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

Cochrane December 2020 briefing document

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 January 2020) we found 50 studies in 12,430 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.

NEW SEARCH UPDATE... Searches are run and screened monthly. Our March 2021 search identified 4 new studies, 5 ongoing studies and 5 papers linked to studies already included in the review. This is in addition to the 7 new, 10 linked and 13 ongoing studies identified up to February 2021. We will be incorporating these into an update of our review over the next few months.

For all references and the most up to date 2020 Cochrane Review follow this link

For further information please visit our webpage.

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