National survey indicates more young adults begin nicotine use with vaping, not cigarettes

November 13 2023

Credit: CC0 Public Domain

Young adults are now more likely to vape than to use traditional cigarettes. After years of public health success in decreasing the numbers of people using cigarettes, researchers are seeing striking increases in the numbers of young people who use e-cigarettes regularly—so much so that, for the first time, there are more young
people who begin to use nicotine through vaping rather than through cigarettes.

"We now have a shift such that there are more 'never smokers' who vape than established smokers," said MUSC Hollings Cancer Center researcher Benjamin Toll, Ph.D., director of the MUSC Health Tobacco Treatment Program. "That is a massive shift in the landscape of tobacco. These 'never smokers' are unlikely to start smoking combustible cigarettes—they're likely to vape and keep vaping. And it's this group, ages 18 to 24, who are going to forecast future e-cigarette users."

That forecast is a mixed bag. It's certainly encouraging to see the lowest recorded level of young adults who report smoking. But while Toll and other tobacco researchers at Hollings believe that e-cigarettes could be a less harmful option for people who want to quit smoking but haven't been able to, they emphasize that it is not a harm-free option—and because of that, it's disheartening to see young adults with no history of smoking begin to vape.

Toll and colleagues at the Medical University of South Carolina report the new findings in a research letter in *JAMA Internal Medicine* this month. The research was supported by the National Institutes of Health.

Naomi Brownstein, Ph.D., an associate professor in the Department of Public Health Sciences, and Brandon Sanford, Ph.D., a postdoctoral fellow in the department, are co-first authors of the research letter.

"If you currently smoke and you've smoked combustible tobacco cigarettes for a few decades—those people are at very high risk of cancer, and so we want to help them to get off combustible cigarettes. Ultimately, we'd like to help them to quit tobacco altogether, but if they're not ready for that, switching to e-cigarettes is at least a partial win," Brownstein said.
"Now, if you are an 18-year-old and your friends are like, 'Hey, let's vape some banana bread nicotine,' and you've never smoked, those are the people for whom we think starting vaping is a problem."

The research team used data from the Population Assessment of Tobacco and Health (PATH) Study, a nationally representative longitudinal survey that's a collaborative effort between the National Institutes of Health and the U.S. Food and Drug Administration. The survey started in 2013, and so far there have been six waves of data collection.

The sixth wave, consisting of survey answers from 2021, wasn't widely available at the time the researchers completed their work. They gained access to the restricted data prior to its public release through the National Addiction & HIV Data Archive Program at the University of Michigan.

The Wave 6 data showed a continuing upward trend in vaping—and found that a majority of young adults who regularly vape, 56%, have never regularly smoked cigarettes.

A total of 14.5% of adults age 18 to 24 reported regular use of e-cigarettes, according to the PATH Study—a figure that is higher than a previous Centers for Disease Control and Prevention report of 11%. Toll expects that the next wave of PATH Study data, scheduled for release in the fall of 2024, will show an even greater increase.

Eighteen to 24-year-olds are a valuable group to marketers of all types. "It's a time that you've just graduated high school; you are transitioning to either college or to work, and you're changing many things, starting your life, and, importantly, it's when brand loyalty starts," Toll said. That's true for cigarettes as much as any product, and secret industry documents, later unearthed in lawsuits, showed how cigarette
manufacturers targeted this group.

Cigarette advertising has been seriously curtailed, but advertising for e-cigarettes has exploded. Toll points to a brand's website that utilizes colorful computer-animated emojis and invites visitors to join its channel on Discord, an interactive social forum.

"We don't know yet what the long-term health consequences are, but I'm very uncomfortable that there are so many flavored and disposable e-cigarettes that are clearly marketed to young people," Toll said.

E-cigarette makers are supposed to apply to the FDA for permission to market their products. Many do not, though, and their products are easily available. So far, the FDA has issued marketing authorization only to tobacco-flavored e-cigarettes.

Fruity, sweet flavors are enticing to young people and hide the flavor of tobacco. Some brands even piggyback on the popularity of cartoons, drinks and toys that are completely unconnected to vaping. The FDA issued warning letters in August to online retailers that were selling vape products designed to look like mainstream products like Starbucks or Dunkin coffee cups. Toll said one of his patients recently told him that he uses a vape flavored like Capri Sun.

In addition to an overall increase in vaping, the survey data showed how vaping has increased in popularity among young women.

"At the beginning of the survey data, young men were vaping more than young women," Brownstein said. "And they still were at the end, but young women had a slightly steeper increase, so they were starting to catch up a bit."

Sanford noted that the group's findings point to unknowns in the public
health arena.

"We know if combustible tobacco use is becoming less prevalent than e-cigarette use, there are a lot of public health implications about where our efforts need to be in terms of cessation counseling and treatment development," he said.

"There is a relative lack of established vaping treatments at the moment. There's a lot of research being done to see if the treatments we've used for traditional tobacco cessation are going to work well in vaping populations, but those efforts are still pretty nascent."

"A lot of people who vape do want to quit," he continued. "Even if the health problems associated with vaping aren't as extreme as smoking, it's still an uncomfortable addiction for a lot of folks."

Toll said the unauthorized vaping products lack standardization and quality control, and his patients have noted that quality can vary wildly even within the same brand.

"We need authorization and standardization of these new vapes," he said.

Further, he added, "There's clear marketing to youth and to adults who never smoked cigarettes. I will never be happy that there are children and 'never smokers' who are now vaping."

Provided by Medical University of South Carolina


This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.