

Electronic cigarettes assist smoking cessation**Clinical Question**

How safe and effective are electronic cigarettes in helping smokers achieve long-term abstinence?

Bottom Line

Combined results from two studies, involving 662 people, showed that using an electronic cigarette containing nicotine increased the chances of stopping smoking in the long term compared to using an electronic cigarette without nicotine. The effect size was small (5%). It was not possible to determine if an electronic cigarette was better than a nicotine patch in helping people stop smoking, because the number of participants in the study comparing electronic cigarettes with nicotine patches was low. None of the total 24 studies included in the review found that smokers who used electronic cigarettes short- to mid-term (for two years or less) had an increased health risk compared to smokers who did not use electronic cigarettes.

Caveat

The small number of trials, low event rates and wide confidence intervals around the estimates mean that confidence in the result was rated 'low' by GRADE standards.¹

Context

Electronic cigarettes are electronic devices that heat a liquid into an aerosol for inhalation. The liquid usually comprises propylene glycol and glycerol, with or without nicotine and flavours, stored in disposable or refillable cartridges or a reservoir. Since electronic cigarettes appeared on the market in 2006 there has been a steady growth in sales. Smokers report using electronic cigarettes to reduce risks of smoking, but some health care organisations, tobacco control advocacy groups and policy makers have been reluctant to encourage smokers to switch to electronic cigarettes, citing lack of evidence of efficacy and safety.

Cochrane Systematic Review

Hartmann-Boyce J et al. [Electronic cigarettes for smoking cessation. Cochrane Reviews, 2016, Issue 9. Art. No.: CD010216.DOI: 10.1002/14651858. CD010216.pub3.](#) This review contains 24 studies involving 10,924 participants.

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1. The Cochrane Collaboration. The GRADE approach. http://handbook.cochrane.org/chapter_12/12_2_1_the_grade_approach.htm [Accessed March 10, 2017]