling, may be effective in those aged 20 and under[6].

Who offers behavioural cessation support?

Behavioural support for young people can be offered by a referral to a local stop smoking service (LSSS), this is dependent on whether the Local Authority provides a local specialist youth cessation service or whether they accept young people referrals. LSSS offer evidence-based interventions to support smoking cessation. However, it needs to be acknowledged that many young people may be unwilling or unable to be referred[4]. This may be due to service availability but also driven by attitudes around smoking cessation. In particular, the embarrassment of using smoking cessation services has been highlighted by young people (10–24-year-olds) themselves[8] and they have been disregarded by some young people because they were considered self-stigmatising and aimed at older or 'addicted' smokers. In another review of 30 studies looking at pathways into and out of smoking among 16–25-year-olds, stop smoking services were viewed to be "uncool" and not aimed for young people.[10]

As per NICE guidelines[4], for those unable or unwilling to be referred to a stop smoking service, guidance can be offered around sources of information, the role of nicotine replacement therapy (NRT; see later for further details), and if offered/chosen, explaining that they are more likely to quit using NRT if they have behavioural support as well, reminding them of the referral option.

Given the embarrassment and stigma around quitting and use of a stop smoking service[8,10], there is some evidence to suggest that perhaps a harm reduction strategy may be a better approach with young people in supporting a quit attempt, especially for those with marginalised identities[10]. Smoking reduction could be encouraged and seen as a necessary step for successful cessation[8].

It is clear from young people themselves that whoever is delivering the support, they should understand the needs of young people, and this has been shown to be essential for quitting success. In the review of factors associated with smoking cessation in young people, attitudes of those offering the cessation support were the most important determinant of cessation. Confidentiality was also a crucial factor[8].

Smoking cessation support and interventions therefor need to be 'young people friendly', approachable and non-judgemental. Young people would benefit from being supported by those who have quit smoking, those who have consideration and understanding of the needs of young people, have information on smoking related health issues, how to quit and access to aids for those who need them.

What should behavioural support look like?

Strategies to increase motivation, ability to control their own decisions and actions, and self-efficacy in young people will be key to achieving cessation in young people. It has been suggested that support should focus on behavioural change, by removing personal blame and reducing stigma, adopting a neutral stance and shifting away from a focus on individual responsibility, which can help foster a supportive non-stigmatising environment for individuals who want to quit[8].

Group support may be more beneficial than individual support[6]. Group support will allow for increasing and/or incorporating social interactions which may be beneficial for an effective smoking cessation programme[8]. Support should acknowledge and identify the link between boredom, stress and smoking cessation. Providing help to manage stress and cope with cravings in alternative ways other than smoking e.g. mindfulness or relaxation techniques[8]

Support should also consider the wider context of the young person, including other substance and alcohol use. Young people who smoke often report alcohol and other drug use, and consumption has been considered as a barrier to cessation[10], in particular cannabis use, which could reinforce cigarette smoking.

Stop smoking aids

There are a wide range of stop smoking aids available however, unlike in adults, there is no clear evidence of the effectiveness of pharmacological interventions in young people[6] and the one medication (bupropion) which has shown to have some effect in the short term (4 weeks) is not licenced for those under 18 years-of-age within the UK.

> Nicotine Replacement Therapies (NRT): The latest NICE guidelines recommend consideration of NRT for young people aged 12 and over who are smoking and dependent on tobacco, but highlight that if NRT is prescribed, it should be offered with behavioural support[4]. The recommended standard treatment duration is 10-12 weeks of NRT and should only be extended after consultation with a physician.
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> In a recent survey of 11-15-year-olds of current smokers who have tried to give up smoking, nicotine products were the second most common quit approach reported[12], and this is further supported in the 2024 review, were young people

expressed interest in NRT to help them quit[8]. However, young people have also highlighted specifically that nicotine patches and gum are shameful, uncool and aimed at older smokers[10].

Whilst NRT is considered safe to be used by those 12+ in years, its effectiveness in supporting cessation is not as strong as that reported in adults. This is reinforced by young peoples' opinions of the usefulness of NRT, which are mixed with some reporting that NRT did not work for them, whilst others considered it to be useful[8].

Smoking dependence may be influential in the effectiveness of NRT in young people. For those who have an established nicotine dependence (moderate to high) it is expected that the use of combination NRT will be more valuable compared to those who have yet to establish regular smoking patters or smoke fewer cigarettes per day. Those young people who are less dependence may benefit from a fast-acting product alone as a substitute for smoking; however more research is required to guide practice. It should be noted that current evidence is mainly based on nicotine patches, and there is an exception to NRT use in young people, in the form of Nicotinell Lozenge products which should not be used by young people 12–17 years of age without prescription. This is not to do with the safety profile, just that the product hasn't been tested in young people yet.

Nicotine vapes: In line with NICE guidelines[4] if a young person asks about using a vape to quit smoking, they are to be reminded that it is illegal to sell nicotine vapes (e-cigarettes) to under 18's and it is illegal for an adult to buy vapes for under 18's. Nicotine vapes are, however, an effective quitting aid for adults[13], and it needs to be acknowledged that young people do currently report using a vape, with 77% of 11-15 year old current smokers reporting using a vape when trying to give up smoking; the most common form of help used[12]. However, in the recent qualitative review of factors associated with smoking cessation, there were inconsistent perceptions around the role of vaping on smoking cessation reported by young people[8], and this supports other reviews into smoking cessation interventions in young people. Therefore, at present there is no strong evidence to support the role of vapes in smoking cessation in young people.

