



Just a quick update on e-cigarettes this month: in November 2022, [Cochrane](#) updated their review of the use of e-cigarettes (vaping) for smoking cessation. This review is updated regularly and looks at whether vaping for smoking cessation is:

- effective;
- safe.

The review looks strong this time around because it includes a total of 78 studies (40 RCTs), representing 22,052 participants. However, the main conclusions are based on only a handful of studies (of varying quality) and the review has high confidence in the accuracy of only one finding:

- quit rates were higher in people randomized to nicotine vaping products (NVPs) compared to people randomised to nicotine replacement therapy (NRT). This conclusion was based on six RCT studies with a total of 2,378 participants. **Confidence in the accuracy of this finding is high.**
- quit rates were higher in people randomized to NVPs compared to people randomised to non-nicotine vaping products (N-NVPs). This conclusion was based on five RCT studies with a total of 1,447 participants. **Confidence in the accuracy of this finding is moderate.**
- quit rates were higher for participants randomized to NVPs compared to people randomised to behavioural support only or no-support. This conclusion was based on seven studies with a total of 3,126 participants. **Confidence in the accuracy of this finding is very low.**
- NVPs and N-NVPs were judged safe, as no serious adverse events were described in any of the studies reviewed. Adverse side effects were more likely to be described for vaping products than NRTs or behavioural support/no support. Common effects included throat/mouth irritation, headache, cough, and nausea. **Confidence in the accuracy of this finding is moderate.**

NBPU agrees with the review statement that:

'The largest health gains are achieved from stopping smoking completely, as opposed to reducing cigarette consumption'

We were therefore surprised to see that while the review focused on **'the electiveness of e-cigarettes in aiding complete smoking cessation'** the definition of abstinence used in the review referred to abstinence from commercial tobacco use only, not the cessation of nicotine dependence. This means **many of the study participants counted as 'quitting' in the studies are actually 'switching.'** That is, they switched from smoking commercial tobacco to vaping to satisfy their nicotine habit. Since the tobacco control community agrees that vapes are less harmful than smoking commercial tobacco but not harmless, people who switch will achieve some health gains, but not the largest possible health gains. The largest possible health gains will come from total abstinence from both commercial tobacco products and novel nicotine delivery products (e.g., NVPs).

Table 1 shows how many participants from the studies showing higher quit rates for NVPs compared to NRT continued using smoking cessation products after cessation support ended. Two studies (Lee et al., 2018 and Russell et al. 2021) found no difference in ongoing NVP and NRT use. One of these studies (Lee et al.) is limited by the small number of participants. The remaining studies all show that people were more likely to continue using NVPs than NRTs in the longer term.

Table 1: Quit rates and ongoing product use 6 months + after cessation support (NVPs v. NRT)

Study	Number (%) of participants achieving tobacco cessation		Number (%) continuing to use cessation products after treatment	
	NVP	NRT	NVP	NRT
Bullen et al. 2013	21/289 (7.2%)	17/295 (5.8%)	71/241 (29%)	17/215 (7.9%)
Hajek et al. 2019	79/438 (18%)	44/446 (9.9%)	173/356 (48.6%)	19/342 (5.6%)
Lee et al. 2018	5/20 (25%)	1/10 (10%)	3/18 (16.7%)	2/9 (22.2%)
Myers-Smith et al. 2022	13/68 (19.1%)	2/67 (3%)	32/59 (54.2%)	7/47 (14.9%)
Russell et al. 2021 (1)	34/140 (24.3%)	15/70 (21.4%)	62/124 (50%)	28/61 (45.9%)
Russell et al. 2021 (2)	44/145 (30.3%)	15/71 (21.1%)	48/103 (46.6%)	28/60 (46.7%)
Hajek et al. 2022	6/169 (3.6%)	3/150 (2%)	-	-

A recent review of the ongoing use of vapes after the end of cessation support (Butler et al., 2022) found that 70% of people who had quit smoking commercial tobacco, continued using vapes six months or longer after the end of cessation support. More people were using NVPs compared to N-NVPs. People were also more likely to continue using vapes compared to NRT.