

Do electronic cigarettes help smokers quit?

Clinical Question	How safe and effective are electronic cigarettes (ECs) in helping people who smoke achieve long-term smoking abstinence?
Bottom Line	<p>Evidence suggests that nicotine EC can aid in smoking cessation and this effect is consistent across several comparisons. There was moderate-certainty evidence that EC with nicotine increased quit rates at six months or longer compared to non-nicotine EC and compared to nicotine replacement therapy (NRT). In absolute terms, pooled data suggest an additional four people for every 100 would quit smoking with nicotine EC compared to non-nicotine EC or to NRT.</p> <p>There was very low-certainty evidence that EC with nicotine increased quit rates compared to behavioural support alone or to no support. In absolute terms, our calculations suggest a further six people per 100 people would quit if offered a nicotine EC compared to being offered behavioural support alone or no support. The effect of nicotine EC when added to NRT was unclear.</p> <p>None of the included studies (short- to mid-term, up to two years) detected serious adverse events considered possibly related to EC use. The most commonly-reported adverse effects were throat/mouth irritation, headache, cough, and nausea, which tended to dissipate over time.</p>
Caveat	Evidence on adverse events (AEs) and serious adverse events (SAEs) was of low to very low certainty across all comparisons, due to a paucity of data. SAEs were rare, in both intervention and comparator arms, with many of the studies that measured SAEs reporting no such events in either study arm. None of the analyses signalled serious harm, nor did complementary data from cohort studies. However, many of the confidence intervals for AE's and SAE's encompassed the possibility of both clinically significant harm and clinically significant benefit. More evidence is needed for these outcomes.
Context	ECs are handheld electronic vaping devices which produce an aerosol formed by heating an e-liquid. People who smoke report using ECs to stop or reduce smoking but the evidence on ECs has not been clear. People who smoke, healthcare providers and regulators want to know if ECs can help people quit and if they are safe to use for this purpose.
Cochrane Systematic Review	Hartmann-Boyce J, McRobbie H, Lindson N, Bullen C, Begh R, Theodoulou A, Notley C, Rigotti NA, Turner T, Butler AR, Hajek P. Electronic cigarettes for smoking cessation. Cochrane Database of Systematic Reviews 2020, Issue 10. Art. No.: CD010216. DOI: 10.1002/14651858.CD010216.pub4. This review contains 50 trials with a total of 12,430 participants.

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Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD010216.pub4/full>