

Smoke-Free Youth, Stalled Adults: From 30 Years of Progress to the Next Frontier in Tobacco Policy

By Jeffrey Smith



Given the success of an extraordinary reduction in youth cigarette smoking over the past 30 years, tobacco control efforts should shift to reprioritize the adult population—where smoking persists and associated health burdens remain—while keeping youth use at near-zero levels.

Introduction

Over the past 30 years, cigarette smoking among high school-aged youth in the United States has fallen to historic lows.¹ In the early 1990s, more than one in four high school students smoked, and cigarettes were still widely marketed and socially accepted.² Since then, policy interventions, public health campaigns, and regulatory action have driven shifts in social norms and a dramatic reversal of once-common behavior.

This near-elimination of youth cigarette smoking stands as a rare public health success story and gives policymakers an opportunity to reflect on how the United States achieved such gains and reassess national tobacco-control priorities. Specifically, adult smoking rates remain stubbornly high, and combustible cigarettes continue to pose significant health burdens.³ Given the near-elimination of youth cigarette smoking, tobacco control strategies must now prioritize transitioning adult smokers away from combustible tobacco products to reduced-risk products, drawing on international models and emerging scientific evidence. This strategic shift is essential to further reduce tobacco-related morbidity and mortality in the United States.

This policy paper reviews national survey data and peer-reviewed research to highlight the dramatic decline in youth tobacco use, analyzes demographic and subgroup patterns, and explores the drivers behind this public health success. Together, these findings set the stage for a discussion of policy implications, with particular emphasis on strategies to accelerate adult smoking cessation and integrate reduced-risk products into U.S. tobacco control efforts.

Historical Trends in Youth Smoking

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The sources included in this paper were verified and active at the time of publication.

response.⁴ Over the past three decades, however, a remarkable transformation has occurred among American youth: Cigarette smoking, once widespread and culturally embedded, has become a rarity among high school students.⁵ The decline in youth smoking represents one of the most substantial public health victories in recent decades, reflecting the combined impact of policy, education, enforcement, and shifting social attitudes.

Three decades ago, cigarette smoking was alarmingly prevalent among American adolescents. According to data from the Centers for Disease Control and Prevention's Youth Risk Behavior Survey (YRBS), 27.5 percent of high school students reported current (past 30-day) cigarette use in 1991, and 70.1 percent reported having tried smoking.⁶ The prevalence of youth smoking increased throughout the 1990s, reaching a peak of 36.4 percent in 1997.⁷ During this period, tobacco companies marketed aggressively, regulators imposed few limits, and society broadly accepted teen smoking.

Beginning in the late 1990s, however, a sustained and dramatic decline in youth smoking rates emerged. YRBS data show that by 2003, current smoking among high school students had dropped to 21.9 percent, and by 2011, it had further declined to 15.8 percent.⁸ The National Youth Tobacco Survey (NYTS) reported even lower rates in subsequent years: 4.6 percent in 2020, 1.9 percent in 2023, and just 1.7 percent in 2024—the lowest ever recorded.⁹ Monitoring the Future (MTF) data for 12th graders closely mirrors these trends, showing past 30-day cigarette use falling from 29.4 percent in 1991 to around 2 to 3 percent in recent years, with 2024 figures aligning with NYTS lows.¹⁰

These declines are striking: Occasional cigarette use among youth fell more than 7-fold, frequent use dropped more than 18-fold, and daily use declined more than 16-fold between 1991 and 2021.¹¹ Notably, these reductions were not linear; the 1990s saw initial increases in youth use before sharp drops—a pattern shaped by cohort effects wherein adolescent behaviors influenced subsequent young adult smoking rates.¹² This underscores the profound shift in youth tobacco use, reflecting both targeted interventions and broader cultural changes.

