

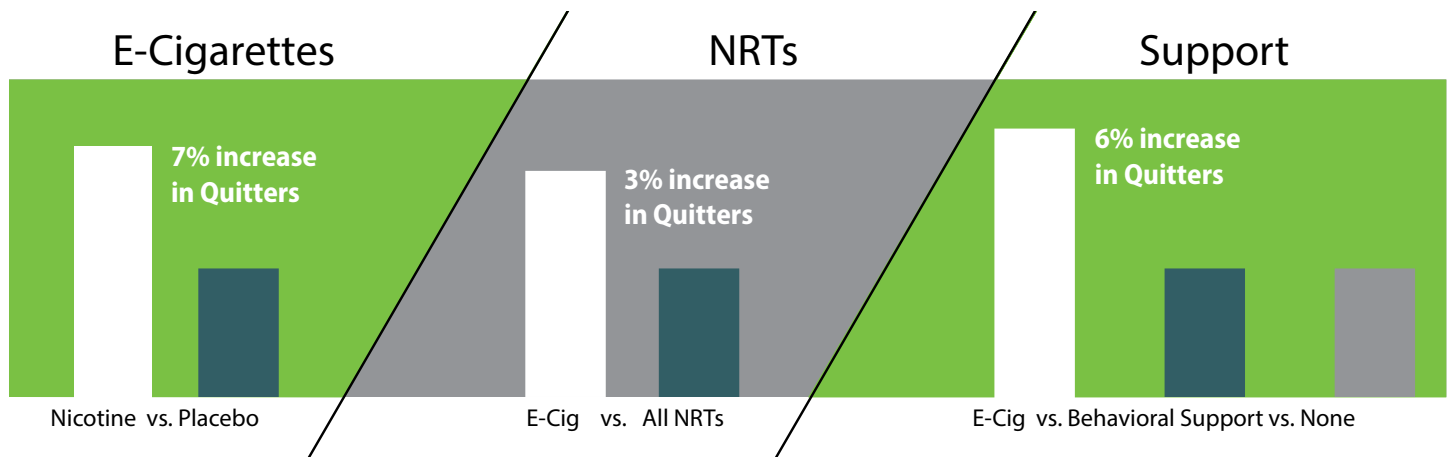
ENDS for Smoking Cessation

Are ENDS efficacious for conventional cigarette smoking cessation?

Evidence from randomized controlled trials (RCTs) suggests that ENDS may be useful for some individuals attempting to quit smoking conventional cigarettes when compared to placebo, but the evidence is limited and of low quality.

- From 5 RCTs, the authors determined with moderate certainty that conventional cigarette smoking quit rates were about two times as high in individuals randomized to receive e-cigarettes with nicotine compared to individuals who received e-cigarettes that did not contain nicotine.

Meta-analytic findings comparing the efficacy of ENDS to conventional nicotine replacement therapies (NRTs) for smoking cessation have yielded differing results.



- However, it seems that ENDS are at least as efficacious in aiding conventional cigarette smoking compared to NRTs, and there is some evidence that they may be even more efficacious than NRTs.

Meta-analytic findings of RCTs suggest ENDS may be more efficacious as a smoking cessation tool than behavioral support only or no support.

However, findings from RCTs may not extend to the general population:

- Evidence from effectiveness studies appears less promising, with findings suggesting that individuals who use e-cigarettes in their quit attempts may actually be less likely to quit smoking cigarettes and more likely to relapse compared to other quit attempters.
- Further research is needed to clarify the discrepancy between RCTs and effectiveness studies.



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ENDS for Smoking Cessation

Learning Objectives:

- Review the efficacy of ENDS for conventional cigarette smoking cessation.
- Describe harms/harm reduction with using ENDS for smoking cessation.
- Discuss implications for clinical practice.

E-Cig **NRTs**
VS

ENDS are at least as efficacious in aiding conventional cigarette smoking compared to NRTs.

What are the harms associated with using ENDS for smoking cessation?

Current evidence suggests that nicotine-containing e-cigarettes do not pose an increased risk of adverse events in current smokers compared to placebo e-cigarettes or conventional NRTs.

They may place the user at increased risk of adverse events when compared to behavioral support only or no support.

The most commonly reported adverse events associated with using ENDS for smoking cessation were: throat or mouth irritation, headache, cough, and nausea. These side effects tend to subside over time.

What are the implications for clinical practice?

Current practice recommendations suggest that ENDS devices should not be considered first-line treatments for cigarette smoking cessation.

However, ENDS devices may be useful for some patients who are attempting to quit smoking conventional cigarettes if they have failed an evidence-based treatment for cessation or if they are reluctant to try an evidence-based approach but open to using an ENDS device.

When considering using ENDS for conventional cigarette smoking cessation with a patient, clinicians should use a shared decision-making approach which takes the following into account.

- Lack of evidence related to long-term efficacy or harms of ENDS
- The unregulated nature of e-liquids
- Variability in the nicotine content of e-liquids & potentially unreliable labeling
- Rare but serious harms (e.g., burns, explosions, & poisonings) may occur
- Pregnant smokers should be advised to use evidence-based treatments (e.g., behavioral counseling, financial incentives) instead of ENDS, as there is insufficient data on the effect of ENDS during pregnancy

NOTE: All of these factors could either limit the efficacy of ENDS for smoking cessation or may be a cause for concern by introducing new types of harm.



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While ENDS devices should not be considered first-line treatments, they may be useful for some patients who have failed at or are reluctant to try an evidence-based approach.

References

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Episode 11
Assessing ENDS Use