

E-cigarette Perceptions and Experimentation Among US Adults

As of 2018, the prevalence of current e-cigarette use among US adults is estimated to be 3%, and the most recent HINTSSM data suggest that an even larger percentage of American adults (19.1%) have tried e-cigarettes at least once. Furthermore, 27.5% of high school students reported using e-cigarettes in 2019, which threatens to erase decades of progress in reducing tobacco use among youth.

Research on conventional cigarettes suggests that perceptions of product harm and addictiveness are associated with smoking initiation and product use, but less is known about the role of these factors in the context of e-cigarettes. A [previous HINTS Brief](#) reported that in 2012 and 2013, nearly 40% of Americans believed e-cigarettes to be less harmful than conventional cigarettes. While 2019 HINTS data indicate that this belief has become less common (14.8%), the fact that 34.5% of US adults “don’t know” if e-cigarettes are more or less harmful than conventional cigarettes suggests that the public still has a considerable amount of uncertainty about the harmfulness of these products.

Among e-cigarette users, the belief that they are less harmful than conventional cigarettes is one of the most common reasons reported for using these products. In addition, people may perceive these products to be less addictive than conventional cigarettes due to a lack of awareness that e-cigarettes typically contain nicotine. E-cigarette advertising could also influence harm perceptions if it creates the impression that e-cigarettes are a less hazardous alternative to conventional cigarettes. More recently, the outbreak of e-cigarette or vaping product use-associated lung injury (EVALI) garnered a lot of media attention, which may increase the public’s perception of e-cigarette harm.

Given the relatively recent introduction of e-cigarettes in the US, the proliferation and rapid evolution of these products, and the growing evidence of health risks associated with their use, identifying factors associated with trying e-cigarettes is increasingly important.

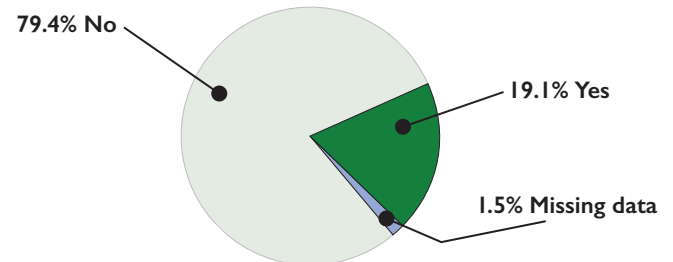
This HINTS *Brief* looks at e-cigarette perceptions and whether perceived harm and addictiveness are associated with trying e-cigarettes.

Note: The HINTS data used in this *Brief* were collected before the Centers for Disease Control and Prevention launched an investigation into the EVALI outbreak in August 2019.

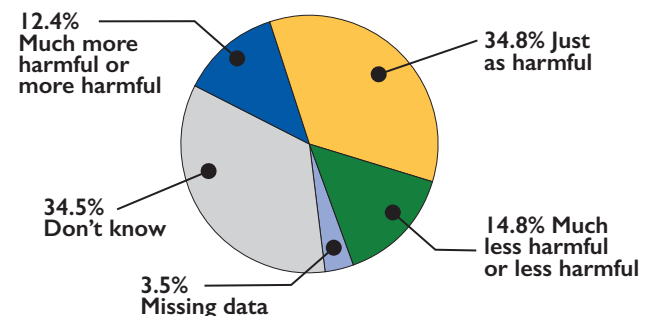
Quick Facts

- E-cigarettes are noncombustible tobacco products that heat an e-liquid in order to produce an aerosol that is inhaled into the lungs.
- The liquids used in e-cigarettes typically contain nicotine and other constituents.
- Nineteen percent of American adults have tried e-cigarettes at least once.
- Younger adults and current smokers are more likely to have ever tried e-cigarettes compared to older adults and never smokers.

Have You Ever Used an E-cigarette, Even One or Two Times?



Compared to Smoking Cigarettes, Would You Say That Electronic Cigarettes Are...



Source: HINTS 5 Cycle 3 (data collected January-May, 2019)
Who was asked: All survey participants (non-institutionalized U.S. adults 18 and older)

In this HINTS *Brief*, we examine e-cigarette perceptions and whether perceived harm and addictiveness are associated with trying e-cigarettes among US adults.

Factors Associated With E-cigarette Trial Among American Adults

A recently published study used HINTS-FDA (2015) data to examine the relationship between e-cigarette perceptions and trying e-cigarettes. A primary finding was that individuals who believed e-cigarettes were less addictive than conventional cigarettes were more likely to try e-cigarettes compared to those who believed that e-cigarettes were just as addictive or more addictive than conventional cigarettes. In contrast, perceptions of e-cigarette *harmfulness* were not found to be associated with trying e-cigarettes. Notably, a substantial number of respondents (approximately one-third) chose “I don’t know” in response to e-cigarette harm and addictiveness questions.

The study also examined whether there was an association between demographic characteristics and trying e-cigarettes. In line with previous research, current smokers were more likely to report trying e-cigarettes compared to those who were not current smokers, and adults aged 18 to 39 were more likely to try e-cigarettes compared to those over age 60. Additionally, adults with less than a postgraduate degree (i.e., those with a college degree, some college, a high school degree, or less than a high school degree) were more likely than those with a postgraduate degree to have tried e-cigarettes.

How Can This Inform Your Work?

HINTS data suggest that there is uncertainty about the health effects of e-cigarettes among US adults, and further efforts to educate the public about these products could be beneficial. Because individuals who perceived e-cigarettes to be less addictive than conventional cigarettes were more likely to try e-cigarettes, increasing public awareness of the fact that e-cigarettes usually contain nicotine and clarifying the role of nicotine in addiction could be an effective communication strategy to improve public understanding of the health effects of e-cigarettes. Several recent campaigns (e.g., FDA’s “The Real Cost” campaign) aim to educate youth about the potential health consequences of e-cigarette use, including nicotine addiction. However, HINTS data suggest that interventions targeting additional groups are also needed. Such interventions should reinforce the fact that youth and young adults, non-smokers, and pregnant women should not use e-cigarettes and that dual use of conventional cigarettes and e-cigarettes offers no benefit and is likely to increase harm.

Health care providers also have a role to play in raising awareness about the addiction potential of e-cigarettes. When screening patients for tobacco use, providers can ask about e-cigarette use and inform their patients that e-cigarettes typically contain nicotine, which places users at risk for nicotine addiction. Providers can emphasize that youth, young adults, pregnant women, and nonsmokers should never use e-cigarettes. Additionally, providers can encourage smokers to quit using proven therapies, and refer smokers to 1-800-QUIT-NOW or Smokefree.gov for free, evidence-based help with quitting.

About HINTS

hints.cancer.gov

The National Cancer Institute (NCI) created the Health Information National Trends Survey® (HINTS) to monitor changes in the rapidly evolving field of health communication. The survey data can be used to understand how adults use communication channels to obtain health information for themselves and their loved ones. HINTS data can also help practitioners create more effective health communication strategies. The HINTS survey has been fielded 12 times to date.

HINTS *Briefs* provide a snapshot of noteworthy, data-driven research findings. They introduce population-level estimates for specific questions in the survey and summarize significant research findings resulting from analyses of how certain demographic characteristics influence specific outcomes.

Many *Briefs* summarize research findings from recent peer-reviewed journal articles that have used HINTS data.

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