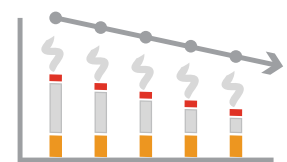
Demographic and Subgroup Variations

Declines in youth smoking extend across every major demographic group. These trends are evident across sex, race/ethnicity, and grade levels, but some subgroups have experienced steeper declines than others. For example, Black and Asian youth experienced the sharpest reductions, shifting from a higher to the lowest prevalence, whereas White and Hispanic students consistently reported relatively higher rates of use.¹³ In 2021, 4.8 percent of White students and 3.1 percent of Hispanic students reported occasional cigarette use, whereas only 1.7 percent of Black and 0.6 percent of Asian students reported occasional cigarette use.

Gender-based trends in smoking rates have also evolved. In the early 1990s, girls were slightly more likely than boys to smoke cigarettes (31.2 percent vs 29.8 percent, respectively), but by the mid-1990s, the opposite was true.¹⁴ By 2024, NYTS data showed that gender-based smoking rates were converging, with 1.6 percent of female high school students smoking versus 1.2 percent of males.¹⁵ Notably, this NYTS data also revealed that non-Hispanic American Indian/Alaska Native students had the highest rates of smoking in 2024: 3.5 percent, highlighting ongoing disparities within specific subpopulations.¹⁶



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Socioeconomic status has historically correlated strongly with tobacco use; youth from lower socioeconomic backgrounds, those with parents who did not attend college, or those who do not have college plans themselves were typically more likely to use these products.¹⁷ Still, recent data indicate that declines in youth smoking have been broadly distributed across different socioeconomic groups, suggesting that societal-level interventions and changing norms have had widespread impact.¹⁸

Drivers of Decline

The precipitous decline in youth cigarette smoking in the United States is the product of a multifaceted, sustained public health effort and broad cultural change. Key drivers include robust policy interventions, comprehensive educational campaigns, the enforcement of age restrictions, and shifts in social attitudes toward tobacco use. The Master Settlement Agreement of 1998, which restricted tobacco advertising and provided funding for prevention programs, also notably contributed, as did the resulting federal, state, and local policies, which further curtailed youth access to cigarettes, raised taxes, mandated warning labels, and banned smoking in public spaces.¹⁹

From a cultural standpoint, school-based education, youth engagement initiatives, and national media campaigns like “Truth” worked together to reshape perceptions of tobacco use, de-normalize smoking, and highlight its risks.²⁰ These efforts were reinforced by the stricter enforcement of age-of-sale laws, which imposed penalties for retailers who sold tobacco to minors and increased compliance checks.²¹ As a result, social norms surrounding tobacco use shifted dramatically. Smoking became less visible and less socially acceptable, and peer influences and family attitudes contributed to declining initiation rates.²²

The Rise of E-Cigarettes and Youth Smoking

Building on the steep decline in cigarette use, the rise of alternative nicotine products, including e-cigarettes, introduced new dynamics into the youth tobacco landscape. Some evidence suggests that these products displaced cigarette use, contributing to reduced combustible tobacco consumption among adolescents.²³ Yet their rapid popularity among adolescents also raised concerns that hard-won progress might be undone.²⁴ E-cigarettes appeal to youth for a variety of reasons, including the availability of appealing flavors, their perceived lower harm compared to traditional cigarettes, and aggressive marketing strategies, which often appear on social media.²⁵

National surveys have consistently shown that e-cigarettes are gaining popularity among high school students. In 2011, 1.5 percent of high school students reported using these products, and that spiked to 27.5 percent in 2019, before falling to 7.7 percent by 2023.²⁶ This increase in e-cigarette use coincided with a continued, albeit slower, decline in traditional cigarette smoking.²⁷

The relationship between e-cigarette use and combustible cigarette smoking among youth is a subject of ongoing debate and research. The “gateway hypothesis” suggests that e-cigarette use may serve as a stepping stone to traditional cigarette smoking, particularly for those who would not have otherwise initiated nicotine use.²⁸ Longitudinal studies have provided some support for this hypothesis, indicating that adolescents who use e-cigarettes are significantly more likely to initiate combustible cigarette smoking than non-vaping peers.²⁹



