There are substantial research gaps in proving the effectiveness of e-cigarettes as quit smoking aids. The 2020 Surgeon General’s Report on smoking cessation found that there is “inadequate evidence” to conclude that e-cigarettes increase smoking cessation. Similarly, the 2018 National Academies (NASEM) report found limited evidence on the effectiveness of e-cigarettes to promote quitting.

E-cigarettes are also not approved as quit aids by the FDA or the U.S. Preventative Service Task Force.

While some evidence supports the use of e-cigarettes as quit devices, recent research suggests that their efficacy for quitting is likely overstated.

- The 2020 U.S. Surgeon General’s report on smoking cessation suggested that e-cigarettes may help some adult users reduce their risk of smoking-related diseases if users avoid prolonged dual use, but found insufficient evidence to conclude that their use in general increases smoking cessation, citing the variable components of e-cigarettes, the different ways in which they are used and a dearth of evaluative studies.

- Some evidence suggests that e-cigarettes with nicotine are associated with increased smoking cessation, compared to non-nicotine e-cigarettes. A 2020 systematic review of 50 studies that included adult smokers in the U.S. and other countries found moderate-certainty evidence that e-cigarettes with nicotine increase quit rates compared to those using nicotine replacement therapy or nicotine-free e-cigarettes. Nicotine e-cigarettes may also help more people to stop smoking than no support or behavioral support alone. The NASEM report also reported that more frequent e-cigarette use may increase an individual’s likelihood to quit smoking.

- A 2018 study among U.S. adults that explored whether e-cigarettes inspired more successful quit attempts found that users of e-cigarettes had 70% lower odds of quitting than non-users.
A 2019 study by the U.K. National Health Service and published in the New England Journal of Medicine found e-cigarettes may help adults quit. A group assigned to e-cigarettes as a combustible tobacco replacement were more likely to remain abstinent at one year compared with a group using nicotine replacement products (18% vs. 9.9%). However, a majority of e-cigarette users were still using e-cigarettes at the one-year follow-up. Researchers noted the study was based on a middle-aged adult population (median age of 41) actively seeking to quit smoking and receiving at least four weeks of behavioral support. Notably, the U.K. also places severe restrictions on the marketing of e-cigarettes.

While some e-cigarettes may help some people quit, the diversity of products as well as the variations in quality and the lack of regulation make determining the potential of any particular product as a quit aid difficult. Some smokers have switched to e-cigarettes or used them to quit tobacco completely, however, e-cigarettes, unlike FDA-approved cessation therapies, lack an evidence base that demonstrates their safety and efficacy. Truth Initiative supports regulation that encourages the development of consistently less harmful nicotine delivery alternatives that allow smokers to quit tobacco altogether or switch completely to a much less harmful, well-regulated product.

A recent meta-analysis of using e-cigarettes as smoking cessation tools suggested that their efficacy depended upon frequency and type of use. Overall, among adult smokers and adult smokers who expressed motivation to quit, consumer product e-cigarette use — e-cigarettes bought from retail settings and used at will by consumers — was not significantly associated with cigarette smoking cessation. In terms of consumer product e-cigarette use, only daily e-cigarette use was associated with increased smoking cessation, while less than daily use was associated with decreased smoking cessation. When used in conjunction with smoking cessation therapy, however, randomized controlled trials found that e-cigarette use was significantly associated with increased smoking cessation. This current study provides evidence that e-cigarettes marketed as consumer products may not be effective tools in smoking cessation. More evidence is needed to understand how e-cigarettes can aid smoking cessation in a supervised manner.

One study showed that product appeal, including flavoring, is likely to encourage smokers to try to use e-cigarettes to quit. A 2020 study published in JAMA Network Open found that among adults, use of flavored e-cigarettes was more likely to be associated with quitting smoking than use of unflavored e-cigarettes, with more than double the odds of increased adult smoking cessation. However, given that flavored e-cigarettes constitute an overwhelming majority of the e-cigarette market in the U.S., stronger empirical evidence is needed to understand if and how flavors factor into smoking cessation.

However, because the youth e-cigarette epidemic in the United States and the youth appeal of flavored e-cigarettes go hand in hand, Truth Initiative strongly supports removing all flavored e-cigarettes from the market, regardless of device type. At a minimum, an e-cigarette manufacturer must show that the flavor itself is safe, helps smokers switch completely from combustible cigarettes, and does not attract youth before a product is allowed to go to market. In addition to flavor restrictions, Truth Initiative supports strong regulations to keep all tobacco products, including e-cigarettes, away from youth.
QUITTING VAPING

After a smoker switches completely to e-cigarettes, they should also stop using e-cigarettes to achieve the maximum health benefit. Many youth and young adult e-cigarette users, many of whom never previously used tobacco, are also in need of support to quit (see sidebar This is Quitting). Evidence from multiple sources indicate that both youth and young adult e-cigarette users want to quit and have made a quit attempt. Nearly two-thirds of adult e-cigarette users plan to quit vaping\textsuperscript{18} and almost a quarter of adolescents attempted to quit vaping in the past year.\textsuperscript{19} Here is what we know about reasons for quitting vaping:

- A 2020 Truth Initiative study published in Addictive Behaviors found that teens and young adults enrolled in the Truth Initiative quit vaping program This is Quitting said they were driven to quit because of concerns about health (50.9%), cost (21.7%), the desire to be free from addiction (16%) and social factors such as others’ impressions of them (10.1%).\textsuperscript{20}

- Nearly two-thirds of adult e-cigarette users (62%) reported plans to quit e-cigarettes for good, according to research published in Nicotine & Tobacco Research in 2020.\textsuperscript{18} Trends in adolescents were slightly lower with 44.5% of youth aged 12-17 reporting that they seriously thought about quitting vaping, half of whom reported thinking about quitting within the next 30 days [50.2%].\textsuperscript{19}

- A 2015 study in the International Journal of Environmental Research and Public Health found that reasons for quitting e-cigarettes varied by smoker status. Never smokers cited e-cigarettes being bad for their health and tasting bad as their reasons for quitting. Former smokers who gave up e-cigarettes were most likely to endorse that it was bad for their health, made them feel sick, and that they preferred another form of tobacco. Current smokers who quit e-cigarettes said that e-cigarettes were too expensive, they liked another form of tobacco better, and that e-cigarettes were not strong enough.\textsuperscript{21}

Recent research has also shown that the E-cigarette, or Vaping, product use Associated Lung Injury (EVALI) outbreak in 2019 and 2020 drove increased coverage about the dangers of vaping and internet searches for vaping cessation. A 2020 study published in Tobacco Control found 130% more news articles covering the dangers of vaping during the EVALI outbreak, and searches for vaping cessation were 76% higher than expected levels for the days during the period when the sources of the outbreak were unknown.\textsuperscript{23} A recent Truth Initiative study published in Tobacco Control also found that perceived risk of lung injury from e-cigarette use was associated with more than double the odds of intending to quit among current e-cigarette users.

This is Quitting

This is Quitting Truth Initiative’s first-of-its-kind, free and anonymous text message quit vaping program for teens and young adults, is helping more than 200,000 young people quit using e-cigarettes. The program first launched in January 2019, created with input from teens, college students and young adults who have attempted to, or successfully, quit e-cigarettes.

Preliminary data published in Nicotine & Tobacco Research showed that after just two weeks of using This is Quitting, more than half of participants — 60.8% — reported that they had reduced or stopped using e-cigarettes.

Teens and young adults can text “DITCHVAPE” to 88709 and get immediate help. Parents of young people who vape can get support at BecomeAnEX.org.
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