Can electronic cigarettes (EC) help people stop smoking and are they safe to use for this purpose?

Findings from the September 2021 Cochrane review

This briefing document brings you the most up to date information on the effect and safety of using electronic cigarettes (ECs) to help people who smoke achieve long-term smoking abstinence. This evidence comes from the most recent Cochrane review of EC for quitting smoking. Cochrane are a non-profit organisation that review all of the available evidence on a particular topic. Our findings help people to make healthcare decisions.

Key findings

- Our review showed more people probably stop smoking for at least six months using nicotine e-cigarettes than using nicotine replacement therapy, or nicotine-free e-cigarettes.
- Nicotine e-cigarettes may work better than no support for quitting smoking, or than behavioural support alone.
- Nicotine e-cigarettes may not be associated with serious unwanted effects.
- The unwanted effects reported most often with nicotine e-cigarettes were throat or mouth irritation, headache, cough and feeling sick. These effects reduced over time as people continued using nicotine e-cigarettes.
- However, we need more, reliable evidence to be confident about the effects of e-cigarettes, particularly the effects of newer types of e-cigarettes that have better nicotine delivery.

Why this is this topic important?

Stopping smoking lowers your risk of getting lung cancer and other diseases. But many people find it difficult to quit. We wanted to find out if using e-cigarettes could help people to stop smoking, and if people using them for this purpose experienced any unwanted effects.

In our latest full review (searches up to 1st May 2021) we found 61 studies in 16,759 adults who smoked.

What we are doing

Each month we are searching for studies looking at the use of e-cigarettes to help people stop smoking.

We look for randomized controlled trials, in which the treatments people receive were decided at random. This type of study usually gives the most reliable evidence about the effects of a treatment. We also search for studies in which everyone received an e-cigarette treatment. In order to keep the information as up to date as possible we are searching monthly for new evidence, a living systematic review.

Other outcomes

Beyond unwanted effects, we also looked at information on other health-related outcomes. This included carbon monoxide and other toxins, lung function, blood pressure, pulse, and oxygen levels. Very few studies looked at these outcomes. In those that did, there was no indication that e-cigarettes posed more risks than smoking cigarettes. We need more evidence on this.

SEPT 2021 SEARCH UPDATE... Searches are run and screened monthly. Our September 2021 search did not identify any new studies. Between June to August 2021 searches identified 2 new, 3 ongoing studies and 5 papers linked to studies already included in the review. The findings from the searches will be incorporated into an update of our review over the coming months. Our new update includes a new outcome - the proportion of people still using e-cigarettes or other pharmacotherapy at longest follow-up.

See our full review

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