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Others argue that e-cigarettes may have accelerated the decline in traditional cigarette smoking by serving as a less harmful alternative to adolescents who might otherwise have smoked combustible cigarettes.³⁰ Some studies point to flavor bans and reduced e-cigarette accessibility as a reason that some youth switch to combustible products.³¹ In addition, data from the Centers for Disease Control and Prevention (CDC) shows that although vaping declined from 14.1 percent to 10.0 percent in high schools from 2022 to 2023, reductions in rates of cigarette smoking slowed in states with flavor bans, suggesting there was some substitution back to combustible products in those states.³² Critics of restrictive/ban policies note that cigarettes pose greater health risks than e-cigarettes (e.g., COPD, cancer), raising the concern that limits on vaping could entrench combustible cigarette smoking.³³ Still, this “diversion hypothesis” is less well supported, as most youth e-cigarette users have never smoked traditional cigarettes.³⁴

Regulation has also shaped these trends. A lack of regulation initially allowed for the rapid growth of the e-cigarette market, but later regulatory measures, such as the U.S. Food and Drug Administration’s (FDA’s) 2016 deeming rule extending its authority to e-cigarettes and state/local flavor bans, have sought to limit youth access and appeal.³⁵ The decline in e-cigarette use seen since 2020 may be partly attributable to this increased regulatory pressure, as well as public health campaigns emphasizing the harms of vaping.³⁶

The Impact of Tobacco 21

Enacted in December 2019, the federal Tobacco 21 (T21) law raised the minimum legal sales age for tobacco products, such as cigarettes and e-cigarettes, to 21 nationwide, following actions previously taken by many states and local governments. Evidence suggests that this policy has contributed to declines in youth tobacco and nicotine use—especially with regard to combustible cigarettes—but the impacts on e-cigarettes are less clear and vary by enforcement efforts and demographics.

Because T21’s implementation coincided with other measures like flavor bans and education campaigns, it is difficult to isolate its contribution to the current state of smoking among youth.³⁷ Still, CDC and FDA data confirms that youth smoking rates continue to decline. The 2024 NYTS reported current (past 30-day) use of any tobacco product among high school students declining from 12.6 percent in 2023 to 10.1 percent in 2024, which is about 2.25 million fewer youth smoking.³⁸ E-cigarette use dropped from 7.7 percent (2.13 million) in 2023 to 5.9 percent (1.63 million) in 2024, continuing the downward trend from 2019 peaks.³⁹ Cigarette smoking fell to historic lows of 1.7 percent among high school students and 1.1 percent among middle school students.⁴⁰ A rapid post-T21 evaluation also found that the perceived ease of purchasing tobacco from stores decreased from 67.2 percent to 58.9 percent among middle school and high school students, respectively, although perceived ease of online access perceptions remained high at 85.8 percent.⁴¹

State-level data adds further support for T21’s impact. Early adopters of the policy, like California and Massachusetts, saw smoking initiation among 18- to 20-year-olds fall by 10 to 14 percent, with particularly strong reductions seen among males (18 percent) and non-users.⁴² Some substitution of vaping for smoking was observed, and these effects were more pronounced for non-Hispanic White youth than for minority groups.⁴³



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Overall, youth cigarette smoking rates now stand at their lowest levels in U.S. history. In 2024, only 1.7 percent of high school students reported current cigarette use, and the MTF and YRBS surveys have produced similar findings.⁴⁴ Ever-use rates have likewise fallen precipitously, reflecting both reduced initiation and declining experimentation among adolescents.

Pivoting From Youth Gains to Adult Gaps

Although youth cigarette smoking has become exceedingly rare and rates of adult smoking are at historic lows (around 11 to 12 percent), adult use remains a pressing public health concern.⁴⁵ Cigarette smoking continues to be the leading preventable cause of death in the United States, claiming nearly 500,000 lives annually, with corresponding economic costs exceeding \$600 billion.⁴⁶ As such, it is critical that U.S. tobacco harm reduction efforts shift to focus on adults and helping them transition from combustible cigarettes to reduced-risk products.⁴⁷

Adult smokers face numerous challenges in quitting combustible cigarettes, including nicotine dependence, behavioral reinforcement, and social factors. Traditional cessation strategies, such as behavioral counseling and pharmacotherapy (e.g., nicotine patches and gums), have yielded modest success, but population-level impact remains elusive because many smokers face barriers like access, motivation, and relapse.⁴⁸ This underscores the need for innovative approaches to reduce harm for those struggling to quit.