Supporting abstinence

Evidence indicates that for those young people who do quit, relapse rates are high, in one study rates were as high as 92% relapsing within one year of their quit attempt[14]. Evidence on the best way to supporting abstinence following cessation is lacking, however creating a smokefree environment, educating around the health risks of smoking, creating a culture of quitting, and reinforcing the non-smoking identity (as we have seen in adults)[15] are likely to support smoking abstinence in young people.

References

1. Harris F, MacKintosh AM, Anderson S, Hastings G, Borland R, Fong GT, Hammond D, Cummings KM. Effects of the 2003 advertising/promotion ban in the United Kingdom on awareness of tobacco marketing: findings from the International Tobacco Control (ITC) Four Country Survey. Tobacco Control. 2006 Jun 1;15(suppl 3):iii26-33. Available at: http://tobaccocontrol.bmj.com/content/15/suppl_3/iii26.short [Accessed 03.06.2025]
2. Emery S, White M, Pierce J. Does cigarette price influence adolescent experimentation?. Journal of Health Economics. 20(2):261-270; 2001
3. Brown T, Platt S, Amos A Equity impact of interventions and policies to reduce smoking in youth: systematic review Tobacco Control 23:e98-e105, 2014
4. NICE. Tobacco: preventing uptake, promoting quitting and treating dependence. NICE guideline [NG209]. 2021 (last updated 04 February 2025). https://www.nice.org.uk/guidance/ng209 Accessed 12.03.2025
5. Hopkins D, Briss P, Husten C, Carande-Kulis V et al. Reviews of evidence regarding interventions to reduce tobacco use and exposure to environmental tobacco smoke. Am J Prev Med. 20(2 Suppl):16-66; 2001
6. Fanshawe TR, Halliwell W, Lindson N, Aveyard P, Livingstone-Banks J, Hartmann-Boyce J. Tobacco cessation interventions for young people. Cochrane Database of Systematic Reviews 2017, Issue 11. Art. No.: CD003289. DOI: 10.1002/14651858.CD003289.pub6. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003289.pub6/full [Accessed 10.03.2025]
7. Minary L, Agrinier N, Dugas EN, Sylvestre M-P, O'Loughlin J. The Natural Course of Cigarette Smoking among Adolescent Daily Smokers in France and Quebec. Tobacco Use Insights. 2020;13. doi:10.1177/1179173X20943549
8. Bitar S, Collonnaz M, O'Loughlin J, Kestens Y, Ricci L, Martini H, Agrinier N, Minary L. A Systematic Review of Qualitative Studies on Factors Associated With Smoking Cessation Among Adolescents and Young Adults. Nicotine Tob Res. 2024 Jan 1;26(1):2-11. doi: 10.1093/ntr/ntad167. PMID: 37648287.
9. Lachance C, Frey N. Non-Pharmacological and Pharmacological Interventions for Smoking Cessation Programs in Youth: A Review of Clinical Effectiveness and Guidelines [Internet]. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2020 Feb 24. Available from: https://www.ncbi.nlm.nih.gov/books/NBK562834/ [Accessed 03.06.2025]
10. Poole, R., Carver, H., Anagnostou, D. *et al*. Tobacco use, smoking identities and pathways into and out of smoking among young adults: a meta-ethnography. *Subst Abuse Treat Prev Policy* **17**, 24 (2022). https://doi.org/10.1186/s13011-022-00451-9
11. Myung SK, Parl JY, The Korean Meta-Analysis (KORMA) Study Group. Efficacy of Pharmacotherapy for Smoking Cessation in Adolescent Smokers: a Meta-analysis of randomized controlled trials. Nicotine & Tobacco Research, 2019, 1473-1479. doi:10.1093/ntr/nty180 https://www.maineaap.org/assets/resources/NRT-Teens.pdf [Accesed 03.06.2025]
12. NHS Digital. Smoking, Drinking and Drug Use among Young People in England, 2023. 17 Oct 2024. https://digital.nhs.uk/data-and-information/publications/statistical/smoking-drinking-and-drug-use-among-young-people-in-england/2023 [Accessed 03.06.2025]
13. Lindson N, Butler AR, McRobbie H, Bullen C, Hajek P, Wu AD, Begh R, Theodoulou A, Notley C, Rigotti NA, Turner T, Livingstone-Banks J, Morris T, Hartmann-Boyce J. Electronic cigarettes for smoking cessation. Cochrane Database of Systematic Reviews 2025, Issue 1. Art. No.: CD010216. DOI: 10.1002/14651858.CD010216.pub9. [Accessed 03.06.2025]
14. Bancej, C., O'Loughlin, J., Platt, R.W., Paradis, G. and Gervais, A. (2007) Smoking cessation attempts among adolescent smokers: A systematic review of prevalence studies. Tobacco Control, 16, e8. doi:10.1136/tc.2006.018853

15. Callaghan L, Yong HH, Borland R, Cummings KM, Hitchman SC, Fong GT. What kind of smoking identity following quitting would elevate smokers relapse risk? Addict Behav. 2021 Jan;112:106654. doi: 10.1016/j.addbeh.2020.106654. Epub 2020 Sep 12. PMID: 32977267; PMCID: PMC7572756.

