Smoking Initiation Shifting from Teens to Young Adults

"Today, it is not only youth who are at risk for smoking initiation. We will need to carefully consider young adults as well."

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The past few decades have seen a steep drop in the number of adolescents in the United States who smoke cigarettes. But according to a new study, the average age at which people first try cigarettes or start to smoke regularly has risen.

Tobacco control efforts over the last several decades have produced some resounding successes. Overall, less than 14% of adults in the United States currently smoke cigarettes, compared to almost 43% in 1965. And for adolescents, the drop has been even more substantial. For example, among US high school seniors, daily cigarette smoking fell from its mid-1990s peak of 33.5% to just 2.4% in 2019.

But over the past two decades, the study found, there has been a change in cigarette smoking behavior: the age at which people tend to start smoking has drifted upwards, from the mid-teens to the later teens and even into young adulthood. The new results were published October 6 in JAMA Network Open.

"For a long time, people have talked about how, if we can just get kids past the age of 18 without smoking cigarettes, they're home free," said Jessica Barrington-Trimis, PhD, of the University of Southern California, who led the new study. "I think that that's a flawed way of looking at things today."

"This [research] really highlights that the trend in smoking initiation has shifted," said Annette Kaufman, PhD, of NCI's Tobacco Control Research Branch, who was not involved in the study. "Today, it is not only youth who are at risk for smoking initiation. We will need to carefully consider young adults as well."

A Preventable Risk

Despite the dramatic drop in the number of people smoking cigarettes, smoking remains a leading preventable cause of cancer and cancer death in the United States. In addition to raising the risk of lung cancer, it increases the risk of throat, stomach, bladder, and many other cancer types, as well as heart disease, stroke, and other serious illnesses.

But quitting cigarette smoking is hard. Each year, fewer than 10% of smokers who try to quit succeed. So public health experts have focused much of their efforts on ensuring that people never start smoking in the first place.

In previous studies, researchers had found that almost 90% of adult daily cigarette smokers first tried smoking before the age of 18. As a result, teenagers have been the primary target for smoking prevention efforts, explained Barrington-Trimis. “But what we’ve seen with some of our [recent] work in young adults is a substantive amount of cigarette smoking initiation” in that age group, she said.

To examine nationwide trends in the age that people begin smoking, Barrington-Trimis and her colleagues analyzed almost 20 years of data from the National Survey on Drug Use and HealthExit Disclaimer. The yearly survey captures information on tobacco, alcohol, and other drug use from a representative cross-section of the US population aged 12 years or older.

The team focused on data collected between 2002 and 2018 from more than 71,000 participants who were aged 22 or 23 in the year when they answered the survey. The proportion of people aged 22 to 23 years who had ever smoked all or part of a cigarette decreased from 75% to 51% over the study period, and the proportion of those who had ever engaged in daily smoking for a period of at least 30 days decreased from 41% to 20%.

Also, the age at smoking initiation was moving up over that time period, they found.

Specifically, among people who had ever smoked by age 22 or 23, the proportion who reported that they first did so between the ages of 18 and 23 rose, from about 20% in 2002 to more than 42% in 2018. And among respondents who transitioned to daily smoking, the proportion who reported having done so during young adulthood also rose, from about 39% in 2002 to nearly 56% in 2018.

The study highlights “an emerging need for tobacco control efforts to further focus on reducing cigarette smoking among young adults,” wrote Ollie Ganz, DrPH, and Cristine Delnevo, PhD, from Rutgers University, in an accompanying editorial.

Nevertheless, they added, “We think it is important to recognize that these findings are the results of a larger public health success of dramatic reductions in youth and young adult smoking.”

Young Adults: A Tough Group to Reach

Given the unquestionable success of tobacco control at reducing youth cigarette smoking, researchers are now asking how to continue making gains, including among young adults.

As part of the Master Settlement Agreement (MSA) of 1998, tobacco companies were prohibited from directly or indirectly marketing their products to youths aged 18 and younger.

“Tobacco company marketing can be explicitly aimed at the youngest legal target group, which is young adults,” Kaufman said. “But tobacco products are still marketed in stores and are prominent

in other places, including entertainment media, where many youth and young adults can see them."

"Even prior to the MSA… young adults were an important customer base for the tobacco industry; a tobacco company infamously referred to young adults as 'replacement smokers' for those who quit smoking or died," wrote Ganz and Delnevo. "After the MSA, tobacco industry marketing and promotional efforts targeting young adults only intensified."

The widespread promotion of tobacco products to young adults is coupled with less prevention messaging aimed at those 18 and over, Barrington-Trimis explained. "Once kids turn 18, they're a lot more dispersed," she said.

Some go to college, while others join the military or the workforce, she explained. Some stay home, others move in with peers. "Just finding them and doing prevention becomes a lot harder," she added.

Although it can be tougher to reach young adults with anti-tobacco messaging, recent progress has been made in restricting tobacco sales to this age group, Kaufman explained. For example, at the end of 2019, the Tobacco 21 law went into effect nationwide, making it illegal for retailers to sell any tobacco product—including cigarettes, smokeless tobacco, hookah tobacco, and e-cigarettes—to anyone under 21.

Future research will help us understand how these laws influence cigarette smoking among young adults, Kaufman explained. For now, though, "we need to reinforce our comprehensive tobacco control policies," she said. That includes federal regulation of tobacco products, substantially increasing the price of tobacco products, smoke-free air laws, expanding efforts to help people quit smoking, and anti-tobacco education campaigns.

"These are a part of any effective strategy to keep young adults from starting or becoming regular cigarette smokers," she said.

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