Importantly, researchers have found pronounced socioeconomic and demographic disparities among adult smokers, observing higher rates of smoking among those with lower incomes, those with less education, and those of certain racial and ethnic groups.⁴⁹ These patterns mirror youth smoking trends but change more slowly. Thus, addressing the needs of adult smokers is essential to further progress in tobacco control.

Reduced-Risk Products for Tobacco Harm Reduction

Reduced-risk nicotine products like e-cigarettes, heated tobacco products, and smokeless tobacco have emerged as alternatives to combustible cigarettes. These products deliver nicotine without the harmful byproducts of combustion, such as tar and carbon monoxide, and are regarded as less hazardous than traditional cigarettes.⁵⁰

Scientific evidence shows that switching completely from cigarettes to approved reduced-risk products can significantly lower health risks.⁵¹ Studies from the United Kingdom and Sweden, specifically, have shown that tobacco harm reduction strategies can accelerate declines in smoking-related disease.⁵² In these countries, regulatory frameworks have promoted the use of reduced-risk nicotine products for adult smokers who are unable or unwilling to quit entirely.⁵³ This approach has been associated with lower rates of smoking-related morbidity and a more rapid reduction in population-level smoking prevalence.⁵⁴

It is important to note that while reduced-risk products are not risk-free, their harm profile is markedly lower than that of combustible tobacco products.⁵⁵ Public health messaging and regulatory frameworks must therefore balance the need to continue to prevent youth initiation of smoking while simultaneously facilitating adult tobacco harm reduction efforts.

\$600 Billion+

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Policy Implications: Shifting Focus to Adult Harm Reduction

The near-elimination of youth cigarette smoking in the United States is a public health triumph, but it is also a signal that it is time for a strategic shift in tobacco control efforts. With youth smoking rates at record lows, the greatest opportunity for further reducing tobacco-related disease is to pivot and focus on adult smokers. Policymakers and public health leaders must consider the evidence supporting various tobacco harm reduction strategies and develop options that encourage adult cigarette smokers to transition to reduced-risk products.

Key policy strategies include reducing regulatory barriers that limit access to FDA-approved, reduced-risk products, expanding education on available harm reduction options, and integrating reduced-risk products into cessation and health-promotion programs. Lessons from international models suggest that striking the right balance between the need to protect youth and the need to facilitate adult smokers' transition to reduced-risk products can yield substantial public health benefits.⁵⁶

Therefore, going forward, tobacco control strategies should prioritize clear communication about the relative risks of different tobacco/nicotine products, support for adult smokers seeking alternatives to combustible cigarettes, and ongoing surveillance to monitor trends and unintended consequences of reduced-risk products. Adopting these strategies would transform tobacco control from a reactive to a proactive effort, taking advantage of emerging, lower-harm nicotine delivery technologies.

Conclusion

The United States has achieved an extraordinary reduction in youth cigarette smoking over the past 30 years, transforming a once-common adolescent behavior into a historical footnote. This shift is the result of comprehensive policy interventions, cultural shifts, and sustained public health efforts. Given this success, tobacco control efforts should shift to reprioritize the adult population—where smoking persists and associated health burdens remain—while keeping youth use at near-zero levels. States and local governments can help maintain the progress made in youth smoking by regularly evaluating retailer compliance with T21 policy, imposing heavy fines on violators, and revoking tobacco sales licenses when necessary.⁵⁷

Reduced-risk nicotine products are a promising harm reduction strategy for adult smokers, having been shown to be effective in international policy and emerging research. Continued progress against tobacco-related disease and death requires that policymakers adopt evidence-based harm reduction strategies that align with sound public health principles. If U.S. policymakers embrace this next phase of tobacco harm reduction with the same resolve that drove down youth smoking, the country can make equally historic gains in reducing the burden of adult tobacco use.



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About the Author

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